

CONTESTED IMAGES OF PLACE IN A MULTICULTURAL CONTEXT

THE AHUPUA' A OF KANAIO AND A'UAHI, MAUI

APPENDIX VOLUME

APPENDIX I

GEOLOGY OF KANAIO-AUAHI

The visible geologic features of Kanaio and A'uahi all date from the Hana Volcanic Series, the last major phase of activity on Haleakala. The southwest rift zone of Haleakala is the most recent development, and still active (historically). The majority of the study area has been impacted by recent historic volcanic activity which appears to have occurred in two phases:

1750(approximate): Eruptive sequence at Pu'u Pimoe, P'u'u Ouli and Hokukamo, triggering ash fountains and flows down to the coast;

1790: Eruptive sequence at both Kalua O Lapa and Kemehunehune flowing down to the coast in Kanaio and Kalo' i. The material, which has been designated Keanae basalts, are composed of:

... from ultrabasic olivine augite porphyries to aphanitic andesites, but olivine basalts are most common. Feldspar phenocrysts are fairly common, and are notably large in a flow in the summit depression and in another flow on the east side of La Perouse Bay, where they reach a size 1/2 by 1 inch. They are mostly of clear gem quality but fractured. Augite phenocrysts reaching 3/4 inch across are common in many flows and usually are more numerous in the upper vesicular part of the lava flow than at the bottom. (Stearns 1942:97)

The depth of the flows is variable, though the Kemehunehune flow appears significantly thicker, up to 40 feet to the west of Pu'u Pimoe, as also the earlier Pu'u Ouli flow, than Stearns notes as the norm:

Individual flows range from a few to several hundred feet in thickness. Those more than about 50 feet thick generally owe their massiveness to having been confined between valley walls or in depressions. The average thickness is about 10 feet on the steep upper slopes where the lavas were very fluid, to 25 feet in the flatter areas near the coast. .. They vary tremendously in texture, depending on similar factors. The lavas confined between valley walls may be dense columnar jointed masses as much as 500 feet thick resembling plugs or they may be thin sheets only 6 inches to 4 feet thick, depending on the pre-valley gradient. (Stearns 1942:97)

A major feature of this area of Haleakala is the number of cinder cones. As Stearns notes:

They are common about the summit and adjacent to the rift zones ...

The cones range from spatter ramparts a few feet high along cracks to cones 600 feet high. They contain all the usual deposits of firefountains. Except for a few cones on the south slope [the Lualailua Hills cluster for example and Hokukamo], they lie in the well defined southwest and east rift zones ...

A diagnostic feature of the Hana cones is their loose fresh black glassy cinders, in contrast to the red and yellow weathered cinders in the Kula cones. Some Hana cones near Makena are coated with a yellow ashy loess that conceals black cinders ...

The Hana ash deposits ... range in thickness from 1 to 20 feet. Bedding is present in the thicker mantles [this can be observed on the lower faces of both Pohakea and Hokukamo]. The deposits form sufficient soil on the rough lava flows near Hana to grow sugar cane. They also form much excellent grazing land at IDupalakua. (Stearns 1942:100-101)

These ash deposits form the basis of the very rich soils that Kanaio and A'uahi are noted for. The porous nature of the Hana Series lavas are a key factor in the lack of stream and soil development in the study area. As Stearns notes:

The Hana lavas are so permeable that they act like a great sponge absorbing immense quantities of rain. Streams are unable to flow to the sea down slopes veneered with these volcanics except during cloudbursts, and then only where channels exist. Thus, the slope between Hana and Nahiku, which receives about 200 inches of rain annually, has no perennial streams. River beds are the sights of mighty torrents a few days each month and are dry the rest of the time ...

General lack of interstratified perching beds allows most of the rain to percolate to the base of the Hana volcanics.

There it may be perched in lava by nearly impermeable conglomerates, breccias, or by soil on top of the Kula formation. If such water-bearing lavas terminate or are cut by erosion, springs appear from their base ...

Vast quantities of water must be moving seaward at the base of the Hana lavas in the eastern half of the mountain ... estimates that 35 million gallons daily is the unaccountable underflow from Keanae Valley into the sea. The total for the eastern half of the mountain must be 5 to 10 times larger.

The ash beds of the Hana member are mostly too coarse and permeable to perch water. They give rise to small springs ... that flow for about three weeks after rains. Some of the springs are perched in lava overlying ash, and others are seeps issuing from coarse beds overlying slightly weathered fine-grained ash or ash soils. (Stearns 1942:102)

Petrography

The petrography of the material from the more recent flows in the Kanaio area is as follows from Stearns (1942):

The Hana lavas erupted along the southwest fissure too much like those of the summit depression and east rift zone to warrant their detailed description. They are mostly olivine basalts, but basaltic andesites are also present. One such lava is exposed along the highway near Makena [Kanaio], 2,500 feet east of Puu Mahoe. The flow crossed by the highway on the west side of Puu Mahoe is an olivine basalt, containing phenocrysts of olivine and microphenocrysts of labradorite and augite. The lava along the highway of 1,500 feet east of Puu Mahoe, between the flow from Puu Pimoe and the 1750(1) lava flow, contains phenocrysts of olivine and microphenocrysts of augite in a very fine granular nonporphyritic olivine basalt. The lava from Puu Pimoe is an olivine basalt containing phenocrysts of olivine (3%) and a few of augite in an internal groundmass composed of olivine (5%); augite (32%) ...; labradorite (35%); interstitial andesine ...; magnetite (15%); and pale-grown interstitial glass (5%). An older lava flow crossed by the coastal trail 1.2 miles southeast of Keoneoio, is similar to the Pimoe flow, but augite phenocrysts are more numerous, and interstitial andesine has not been recognized.

The Historic (1750) Lava Flow

The lava flow near Makena [Kanaio] erupted about the year 1750, probably in and from two separate vents low on the southwest rift. One flow originated at Kaluaolapa, at an altitude of 575 feet, and the other from a fissure at an altitude of 1,200 feet, a mile to the northeast. The two lavas are identical in composition in hand specimen and under the microscope. The rock is a picritic basalt of aa type, containing abundant phenocrysts of yellowish-green olivine up to 5 mm across and black augite as much as 8 mm across. The augite phenocrysts (18%) are pale purplish-brown, euhedral to subhedral in outline ... In places a number of such grains are grouped together to form glomerocrysts. The olivine phenocrysts (20%) are colorless in thin section ... The ground mass is interstitial, with an average grain size of .05 mm. It consists of olivine (5%); augite (25%) ... black glass (3%), heavily charged with-dusty iron ore.

The lava was briefly described by Sidney Powers (1920) and a specimen collected by him was described by Washington and analyzed by Keyes (1928). Powers noted that the 1750 flow issued from Puu Pimoe, and Washington accepts this argument. Inasmuch as the 1750 flow and the flow from Puu Pimoe are entirely separate flows, probably of different age, there is some doubt as to which flow was analyzed by Miss Keyes. Washington's description, however, fits better the flow from Kaluaolapa, and on Powers' map the lava labeled "1750 flow" is the Kaluaolapa flow. It is probable, therefore, that the analysis is of the 1750 lava flow. (Stearns 1942:302-03).

Historic Flow of 1750

A generally accepted fact is the recent historic flow that covered much of the coast from west Kanaio to Ke'one'oi'o. This flow, which significantly changed the coastline and formed La Perouse Bay, is of interest not only for the oral traditions surrounding it, but also the implications it has for similar flows and their social impact in Kanaio and A'uahi. The analysis in Stearns (1942) has been the basis of all subsequent dialogs and thus is here quoted in full.

Historic Lava Flow

Many of the lava flows in the summit depression and in the Ulupalakua-Nuu area are black and bare, obviously

erupted in recent time. Two of the freshest are near La Perouse Bay. They are differentiated from the other Hana lavas ... simply because Hawaiian legend has recorded them.

The upper one broke out of a fissure 1 1/4 miles south of Ulupalakua (Makena P.O.) on the south slope of the old cone, Pu'u Mahoe, at an altitude of 1,550 feet. [In actuality the fissure is on the south slope of Kemehunehune, at 4200 feet] The spatter bordering the fissure is covered with brush and the upper stretches of pahoehoe support a little vegetation. Farther seaward, where there is little rain and the aa clinker is very rough and open, the lava looks as fresh as some of the flows of Mauna Loa that have been poured out in the last 50 years. The flow is 3 miles long, 5 to 20 feet thick, and is an olivine augite porphyry. It extended the coast line about three-quarters of a mile.

The lower flow broke out at Kalua O Lapa cone, which is on a fissure parallel to the upper vent, but a little to the eastward at an altitude of 575 feet. The flow is similar to the upper one and is covered with rough aa clinker and a little pahoehoe that congealed while changing to aa. It overlies the Mahoe flow but may have been laid down only a few hours or days later. Both flows contain large balls, or wrapped masses of aa typical of many Hawaiian lava flows.

The earliest published record seems to indicate that the Lapa flow might be the historic flow and the Mahoe flow earlier, but the similarity of petrology and degree of weathering suggest simultaneous eruption. The opening of two distinct vents during one eruption on the same rift is common in Hawaii.

The record appears in Dana, who states "The period of the last summit eruption is unknown. Mr. Bailey, of Wailuku, Maui, has stated that, according to an island tradition, a lateral eruption of the mountain occurred about 150 years since in the district of Honuaula of the southern part of East Maui, at an estimated elevation above the sea of about 400 feet. "(Dana 1890:278-79) This definitely describes the lower flow.

The late Lorrin A. Thurston, a serious student of Hawaiian canoes and lore, published the following account, which confirms the recency of the eruption. It is quoted in full because many geologic writers have given categorically the date 1750 to the lava flow.

Popular impression and report is to the effect that there is no record, or even tradition, of volcanic activity on the island of Maui, although the mute evidence thereof, both in the crater of Haleakala and on its outer slopes, is the shape of comparatively recent lava flows, are many and plain.

Among more recent flows, one, especially, is quite as fresh in appearance as the 1801 flow from the western slope of Hualalai, in Kona, Hawaii, which was seen and the date recorded by a white resident.

The writer shared the popular opinion, and, about 1879, remarked upon the supposed fact to Father Bailey, the venerable American missionary who came to Hawaii in 1837. He was stationed on Maui in 1841 and lived there for many years.

In his usual deliberate drawl, Father Bailey replied: "That is not so!" "What do you know to the contrary?" I asked. He thereupon made in substance the following statement, which for 26 years was all that I heard concerning knowledge or tradition of volcanic activity on the island of Maui.

"I was first stationed on Maui in 1841," said Father Bailey. "In my trips about the island I noticed a lava flow at Honuaula, at the south end of East Maui, which appeared much fresher than the other flows--much more so than it appears now (1879).

"I asked the natives if they knew when that flow occurred, and they told me that their grandparents saw it. They also told me that a woman and child were surrounded by the flow, but escaped after it cooled."

I have since visited the locality indicated by Father Bailey and examined several other recent appearing flows nearby. The government map of Maui shows three such flows, all in Honuaula and originating below the upper road around the island. The flow in question, manifestly the latest, begins about half-way down, between the upper road and the sea. It spreads to a width of a mile or so at the coast, having built quite a promontory out into the ocean. Its source is at a small hillock or crater, two rocky projections with perpendicular interior sides, a few feet apart, marking the spot from which the torrent of lava poured forth. The flow rapidly widening, ran to the sea, a distance of a couple of miles or so. The lava is rough aa, entirely devoid of vegetation, and looks as though it might have first seen daylight in the twentieth instead of the eighteenth century.

The flow forms the western side of Keoneoio, or La Perouse Bay, named after the French explorer who landed there in 1780. The government light-house, known as the Kianu Light, is at the eastern point of the bay. The flow partially

surrounds and forms an almost completely protected section, some 10 feet deep, at the head of the bay, which had been converted into a fish pond by the old natives. A storm opened up a passage through the wall, and the interior forms a perfectly landlocked little harbor, safe in all weather, for sampans and boats of that size. Dr. Raymond built a wharf there, which is still in good condition. There is a small settlement on the beach amid a splendid growth of algaroba trees.

The flow is manifestly of later formation than the adjacent flow to the north and the other more recent flows to the eastward. The flow immediately eastward has considerable growth of the old dry-country type, among others there being wiliwili trees with trunks up to four feet in diameter. This is the tree the wood of which is so light that it is used by the Hawaiians as the ma, or float, of outrigger canoes.

About 1906 I happened to be camping on the outer Haa slope of Haleakala, near the summit, with Louis von Tempsky. We pitched tent and went into camp late in the afternoon, just as it began to rain. It did not stop raining for two days and nights, so that four of us, with three Hawaiian cowboys, were storm-bound for that length of time.

In passing away the time, I mentioned the above conversation with Father Bailey, when one of the cowboys, a half-Chinese named Charlie Ako, said: "I know about that."

"What do you know?" I inquired.

"I married a woman from Honuaula," said Ako, "and my father-in-law, of Honuaula, who died last year, at the age of 92 years, told me that when the flow at Keoneoio ran out, his grandfather saw it, and that, at that time, he (the grandfather) said he was old enough to carry two coconuts from the sea to the upper road. "

This is a distance of 4 or 5 miles. The trail is rough and the upper road is at an elevation of approximately 2,000 feet.

I obtained no further information from Ako.

I told several others of what I had heard about the flow; but did not myself visit Keoneoio until 1922, when I made a close inspection of the flow and sought information concerning it from the kamaaina living along the beach between Makena and Keoneoio.

There I met three old Hawaiian men, all of whom had known Ako's father-in-law during his lifetime. Each of the three men, separate from the others, told me the following tradition, or legend concerning the flow in question, differing only in minor details.

A man and a woman with two children, a boy and a girl, lived at the point in Honuaula, where the lava flow which forms the west side of Keoneoio originated.

"They owned a flock of chickens, and had made a vow that no one should have one of these chickens until some of them had been sacrificed to Pele, the goddess of the volcano.

"One day an old woman appeared and said she was hungry and asked for a chicken to eat.

"The couple replied that they could not give her a chicken because of their vow to Pele.

"The old woman thereupon became enraged, disclosed herself as Pele and, with the typical cruel and vengeful spirit of the Hawaiian gods, instead of being grateful to the couple for their faithfulness in their vow to herself, cast a spell upon the earth and produced a lava flow on the spot, with which to destroy the offenders.

"The mother seized her little girl and started to run up the mountain to escape the lava.

"Pele seized the woman and split her in two; turned her and her child into stone and fixed the halves, one on each side of the spot where the lava was pouring from the ground, where they can be seen to this day, conclusive evidence of the truth of this legend.

"Meanwhile the father grabbed his little son and started to run with him for the coast, intending to swim across the channel for safety to the island of Kahoolawe, some eight miles away.

"While Pele was destroying the woman, the man made some distance down hill before Pele could attend to him. Having disposed of the woman, Pele at the head of her lava flow, then chased after the husband. He, arriving first at the beach, plunged into the sea, and, with his son, had reached several hundred feet from the shore when Pele arrived. She threw rocks at him, finally hitting and killing both father and son. She turned both to stone. They can be seen to this day, a large rock and a little, rising from the sea, several hundred feet out from shore, undisputed proof of the truth of this story, as anyone can see who chooses to go and look.

None of the above mentioned kamaainas could give me any information bearing on the date of the lava flow in question.

Checking the statements made by Father Bailey, a rough estimate of the date of the flow is arrived at in the following manner:

Father Bailey stated that about 1841 people then living told him that their grandfathers had seen this volcanic eruption.

Allowing the usual number of years to a generation, say 33, the ages of the fathers and grandfathers of people living in 1841, would, combined, amount to 66 years. To this add the age of Father Bailey's informants, say another 33 years.

This would carry back the date of the flow approximately 99 years prior to 1841, or, say, to 1742.

Checking the date of the flow by Charlie Ako's story, we get the following. Ako's father-in-law was 92 in 1905. That would carry him back to, say, 1813. A boy who could "carry two coconuts from the sea to the upper road" must have been at least 10 years of age. Deducting this 10 years from the years of a 10 generation, 33 years, leaves 23. Deduct this figure from 1780, and it leaves 1757.

... These two methods of calculation are rough, but they come within 15 years of each other.

Take the average between the two dates and we have 1750, as the approximate date of the last lava flow on Maui. If anyone has a different method of calculation, a different theory or other information, the field is open for speculation, conclusion and publicity.

I have searched the histories and early accounts of Hawaii for any record or tradition of the last volcanic activity on Maui but have found only two references thereto--one in a comparatively recent issue of the Hawaiian Annual, and one in James A. Dana's Characteristics of Volcanoes, published in 1891.

Both refer to Father Bailey as authority for saying that there had been a lava flow, but the editor of the annual, Thomas G. Thrum, tells me that he got the story concerning Bailey's statement from me, so that is no corroborating evidence. It is probable, also, that Mr. Dana's statement emanated from the same source, as he was in the islands shortly before his book was published, and he simply credits Father Bailey with the statement that the flow was "about 150 years ago," which would make it 1740.

If anyone can direct me to any other record or evidence or tradition of recent volcanic activity on Maui, I will accept and publish it gratefully. It will add an interesting item to Hawaiian volcanic lore. (Thurston 1924)

J.F.G. Stokes, Hawaiian ethnologist, thinks Thurston's use of 33 years as the length of a Hawaiian generation is too long and that 25 years is better. He favors the year 1770. As a definite date cannot be assigned, 1750 is used herein because it has come into general use.

The numerous black lava flows are indicative of late volcanic activity, and judging from the time interval between these late flows as shown by the amount of weathering and vegetation, it may be that Haleakala will erupt again. Possibly the large number of earthquakes since 1937 having epicenters near Maui have volcanic significance. (Steams 1942:102-07)

APPENDIX II

DRY FOREST COMPOSITION

(from Resnick 1977)

Jane Resnick's 1977 survey of the native forests in upland Honua'ula is the only extent survey of its kind for this region. Unfortunately she did not include A'uahi as it is presently seen as a portion of the neighboring district of Kahikinui, though she does note that it contains the greatest remnant extent of the native dry forest. This is also reflected in the much work by botanists such as Rock (1913) and Lamb(1981) who frequently cited A'uahi individuals as the type source for their species identification.

Resnick divides the forest into lower (below 2600' elevation) and upper (from 2600'4000' elevation) components. The lower forest was identified as including the following native trees: the dominant individual is the *wilwili* (*Erythrina sandwicensis*). The *naio* (*Myoporum sandwicense*) is likely responsible for the place-naming of Kanaio, as it was till the mid-19th century a major component of the forest. The only species which appears to be extending its range, at least in wet gulches, is the *kukui* (*Nototrichium* sp.), possibly due to the interaction with pigs. Other species noted included the *lama* (*Diospyros ferrea*), *alabee* (*Canthium odoratum*), *akoko* (*Euphorbia celastroides*), *obe makai* (*Reynoldsia sandwicensis*), *hao* (*Rauvolfia* sp.), *aiea* (*Nothocestrum latifolium*), 'ala'a (*Planchonella* sp.) and *kolea* (*Myrsine* sp.). Resnick noted several native vines, *huehue* (*Cocculus Ferrandianus*) and *Bonamia Menziesii* along with the native poppy (*Argemone glauca*) which is very common in the area. These all compete with a variety of introduced exotics to which they have been unable to compete successfully due in large part by goat/cattle grazing. The impact of grazing is especially noticeable in these lower areas as water is more scarce and thus food is more limited, so the pressures of the huge goat herds (some estimated at upwards of 100-200 animals in 1992) on these plant populations can not be underestimated. It has been suggested that it may be possible to revitalize the forest sections in large part by curtailing the grazing activities- by fencing off or eradicating the goats/cattle the endemic species may be able to recover some of their former vitality.

The upper forest includes most of the species noted above, with the exception of the *wilwili*, but includes several species unique to the upper reaches, such as 'obia lehua (*Metrosideros collina*), *halapepe* (*Pleomele aurea*), both of which are dominant species in the remnant forests, though the *halapepe* has been heavily impacted by goats, which butt against the trunks to knock it over (for reasons unknown). It was noted in the summer of 1992 that fully 1/4 of the *halapepe* located had suffered from this treatment, most in the few weeks prior to the survey. Other tree species present included *iliabi* (*Santalum* sp.) in small numbers after the great sandalwood harvesting of the early 19th century, the *olupua* (*Osmanthus sandwicensis*), *maua* (*Xylosma hawaiiense*), *kanila* (*Alphitonia ponderosa*) and *beau* (*Exocarpus* sp.). At the highest elevations the *mamani* (*Sophora chrysophylla*) becomes a dominant member. Understory growth includes 'ulei (*Osteomeles anthyllidifolia*), *pukiaue* (*Styphelia tameiameia*), *maile* (*Alyxia olivaeformis*), *Wikstroemia* sp., *Sicyos* sp. and *Korthalsella* sp.

It should be noted that even in A'uahi these species are limited to areas of relatively little traffic, specifically small kipuka in the recent a'a flows or on the a' a flows proper. This makes them less attractive to both goats and cattle, since during times of relative plenty there are easier and more plentiful grazing areas elsewhere. However in times of drought, as has been experienced in the area for the last 10 years, the relatively protected areas become havens for goat herds, which have severely decimated the remnant forests far beyond what Resnick in 1977 feared, which even then was a rapidly decreasing pattern of isolated pockets of endemic forest.

PLANT SPECIES NOTED BY ROCK(1913) AND LAMB(1981) FOR A'UAHI

In both Rock's (1913) and Lamb's (1981) works there are various citations to specific species located in A'uahi. Rock obviously considered A'uahi to be a primary source for dry forest plants as a number of plants are not only specifically cited and described by location, but a number of his illustrative plates are of A'uahi plants. The following is a summation of those plants specifically cited. It should be noted that this is not an all-inclusive list, as it does not include those plants noted by others (such as Resnick above) as present in the area, but only those considered significant or as type-examples by Rock or Lamb. The scientific nomenclature is from the original texts and has not been updated.

Halapepe **Dracaena aurea** H. Mann.

On the Kula slopes of Maui there once existed a forest of this tree, the remnants of which can still be seen.(Rock: 109)

On the lava fields of Auahi, on the southern slope of Haleakala, the tree is most numerous, but differs in many regards from the specimens found in the forest of Makawao on the same mountain. The leaves of the Auahi specimens are much smaller and more graceful.(Rock:112)

ʻIliahi **Santalum Freycinetianum** Gaud.

On Lanai and East Maui on the southern slopes of Haleakala occurs Hillebrand's var. *cuneatum*, which differs from the species in its small thick, fleshy, suborbicular leaves, which are slightly cuneate at the base. It is usually shrub, but to the writer's astonishment it grew as a veritable vine, completely covering a species of *Sideroxylon*.(Rock:129)

ʻIliahi **Santalum Haleakalae** Hbd.

This species, which is easily distinguished from the other Hawaiian Sandalwoods by its dense corymbose inflorescence, which is bright scarlet, is peculiar to the Island of Maui, and at that confined to the eastern part Mt. Haleakala, after which mountain it was named by Hillebrand, who records it as a shrub.

It is, however, also a tree, though not of any size; the highest trees observed by the writer were about 25 feet. It grows around the crater of Puunianiau, on the northeastern slope of Mt. Haleakala, at an elevation of 7000 to 9000 feet.(Rock: 133)

It has been reported by Hillebrand to grow only at very high elevations near the summit of the mountain, together with *Rainardia* and *Geranium*. It may, however, be of interest to state that it was observed by the writer on the southern slopes of Haleakala on the lava flows of Auahi, Kahikinui, at an elevation of 2600 feet. At this locality, which is one of the richest botanical districts in the Territory, it is a fine-looking tree and does not show any of the signs of stiff branches and short, gnarled trunks, as, of course, must be expected at high altitudes. Were it not for the dense inflorescence and bright scarlet perigones, one could easily mistake it for **Santalum ellipticum** of Oahu, which it, in reality, resembles greatly.(Rock: 135)

Mamani **Sophora chrysophylla** Seem.

On Haleakala, Maui, the trees are of medium size, though reaching a similar development at Auahi as near the volcano at Puau. On the upper slopes of Haleakala they are shrubby.(Rock: 189)

MAMANI occurs as a small to medium sized tree 3' in diameter and 40' tall in good sites. It occurs widely from just above sea level to 10,000' on Mauna Kea. It, along with NAI, forms an extensive belt of pygmy forest on the higher slopes of the mountains of Kauai, Maui and Hawaii.(Lamb: 50)

Wilivili **Erythrina monosperma** Gaud.

The *Wilivili* is the feature of lowland vegetation up to 1500 feet. It thrives best in the hottest and driest districts on the leeward sides of all of the islands, especially on the scoria and among rocks... It is characteristic of the lava fields of North Kona, Hawaii, on the west end of Molokai, the gorges of Mauna Lei and Nahoku on Lanai, the lava fields on the southern slopes of Haleakala, Maui, in the dry canyons of Kauai, and even on the barren island of Kahoolawe a few trees are still in existence.(Rock: 191)

It inhabits dry lowland forest 1,500 to 2,000' elevation and is quite plentiful locally... On Maui a good number can be seen along the road between Ulupalakua and Kaupo, in an area called Auahi by Rock, associated with *Reynoldsia sandwicensis*, OHE OHE MAKAI.(Lamb: 49)

Maboe **Alectryon micrococcus** Radlk.

The *Maboe* inhabits the dry regions on the leeward side of the islands. It is very scarce on Oahu, where it grows in Makaha valley of the Kaala range, and practically extinct on Molokai; on Kauai it was found by Mr. Francis Gay back of Makaweli, while the writer discovered a new locality from which it had not been reported previously. About seven miles from Ulupalakua, on the Island of Maui, is a small area of forest on the lava fields of Auahi. Unpromising as it looks from the road, this forest is botanically, nevertheless, one of the richest in the Territory. It is there that the *Maboe* is not uncommon, and still thrives in company with many other rare trees peculiar to that small area, such as *Pelea*, *Xanthoxylum*, *Bobea*, *Pittosporum*, *Pterotropia*, *Tetraplasandra*, etc. Owing to its scarcity, it is unknown to most of the old natives, who have heard of it only in rare instances

from their ancestors. (Rock:277-78)

This MAHOE is more widely spread as it is endemic to Kauai, Molokai and Maui. On Maui, Rock found it in the very dry area of Auahi on the south slope of Haleakala where he found so many other species. It was fairly abundant at that time. (Lamb: 76)

O'a or *Kanila* **Alphitonia excelsa** Reiss.

It inhabits the dry regions on the leeward slopes of all the islands, but is nowhere common except on Kauai and at Auahi, district of Kahikinui, on Maui, where it is gregarious on the *aa* lava fields. It is in this latter place that the writer met with trees whose trunks were more than 2 feet in diameter.

On the islands of Molokai and Lanai it is very scarce indeed and found only on exposed ridges as straggling shrubs. On Maui, on the southern slopes of Haleakala at an elevation of 2600 to 3000 feet, it is a beautiful tree with a straight trunk. The name *Kanila* is unknown on the island of Maui, for this species; it is always referred to as the *O'a*, while the name *Kanila* is applied to *Colubrina oppositifolia*, from Hawaii. (Rock:287)

Mana **Xylosma Hillebrandii** Wawra.

This tree, which is also called *Mana* by the natives, is to be found on all the islands of the group, with the exception of Oahu and Kauai. It is a much smaller tree in certain localities, only reaching a height of 10 to 15 feet, preferring the very dry lands on the leeward sides of Lanai, Molokai, Hawaii, and Maui. On the latter island on the southern slopes of Haleakala, and on Hawaii in the rain forest of Kau, it reaches its best development: there have been observed trees 40 feet in height with a trunk of over one foot in diameter.

On Maui it grows above Makawao and on the southern slopes of the crater of Haleakala on the lava field of Auahi, district of Kahikinui, at a height of 2600 feet above sea level. (Rock:315)

Tetraplasandra meiandra (Hbd.) Harms.

On Maui, on the lava fields of Auahi, situated on the southern slopes of Haleakala, grows a beautiful tree which has to be referred to ... It is a handsome tree of 50 feet or so in height, with a trunk of almost two feet in diameter. (Rock:349)

Kolea **Suttonia** var. **lavarum**. Rock var. nov.

The variety *lavarum* occurs on the southern slopes of Mt. Haleakala, Maui, on the *aa* fields of Auahi, on the land of Kahikinui, an exceedingly dry locality at an elevation of 2000 feet. It was collected by the writer flowering and fruiting November, 1910. (Rock:371)

Kolea **Suttonia auahiense** Rock

That *S. auahiense* is a good species is brought out by the fact that the latter grows in company with *S. sandwicense* with black ovoid fruits on the lava fields of Auahi, Maui, and nothing is more in contrast than to see these two species growing side by side, especially when loaded with respectively the bright yellow and the black fruits. (Rock:383)

Alaa **Sideroxylon sandwicense** (Gray) Benth. & Hook.

It is usually found in the dry districts of nearly all the islands, and is especially common on Lanai in the valleys of Kaiholena and Mahana. On Maui big trees can be found above Makawao, in the gulches of the north-western slopes of Mt. Haleakala, as well as at Auahi, on the south side of the said mountain. (Rock:385)

Alaa **Sideroxylon auahiense** Rock.

It was discovered by the writer during the month of November, 1910, on the Island of Maui, southern slopes of Mt. Haleakala, on the lava fields of Auahi, district of Kahikinui, elevation 2600 feet. It grows in company with *Alectryon macrococcus*, *Pelea multiflora*, *Pterotropia dipyrrena* and *Sideroxylon sandwicense*, as well as with another *Sideroxylon* with perfectly globose, orange-colored fruits which are smaller than in the species in question, and may be described as follows:

Alaa **Sideroxylon** var. **aorantium** Rock var. novo

... The variety occurs on the Island of Hawaii in North and South Kona, as well as at Auahi, Maui, and can be distinguished at a glance from the species, even at a distance. (Rock:391)

Sideroxylon spathulatum Hbd.

The writer met with this same species on the southern slopes of Mt. Haleakala, on the lava fields of Auahi, at an elevation of 2000, near the government road, in company with *Reynoldsia sandwicensis*, *Antidesma pulhinatum*, etc. (Rock:391)

Hao **Rauwolfia sandwicensis** A. DC.

The *Hao* is a medium-sized tree with milky sap ... When growing on the rough *aa* lava flows on the leeward sides of the Islands,

as on Auahi, Maui, on the southern slopes of Mt. Haleakala, it is a more or less stunted shrub.(Rock:409)

Aiea **Nothocestrum latifolium** Gray.

On the Island of Maui, on the southern slopes of Haleakala on the lava fields of Auahi, land of Kahikinui, occurs a variety enumerated as *B* by Hillebrand in his Flora. During the winter months, especially in the month of November, the trees are adorned with large dark green foliage hiding the ugly gnarled stiff branches, while in the month of March they are either bare or with only very scanty foliage.(Rock:421)

Rock found this species to be common on the driest parts of Lanai and Molokai and also in the very dry area of Auahi beyond Ulupalakua, Maui where I saw one specimen ... Trees are small, gnarled, with stiff branches. The dry, rough, rocky habitat is very severe. Trees are few and far between.(Lamb:121)

Naiio **Myoporum Sandwicense** (DC.) A. Gray.

The *Naiio* or Bastard Sandalwood is a very handsome tree which reaches a considerable size ... Next to the *Obia* and *Koa*, it is one of our most common forest trees, growing at all elevations from sea level, where it is a small shrub 2 feet high, up to 10,000 feet. On the Island of Maui, in the dry forest back of Makawao (elevation 2500 feet), as well as at Auahi, southern slopes of Haleakala, it attains its greatest height and diameter of trunk; trees of 50 to 60 feet with trunks of more than 3 feet in diameter are not uncommon. It prefers the leeward sides of the islands, especially the *aa* lava fields, regions with very little rainfall, as well as the high mountains of Mauna Kea, Mauna Loa, Hualalai and Haleakala, where it forms the upper forest zone together with the *Mamani* (*Sophora chrysophylla*), *Raillardia*, *Coprosma*, and *Styphelia*, reaching a height of about 20 feet, and withstanding heavy frosts. At the lower levels it is associated with the *Mana*, *Holei*, *Aalii*, *Kauila*, *Ubiuhi*, etc ... Dead trees are called *Aaka* by the natives.(Rock:427-29)

Abakea **Bobea Bookerii** Hbd.

It also grows on the lava fields of Auahi, district of Kahikinui, southern slopes of Mt. Haleakala, Maui; there the writer met with a single tree with a large trunk vested in a gray large-scaly bark; it had three main trunks each of a foot or more in diameter. It is associated with *Alectryon macrococcus*, *Tetraplasandra meiandra* var., *Pittosporum*, *Dracaena aurea*, and others. It is one of the rarest trees in the territory.(Rock:443)

Ohe ohe makai **Reynoldsia hillebrandi** Sherff

It grows in the company with WILIWILI at Puuwaawaa, Hawaii, and on the dry side of Haleakala, Maui, and with LAMA near Wahaulu Ranger Station in Puna, Hawaii. (Lamb:100)

APPENDIX III
THE CULTURAL LANDSCAPES OF THE PAST IN KANAIO-A'UAHI

I. The Physical Evidence

While no formal detailed archaeological survey has ever been conducted in either Kanaio or A'uahi, in 1930 Winslow Walker conducted a survey of major sites on the island of Maui under the auspices of the Bernice P. Bishop Museum. Unfortunately while the manuscript was completed in draft form, it was apparently found unacceptable for publication and has thus languished in the Bernice P. Bishop Museum archives. In the 1960's Elspeth P. Sterling compiled all available archaeological, legendary and interview sources for a compendium of archaeological and legendary Sites of Maui in the same format as the volume on Oahu that she and Catherine S. Summers had completed and published in 1978 for the Bernice P. Bishop Museum. This work was supplemented by interviews and place-name mapping conducted during the Bishop Museum sponsored survey of sections of Kahikinui in 1966-1967 under the direction of Peter Chapman. Unfortunately, as with the Walker work of the 1930's, neither the Sterling 'Sites of Maui' nor the Kahikinui research was ever completed and published. Thus while there is a fair amount of material available that refers directly or indirectly to Kanaio-A'uahi, it exists in fragmentary form without any synthetic discussion or analysis.

The major source used in this discussion of prior archaeological work is the E.P. Sterling ms., as she was working with Peter Chapman in collecting material on Kahikinui, and thus her manuscript files contain the majority of information available through 1980 including the earlier work of Walker and others in Kanaio-A'uahi.

The other sources that directly discuss the study area are varied in nature: the first is the various writings of Inez Ashdown, a long-time resident of the 'Ulupalakua area and very familiar with the Kanaio-A'uahi area. The second source is the files of the Office of Historic Sites, Department of Land and Natural Resources. In the 1970's they conducted a series of very quick reconnaissance surveys on this entire section of the island of Maui for the purposes of re-checking the condition and preservation possibilities of various sites discussed in the earlier Walker (1931) research. The goal was to develop an initial database of archaeological and historical sites suitable for the State and National Register of Historic Places. Unfortunately the work is rather skewed as time and staff limitations forced the work into areas of minimal effort, thus the coastal regions, with easily-visible site complexes became the emphasis of the study.

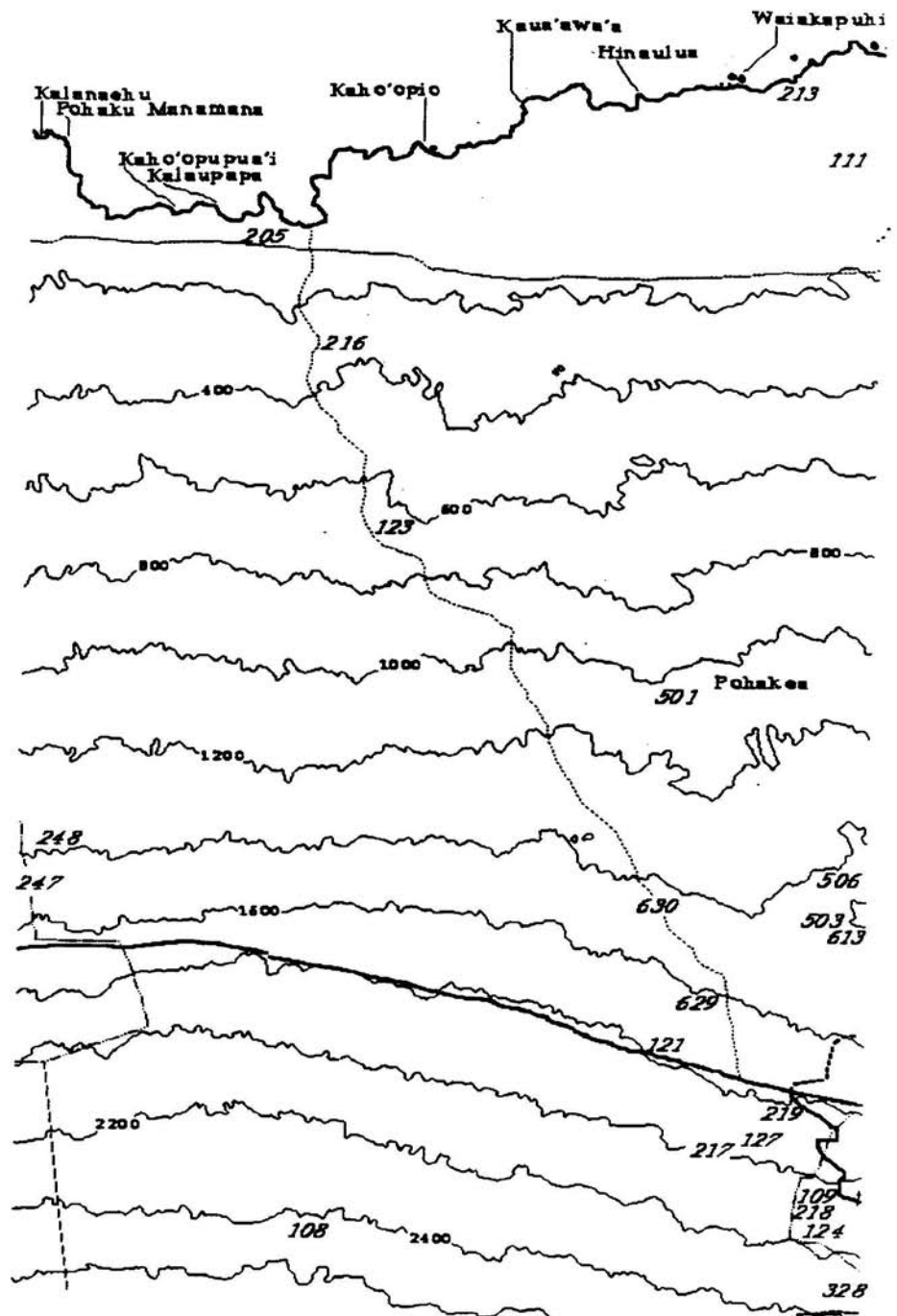
In order to more easily visualize the patterning of the archaeological record in Kanaio-A'uahi, the sites have been organized into functional types (as defined by Sterling and others) rather than just by ahupua'a location. The site numbers given are arbitrary location numbers for the purposes of map identification (see Map II-IV). Unless otherwise noted all the following information is directly abstracted from the Sterling ms files. Sites noted with asterisks are in bordering ahupua'a (Kalo'i to the west and Lualailua Hills to the east) outside the formal boundaries of the study area.

Location Code:

To preserve the anonymity of the sites, but at the same time provide some orientation to their location, the following coding system has been used for this study:

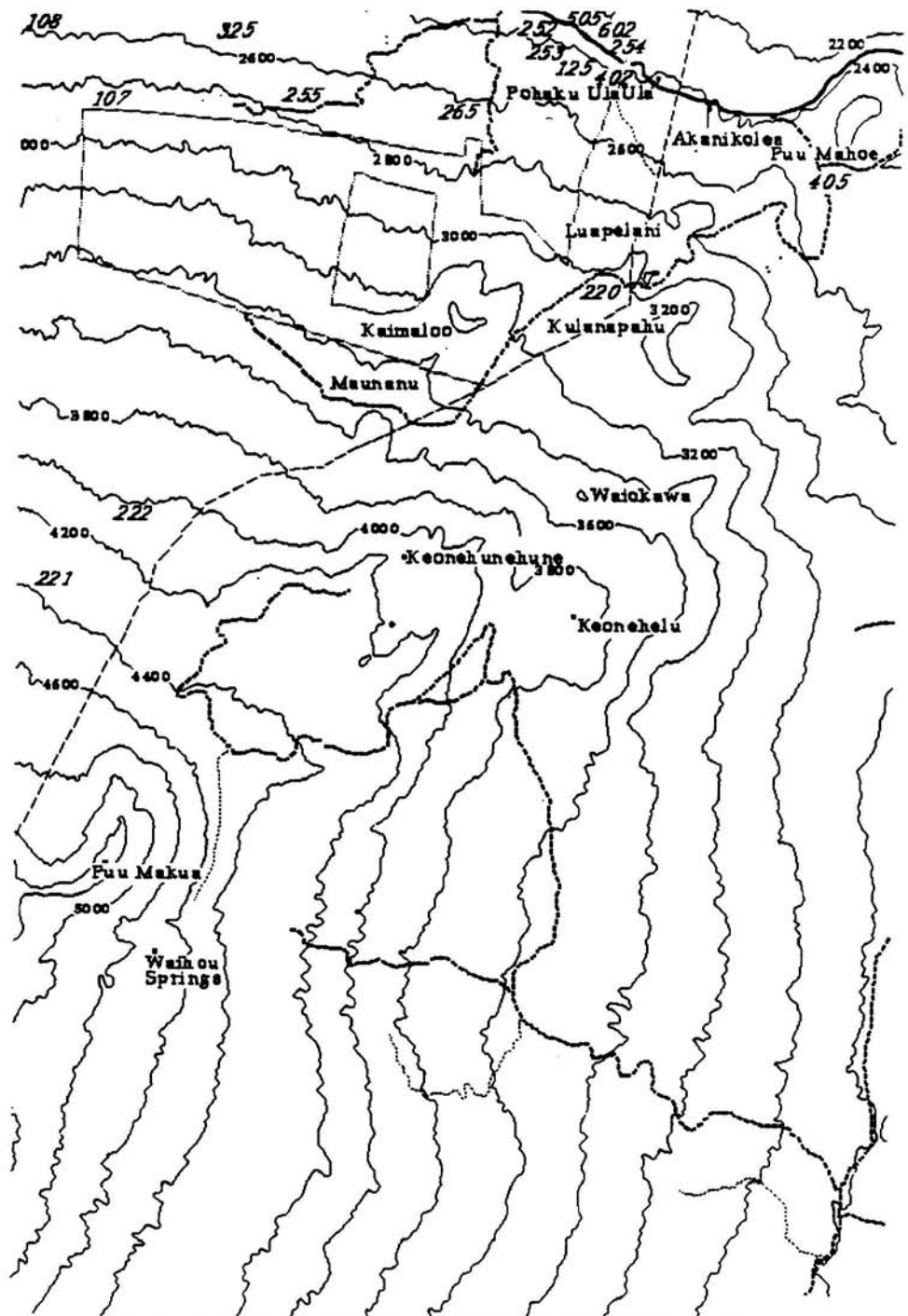
- From the coast - 300 foot elevation= A
- From 300 - 600 foot elevation= B
- From 600 - 900 foot elevation= C
- From 900 - 1200 foot elevation= D
- From 1200 - 1500 foot elevation= E
- From 1500 - 1800 foot elevation= F
- From 1800 - 2100 foot elevation= G
- From 2100 - 2400 foot elevation= H
- From 2400 - 4000 foot elevation= I
- Above 4000 foot elevation= J

Sites with roman numerals are those located by prior field study or mentioned in the literature. Sites with italicized numerals are those that were located during this field survey.



MAP 8 **Lower Kanaio** **Archaeological Sites**

R.B. 9/94



MAP 9

Upper Kanaio Archaeological Sites

R.B. 9/94

Religious:

101[Kanaio]: Ke-one-ulaula (Red ... Sand). Has kukui nuts from the grove of Lanikaula (Molokai)--this became a second grove also called Lanikaula.(Po interview 1966)

102*: 'Aku, a ho-oulu-'ai heiau lies on the seaward side of the road.(Po interview 1966)

104[A/Kanaio]: Located above the short trail several hundred feet near the a'a flow on the Kaupo side. It is a large rectangular enclosure approximately 60 by 60 feet, of a' slabs (not chunks). In the walls are pieces of coral. Opening on the Kaupo side. Walls are 10 feet high and 3 feet thick. Depression on the top of wall are possibly for images. From shore trail to this structure are scattered a number of stone cairns approximately 6 feet high.(Sinoto ms. 12/22/61)

120[AlKanaio]: Wahene Platform, which is Walker site? listed as a heiau or burial site. The presence of post holes in the platform suggests a house site instead. It is a rectangular platform 18m by 8m, on a lava flow 250m north of the shore.(Connolly 7/11/1974)

103[GlKanaio]: Another heiau is at Hulupapa, a fig grove lies mauka of it.(Po interview 1966)Papanuiokane Heiau site 192 [BI-27]. This site is located at Hulupapa approximately 200 feet above the upper Kaupo trail. It consists of a platform measuring 63 by 44 feet, of rough a'a without pebbles or coral. The front is 3 feet high. Drums are heard from this heiau.(Walker ms 1931)

Site 192, Papanuiokane Heiau. The Walker platform. The site is located approximately 700-800m to the west of the Kanaio (Honua'ula) Church, at the same elevation.

The vegetation includes koa haole, lantana, yellow poppies and the Apples of Sodom bush. It is cleared and roughly leveled with paving, 1 short wall and a stonelined pit. There were no visible uprights.(Connolly 9/21/1973)

A large enclosure of well-stacked core-fill a'a with a standing upright in the northeast corner in front of a very large boulder. This enclosure is located in the site 251 complex at the boundary between Kalo'i and Kanaio. The heiau appears to have been somewhat truncated at the makai end by a relatively recent bulldozed jeep trail, and likely consists of a series of clustered enclosures in this flat pasture section. The location seems somewhat unusual given the proximity of a ridge nearby with excellent overlook visibility, while the apparent heiau site is located in a lower section with somewhat limited visibility. The site is not particularly large, and consists of a pair of enclosures and cleared paved areas covering approximately 15m x 12m.(Bordner 12/29/91)

105[A/Kanaio]: Ko'a site Ho-4 [B2-6]. Near the shore and below the trail and a little towards the Kula side of the heiau [Ho-3] is a large pond (now dry). On the makai side is a rectangular platform which may be a ko'a. Coral on top.(Sinoto ms 12/22/61)

106[A/Kanaio]: Heiau site Ho-2 [BI-31]. Mauka of Pi'ilani Bay, approximately 2000 feet. Houses of Kanaio village almost directly above on the hill. Terraced platform built into a rocky hill. Faces mauka, approximately 7 feet high. Makai side is a natural hill. An old trail must come through here.(Savage and Tompkins ms 11/61)

Kanaio Mauka complex, which consists of an early historic houselot complex in an arid area. There is sparse lantana, koa haole and Apple of Sodom bushes. At the northeast corner is a thick tangle of fig trees. There is a large terrace platform and at the northeast end is E.P. Sterling's site Ho-2(Ma-BI-13). The complex measures 105m from east-west by 70m north-south. It is constructed of a'a, mostly on flat ground or base of a 5m high cliff. It has historic and pre-contact artifacts.(Hommon 8/15/1973)

125[I/Kanaio]: Series of large enclosure/boundary walls and historic house(collapsed) while some of walls seem historic, and

all stacked a'a up to 1.8m high, .8, wide and well-done. It somehow seems that it larger than it should be and has front (downslope) facing of very large stone. It appears to be a pre-contact site that was used during the historic period as a house site. Some of the eucalyptus on-site (this is the West Eucalyptus grove) a very large but definitely post-date the walls, the trees being planted in the 1930's by CCC workers.

Some of the enclosed areas do not make much sense as they are on steep slopes and the layout is very odd in certain spots.

The site contains a well-made rectangular cistern 2m x 3m (interior diameter) of mortared stone which had a protective roof of corrugated iron (still present though collapsed). The collapsed house was apparently single-roof with board-and-batten siding measuring approximately 10 feet x 30 feet. Downslope of this site are several further enclosures (to West), and to the North are several level platform units situated between a pair of parallel walls. The size of the stones used in construction, and the quality of the stacking is notable, especially on the front facing of the major walls. (Bordner 6/11/1992)

110[G/Kanaio]: Manokaahia Heiau site 191 [BI-26] is located at Puki 200 yards west of the church in a hollow open to the sea. It is an open platform 60 by 63 feet, constructed of rough lava. The front is 3 feet high, the back 1.5 feet high. A wall 2.5 feet high separates the higher and lower platforms. The upper platform is dirt and coral-pebbles. A grave has been placed on this heiau so the natives speak of it as having lost its heiau standing and power. Drums and 'ukeke music are heard here on the nights of Kane. (Walker ms 1931)

Manokaahia Heiau, Walker site 191. It is located slightly mauka and west of the Kanaio (Honua'ula) Church. No distinct structures were seen in this part of the hollow. However, in this hollow it is possible the ruins of Manokaahia Heiau remain. Starting in the church yard, we crossed a wall on the west border. We then walked west down into the hollow roughly in line with the church. We climbed over another wall. Between this second wall and a small ridge bordering on the east side were small poorly preserved rock piles that possibly mark the heiau site. A large mound of rocks may be the grave Walker refers.

What we found did not match Walker's description. More small terraces were evident in the floor of the same hollow makai of the structures described above. (L. Bruce 7/9/1972)

A series of collapsed core-filled walls and platform edges, very badly kicked around, the must be L. Bruce's Manokaahia heiau mounds.

It is located in the mauka section of Site 257 on a higher flat, and so overlooks most of the site, though it is downslope of the habitation platforms. It is impossible to accurately locate any features, though it appears to be a series of stepped platforms with low core-filled a'a walls. There is a boundary wall just mauka running East-West to Honua'ula Church and a second one to the East which separates the flat from the gulch to the East (between the flat and Honua'ula Church). It appears likely that much of the heiau structure was borrowed for the wall construction. Mauka of the boundary is a further series of terraces which appear to be part of the same structure. When the terraces are lined up you end up with a multi-leveled stepped platform structure with low corefilled walls oriented directly towards the East side of Pimoe cone. (Bordner 6/13/1992)

126[G/Kanaio]: The cave of Kaipolohua. On this upper road .. in Kanaio, they passed the cave of Kaipolohua, seaward of place of Lono, son of Pamao, the person about whom there is a story full of pathoes. They passed Kanaio reaching Puuonole where they tread the famous lava of Kuanunu ... (*Kaukoa*, Moses Manu: 2/23/1884)

Kaipolohua Village, from the Legend of Pamano.

Kahikinui, in Maui, is the land in which Pamano was born; in the village of Kaipolohua. Lono was the father of Pamano and Kanaio was the mother. The brother of Kanaio was Waipu ...

The reputation of Pamano as a singer and chanter, after a time, spread over the land of his birth and at last it reached Koolau [Koolau is mentioned as a person so prominently a little further on in the story that I rather think this refers to, him rather than a place and would a place on the Kona side be called Koolau? EPS notes] in the uplands of Mokulau, located in the middle of Kaupo.

Koolau in this tale is a village in the district of Kaupo, adjoining Kahikinui, not the windward district of same name.

Ku'i aku la ke kaulana I ka le'a, a lobe o Koolau i uka o Mokulan, e waiho lai waena lona O Kaupo. (Fornander Collection of Hawaiian Antiquities vol. 5 pt. 2, pp. 302)

Site 1234, Kaipolohua Cave. A very large lava tube identified by Manu (Kuokoa 2/23/1884) as the cave of Kaipolohua. The vegetation is koa haole and Apple of Sodom bushes.

The cave is 56m long, 3.6m by 11.5m wide. No structures or cultural material were noted. Just outside is a 10m square enclosure--Mr. Voss says that it was built at the turn of the century as a pig pen. There is also a terraced platform and retaining wall. Mr. Voss has been told that a former minister of the nearby Kanaio church was buried in the cave in the 20th century. The smaller of the 2 terraced platforms may be the grave monument.(Hommon 10/31/1973)

A series of caves and associated walled structures. The makai cave is Kaipolohua cave, which drops down quickly from the entrance for approximately 15m. At this point the cave is actually an enormous cavern (possibly 16m x 14m), but a partial dike closes down most of the cavern except for a small access (5m diameter) to the back sections. Beyond the dike plug the cave again opens up, to the extent that access to the back sections of the cave are impossible without a ladder as the floor is approximately 5m below the dike plug. The cave appears to continue for at least 20m more, quickly tapering down to a much smaller cave which appears to continue for some distance further.

The entrance section has good soil and a tremendous amount of midden including torch remnants, mammal bone, coral and shell. There is a platform constructed of stacked roof fall material approximately 10m inside the cavern which may be the 'pastor's burial'. While the fall has been stacked into terrace units within the entrance, there are no other visibly unique structures within the cavern. This area would seem appropriate to the tradition that it was used as a school, especially as the terraced section, with the soil present, would fit Sam Po's description of "drawing pictures in the dust", especially as there does not appear to be any soil in the back sections which are too dark to see in anyways. The cavern is very quiet and would be good in that there are limited distractions, especially important given the traditional educational pattern emphasizing detailed memorizing.

It should be noted that Fornander's notes indicate that there was not only a cave of Kaipolohua, but also a village of Kaipolohua; also that Pamano was not only born in this village (cave linked to his name), but also that his father was named Lono, his mother Kanaio.

Mauka of Kaipolohua Cave a section collapsed at some time in the past and the open tube section, which has good soil and is protected from winds, has a number of walls, terrace units and paved areas. At the upper end of the open tube section is a very unusual ramped causeway that leads up to a series of paved terraces that appear to define a heiau. This is likely the Alahaloihi noted on the State map.

At the upper end of the tube section is a cave heading mauka which is the Pamano Cave. At the entrance is a large flat which has been recently (within the last 6 months) cleared of all brush and trees and has a recently-used firepit near the cave mouth. In addition a piece of multi-colored nylon (like a light tent cover) was rolled up on a stone shelf in one corner, with another piece located within the cave entrance. A number of recent broken glass fragments were also located in this area.

This cave is a much smaller one, with the entrance only being 1m high x 6m wide. The cave quickly drops down to .6m high for 10m. The flooring in this section appears to be paved, or at least cleared of much loose material. The cave then opens back up to 1m high x 4m wide for another 6m, now dropping at a gradual slope downwards. At this point it narrows out significantly back down to .6m high, but as the ceiling is very loose it was not investigated further. It would make an excellent small refuge cave but there were signs in the interior of past human occupation except for the possible clearing of loose material. It may be that the obvious entrance area made use of the cave very limited as it was too noticeable to be used for either burials or refuge.

Directly above the cave (on the capstone) is a large 2-tier enclosure. The lower unit is flat with good soil, the upper one appears to have several internal terraces. The walls are core-fill a'a up to 1.6m high and .8m wide.

If the Kaipolohua Cave is linked to the chanter/singer Pamano, it is interesting to speculate that if that was because of that dike, as it would make an excellent stage platform. It really is designed or set up as a natural stage/amphitheater. It is worth noting that the upper cave, which is largely collapsed, is called Pamano. While Alahaloihi is given as a location on the State map, there is no indication as to how that name was acquired.(Bordner 6/23/1992)

109[G/Kanaio]: Manonokohala Heiau site 190 [Bl-25] is located at Puki approximately 300 feet east of the church on level ground. It consists of an irregular platform that is 70 feet long with 2 levels to the interior. The makai front is 3 feet high, with a drop of 3 feet to the northeast portion. It is constructed of a'a block, ili'ili and coral. Drums are heard from this heiau.(Walker ms 1931)

Manonokohala Heiau, Walker site 190. The corner and front wall are visible immediately above the road. The abandoned house stands on heiau. Behind its out-house are many small segments of terraces.

There are additional unrecorded sites. Directly east of the abandoned house on top of a small knoll is a walled area with two plumeria trees inside it. A plastic flower and the appearance of this site led us to speculate that this structure may enclose an historic

graveyard.(L. Bruce 7/9/1972)

108[I/Kanaio]: Kohala Heiau site 189 [B1-24]. It is located south of the Kula Pipe Line 1/2 mile east of the J. Burns house. It is a rough platform of basalt blocks on end of a high ridge overlooking the sea and measures 53 by 34 feet. The front is a terrace 3 feet high extending 23 feet, but stone paving only goes 8 feet back from the front. The west side is faced but there are no free-standing walls. The hill extends on the level in front of the platform and some of the open space may have been within the heiau confines.(Walker ms 1931)

Kohala Heiau, Walker site 189. Tentatively found. It was hard to find as the area is very rocky and densely covered with lantana. Only part of a platform is visible.(L. Bruce 7/9/1972)

127[F/Kanaio]: An enclosure located just downslope of the historic Site 217 enclosure, this feature seems much older in construction and form than the other feature just upslope and to the East. The enclosure is of core-fill a'a up to 2.3m high and 102m wide - a very impressive piece of near-vertical stacking. This enclosure is of a rounded shape but does not follow the slope contour. There is a single-course alignment outside of the Southwest corner, which extends for 2m then disappears, which measures .3m high and .4m wide. There are no visible interior features or midden within the enclosure. The interior is clear of loose material but is not level, and in fact has a strong downhill slope to the Southwest.(Bordner 6/10/1992)

121[F/Kanaio]: A 'New Age' ceremonial site. This site consists of a pair of features located just makai of the main highway near a large turnout. The upper feature is a circular stone alignment surrounding a small rock outcrop. The alignment has broken segments at the cardinal compass points. The feature is approximately 4m in diameter, with the alignment being of a single course of a'a. The central outcrop was decorated with woven yarn braids, incense ash and a picture of what appeared to be a Hindu maharishi(sp?). The lower feature is connected to the upper by a well-worn recent trail which suggests either large groups or frequent use. The lower feature is a very large natural lava tube section, which at the front entrance again had incense, yam braid and several of the picture postcards. The cave is 305m high, 5m wide, and extends for at least 25m mauka and makai. The large number of footprints leading into the cave indicates that rituals must involve the cave proper. (Bordner 12/26/91)

The New Age site does not appear to have been used since last time, though there are a lot of indications of continued traffic down to the cave. I don't remember the ti and firepit just inside of the mouth of the cave from last time, but they both look pretty old (at least several months).

It appears that the ceremonial activity did not end, it just moved from the outside (upper) site down to within the privacy of the mouth of the cave. The cave continues for 20m downslope and then ends in an old rock fall. The cave is very impressive, with an average height of 3m and width of 4m, with large concentrations of nitrate crystals which in drip spots have formed short stalactites. There is a 'pathway' down the right side (facing cave interior) with a single alignment of fall material, which blocks off most of the cave. On both the right cave wall (along a natural ledge) and on the stones making up the alignment candles have been placed every meter, appear to be squat votive candles.

The altar at the cave base must have been used recently as a votive candle (a very large one) was still burning. At this base altar, in large part consisting of objects placed on the fall that seals off the cave, is a large collection of votive objects. To the left under a natural ledge is a wood pole (sort of looks like a kapu pole but missing cloth), next to it is a very large giant clam shell full of water from a drip (the shell is brand new). At the altar front there are three levels of items: the lowest level (at floor) has multiple candles, a ceramic hobby horse and a ceramic butterfly. The middle level has candles and a new green coconut. The right side of this level has some lily stuck in the fall (placed upright). On the upper level is a Virgin Mary image, a Buddha image and a number of candles (the large one still burning is in this group).

The goods in large part do not appear to mirror those located in the secondary votive center located under the boulder at the cave entrance, which was limited to smaller objects and playing-card sized images (Indian/Christian), though the pattern of images seem to reflect the same religious patterns (i.e., Hindu, Buddhist and Catholic). The items at the secondary entrance center do seem to be the same (or are actually the same items) located at the upper site in December.(Bordner 6/6/1992)

107[H/Kanaio]: Kauhuka Heiau site [B1-23]. Located 1 mile east of J. Burns house above the Kula trail at an elevation of approximately 700 feet (at Kaunu Keaha). This heiau is a small platform of basalt blocks on top of a rocky knoll, and measures 15 by 17.5 feet,

with an average height of 3 feet. It is likely a “Houlu ua” or rain shrine type as native said that whenever the clouds gathered over this spot it would surely rain.(Walker ms 1931)

Kauhuka Heiau, not found. We were unable to locate site 188. The slopes in the area have been recently cut with a series of horizontal bulldozer road which obliterated this site. It is also possible we were not looking in the right location. Not until the end of the day did we find the “J. Burns house.”

We concentrated our efforts in an area mauka and between the large eucalyptus grove and a water storage facility. (It was not a tank as marked on the USGS quad; from a distance it looked like a reservoir.)(L. Bruce 7/9/1972)

The likely structure that is Walker’s Houlu’ua heiau is located downslope and beyond the large reservoir. The site consists of a very large rock outcrop which has been modified with stacked boulders, some of which are extremely large. The outcrop drops 15m straight down in front, and a 3m high stacked platform has been constructed on top of the outcrop. The site is roughly triangular, with a leveled surface but no -visible paving, though there are remnants suggesting that there was a higher triangular platform located in the middle. The site is 8m x 6m x 8m, with stacking 2m high on the mauka (upslope) face. The triangle is oriented so that the short base side is facing Keoneo’io, and the point is directed to the Northeast.(Bordner 6/21/1992)

111[A/Kanaio]: Heiau sites(?), heiau at Kiipuna, Ninaulua nui. Located in the lava flows makai to the trail between Waialio and Wahene are several large open platforms of ili’ili and coral and pebbles without walls. They were not seen [by Walker 1931], but were reported by Ben Aikala, but his information is not reliable as he confused heiau and burial sites. (Walker ms 1931)

123[B/Kanaio]: A platform located along the Pohakea trail at the edge of the kipuka with good soil. While this platform initially appears to be a house platform, its location, and the presence of coral suggest that it likely served as a religious site of some form.

The platform levels out an area 5m x 2m and has several waterworn stone and the platform, two which may have been ahu stones. The front facing wall is of stacked a’ a up to 105m high. In addition to the brain coral clumps, there are scatters of shell midden at several spots (mainly cowrie). There is what appears to be an access ramp on one face the leads the trail through the center of the platform up the new flow (where the trail continues downslope). It is very clear that the trail intentionally runs through the platform and not around, which argues against the site functioning as a house site. (Bordner 6/8/1992)

112[A/Kanaio]: A well-built ko’a at Uliuli village[#207], which stands on the point a few feet back from the shore and measures 35 feet long by 10 feet wide, but with the end rather than the side towards the sea. A platform 3 feet high with large stones set on edge forms its borders. The top is fairly smooth with pebbles and flat stones. There are 2 pits on top and the south end is raised into a pile. At the south end is a low terrace which serves as a step platform. Another one is built at the southwest corner and has a long gray sandy-looking stone across the top where it joins the main platform. This suggests the stone “Lohe” mentioned by Emory at the Kula heiau at Kaunolu on Lanai. Coral is strewn only on these 2 step platforms.(Walker ms 1931)

122[F/A’uahi]: A series of very impressive walled terraces enclosing a knoll. The knoll contains wiliwili on top, and a substantial wiliwili forest grove in the gulch that runs by the knoll. In addition heavy vegetation is on the west side of the knoll, including a very large kukui tree, which suggests a permanent spring of some sort at the base of the knoll. While there are some pieces of wrought iron scattered about the site, the quality and size of the stacked and core-filled construction appears not only to be pre-contact, but this site is massive enough to have been a heiau rather than a habitation site. Some of the retaining walls are upwards of 2.8m high with vertical facing, while the free-standing core-fill walls are upwards of 2m high in certain locations. There is what appears to be a small (30cm high) ahu stone placed at one face of the central platform, but there was no coral nor midden noted at this site.(Bordner 7/19/1991)

113[A/A’uahi]: Heiau at Auwahi, site 185 (A37-12), located west of Lualailua Hills 50 yards south of junction of beach trail on the west bank of a gulch. It is a small heiau built of rough lava blocks, measuring 50 by 60 feet. A low wall surrounds the inner court. At the north end is a platform 4 feet high. There is a smaller platform at the other end with a pit in it.(Walker ms 1931)

114[A/A’uahi]: A heiau at Makee, site 187. This heiau is at the village site of Makee at the shore, 75 yards above the trail. It is a small heiau 60 by 30 feet, of the walled enclosure type with a high open platform at the south end. On the east and north sides are walls 6 feet thick and 8 feet high. At the southeast corner is a hole opening into a tunnel

which extends under the platform. The sides were walled with rock but the hole was too narrow for a man to crawl into with safety, as several large rocks had already fallen in, but nothing could be seen inside. This platform, 25 by 30 feet and 5 feet high was paved with pieces of a'a, coral and pebbles. Part of it had been torn away on the south side to build a modern cattle wall. A small narrow enclosure is shown against the east wall in the plan. {Walker ms 1931}

182*[H/Lualailua Hills]: Site 182 (A37-7) is a heiau in Lualailua Hills ahupua'a located on the north side of hills near trail which comes up from the southeast. It is a small heiau in the a' a of rough construction made of basalt chunks and ili'ili. No pebbles, but some pieces of coral found. It is notched and shaped and measures 38 by 23 feet. It is walled all around to a height of 2-3 feet inside and about the same in thickness. The highest part outside is south side, where the wall has been built up to 7 feet. A rough pavement covers the interior and at the east end a low platform 6 inches high occupies the space between the walls. The entrance is at the seaward side. A tiny enclosure 3 feet square and about the same height has been built into the corner of the jog on the outside. Naio branches and stones cover the opening, but only a large chunk of coral was found. {Walker ms 1931}

186*[H/Lualailua Hills]: Heiau at Kohaluapapa, site 186 (A37-8), located northwest of the hills on a high shelf of land. It is a large walled structure of irregular plan, with a total length of 110 feet. Construction is of massive basalt with ill' ill, pebbles and coral scattered plentifully everywhere. Walls are massive, 6-8 feet thick and 4.5 feet high at the west. The south side is terraced in 2 tiers on the rocky hill, and is open to the sea. Four main enclosed courts can be seen. A is unpaved, B is the central court rough paved where the principal ceremonies were likely carried out. At the west end are 2 pits or depressions without stone lined sides. C is a smaller enclosure probably for a house of some kind. The east wall is 6 feet high. Between C and D is an open platform terrace approximately 2.5 feet above the level of D. D is a large court with a high wall on the east side and a low wall at the front, below which is a second step terrace 5 feet high. The west end is open, there being no definite border but a large rock on which are some pebbles and ill' ill, perhaps an altar of some kind. Adjoining the heiau are a series of walls forming irregular enclosures extending to a large dwelling site on the point, which may have been the house of the Kahu.(Walker ms 1931)

183* [A/Lualailua Hills]: Kaluakakalioa Heiau, site 183 (A37-3), located above the village site of Honamuuloa near the water tank at approximately 300 foot elevation. It is a goodsized walled heiau 48 feet square. The walls are built of massive blocks of basalt to a height of 6 and 8 feet. They are 6 feet thick and have image holes in the top. The interior is divided into a lower and an upper court, each with its low terraces. The lower court is paved with flat slabs, coral, pebbles and cinders. The northeast corner is the highest part of the interior. {Walker ms 1931}

184* □

by 25 feet. Built of slabs of basalt some of which are placed on edge in a wall 3 feet high. On the seaward side is a step terrace built of coral. There are low terraces in each arm of the L with chunks of coral scattered over them. The small square hole in the corner contained bits of sea urchin and other shells.(Walker ms 1931)

119*: Momoku heiau--Lualailua is the ahupua'a. Momoku was the heiau that was built by the menehune at Ka-papa-iki. That was one of the heiaus built by the gods of this race of people (the Hawaiians).(HEN vol. 1, 10/13/1885)

Habitation:

201: After Mauhu came to Hale'ahu--a wealthy native Ku-lani-paha'a lived here. When he died people dug up his property looking for money (none found).(Po interview 1966)

202*[A/Kalo'i]: Kalo'i house sites. Below trails and in vicinity of Black Sand Beach--a number of nice house sites. Behind are wells.(Sinoto ms 12/22/61)

Site 1238, the Wawaloa complex, in Kalo'i near Kanaio. It covers 20 hectares. It contains a probable heiau, 3 *pahale* (house enclosures), 14 wells, 2 lava bubble shelters, a ko'a (fishing shrine) and 9 ahu. This site contains the shelter excavated by Chapman and Kirch in 1966 as Bishop Museum site Ma-B2-1 and MaB2-M8.

203[Kalo'i]: Also in the vicinity [of the heiau #104] are house sites, and semi-circular walls (for sweet potato). Against the lava bluff

are shelter caves, on top of the a' a flow are walls forming shelters. The area is surrounded by an a' a flow (and is apparently an old pahoe flow). The old trail must run from here to Kanaio village--see Hawaii Territory Survey Map 1929.(Sinoto ms 12/22/61)

256[F/Kanaio]: A series of 'cupboard pukas', cleared areas and a enclosure, all mixed in on a low section of a' a flow just Kanaio-side of the ahupua'a boundary wall. The entire site is very knocked about and appears quite old. The main features are hard to distinguish as everything is so kicked around, but the main feature is a series of single-alignment 'puka' in the a' a, usually 30cm square that appear to be for planting. There are at least 5, mixed in with small vague enclosures around 1m square, again single alignment. They enclosure clear and level areas with a' a flow, but no soil. The vegetation in this area is heavy so water must be present but there is no visible soil. At the makai end is a very nice trail running makai.(Bordner 6/12/1992)

266[F/Kanaio]: According to the map locations this site should be the Kanaio Mauka complex noted by Hommon, however other than the vegetation the description does not apply. In fact Site 204 is obviously the complex noted, which was mislocated on the maps. Site 266 consists of a series of C-shaped shelters, enclosures and related walls in an area of new lava flow. The majority of the site appears to be enclosed planting areas, with stacked a' a walls up to 1m high. The lower section, which is in area of limited soil, appears to be small habitation enclosures. A gulch flows into a kipuka with good soil and relatively dense vegetation, and several of the walls appear to act as water control and diversion features for this gulch. There are several small caves in the immediate vicinity which have good vegetation and insect life, suggesting that water is persistent at least underground in the area. (Bordner 12/24/91)

264[F/Kanaio]: A platform on a knoll to the West of Site 204, at roughly the same elevation as the upper portion of Site 204. The platform is constructed of stacked a' a up to 2m high on the front face. The top has small a' a paving and is level. There are numerous mounds in the area, both on the rise and down slope that appear to be planting mounds. (Bordner 6/14/1992)

204[F/Kanaio]: Near to heiau Ho-2 [site #106] are some abandoned house lots of fairly recent times. Old trail must come through here.(Savage and Tompkins ms 11/61)

Kanaio Mauka complex, which consists of an early historic houselot complex in an arid area. There is sparse lantana, koa haole and Apple of Sodom bushes. At the northeast corner is a thick tangle of fig trees. There is a large terrace platform and at the northeast end is E.P. Sterling's site HO-2(Ma-BI-13). The complex measures 105m from east-west by 70m north-south. It is constructed of a' a, mostly on flat ground or base of a 5m high cliff. It has historic and pre-contact artifacts.(Hommon 8/15/1973)

Site 204 is a very large complex of habitation, ritual and agricultural features of which the uppermost portion has been destroyed by the main road. The site consists of two main sections, the mauka one located around a sharp ridge flat which contains a sink with a possible spring. The lower portion, which is located nearly 30-40m makai of the upper portion, is based around a pahoe flow flat which also appears to contain a sink with spring, though both appear dry at present.

The upper section contains the following features: A: a small enclosure on the ridge just to the West of Site 263 and mauka of the cluster of modern houses. It is constructed of stacked a' a up to 1.8m high, .4m wide, and measures 2.5m x 4m in an oval. The interior is clear and flat, and there is cowrie shell midden just outside of the feature. B: a platform with ili'ili paving and a front facing .7m high. C: is a small paved area of ili'ili with a facing of .4m high. D: is a walled enclosure with a clear and level floor. The wall measures up to 2m high (inside), 1.4m high (outside) and is of core-fill a' a up to .6m wide. E: is a large flat area with a partial retaining/boundary wall on the low sides (South and East). On the East side it is a boundary wall up to 1m high (the windward side). The interior is part of a larger flat with soil, the whole being clear and level. There are two trees (fig?) in the mauka end wall. F: [Site 106] is a very impressive stacked a' a platform with facing walls up to 203m high enclosing the back side of a high spot on the knoll with at least 3 apparent postholes. This feature appears to be a heiau given the size of the feature and the quality of construction. G: is a pair of mounds of a' a (mainly fist-sized) of possibly cleared material from the flats up to .4m high. H: is a very well-constructed enclosure which has had the mauka end destroyed by the main road. It is constructed of core-filled a' a up to 2m high and .5m wide. The interior is clear with deep soil. There is an extension of the enclosure into a low sink

area with very lush vegetation and a possible spring (now dry). I: a partly-paved platform outcrop overlooking the upper portion of the site. There is no facing as it a built-up natural ledge which has been leveled. A well-constructed trail (typical of those in this area - see Site 611) leads down from just upslope (to the Northwest) down to the site, with a windward retaining wall (single-stack stone) as per the Pohakea Trail construction. J: is a walled enclosure overlooking the trail (and 'I') from the high point on the knoll. It has a front facing up to 1.5m high (outside) and .4m (inside) of stacked a'a. A boundary wall follows the ridge spine from 'J' on the ridge makai for over 100m down slope. It is constructed of stacked a'a up to .6m high and 0.4m wide. K: a walled enclosure of stacked a'a up to 1m high and .8m wide. L: a walled enclosure of core-filled a'a up to 103m high and .8m wide. M: a very impressive walled enclosure of core-filled a'a up to 3m high and .7m wide. It is constructed on a rather steep slope, and the interior is steep and does not contain significant amounts of soil.

The lower portion of the site is located approximately 35m makai of feature 'M', and appears to enclose a low that possibly contained another spring (now dry). All walls in this section were of core-fill a'a construction. No midden was noted in most of the site. Many of these features in the pahoe-hoe flat have had low sections filled with a'a to level out the interiors. Boundary walls extend out from the site in all directions for many meters beyond the formal end of the interior features.

Mauka of the main road the site continues for approximately another 200m. From the road to this location there are numerous mounds and amorphous rock piles but the only distinguishable feature is O: a rectangular enclosure. The enclosure measures 2.5m x 3.5m and is badly collapsed. The walls are of core-fill a'a up to .6m high and .8m wide. The interior is clear and level and has good soil. This section, though merely on the mauka side of the main road from the rest of the site, has much denser vegetation and there seems to be a lot more water. This is emphasized by a number of deep erosional gulches that run through this area, as this section appears to be the major drainage for the spectacular gulch/canyon that runs down slope from the Goodness Estate. (Bordner 6/12-14/1992)

251[G/Kanaio]: A complex of core-filled boundary walls, enclosures and platforms located on a ridge overlooking a well-watered flat pasture area at the Kanaio-Kalo'i ahupua'a boundary. This complex also contains what appears to be the Papanuiokane Heiau (site 103) in a series of enclosures and walls in the lower pasture area. A pair of gulches which carry a considerable amount of seasonal water bracketed the ridge, the one to the west apparently being the boundary definition for the ahupua'a division between Kalo'i and Kanaio (this gulch watering the flat pasture area containing Papanuiokane Heiau). The walls on the ridge tend to meander on slope contours, often forming small enclosed areas then continuing on. In most cases the large boulders on the ridge are incorporated into the walls.

There are a large number of cleared and leveled areas, most with soil, though several are paved with a'a ili'ili paving. The site continues down to the main highway but does not appear to have extended to the makai side of the main highway. The walls are up to 1.5m high, though the average is approximately 1m high. A pair of more linear boundary walls extend off across the pasture to the northwest, the mauka one of core-filled a'a up to 1.4m high is linked to the complex of enclosures including Papanuiokane Heiau. The makai wall is of stacked a'a up to .9m high and eventually links up with a barbed-wire fence which defines the pasture area.

The major section of the pasture has been terraced as units are still visible, but has apparently been cleared during the historic period as walls stop and the terraces are not faced. It is likely that prior to this clearing that the lower portion of the pasture was a continuation of the complex of walls and enclosures still extent in the mauka portion. (Bordner 12/29/91)

214[A/Kanaio]: Site 1002, Alaha Village complex. This is Bishop Museum site BI-1-22, and is a village site with enclosures, platforms, spring, agricultural pits and an indeterminate ko'a.

It is called Wakalani in the place names, southeast Maui, collected from Sam Po in 1966/1967 by Chapman. The site is at the beach end of the jeep road, around a small bay at the edge of the a'a flow at the beach. The vegetation is kiawe and lantana.

There are 36 features both pre-contact to historic cattle pens at the site. It is unusual in that there are no readily identifiable religious sites. (Connolly 7/11/1974)

265[I/Kanaio]: A partial enclosure (a portion has been destroyed by a jeep road) located near the Buddhist temple. It is constructed of stacked a'a up to 1.6m high and .6m wide. Worked into the top section of the wall are a series of reinforcing wood fence posts and 2-strand barbed wire. The interior is clear and level. The section remaining is 8m x 19m. There are a number of rusted 55 gallon drums in the Northeast corner. It is very likely a historic habitation site but there are no surface indications of a structure within the enclosure.(Bordner 6/15/1992)

220[I/Kanaio]: A well-stacked V-shaped wall up to 1m high. It is an apparent habitation area that is pre-contact in construction, well-stacked and with no visible midden which uses a cliff face as the back side of the shelter. Given prevailing winds it would have been a good shelter but there are other locations nearby that are equally suitable which so no indication of prior human use. The facing on the cliff face is used to develop a level platform on the cliff top which also has a protective wall on the mauka side. The platform is cleared and leveled.(Bordner 7/4/1991)

221[J/Kanaio]: A historic(?) house site located at 1365m in upper Kanaio. There is a circular, well-stacked a'a platform approximately 3m in diameter, with wood beams fixed into the base, which appears to be a water tank. Nearby is a well-built walled enclosure and a cleared pasture to the southeast. The walled enclosure is approximately 12m square, with some clearing of the interior, with walls of stacked a'a up to 1.5m high. At the southeast corner is a cleared and paved (with ili'ili) section. Outside of the enclosure at this point were several wood blocks and historic bottles). At the north center of the interior is a mortared trough, either for use as a toilet or water trough. On the north wall was a green-glass gin bottle fragment from 1840-1900.

The pasture below is well cleared and has been terraced at some time in the past. Possibly was originally agricultural and later converted to pasture. In the center of one pasture terrace is a triangular wooden frame with 2x4 wood framing, nailed, with a metal water pipe protruding up through the frame side. In a corner nook of the same pasture unit was an old steel automobile wheel with 2 welded-on rebar handles and 3 welded-on rebar feet. The center has been burned out by high heat, and this is likely a charcoal holder for branding irons. This was later corroborated by the Erdmans who noted that this was a 'lineman's house' that was used in the past for branding and corral work in upper Kanaio, though it burned down a while ago. (Bordner 7/4/1991)

222[J/Kanaio]: A possible remnant wall as front-facing on a bubble for use as a shelter. Difficult access as tube is nearly vertical and base is almost 6m down. No midden or other cultural material noted.(Bordner 7/4/1991)

213[A/Kanaio]: Site 1800, "Waiakapuhi". On Coast near Waiakapuhi. Primarily platforms/terraces or a'a chunks. Well-built and very well-preserved. Agricultural terraces, walkways, platforms--very nice from helo photos.(Hommon 12/5/1977)

252[E/Kanaio]: A very large enclosure and a series of associated c-shaped shelters located below Pimoe. The large enclosure is of excellent a'a stacked core-filled construction, with walls up to 1.8m high. While the enclosure may have served as a corral, the low makai wall and leveled and cleared interior would suggest either a high-status habitation site or a heiau. The enclosure is located at the front face of a significant elevation drop-off and thus has a superb view of this whole section of the coast over to Hukukamo to the east and Pu'u Olai to the west. Outside of the enclosure and to the east are several short wall fragments of stacked a'a which lead to a C-shaped shelter oriented as a windbreak. This feature incorporates a natural outcrop into a cleared area 203m long. Approximately 60m to the northeast is a second enclosure which has been heavily damaged, very likely by military use as it is located within the National Guard Ordnance Disposal Zone. It is of core-fill a' construction up to 103m high and measures 7m x 4m.(Bordner 12/24/91)

216[A/Kanaio]: A series of very collapsed walls and enclosures just to the West of the Pohakea trail in a scrub *kipuka* with good soil and relatively level. All the features are very vague, though they appear to have been of core-fill a'a up to .7m high (now usually .3m high) and 1m wide. While most of the walls appear to have defined planting areas, several of the enclosures may have had interior paving and appear to have been house sites. (Bordner 6/8/1992)

205[A/Kanaio]: Sam Ka-Iani-paha'u (his brother) built a grass hut near the cave Ku-wai-a-ka-'ilio.(Po interview 1966)

Waiailio Village #2. Located at the foot of Kanaio trail. The site contains 15 house sites, pens, canoe sheds and other enclosures.

There is the only example of a stone house with a grass roof still in place. Built close to the water's edge on a platform 3 feet high, measuring 25 by 40 feet. The house is 15 by 30 feet, 5 feet high with walls 3 feet thick. The edges of rafters rest on the top of the wall, and the ridgepole is 10.5 feet from the ground. Shells, coral and pebbles litter the platform. The door is only 45 feet high. Recent occupation (nails, bottles and trash)--also rotten pot-pounding board and outrigger. Beams in the roof were nailed, not lashed. Original owner was Kalani Pahoā [Kalanipaha'a] (died recently [1931]) but the house represents the type probably common in windy Kahikinui. Well of brackish water near the house. Neighboring enclosure possibly for canoe.

On the trail up to Kanaio 12 house sites seen, located on grassy bench among the lava flows, and several cultivation patches (potato likely).(Walker ms 1931)

Site 1481. Kanaio Waialio Complex. On the coast, makai of Hoapili trail (? 8/-/73). Bishop Museum site #BI-39, Walker Waialio Village #2. " ... a complex consisting of 35 features in a 144 acre (approximately 120m x 120m) area. Canoe shed noted by Sterling (1962). Name of complex is Kanaio Waialio, according to William Kauai Jr. of Ulupalakua. Located east of Alaha complex (50-14-1002), west of Makee complex (50-14-1472) and southeast of Pimoe cone. Most features on barren a'a lava around and within a small, steep-sided depression (approximately 38m x 22m) that opens on the shore. Sparse vegetation--includes kiawe, lantana, sisal and a few native plants. Surface midden in 22 features. Features unusually densely concentrated. Two house platforms--includes Walker's thatched roof house. Also well, enclosures, trails, walls, platforms, canoe shed, salt pans. (Historic Sites files, ? 8/-/1973)

Kanaio Makai is a series of platforms in stepped terraces, several enclosures and a series of stepped platforms that end (makai end) in two enclosures. The makai enclosure is full of coral - looks like a *ko'a*. Several of this series of terraces appear to have knocked-over *ahu* stones in terraces. Several improved blister-shelters, one probable water cave with protective wall and an excellent piece of the Pi'ilani Trail are also within this site. The canoe sheds were not located, but given the swell and chop conditions taking canoes in and out of this spot would be difficult at the calmest of times, and impossible most of the time. This embayment is very exposed in almost all conditions, and the slightest wind will combine with the constant swells to produce a vicious chop that would wipe out any canoe light enough to be lifted ashore (as there is no beach) and there does not seem to be any protected areas which would provide a safe landing. All platforms had extensive midden - largely drupa and cowries, some cone, a bivalve and some wana body parts (no spines noted). Basalt flakes were noted on several platforms, as were a number of possible hammerstones. The large number of *ahu* stones is noteworthy - all are waterworn, ovoid, 60-90cm high, and located at the front edge of each platform. All have been knocked out and broken at a more recent time (except one still in place). The flats all have excellent soil and the presence of the kiawe groves suggest water. (Bordner 7/8/1992)

254[H/Kanaio]: The Goodness Estate. This is a series of structures on both sides of the upper Kanaio road. On the mauka side of the road is a garage fronting the road and a small shed approximately 10m mauka of the garage (upslope). The main house is makai of the road and oriented facing the road. There is a subsidiary house (looks more recent) approximately 15m down slope to the Southwest. There is excellent wall stacking on the boundary and retaining walls. There is a lava bubble shelter 4m Northwest of the lower (secondary) house but there was no visible midden.(Bordner 6/11/1992)

263[F/Kanaio]: A small walled and terraced enclosure located on a ridge just makai of the main road and 15m Northwest of Site 262. This is a very well-made feature as a very steep talus slope has been stacked and faced in two levels to form the structure. The enclosure measures 4m x 5m. The wall measures .9m high and .5m wide, of stacked a'a. There is a large mound of a'a 7m to the west-south-west of the enclosure which has been somewhat leveled. It measures 4m x 6m and is .6m high. This may be field clearing as there is no visible signs of facing on the mound sides.(Bordner 6/13/1992)

262[F/Kanaio]: This partial walled platform is located on the next small ridge approximately 30m to the West of Site 261 at the same elevation. The wall is on the windward and makai faces of the platform, constructed of stacked a'a and measures 1.1m high by .4m wide. The platform has a front facing up to .3m high. The platform covers 4m x 4m, with a'a paving within a flat area of 6m x 8m defined by ridge spines on the lee side (West). The interior is fairly clear and level. There is a very large mound of a'a 5m to the west-south-west. The mound measures 4m x 7m up to .7m high.(Bordner 6/13/1992)

- 261** [F/Kanaio]: A walled enclosure West of Site 260. It measures 5m x 4.5m, and has walls of core-filled a'a up to 1.6m high and .6m wide. The interior is flat and clear with good soil. (Bordner 6/13/1992)
- 260** [F/Kanaio]: A terraced platform on a knoll 10m makai of the main road on the same road (but mauka) of Site 259. The platform covers a large area - up to 16m on the makai face, with a stacked facing up to .4m high. Retaining walls on the ridge side go back for 7m and are faced up to 1m high. The platform interior contains soil and there are fragments of what may be a smaller interior platform but it is too damaged to be sure. There is a very well-constructed boundary wall down slope to the West, which curves up from the Southwest (makai) over to climb the ridge just mauka of this platform. This wall is core-filled up to 1.8m high and .5m wide. (Bordner 6/13/1992)
- 259** [F/Kanaio]: A partially-walled platform (with the wall on the windward side) located just one ridgetop to the West of Site 258 at the same elevation. These sites would make excellent lookout points, as they have an open view of the entire coast from Keoneo'io over to Pohakea. However there are even better locations just mauka of these which do not show any signs of human modification. The wall is of stacked a'a and is 2.5m long by .5m high and .6m wide. The platform is 2m x 3m with front facing of stacked a'a up to .4m high. The platform interior is clear but not particularly level. (Bordner 6/13/1992)
- 258** [F/Kanaio]: A walled enclosure on a knoll below the main road. The walls are constructed of core-filled a'a up to 1.9m high and .6m wide. The enclosure is rectangular and measures 2.5m x 3m, and has an entrance in the makai face. (Bordner 6/13/1992)
- 257** [G/Kanaio]: West Kanaio complex. This is a large complex of agricultural and habitation features located to the west of the Honua'ula Church and mauka of the Site 126 Kaipolohua Cave complex. The lowest (makai) section consists of a series of agricultural features in a draw. The soil in this area is excellent, is at least 30cm deep, and has been recently tom up by pigs. The agricultural walls are of stacked a'a up to .6m high and .5m wide. A habitation platform is of leveled talus with a .5m high front face, and covers approximately 1.5m x 2m.
- Mauka of this series of features the slope levels out, and there is a complex series of well-built boundary walls that appear to enclose sections of the flats but also go mauka (upslope). The walls are mixed core-fill and stacked, up to 1.9m high, with the core-fill sections of noticeably better construction. One enclosed area has a grove of *ko'a* with very deep soil and a spring and there is very dense vegetation and very moist soil. Scattered throughout are short wall sections that are possible agricultural terraces or mounds, but they are so kicked about (probably by cattle) that they are indistinguishable now. On the ridge that leads to the spring and *ko'a* grove, at the West edge of the site, are a series of faced talus house platforms on the ridge face. The front faces are .7m high, and the terraces measure approximately 2m x 2m each. A core-fill boundary wall running on the ridge from these platforms measures .6m high and .5m wide. There is a complex series of agricultural terraces that cover the West side of the gulch. While the East side has some, they are not a prevalent. The West bank is terraced all the way down to the streambed, usually the facing of 1-2 courses of stacked a'a up to .4m high. The flat areas are level and clear, and usually measure from 1m x 2m to 2m x 3m. (Bordner 6/12/1992)
- 233** [H/Kanaio]: A rectangular enclosure that appears older than the boundary walls in the area. It is located on a sheltered rock outcrop between two higher ridges. It measures 4m x 5m, with a front face up to .6m high. The front facing is actually a faced talus slope of natural material. The interior is clear but not level as the enclosure is on a slope. There is a possible entrance ramp at the front (down slope side). (Bordner 6/11/1992)
- 234** [H/Kanaio]: A stacked a' a platform that apparently was constructed as a base for a water tank, which has a 3/4" pipe going down slope to a historic housesite, at the base of the slope. The platform is 1m high in front, well-stacked and level. The platform is circular, with a 3m diameter. (Bordner 6/6/1992)
- 215** [H/Kanaio]: The mauka portion of Bruce's "walled structures", located on a knoll approximately 4m 'Ulupalakua side of the mauka-makai boundary wall. It is a small 4m x 3m rectangle, corefill a'a up to 1.5m high, .5m wide with no visible entrance. The interior is clear and level. There are no visible indications that was a heiau.

217[F/Kanaio]: This platform is oriented mauka-makai, and measures 3m x 6m and .3m high. It is constructed of stacked a'a leveled with smaller pieces but no ili'ili paving, nor is there any visible cultural material. It is located on a knoll with an excellent view of Kanaio town and makai. The down slope area is barren, likely due to soil conditions, as this area consists of a very large granular ash and would seem to be very poor for planting unless crushed. Approximately 6m to the West is a large historic enclosure which measures 15m x 18m, with walls of core-fill a'a up to 1.5m high and .6m wide. In the West center of this enclosure is a mortared stone cistern 2m in diameter and 2.5m deep. The whole interior of the enclosure has scattered historic midden of flat glass (old) and white ceramic. The interior of the enclosure is clear of loose stone but not flat as there is a fairly strong slope down to the Southwest.

To the West of the lower enclosure (Site 127) are a series of very fragmentary wall sections from 1m to 3m long of stacked a'a up to .4m high and .5m wide. They seem to delineate sections of flats with soil for planting areas, but most of the walls have been destroyed or cleared out except on outcrops. (Bordner 6/10/1992)

206: Uliuli village, located near the point of Kahawaihapapa. There are 21 different sites of different kinds counted here, 11 identified as house sites. Several large enclosures with low walls, and house platforms inside measuring 25 by 15 feet. May have been the homes of chiefs, or 1 or 2 may have served as heiau as no definite heiau structures were seen in this region. A well built ko'a stands on the point a few feet back from the shore This suggests the stone "Lohe" mentioned by Emory at the Kula heiau at Kaunolu on Lanai. Coral is strewn only on these 2 step platforms.

The ruins of the old windmill pump and trough may still be seen, but the large square stone base on which the windmill stood should not be mistaken for a heiau structure. North of the windmill 150 feet is a great hole in the ground which is the entrance to a lava tube, in which under the windmill is the spring of fresh water which has the name Waailio. The story is told of an old woman who lived a mile or so from the shore who had a little dog that often used to disappear and then come back wet and muddy. As there was no water near her house the woman became curious and decided to watch where her dog went to find the water. She noticed the dog disappeared into a small hole in the rocks, and attempting to follow she found herself in a large tunnel which led down to the shore. By following it she finally found the spring. The story does not seem so fanciful after one has seen the tube. It appears to extend indefinitely off toward the mountain, but was only followed seaward to the spring. As there are houses with stone walls and part of the timbers are still in place, it is not surprising to learn from Kaupo natives that this village had been inhabited till 35 years ago. Salt from the sea spray collects in small pools on top of the rocks near the spring(#602), and the spot was often visited by natives from distant places in order to procure the salt.(Walker ms 1931)

255[I/Kanaio]: A V-shaped shelter which measures 2m x 3m, with a stacked a'a wall up to 1.8m high on the Northeast side. The interior is clear and fairly flat. There were no associated visible features. (Bordner 6/11/1992)

240[E/Kanaio]: A pre-contact and early historic house site on a high knoll. The major feature is a large core-filled a'a windbreak wall up to 1.8m high that extends for 14m to protect the flat top of the knoll. On the lee side are 2 cleared and leveled terrace units paved with a'a ili'ili. Both on and around the terraces are shell midden (large Drupa and Cowrie), coral abraders (5), sheet iron and zinc roofing and flashing, cut and sawn hardwood, 19th c. ceramic and pre-1880 glass fragments. A hand-built and stacked revetted roadway leads directly to the site and a enclosure-pen complex down at the base of the knoll in a gulch. The roadway leads back towards Lualaiua Hills, and has a wall boundary for a section. This wall, of poorly stacked a'a then veers away to the south and the base of an adjacent knoll.(Bordner 7/23/1991)

239[E/A'uahi]: A series of C-shaped shelters and enclosures in older flow material. The walls are of stacked a'a, and have been heavily collapsed, likely by the very heavy goat traffic in the area.(Bordner 7/23/1991)

241[E/A'uahi]: A series of enclosures and habitation areas on a knoll next to a very large gulch that must have seasonal heavy water flow due to the lack of internal vegetation. The walls are of stacked a'a in poor collapsed condition. Mauka 20m is a lava bubble shelter 1m high, .6m deep and 1.5m wide. Just down slope of the shelter are a series of cleared and leveled areas with a'a ili'ili paving. Both the shelter and associated paved areas contained coral fragments, though they were too degraded to specify as tool fragments.(Bordner 7/23/1991)

207[A/A'uahi]: Makee village, site 187. Makee is the site of a larger village and heiau described as site 187. Extending back from the shore, eleven large dwelling sites were seen. A dwelling site is a platform or enclosure within which are one or more house platforms and smaller enclosures presumably part of the same establishment. A fine example of a site of this kind is located on the highest point of the village. The terrace is 60 feet long built up 9 feet at the front. A wall 7 feet high bounds it on the east, and forms a small enclosure on the north. The house platform is 14 by 30 feet raised 1.5 feet above the terrace. It is paved with pebbles and coral, and in the center is a firepit. This was in all probability a chief's house.(Walker ms 1931)

Site 1472, Makee Village complex, covers 4 hectares. The complex contains houseyards, a rock shelter, platform and burials on the coast. It continues inland 300m. The terrain is rugged, with numerous a' a outcrops and there is a small gully at the east end of the complex. Makee has 52 features with houseyards, rectangular and circular enclosures, platforms, a rock shelter, possible burials, trails and a heiau. The heiau is Walker's site 187 with tunnel.(R. Connolly 11/5/1973)

253[D/A'uahi]: A sink and nearby enclosure. The sink is a collapsed roof section of a large tube which still extends mauka-makai. The sink is very impressive, being approximately 15m deep, measures approximately 14m x 8m, and contains very luxurious vegetation including ferns and ti. Access to the base of the sink is by a very artfully worked stacked pahoehoe slab stairway which is built out of the collapsed roof section. The tube has standing water and is muddy even in the exposed section, and the tube continues for at least 8m in either direction from the sink access. The enclosure is 9m upslope from the sink and measures 10m x 5m, with stacked a'a up to .6m high. (Bordner 7/22/1991)

The cave runs to North for approximately 20m then has a combination of natural and artificial rockfall which acts as a refuge-type barrier. Beyond the barrier the cave runs for an additional 20m+, curving slightly to the Northeast. There are at least 8 different drip spots in the North section, and very good loess soil even in the cave, with excellent 1m+ deep cultural deposits in the area of the open sink section. The area was used during the historic period as iron, glass and plastic are present, and there are at least 2 recent pot-holes/test pits in the material. The South end of the cave (beyond the sink) is naturally plugged (not from fall) and only extends for approximately 6m beyond the sink entrance. Again there is deep soil and a 1m+ cultural deposit with fish bone, bird bone and very large 'opihi. On a side wall 'shelf' were several hammerstones in conjunction with shell, bird bone, 'opihi and dog bone. There is also an apparent ash deposit nearby. The whole area (both within the sink and the surrounding tube sections) has been artificially cleared with loose material stacked to the sides and all interior areas leveled. These modifications to have extended only into the area of natural light, as the North end does not have these modifications further in the cave.(Bordner 6/31/1992)

235[B/A'uahi]: A C-shape shelter of stacked a'a up to .8m high and 3m in diameter which has been oriented as a windbreak. (Bordner 7/21/1991)

229[E/A'uahi]: A large complex of shelters, enclosures, walled platforms and wall sections. The major structure, a large walled platform, is on a knoll overlooking a deep *wilivili* forested ravine. The platform, which measures approximately 12m x 10m, contains several internal walled subdivisions; all cleared and cobble paved. Scattered in and around the platform were Japanese porcelain (blue-and-white ware), blown glass fragments (prior to 1900), sheet iron and large drupe shell. Two coral abraders were on an outer paving area. The walls are up to .8m high, with the highest sections on the northeast wall, which would take the main brunt of the strong winds. The central interior walled platform is 3.5m by 2m. Most of the interior is clear, as the majority of the midden was located either immediately outside or in the mauka platform area.

This site complex contains a minimum of 4 other shelters or habitation enclosures. The extensive network of core-filled a'a boundary walls are irregular in orientation and do not follow slope contours. They appear to have served more to either restrict grazing animals or protect areas in gulches from the depredations of cattle and pigs. Low areas in seasonal drainages have much better soil conditions, and the majority at present are in *wilivili* forest groves. In fact it seems likely that there is a relationship between the *wilivili* and sweet potato cultivation. The *wilivili* grows in areas of good soil, in low spots protected from the worst of the wind. The leaves and shade of the *wilivili* appear to discourage most understory growth and also provide a comprehensive humus layer. This combination of protected soils and limited competition would appear to be ideal for vine-type ground plants such as sweet potato, gourd and squash--the very type of crops that are noted as being the mainstay of crop production in Kanaio-

This is a large site complex located just mauka of Hokukamo, and consists of a series of walled enclosures, platforms, walls and trails.

The complex is located in a a'a flow next to a very large gully which appears to have water a large proportion of the time due to the lack of vegetation. There are at least 14 habitation enclosures and platforms, not counting a large number of cleared, leveled and paved areas without walls. A formal marked trail runs through the upper portion of the site from east to west. The site is enclosed in a series of boundary walls which extend off in all directions, and possibly delineate planting areas. The site has been partially destroyed by a historic jeep road, which has destroyed the major portion of a very substantial and well-built walled platform, which still contains a series of three levels of paved platforms with front facing up to 1.7m high and internal ili'ili paving. Very little midden was present on the surface except of several coral abrader fragments and some scattered shell (*Conus* spp.). All walls in the complex are of core-fill a'a, and much of the site consists of improved natural features in the flow. A unique feature is the large number of very small stacked holes in the a'a as they are not deep enough to have been wells, and would appear to have been protected planting pits which usually measure only .4m in diameter. The lack of soil within the village area would argue that the complex must have been for habitation purposes, though the area outside of these features has much better planting opportunities. (Bordner 7/19/1991)

236[D/A'uahi]: A series of walls, shelters and planting mounds on both sides of a jeep road. On one side is a series of stacked a'a mounds approximately 2m x 1m oval in form around .4m high. They are scattered 3m to 7m apart throughout this entire section of a flat southwest of Hokukamo. The other side of the road has an pair of connected enclosures which measure 10m x 5m, with some internal walls. Approximately 8m to the east is a V-shape shelter of stacked a'a up to .7m high which measures 5m x 3m. Scattered around these features are a number of planting mounds following the same form and spatial distribution as on the other side of the road. (Bordner 7/22/1991)

242[F/A'uahi]: A series of enclosures and platforms on a knoll covered in a *milimili* grove. Most of the walls are core-fill a'a and have been heavily collapsed by cattle. A few sections of platform facing are very nice and still intact. There is a possible historic road leading to the site, but this only continues for 8-10m and then disappears. As with other roads of this period it appears limited to areas of fresh a'a or very difficult access, as when the land flattens out or returns to older flow material the road just ends. To the west approximately 20m is a second cluster of features, a series of terrace walls and shelters. Just beyond this second knoll to the west is a steep drop into a semi-active stream drainage, which though it does not contain water does contain a very dense vegetation pattern. (Bordner 7/25/1991)

243[G/A'uahi]: An enclosure and C-shape shelter constructed of stacked a'a. (Bordner 7/25/1991)

244[G/A'uahi]: A small enclosure on a knoll that overlooks much of lower A'uahi. The visibility is reminiscent of that for a heiau, but the construction is that of a habitation enclosure, being of stacked a'a with cleared and leveled interior. (Bordner 7/25/1991)

245[F/A'uahi]: A C-shaped shelter oriented as a windbreak on a knoll. The feature measures 2.5m x 1.5m, of stacked a'a up to .6m high. A cleared and paved area with a'a ili'ili paving extends for 2m around the front of the shelter. (Bordner 7/25/91)

246[E/A'uahi]: A historic house site, enclosures and associated boundary walls. The house is located near a gulch which seems to have a good seasonal flow of water given that it is clear of vegetation. A local informant said that the house had been used into the 1950's. This site is located approximately 400m mauka of the 240 historic house site. Boundary walls extend mauka almost to the main highway, while others extend along the elevation contour to both east and west. Makai and to the east of the house site the boundary wall converts into a well-constructed circular enclosure of core-fill a'a 7m in diameter with walls up to 1.7m high. While there is no visible gate access there is an external stacked a'a ramp to the makai corner. The boundary walls are of core-filled a'a up to .9m high. The house proper still stands and measures approximately 6m x 4m. It is constructed of 2x4 timbers and 4x8 sheet board with a peaked corrugated metal roof. There was no visible cultural material or midden at the site, nor any evidence of recent occupation. (Bordner 7/26/91)

247[E/A'uahi]: A series of walled platforms situated on a new a'a flow across the gulch 40 from site 246 to the northeast. The

platforms are situated on a knoll overlooking the gulch. The platforms have stacked a'a front facing, with leveled and cleared interiors. (Bordner 7/26/91)

- 248**[E/A'uahi]: A small triangular enclosed flat on an a'a ridge. The enclosing wall on the west side of the flat is of stacked a'a up to .7m high, while the east side is only .4m high with the two tapering into a triangular point at the makai end. The interior of the enclosure is relatively flat with 2 *wilimik* trees inside. At the mauka end is a firepit with relatively recent fishbone. (Bordner 7/26/91)
- 249**[E/A'uahi]: A pair of L-shaped shelters approximately 45m to the southwest of the 240 historic house site. The walls are of core-fill a'a up to .5m high but have been seriously collapsed by goat traffic. (Bordner 7/27/91)
- 250**[E/A'uahi]: A C-shaped shelter on the side of a knoll. The shelter is constructed of stacked a'a up to 1.4m high, with an interior diameter of 305m. (Bordner 7/27/91)
- 237**[D/A'uahi]: A small platform of stacked a'a which overlooks an agricultural planting area. (Bordner 7/22/1991)
- 238**[D/A'uahi]: A series of enclosures, terraced platforms and bubble shelters. Most of the walls are core-filled a'a. The complex continues over the top of a knoll and into the next swale. Nearby is a core-filled a'a boundary wall. (Bordner 7/22/1991)
- 230**[E/A'uahi]: A small C-shape shelter oriented as a windbreak but partially destroyed by a historic jeep trail. A second c-shape shelter and associated cleared and leveled area is located approximately 20m to the northeast of the first. Both are approximately 2m in diameter with a wall of up to 1.3m high. No midden was noted. (Bordner 9/19/1991)
- 231**[E/A'uahi]: A C-shape shelter located on a a' a knoll which may contain other ambiguous features including platforms and cleared areas. The C-shape is oriented as a windbreak, and is 104m in diameter with a wall of stacked a'a up to .6m high. (Bordner 7/19/1991)
- 232**[F/A'uahi]: A C-shape shelter located near the main highway, of stacked a'a 3m in diameter and up to 1m high. Nearby is another C-shape which is slightly smaller, being 2m in diameter and up to .8 high. A substantial stacked a'a enclosure is located just makai of these two shelters in an area of more level pasture. The enclosure measures 5m x 5m, with the west wall continuing makai for 7m. This feature has been heavily damaged by both mechanical clearing and by constant cattle traffic, so that the walls only measure .5m high, though they were obviously considerably higher originally (possibly up to 2.5m high). (Bordner 7/19/1991)
- 208**[A/A'uahi]: Manini village. At Manini is a village of 10 house sites with accompanying pens, burial platforms, and irregular enclosures some of which are places where tapa was dried out of the wind. The 6 large house platforms are coral paved with ends to the wind. They average 12 by 25 feet. At the beach is a canoe shed. One spot is littered with chips and fragments of beach stones was probably a workshop where adzes were made. None were found, but 4 stone squid sinkers were picked up. (Walker ms 1931)
- A series of shelters, platforms and enclosures just down slope of boundary wall #731. The a'a seems very recent at this location. One of the features is a bubble shelter which measures 2m x 3m, .8m high, which contains a complete set of pots, pans and plates, all of which still look usable, along with an old rubber poncho/tarp. Some glass was noted, but the majority of artifacts (coral abraders, basalt hammerstones and basalt flakes) and midden appear to be pre-contact in form. Numerous cleared and leveled areas are scattered throughout the complex, while both artifacts (coral abraders and basalt flakes-hammerstones) and midden do not seem to correspond to specific work or residence areas. Approximately 50m to the west is an irregular enclosure that is in the form of a triangle, with the base 10m across and running to an intersect at the tip of a small point almost 20m away upon which the enclosure sits. The walls are of stacked a'a up to 1.5m high. On the other side of the coast road from the triangular enclosure, approximately 10m mauka, is a second rectangular enclosure of stacked a'a up to 1m high which measures 8m x 7m. While the enclosures of both of these features contain coral and appear to have been cleared of large loose material, neither exhibited any signs of paving or uprights to indicate possible use. (Bordner 7/21/1991)

- 224[F/A'uahi]: A U-shaped shelter located just makai of the main highway in A'uahi. The shelter measures 3m x 5m, of core-fill a'a construction up to 1.3m high. No midden was noted. (Bordner 7/15/91)
- 225[F/A'uahi]: A walled platform house site located just mauka of the main highway in A'uahi. The interior is cleared, and the site is associated with a series of leveled and cleared areas that have internal mounding that is typical of sweet potato planting areas. The platform measures 2.5m x 305m, with walls up to .8m high. (Bordner 7/18/91)
- 226[E/A'uahi]: A pair of connected C-shaped shelters oriented as windbreaks, located on a small knoll above around a series of cleared areas including a large *wilivili* grove. The shelters are constructed of stacked a'a, with cleared and leveled interiors with cobble paving. Both are situated so as to be protected from the strong prevailing winds by higher knolls, though they are still able to overlook the majority of cleared planting areas. The shelters are approximately 2m in diameter with walls up to .6m high. No midden was noted. (Bordner 7/18/91)
- 227[E/A'uahi]: A L-shaped wind shelter which measures 5m x 2.5m, of core-filled a'a up to .8 high. A series of vague features are located in this area, all of which are more improved natural features rather than visible man-made constructions. The pahoe-hoe is in slabs or sheets, with a'a at the edges where would have occurred normally, but the area is too clear. Judicious use of the natural features with minimal clearing would have resulted in habitation areas, windbreaks and planting areas, especially in gaps between the pahoe-hoe sheets, where the heavy vegetation such as the *wilivili* now cluster. However, without visible midden the features are too ambiguous to be formally termed human modifications. (Bordner 7/18/91)
- 228[E/A'uahi]: A very large house site or heiau located on top of a small a'a knoll. It consists of a large enclosure with a series of cleared, leveled and ili' ili paved areas. The walls are core-filled a'a up to 1m high and .7m wide. In the northeast corner flat pahoe-hoe slabs have been laid down as a floor. The site is located next to a large gulch which must have running water a good proportion of the time as it is clear of vegetation. The gulch is heavily used by cattle for mauka-makai travel, and would appear to provide an excellent trail for human travel from the coast up to Lualailua Hills. (Bordner 7/18/91)
- 212[A/A'uahi]: Along the Shore Trail are scattered house sites and villages. Five house sites were seen just west of Waialio at the foot of the Lualailua trail. (Walker ms 1931)
- 210* (A/Lualailua Hills): Waialio Village sites. Waialio is the name given to the village at the foot of Lualailua trail. 27 sites were seen, 15 of them house sites, but no heiau structure. 140 house sites in all were seen in a stretch of 6 miles, from Manawainui Gulch to the foot of Lualailua trail. Assuming 6 persons to a house would give a population of 840 for this section of Maui. (Walker ms 1931)
- Site 1165, Waialio complex. This site is located on the coast and is called Waialio Village #1. It is a village site with enclosures, platforms, a canoe shed and terraces. It is at the foot of the lowlands below Lualailua Hills at the shore, and covers 36 hectares. There are 19 features within the complex, but no religious sites. (Hommon 1973)
- 211 * [H/Lualailua Hills]: North of Lualailua Hills at the place where the trail comes up from the southeast is a small village of 5 house sites and the small heiau described as site 182. All were of rough basalt blocks. Small piles of stone nearby indicated potato patches, the only crop besides melons and gourds which can be grown in such rough country. (Walker ms 1931)
- 209* [A/Lualailua Hills]: Hanamauloa [alt. sp. Hanamauloa] Village. Hanamauloa, the largest village, is situated at the shore below Lualailua Hills. It contains approximately 80 sites of all kinds which is about 4 times as many as the average village contained. Not all of those sites were used as human habitation, and it is difficult to determine which ones were so used. (Walker ms 1931)
- Hanamauloa is a large village near Kiakana Point. The trail here leaves the lava flow and comes out into a grassy basin. The trail itself is 6 feet wide and has curbs 2 feet thick of slabs of stone. 70 sites were seen in this vicinity including heiau sites 180, 183, and 184. The 28 house sites are large, the platforms covered with pebbles and coral. There are several large caves at the shore which have been used for shelters and are still used by fishing parties. A windmill and wooden cabin show that the place was occupied at a comparatively recent date. (Walker ms 1931)

Agricultural:

- 324**[F/Kanaio]: A series of mounds and apparent agricultural terraces/planting areas located on a knoll to the West of Site 204. The features are of single-course a'a and define flat and clear areas. These features are located approximately 10m makai of Site 264.(Bordner 6/14/1992)
- 327**[H/Kanaio]: This enclosure is located just makai of the Goodness Estate 15m to the West of the lip of the gulch/canyon and 4m East of a mauka-makai boundary wall. The walls are core-filled a'a up to 1.6m high and 1m wide. The site measures 5m x 4m with a level and clear interior with good soil. (Bordner 6/18/1992)
- 321**[H/Kanaio]: Second L. Bruce "walled structure", consists of an oval enclosure corefill up to 1.8m high and 1.5m diameter(interior). On a slope, interior clear but not level.(Bordner 6/6/1992)
- 322**[H/Kanaio]: A large partial enclosure located approximately 5m makai and down slope of site 321. Badly collapsed stacked a'a up to .6m high, 1m wide and measures 4m x 7m. It apparently encloses a partial low sink flat. It appears agricultural as the interior is clear and level with good soil. Both sides have semi-natural flats at the bottom of lows. These are found all throughout Kanaio and would be good for planting as they have decent soil and are fairly level, but in most cases do not appear to have been cleared of loose rock. A fairly high proportion of the land around Kanaio town fits this category and might help to explain the lack of more formal agricultural features as long as sufficient water (rainfall/mist) was available.(Bordner 6/6/1992)
- 328**[H/Kanaio]: A core-filled a'a enclosure on a ridge point. It measures 3m x 305m and has walls up to 1m high and .8m wide. The interior has been badly damaged, but is still level.(Bordner 7/3/1992)
- 325**[I/Kanaio]: A improved sink with banana (in good condition and bearing). This sink appears to continue as a cave at the makai end. The large area around this site contains a number of very ambiguous features that appear to be core-filled boundary walls, planting mounds and cleared areas for agriculture. This area has a number of small flats with good soil separated by a'a outcrops.(Bordner 6/22/1992)
- 326**[G/A'uahi]: A leveled a'a knoll. On top of the knoll an a'a field has been leveled out and measures approximately 10m x 5m. In addition the stream sides down slope have been built up and fronted with stacked a'a up to 1m high, probably for water control onto the lower flats.(Bordner 6/26/1992)
- 320**[D/A'uahi]: A series of features located in a natural sink. The free-standing walls have been built up to .6m high of stacked a'a. The center of the features have been cleared of stone, and the area contains very rich and deep soil. This would appear to be a planting area for either dryland kalo or sweet potato/yam cultivation.(Bordner 7/21/1991)

General Legendary Cites:

"They sailed to Kulua (the ancient name of the island of Maui, perhaps so called because of the two divisions, East Maui and West Maui)."(*Hainakolo, Hawaii Holomua*, 12/26/1912, "Place Names of Maui")

"Kaala-miki-hau was a shark of Honuaula, Maui"(4/1888)

"Kane-i-kokala (k) was a shark of Kahikinui. In Mr. Bingham's list it is called the shark of Maui."(J.S. Emerson; "Sharks of Maui" in HEN vol. 1 pp.588)

"Kane-kokala (Kane-of-the-thorny-spines-on-the-back) and his sister, Kane-wahine (Kane-the-female) lived at Kahikinui, Maui. They went together around Maui, the brother grew hungry and the sister went for food."(3/16/1907, HEN vol. 1 pp. 588)(EPS ms

1977)

“Uliuli ka pali O Kahikinui e, Dusky are the cliffs of Kahikinui,
Kokolo mai la ka ohu he ino.” The mist creeps by; it is storming.
“Honuaula, e paluku ia ana na Honuaula, whose shoulders are pummeled by
kipipooihiwi e na ale O ka Moae.” the Moa’ e wind.
“Ka ua Naulu O Honuaula.” The cloudless rain of Honuaula.
(HEN: vol. 1 pp. 950)(EPS ms 1977)

Legendary Sites:

405*: A Hawaiian Legend of a Terrible War Between Pele-of-the-eternal-fires and Waka-of-the-Shadowy- Waters.

At Kapahulu, in Kipahulu, the lava went on a slant below Ke-’aha-moa from Hale-a-ka-la to Luala’ilua, and made 2 mounds, called Na-pu’u-mahoe (Twin Hills), that remain to this day. Above these mounds was the first long trail connecting noted places and between these mounds is the new government road being used now.(HEN vol. 2, Ka Loea Kalai’aina 9/9/1899)

401: Kumukau’s place. Makai is a cave called Ka-lua-’ilio (dog-cave). It is at the edge of the place where Pamano met his death.(Po interview 1966)

402: Pohaku-’ula’ula and the legend of ‘Ele’io. He (Ele’io) went from Kekaha, turned to the leeward side of Maui and arrived at Honua’ula where he met a female spirit, Kelekeleiokaula. The woman whose name was Kelekeleiokaula was a virgin who had not known men. She had sickened and died and so her spirit went to meet ‘Ele’io at Pohaku-’ula’ula. This place lies directly above Pu’umahoe in Honua’ula ...

After their conversation on the resting place of Pohaku-’ula’ula, the spirit of Kelekeleiokaula accompanied him as far as the trail leading to her home and that of her parents.(Pualewa/HEN notes)

411[A/Kanaio]: Pohaku Pa’ea. Pohaku Pa’ea in the sea is the lower part of the man’s body, and Pohaku Po’okanaka up near Pu’u Mahoe are the man, Pa’ea, of the Pele legend which puts the Pa’ea flow as the very final eruption, said to have occurred in 1736 when Pai’ea Kamehameha I was born and his grandfather, King Kekaulike, died. Pele went to Moku Hawai’i as his Tutu ‘Aumakua and he could stop a lava flow by tossing some of his hair into it.(Ashdown letter 1/28/1977)

At Kanaio, the Destruction, the man named Paea dwelt at Make’e and desired everything for himself. He brought punishment upon his wife ‘Olapa and after destroying her was, himself, ground like stone into powder. His head and torso are Pohaku Paea at the Ana Muki; his lower body is Pohaku Paea in the Sea of Keoneoio where the spirits mourn at Ku-makena, Nahawale, and Maonakala which once was a thriving village.(Ashdown ms, n.d.)

“Last Lava Flow on Maui: The Evidence and a Rough estimate of the Date.”

“I [Father Bailey] was first stationed on Mau-i in 1841,” said Father Bailey. “In my trips about the island I noticed a lava flow at Ho-

nu-a-u-la, at the south end of East Mau-i, which appeared to be much fresher than the other flows--much more so than it appears now (1879).

"I asked the natives if they know when that flow had occurred, and they told me that their grandparents saw it. They also told me that a woman and child were surrounded by the flow, but escaped after it cooled."

... In passing the time, I happened to mention the above conversation [Thurston, in 1906] with Father Bailey, when one of the cowboys, a half Chinese named Charlie Ako, said; "I know about that."

"What do you know?" I enquired.

"I married a woman from Ha-nua-u-la," said Ako, "and my father-in-law, of Ha-nua-u-la, who died last year, at the age of 92 years, told me that when the flow at Ke-o-ne-oio ran out, his grandfather saw it, and that, at that time, he (the grandfather) said he was old enough to carry 2 coconuts from the sea to the upper road."

This is a distance of 4 to 5 miles. The trail is rough and upper road is at an elevation of approximately 2000 feet.

.... There I met 3 old Ha-wai-i-an men, all of whom had known Ako's father-in-law during his lifetime. Each of the 3 men, separate from the others, told me the following tradition, or legend concerning the flow in question, differing only in minor details.

"A man and a woman with two children, a boy and a girl, lived at the point in Ho-nua-ula, where the lava flow which forms the west side of Ke-o-ne-oio originated.

"They owned a flock of chickens and had made a vow that no one should have one of these chickens until some of them had been sacrificed to Pe-le, the goddess of the volcano.

"One day an old woman appeared and said she was hungry and asked for a chicken to eat.

"The couple replied that they could not give her a chicken because of their vow to Pele.

"The old woman thereupon became enraged, disclosed herself as Pele, and, with the typical cruel and vengeful spirit of the Ha-wai-i-an gods, instead of being grateful to the couple for their faithfulness in their vow to herself, cast a spell upon the earth and produced a lava flow on the spot, with which to destroy the offenders.

"The mother seized her little girl and started to run up the mountain to escape the lava.

"Pele seized the woman and split her in two; turned her and her child into stone and fixed the halves, one on each side of the spot where the lava was pouring from the ground, where they can be seen to this day ; conclusive evidence of the truth of this legend ..

"Meanwhile the father grabbed his little son and started to run to the coast, intending to swim across the channel for safety to the island of Ka-ho-o-la-we, some 8 miles away.

"While Pele was destroying the woman, the man made some distance down hill before Pele could attend to him. Having disposed of the woman, Pele at the head of her lava flow, then chased after the husband. He, arriving first at the beach plunged into the sea, and with his son, had reached several hundred feet from the shore when Pele arrived. She threw rocks at him, finally hitting and killing both father and son. She turned both into stone. They can be seen to this day, a big rock and a little, rising from the sea, several hundred feet out from shore, undisputed proof of the truth of this story, as anyone can see who chooses to go and look ... "(L.A. Thurston, Advertiser 2/24/1924)

413: From Hana-mani-o'a to Wai-aka-puhi we never fooled around that sea. Pele had been angry with a certain man who was unreliable. She cooled her anger by destroying this Puhi-'o-' a there and filled his mouth with boiling lava. Plenty puki were there, huge ones. And the eel shadows were eerie. The Ua-lani-pili used to make cloudbursts all in Honua'ula, along with the Ua'lani-pa-ina rain of Ulupalakua and these two rains along with Naulu kept the land fresh. I do not see them anymore. Sometimes a Kilihune blows a bit of moisture, softly, but the land is too dry. Pili grass seed should be planted. Even the wiliwili and Neneleau are dying ... Even the forest mauka seems to be disappearing.(Ashdown letter 1/28/1977)

414: Kanaio. In one sense, Ka naio refers to destruction, and it occurred in Kanaio in 1736 or so. Down near the shore is Ke awa naku (Ke awa nuku?) heiau. The Rolling Waters? or a harbor-- Or is it Kanahena where that harbor of Paako is said to be where people were "given to the mano"?(Ashdown ms n.d.)

407: Pu'u Pi'imoe. The hill where Pele went inland to "climb to sleep." 'Olapa is associated with the death of King Kekaulike of

Maui (died 1736). Makua flow is the oldest.(Ashdown ms 2/10/1977)

412: ... Po-Poki heiau is by the cemetery of the Kukahiko family. Po means a night or revelation; Poki is the dog of Pele associated also with Wai-a-ka-ilio Springs (I.e., the dog belonging to the old woman which leads her to the spring). Since Nahuna (the Secrets) is the name of the lae there, no doubt many revelations were given there. Most people call it “popoki” today, because “the sea hisses there.”(Ashdown letter (1/28/1977)

406: We, oh reader, shall move to Auwahi (going past) Ke-ahu-aiea at the boundary of Kahiki-nui and here we come to Honua’ula (Ke-ahu-aiea is on the boundary of Luala’ilua and Auwahi and the maps show Auwahi as in the district of Kahikinui, EPS). Between the hill of Nale and Ke-puka-hala-malo at Auwahi, is the source from which Pele descended to a place called Kuanunu.(HEN vol. 2, Ka Loea Kalai’aina 9/19/1899)

408: Ka-hiki-nui. The big horizon. Named by Hawai’i-loa-ke-kowa, the first navigator. Named the big island for himself, and others for his family. Pu’u Ani-Ani in Kahikinui is named for his father, Ani-ani-ka-lani, also a great navigator.

Hawai’i-loa “drew” the navigational triangle, from Maui to Kohala, Hawai’i, and to South tip of Kaho’olawe named Ke-ala-i-Kahiki (trans.= the-roadway-to-and-from-the horizon). Kahiki doesn’t necessarily mean Tahiti. Kahiki-ku is the entire horizon as far as the eye can see.(Ashdown ms 2/10/1977).

409: Area between Nu’u and Paeahu was called Honua’ula. Now commonly called Kahikinui.(Ashdown letter 1/28/1977)

410: A’uahi. The misty-white smoke of the lava flows.(Ashdown letter 1/28/1977)

403: After a little while they went on to A’uahi for which these few lines of song are the beginning:

Hot is Auwahi

Glowing, the lava of Hauake’ie’ie

It wasn’t long before they came among the wiliwili trees and ‘akoko shrubs. They reached Ke-ahu-’aiea which is the boundary of Honua’ula and Kahikinui.(Kaukoa, Moses Manu: 2/23/1884)

404*: The rocks at Hanakaieie in the legend of Aukelenuiaiku. (As Pele and Hiiaka moved down the island chain)... from Molokai they journeyed to Haleakala in Maui. Upon their arrival at this place they began digging a pit which they left open on the top of the mountain. The rocks at Hanakaieie, at Kahikinui, are those that were dug up by Pele and Hiiaka.

Note by E. Sterling: “This had reference to a cluster of rocks in a field or section of a’a rubble lava in the uplands, said rocks being noted for their grouping rather than extraordinary size.”(Fornander v. IV/I: 104)

Burial Sites:

503[E/Kanaio]: Pu’u Pimoe, where Pele went inland to sleep, is a burial place. Not only the “5 coffins, but much earlier hiding places.(Ashdown letter 1/28/1977)

Modern burial cave at Kanaio. It is located east of the old prison camp at the foot of Pimoe cinder cone. The teachers (from Maunaolu College) had found the cave over a year ago and reported it to Elspeth P. Sterling, with the fact that there was jade jewelry with one burial. A month or so ago they revisited the site and found the coffins open, the contents strewn about the and jewelry gone. The cave is quite small and had been sealed. A chimney-like hole in the roof had also been closed with a few stones. Seven coffins were found inside, most of them smashed. A child’s coffin had been partially opened and overturned, but not ransacked. Eight crania were seen. Several coffins were fastened with square, cut nails; others were fastened with galvanized

wire nails. Remnants of clothing, a felt hat and shoes were found scattered about. One desiccated right foot was found. The cave was quite wet from recent heavy rains. I would guess that all the burials had been placed there within the last 50 years. The site is apparently rather well known. Later heard that a group of students(?) had followed us there that day.

Visited the east rim of Pimoe and found a number of paved terraces extending from the 1569 top down the saddle to the north.

The 3 upper terraces were well paved, perhaps 2 by 3 fathoms but vague on the west side, and each about 1 foot above the one below. A 3 foot drop on the north side of the series starts another series of terraces, mostly outlined with stone and with little or no paving, which continued perhaps 300 feet to the bottom of the saddle. This group is most likely a burial ground. The paving on the upper terraces seemed to be only about 6 inches deep. Elspeth P. Sterling thinks the area a heiau. (Soehren letter 4/13/1963)

Site 1235, Cave of 7 Coffins. This is a lava tube/bubble 100m from the base of Pimoe cone, surrounded by low rock knolls in lantana. The entrance is sealed with a stone wall, and nearby is a small wooden shrine, shaped like a gabled house, with a statue of Christ and 2 votive candles. Did not enter.

Lloyd Soehren in 4/13/1963 went with E.P. Sterling to see the cave. A year earlier there had been 1 burial with jade jewelry. On 4/13/1963 the coffin was open, the contents strewn around and the jewelry was gone. The cave is now sealed and quite small. There are 7 coffins, most smashed. Eight crania were noted. The burials apparently have been within the last 50 years. Later heard that a group of students(?) had followed us (Soehren) there that day. Probably from Maunaolu College as two teachers from there went with L. Soehren and E.P. Sterling. (Hommon 7/17/1973)

Informants say that the "7 Coffins" site has been heavily vandalized, with coffins busted up, wall kicked down and bones scattered around.

The probable "7 Coffins" site is located in a very dense lantana thicket in one face of a small collapsed sink. The front of the cave appears to have a well-stacked wall sealing off the entrance. No sign of a shrine was noted, the only cultural material being numerous aluminum beer cans on the sink floor. A second possible burial area is located in the East face of the sink, where a small cave goes back for at least 5m. A piece of 2x4 wood plank is located on the floor of the sink near the cave entrances and may be one of the coffin pieces noted by others. (Bordner 6/26/1992)

506[E/Kanaio]: A cave located on a remnant of an older outcrop which now an 'island' in the new flow material from Pimoe. There is a cave which extends for at least 4m back which has recently-cut haole koa limbs and a much older torch end (pili grass) at the mouth. The cave is only .6m high and 1.5m wide, with a very fragile ceiling. No burials were visible. (Bordner 6/26/1992)

505[H/Kanaio]: The historic cemeteries located 10m apart just makai of the upper Kanaio road. The mauka one has 11 units, all concrete cenotaphs except the mauka row which are just single-course walls. The makai group are surrounded by cinderblock walls with a gate, with 2 concrete cenotaphs inside. (Bordner 6/6/1992)

507: Burials at Waiailio, in Lua o ka Ilio lava tube cave [site 604]. After lunch we examined the lava tube Lua o ka Ilio(?) (Waiailio of Walker) through the large hole in the roof just mauka of the old windmill site. The banana trees in this hole were flourishing from the rains. On the floor of the cave were found a number of shell fragments, and a coral file was picked up at the mouth of the mauka entrance to the tube. There is a good deposit of dust in the area around the opening, but no indication of midden material below the surface. The remains of a wood ladder still stand against the east side. Bottles and gunny sacks were found near the foot of the ladder. The tube extends makai about 100 feet (Mr. Boym checked this site). Mauka we walked slowly but steadily for nearly half an hour. At least one burial was seen in the center of the passage under a heap of rocks; other heaps may have been burials but no bones were seen. At the end of a dead-end tube to the right a chamber had been sealed off, inside which were seen many bones and a large helmet shell with (I think) a hole in the spire end (apex). It was not removed. Other bones were seen under the rocks at the end of this tube. A little beyond in the main tube, just before a rock fall appears to block passage

(by clearing it one might squeeze through a ways farther), and on the right side in a nook a coffin was seen. On a ledge above was an old charcoal iron. The wood was sopping wet and crumbled at the touch. The end had fallen out, and with it a woman's turtle shell comb of the ornamental kind. A bottle appeared to lie along side the remains inside the coffin. Nothing was taken.(L. Soehren 4/13/1963)

501[D/Kanaio]: Pohakea (Suspended Sand), a hill east of Pimoe. Seven coffins found there.(Po interview 1966)

502: Lava tube with human remains and lava basin with pure fresh water near South shore Maui. About 1 mile up the trail, at approximately the 600 foot elevation, just off to the right, east, are 2 tubes. The upper one leads down into 2 branches. A water basin is in the left, east, branch.(Torgerson ms n.d.)

601: Pahua fishing grounds located at Kanaio. Laeloa is one landmark--when directly over Holu Point that is the upper mark. Puwai is the lower mark and is called Kahope-a-ka-waa. There is a cave at Kanaio. The stone within resembles a man standing--when it appears slightly toward the windward side then you came over the spots roughly 40 fathoms deep.(HEN notes n.d.)

608: Wai ola Flow takes its name from the story: All Honua'ula (the Sacred Land/Earth of Maui), from Nu'u-Wai'u to and including Pae-ahu, and from beach to mountain summit. The Ali'i liked to dwell in Honua'ula--the final one I know about was Queen Kalola (daughter of King Kekaulike and sister to King Kahekili of Maui, who died in 1794). Kalola was the last one to pronounce the sacred 'Kapu of the Burning Sun' of only the Maui ali'i (in 1790) in response to the Olowalu Massacre by S. Metcalf.(Ashdown ms 2/10/1977)

609: The area has not been studied thoroughly by archaeologists but valuable as heiau, house sites, etc. remain from antiquity. Pi'ilani paved road from Keoneoio to Nu'u is about all that remains of the trail built by order of King Pi'ilani who died in 1524. His son, Kiha, is credited, but he simply completed the road round West Maui.(Ashdown letter 1/28/1977)

The Pi'ilani trail within Kanaio and west A'uahi is in excellent condition, and obviously served as a main focal point for traffic along the coast. This can still be seen not only by the effort involved in the construction and maintenance of the trail, but also the large number of subsidiary trails that branch off from this trail to various locations along the coast. However it does not appear that it was integrated into travel into the lower mauka sections as no visible subsidiary trails were noted heading mauka. At intervals along the makai side of the trail are small oval enclosures which appear to have served as temporary shelter, likely for individuals who ended up on the trail at dark. While this trail is very wide, the base material is very difficult to walk on. In part this may be due to disturbance by wheeled and hooved historic transport, but in some areas it appears that the trail was not really intended for normal foot traffic as there will pre-contact stepping-stone trails running parallel to the Pi'ilani trail that provide a much safer and quicker path.(Bordner 12/21/91)

611[F/Kanaio]: There are a whole series of trails that run makai from the Site 256 area, along with others running along the slope contour. All are excellent in construction-- a combination of small material with stepping stones. One big one continues to the Southeast over to Site 204. Though there are supposed to be a series of water caves in the vicinity I was unable to locate them. Many of the trails cross over the ahupua'a boundary into Kalo'i.(Bordner 6/12/1992)

629[F/Kanaio]: A large series of lava tubes located on either side of the main highway. The largest of this series of at least 12 parallel lava tubes measures .8m wide and 2m high and extends for a minimum of 30m. All the tubes are in a section of recent a' a flow, and run from the northeast down to the southwest. While none of the tubes had visible cultural material, dense vegetation indicates water is present within at least some of the tubes. Several have been intentionally filled in areas of roof collapse, though in most cases this appears to have been done to keep cattle from falling in. However several show sophisticated blocked-off openings which likely were to hide burials. Many of these tubes are only 3-8m apart and it is possible that they merge at some point up mauka that was not located.(Bordner 12/20/91)

610[F/Kanaio]: Additional structure, unrecorded. On the top of a hillcrest approximately .8 mile west of intersection of highway and National Guard access road. There is an irregularly-shaped walled enclosure. The ocean side has a flat surfaced lanai extending the length (about 20 feet) of the structure. It is built up about 2 feet from the surface of the hill.(L. Bruce 7/9/1972)

613[E/Kanaio]: A midden deposit located in the National Guard range on the mauka side of Pimoe. One individual, while collecting cinder from here, found a piece of flat cinder with 7 islands carved on one side and "Islands of Hawaii" inscribed on the other in gold plate.

On close examination the historic midden deposit is limited to a fairly small area, a low pit now cut by an water erosion gulch. On the East side of the gulch there is a crushed car at the base, mixed with iron, glass, ceramics, *'opihii*(large) and cowrie(large). On the West side of the gulch are house beams, lumber, plumbing, electrical boxes/wiring, a complete boot, cattle bone, ceramics, glass and large *'opihii*. The West side almost looks like a burned-out house as there is 5cm thick ash layer around burned house beams, and also a large amount of melted glass. But it could be dump burning. Surface finds also support a small area of no more than 15m x 10m - not just scattered around but very focused. Given deeper lows from erosion/cinder mining, it is a puzzle why material ended up here and only here, unless there actually was some sort of structure which became a dump site. The glass and ceramics likely date from the Prison Camp period, which may also explain the large amount of shell if it was a work camp with a part-Hawaiian population. (Bordner 6/26/1992)

602: Salt pools at Uliuli village(#207). Salt from the sea spray collects in small pools on top of the rocks near the spring, and the spot was often visited by natives from distant places in order to procure the salt. Elsewhere, as at Nu'u, salt pans were made by making shallow depressions in large boulders. (Walker ms 1931)

628[F/Kanaio]: A rectangular enclosure of excellent construction on a flat approximately 60m makai of the site 121 cave. The enclosure is of core-filled a' a construction up to 1.5m high and 1.1m wide, and appears to have a entrance on the makai face.(Bordner 12/26/91)

630: Traditional trail that runs from Kanaio east of Pohakea and down to the coast at Waiailio. The trail is in good condition, with stepping stones incorporated where needed. There are three small *ahu* located at high visibility locations along the trail, each of stacked a' a .7m high. The *ahu* are located in areas of flats where the trail disappears, and act as indicator marks for where the trail re-appears. Coral is not used on the trail as it is not necessary - the use of the path leaves the path light gray from the dust and exposed rock, which provides a very sharp and distinct contrast to the very dark gray and red-orange a' a flow material. It is distinctive enough that this trail is very visible on the aerial photos of this section of Kanaio. At certain locations the trail has stacked a' a walls on either side up to 1m high, and at one location when the trail enters onto a flat the trail is on a causeway for almost 15m. The trail intentionally connects a series of large parallel *kipuka* with good soil (though very limited water), and it is possible that these are the locations noted in the Po interviews where soil was taken from to transport down to the coastal planting areas.(Bordner 12/26/91)

620[H/A'uahi]: A walled enclosure around a small gully. The wall is of stacked a'a up to 1.5m high, and the enclosure runs for 40m x 30m.(Bordner 7/15/1991)

621[I/A'uahi]: A series of corrals and holding pens that form the work station for 'Ulupalakua Ranch during branding and sorting. All the fences are barbed wire with gates, still seasonally used, with a water tank at the mauka end.(Bordner 7/15/1991)

622[F/A'uahi]: A cluster of 3 *ahu* in an L shape. All are substantial and highly visible, of stacked a' a up to 2.2m high. They appear to small to have served as burial *ahu*, and may possibly mark the site 603 'Abu of Aiea', though if this is the case the puzzle is the presence of three similar *ahu* rather than one distinctive one. (Bordner 7/18/1991)

623[F/A'uahi]: A large irregular oval enclosure, with very low walls which are only up to 2 courses high. The pahoehoe wall is only .6m

high. The interior is clear and flat though it consists of bare pahoe-hoe. (Bordner 7/18/1991)

624[F/A'uahi]: An *ahu* in an open area below the main highway. The *ahu* is of stacked a'a up to .6m high and covers 2m x 1.5m. In form it appears to be a burial *ahu*, as there is no sign of collapsed stacking. To the south approximately 15m is a walled enclosure of stacked a'a with unusually high walls of up to 1.7m high, .8m thick. The enclosure measures 6.5m x 3m. The interior does not appear to be noticeably cleared or leveled. (Bordner 7/18/1991)

625[F/A'uahi]: A small enclosure of core-fill a'a construction located on top of an a'a flow. There must be water in the flow, as vegetation is rather lush in includes very large sisal. The enclosure measures 4m x 3m, with walls up to .7m high. In the stacked material were several water-worn stones, possibly from nearby gulches. (Bordner 7/18/1991)

626[C/A'uahi]: A series of linked walled enclosures in a low spot. They are constructed of stacked a'a up to .5m high on an a'a flow sink, and measure approximately 3m x 2m each. (Bordner 7/21/1991).

627[E/A'uahi]: An oval enclosure of core-fill a'a construction. The enclosure is approximately 8m x 6m, with walls up to .5m high. Down slope approximately 17m is a cleared and leveled area measuring 7m x 5m, with a small walled puka in the mauka end (30cm diameter). Next to this cleared area is a L-shaped wall section 3m x 205m of stacked a'a up to .3m high, that may have served as a shelter though there was no paving nor midden present. There are several other cleared areas in the vicinity but their boundaries are too indistinct to delineate them clearly. (Bordner 7/22/1991)

631[G/A'uahi]: A enclosure which has been partially destroyed by construction of a "NOAA Cooperative Weather Station" instrument cluster near a jeep road. The rectangular enclosure has had one wall destroyed by the bulldozed access to the NOAA instruments. The rectangular enclosure is of core-filled a'a up to 1m high with a leveled and cleared interior. (Bordner 12/27/91)

603[G/A'uahi]: Ahu of Aiea. The boundary work in this region was very interesting. One large ahupua'a--"Auwahi" was owned by Kamamalu, or rather Ruth Keelikolani at that time and this land was surrounded on all sides by Government land, so that I had to make a survey of Auwahi, the land was one of those awarded by name with no survey. This land also adjoined Kahikinui and where the boundary crossed the old alaloa mauka of Lualailua hills, was the ahu of Aiea. The old alaloa is quite a ways mauka from the present Government road and overgrown with forest.

This ahu was located on the mauka side of the old alaloa, and was a large and well built pile of stones and was the first real ahu puaa pile of stones that I have seen. (EPS ms 10/3/64)

604*: Paiko Windmill. '... started on our way out to Kanaio on foot, we camped below Pimoe Hill. This is waterless country, and we had to pack all our drinking water from Paiko's tanks.

We finally located a waterhole up above Lualualaea (Lualailua-EPS) Hills, and pitched our main camp up there

Paiko's windmill is located below Lualualae Hills, about a mile back from the sea, and is very interesting; we climbed down the shaft of the windmill into a immense lava tunnel cave, the lava tunnel being about 20 by 20 feet on one side of the lava tunnel was flowing a beautiful stream of water. The stream I should judge was about 1 foot deep and 3 feet wide, flowing on quite a grade. The country is very barren around the lava tunnel, also there are no woods to speak of above on the Haleakala slopes, yet the natives state that this stream of water never diminishes. (Baldwin ms 10/1881)

Today the Wai-a-ka-ilio supplies water to be pumped clear to Lualailua and the "Kahikinui House" built by Antone Pico in the mid 1830's. It was used by Ulupalakua Ranch but is now leased to AMFAC for ranching. (Ashdown, ms 2/10/1977)

607*[H/Lualailua Hills]: Footprint petroglyphs. K.P. Emory in 1922 visited an inaccessible part of Kahikinui near Lualailua Hills and was shown what appears to be human foot prints in an old lava flow. A total of 31 were counted, of which 20 were in pairs 3 inches

apart. He concludes that they represent children's feet but is uncertain whether to regard them as true petroglyphs or as imprints made by children trapped on a lava flow. This last seems unlikely as the natives have no memory or even legends of any recent eruption of Haleakala. His conclusion is to regard the prints as petroglyphs but of a form very different from those in Molokai (Kalaina Wawae, Moomomi).(Walker ms 1931)

Footprints in the Lava ..

These are to be observed on the pahoehoe lava which passes close to the north side of the inland hill of Lualailua, at a place called Papakea. The footprint petroglyphs are 30 in number, crowded into 5 small patches of pahoehoe, within an area not more than 35 feet in diameter, 200 yards north into the flow. They had been cut into the lava to the depth of 1/8 to 1/4 inch. Most of them are 8 inches long. The longest measured 10 inches, the shortest only 4 inches. Twenty of the foot-prints were arranged in pairs, 2 inches apart. They were pointing in all directions, but most of them into the flow.

These foot-prints were shown to Kenneth Emory in 1922 by Joseph V. Marciel of Kaupo. Hawaiians had shown them to Marciel years before, saying they were footprints of Menehune people made while they were crossing the flow, carrying stone for the building of Ho'alo'a heiau at Kaupo. Extensive weathering of the edges indicated that they were made long ago. A few of the petroglyphs were outlined, and some had the toes marked.(Emory ms 1/1960)

Footprints at Papaiki (Coming from Nuu to Lualailua Hills, EPS)... We were so glad when we drew close to the hills for our goal was just back of it. There were tall hills at 1500 feet above sea level. There was a hill on the upper side and one on the lower and the road went through the houses standing there, the beaches, Makena, Ulupalakua and Kahoolawe. From here we went along the side of the upper hill down to this side and it wasn't long before we came to a rocky plain. Here we dismounted and tied our mules to stones. We walked to the place where the footprints showed on the pahoehoe lava, not far off.(T. Maunupou , A Visit to Kaupo, Maui...', Kuokoa 7/6/1922)

605*: In the rough country near Lualailua Hills certain structures were seen which may have been house sites or sites of some other purpose. On the edge of certain flattopped hills a stone facing structure at Kaulaula, 1/4 mile east of the cabin on the Kula trail is a double terraced hill 37 feet long. It is built of rough basalt blocks but does not extend back more than 6 feet from the edge. Coral was found on site and also chips and flakes of a dark fine-grained basalt such as is used for adzes. It was suggested by the guide, J. Bums, that trees for canoes were felled and roughly shaped here, as the forest formerly extended down much further than it does now.(Walker ms 1931)

606*: Lualailua Fishing grounds. Lualailua is the ahupua'a. Pi is the fishing ground, and its landmark is located at Kipahulu. When Punalena is in direct line with the depression on Ka-Iae-o-ka-ilio, it is there, at the same place, where Kiele is located. The main landmark is Hekikipaihi (Hikilipahi in Hawaiian text, EPS). It is at 120 fathoms deep. (HEN vol. 1,-Poepoe and others collect.)

The important fishing ground, of the places mentioned (La-pueo, Alena, Lualailua) is Kiele;belonging to the Ahupua'a of Lualailua. The landmark is located in Kipahulu. It is the hill of Kalena, when it is in line with the depression of Ka-Iaeo-Kailio. The stone of the cape is its principal mark. It is 120 fathoms deep. (HEN vol. 1, Poepoe and others collect.)

Boundary Walls:

720: Stone boundary wall that appears historic, runs along ridge line. At lower section the wall is only up to .8m high, at upper sections up to 1.2m high. Constructed of stacked a'a.(Bordner 7/6/1991)

721: A combination of barbed wire fence and stone wall. The section running over the cinder is in fencepost and barbed wire, but when shifts to pasture turns into stacked a'a stone wall.(Bordner 7/7/1991)

- 722:** A stone wall 105m high of stacked a'a.(Bordner 7/7/1991)
- 723:** A stacked stone wall of a'a construction up to 1.3m high.(Bordner 7/10/1991)
- 724:** A pair of stacked stone walls that enclose or border a quarried area near the main highway. The walls are of stacked a'a up to .14m high. Ties into a nearby series of house sites and agricultural features.(Bordner 7/13/1991)
- 725:** A stacked stone wall of a'a up to 1.2m high. A second wall similar in construction and size intersects down slope.(Bordner 7/14/1991)
- 726:** A stacked wall of a'a up to 105m high.(Bordner 7/15/1991)
- 727:** A stacked boundary wall that appears to run completely through A'uahi, of a'a construction up to 1.4m high.(Bordner 7/15/1991)
- 728:** A stacked boundary wall that defines A'uahi from Lualailua Hills, of a'a construction up to 1.6m high.(Bordner 7/15/1991)
- 729:** A very erratic stacked wall of a'a construction which appears to serve more as a retaining wall for flat planting areas than as a boundary wall. In spots it even almost meanders back on itself forming sheltered areas protected from the prevailing winds. The wall is core-fill a'a up to 1.2m high.(Bordner 7/15/1991)
- 730:** A boundary wall of stacked a'a up to 1.1m high.(Bordner 7/21/1991)
- 731:** A boundary wall very poorly stacked a'a up to .5m high, usually only 2 courses high. It is very erratic in course, meandering off the contour.(Bordner 7/21/1991)
- 732:** A boundary wall of stacked a'a.(Bordner 7/21/1991)
- 733:** A series of fragmentary free-standing walls in a *kukui* grove. The walls are generally from 2m-4m in length and up to .7m high of core-fill a'a construction.(Bordner 7/21/1991)
- 734:** A boundary wall that meanders from an a'a spine and then turns into a freestanding wall. The wall is of stacked a'a up to 1.3m high. The wall at one point incorporates a partially collapsed bubble into a possible shelter, but no midden was noted.(Bordner 7/23/1991)
- 735:** A boundary wall of stacked a'a construction up to 1.8m high. This section has a barbed-wire fence incorporated into the upper course.(Bordner 7/25/1991)
- 736:** A boundary wall of stacked a'a up to 1.6m high.(Bordner 7/25/1991)
- 737:** A boundary wall which appears to parallel a historic-period road, of stacked a'a up to 1.5m high. (Bordner 7/25/1991)
- 738:** A short wall section coming off of a ridge, of stacked a'a up to .8m high. It appears similar in form and size to one found down slope, and is probably an extension of that unit.(Bordner 7/27/1991)
- 739:** A boundary wall of stacked a'a up to 1.4m high.(Bordner 7/27/1991)
- 740:** A boundary wall of stacked a'a up to 1.2m high. This wall appears to run parallel to the coast for a considerable distance both to east and west. While parallel to Pi'ilani trail it is makai of the trail and does not appear to be related to it.(Bordner 12/21/91)

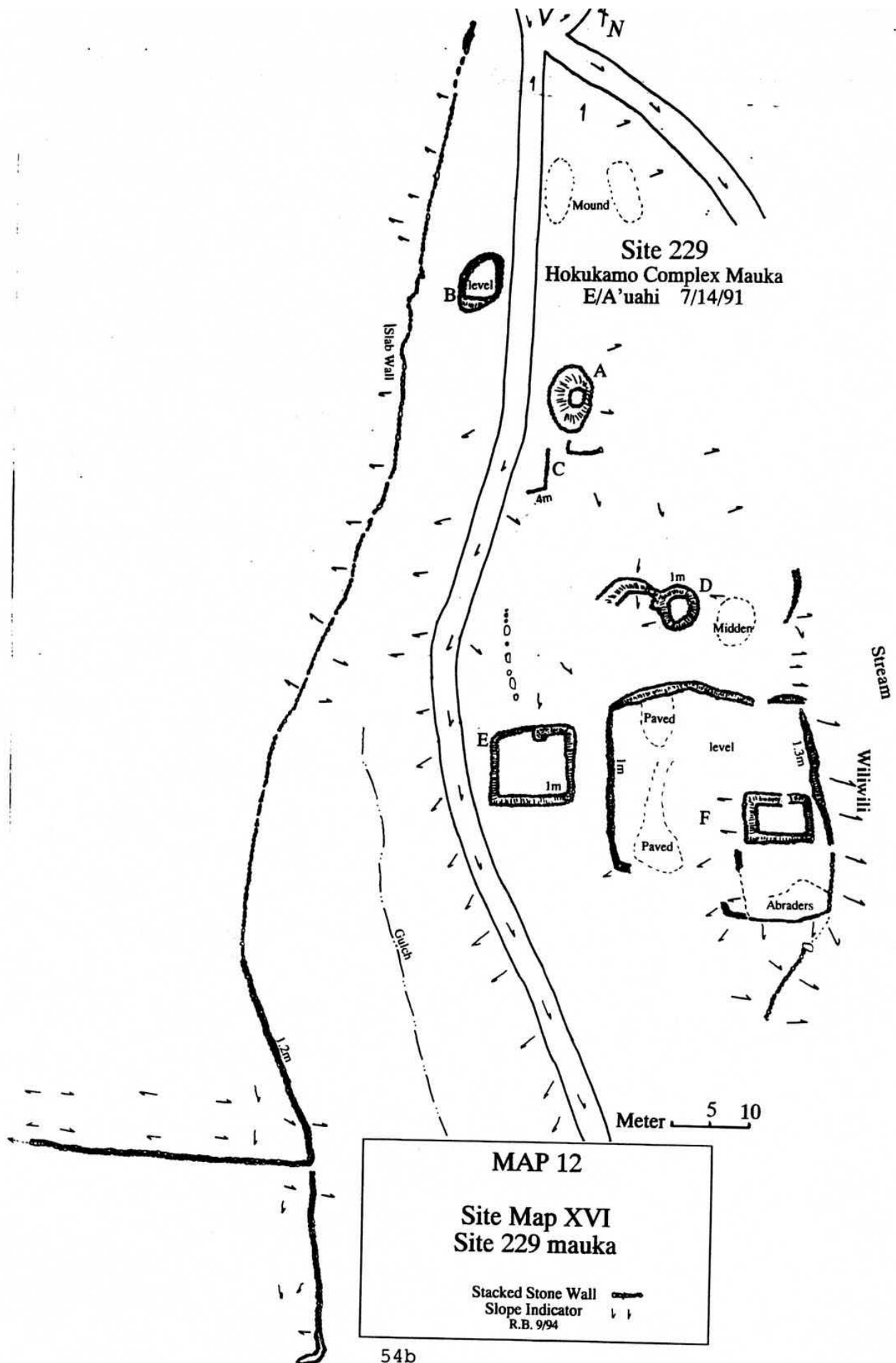
- 741:** A boundary wall that appears to define the area between Pimoe and Pohakea (below Pimoe) along the slope contour. It converts from a boundary barbed-wire fence to a mixed stacked and core-filled a'a wall up to .8m high and .5m wide, of poor to fair construction, below Pimoe. It extends across the new flow (flow from Pimoe) over beyond Pohakea till it reaches the older flow material, at which point it stops. (Bordner 12/24/91)
- 742:** A pair of parallel stacked walls up to .4m high, .4m wide and approximately 10m apart. They are located on a ridge above the campsite and seem to enclose an a'a low/sink on the mauka-makai sides. There are no enclosing walls visible at this feature. Below the makai wall (down slope) is a very large *wilivili*, but between the walls is largely bare a'a. The makai wall extends for approximately 8m and then ends, while the mauka wall continues for almost 100m on the same heading and ends in a series of outcrops in an a'a field. At this point there is a largely natural a'a ridge spine heading makai and down slope, but it is so low that it could only have acted as a boundary marker. The cattle have beaten a 2m-wide pathway just mauka of this wall, and it obviously acts as the major route they follow across this section. The area just mauka of the wall seems to have several short walls running east-west (on the contour) that tie into mauka-makai (down slope) ridgeline outcrops but as these walls only measure up to .4m high, of poorly stacked a'a, it is hard to visualize their purpose except as boundaries, as they do not act as retaining features for soil or water diversion.(Bordner 6/6/1992)

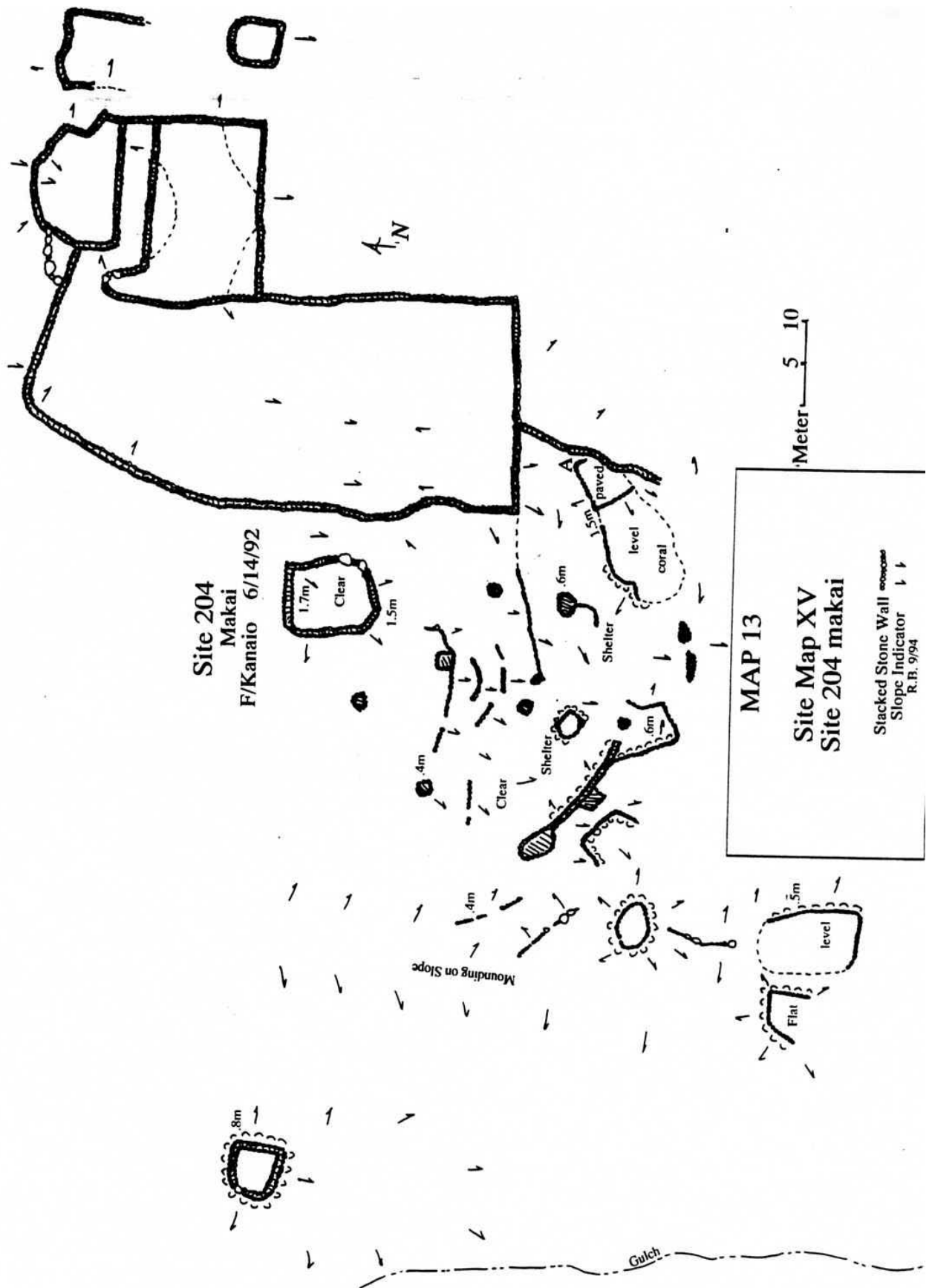
Site 229
Hokukamo Complex Makai
E/A'uahi 7/19/91

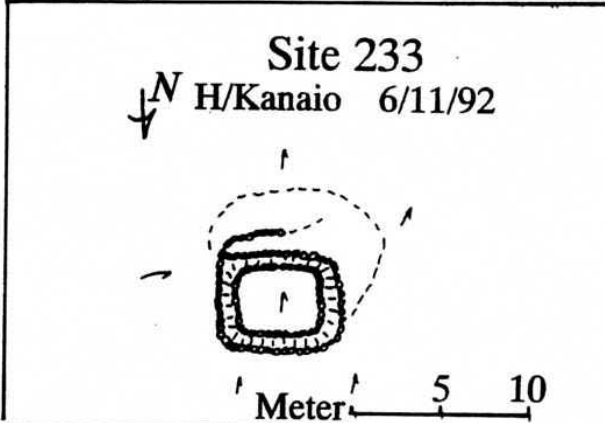
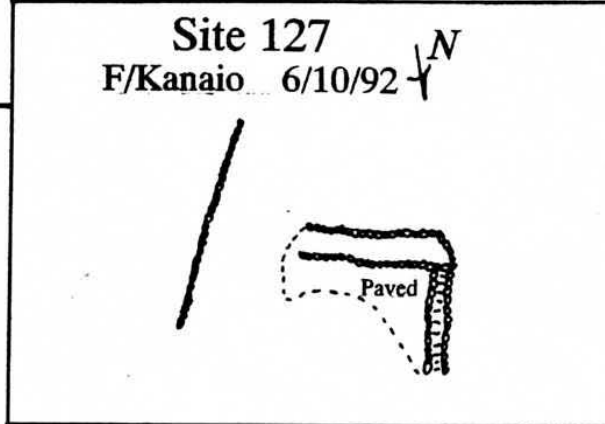
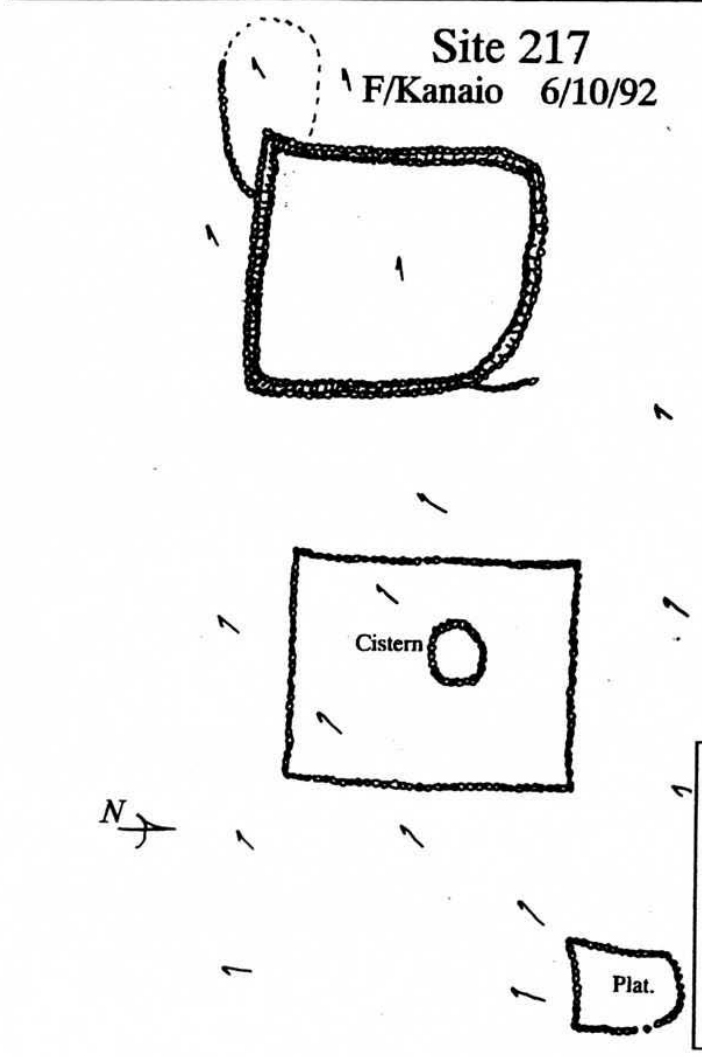
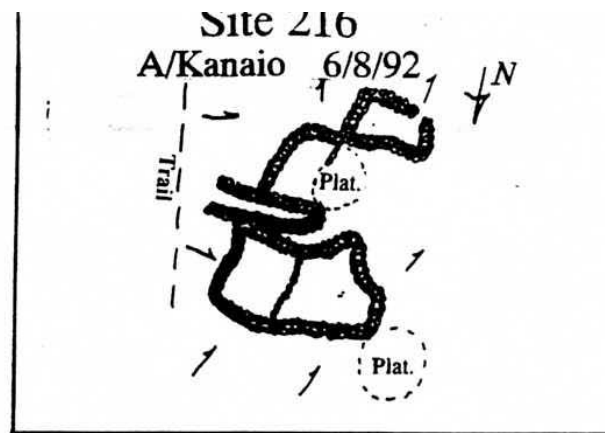
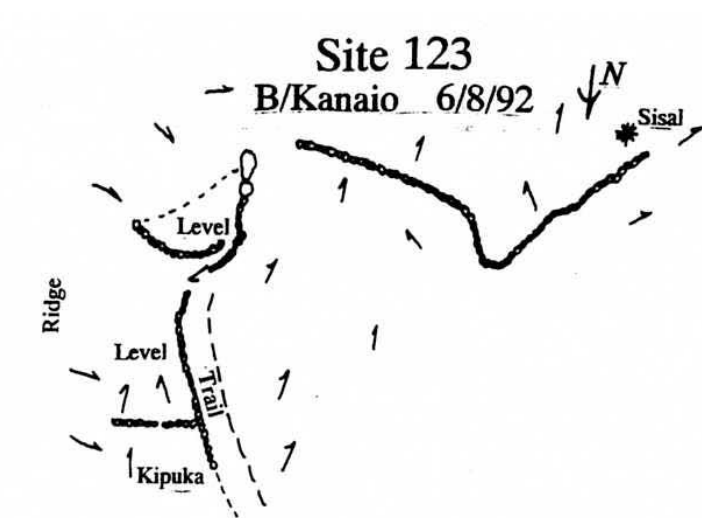
1.4m
9m
Paved Plat.
Burial Plat.
Foot Trail
Paved
Puka
Paved
Puka
5m
1.3m
1.7m
Paved
Clear
Jeep Rd.
C
1.7m
Gulch
Small Gulch
Clear
D
Paved
N
MAP 11
Site Map XVII
Site 229 makai
Stacked Stone Wall
Slope Indicator
R.B. 9/94
Meter 5 10
54a

Site Map XVII
Site 229 makai

Meter $\overset{5}{\text{---}} \overset{10}{\text{---}}$









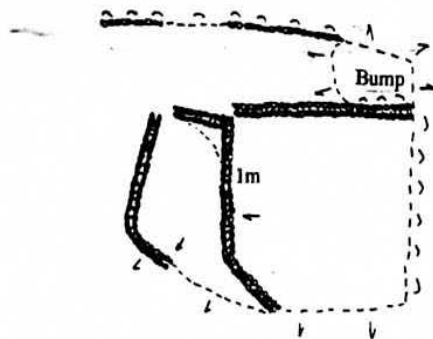
MAP 14

Site Map I

Stacked Stone Wall 
 Slope Indicator 
 R.B. 9/94



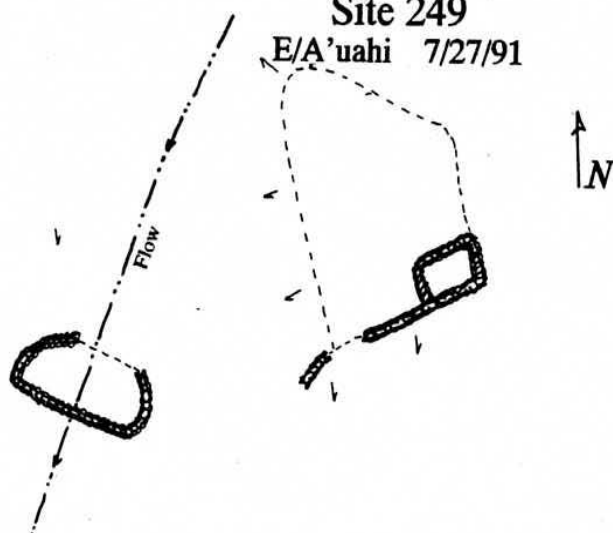
Site 242
F/A'uahi 7/25/91



Flow

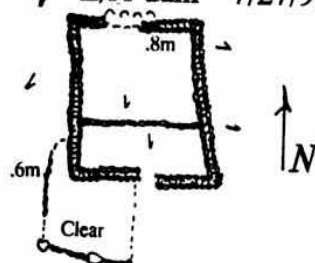
Site 249

E/A'uahi 7/27/91



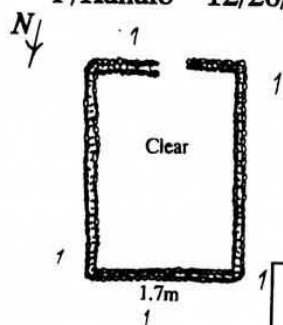
Site 250

E/A'uahi 7/27/91



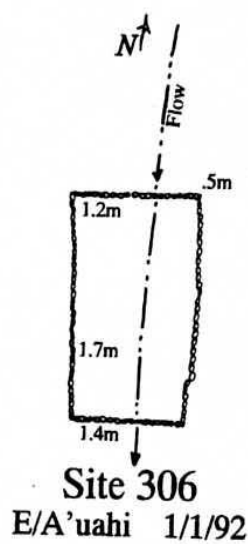
Site 628

F/Kanaio 12/26/91



Site 121

F/Kanaio 12/26/91



Site 306

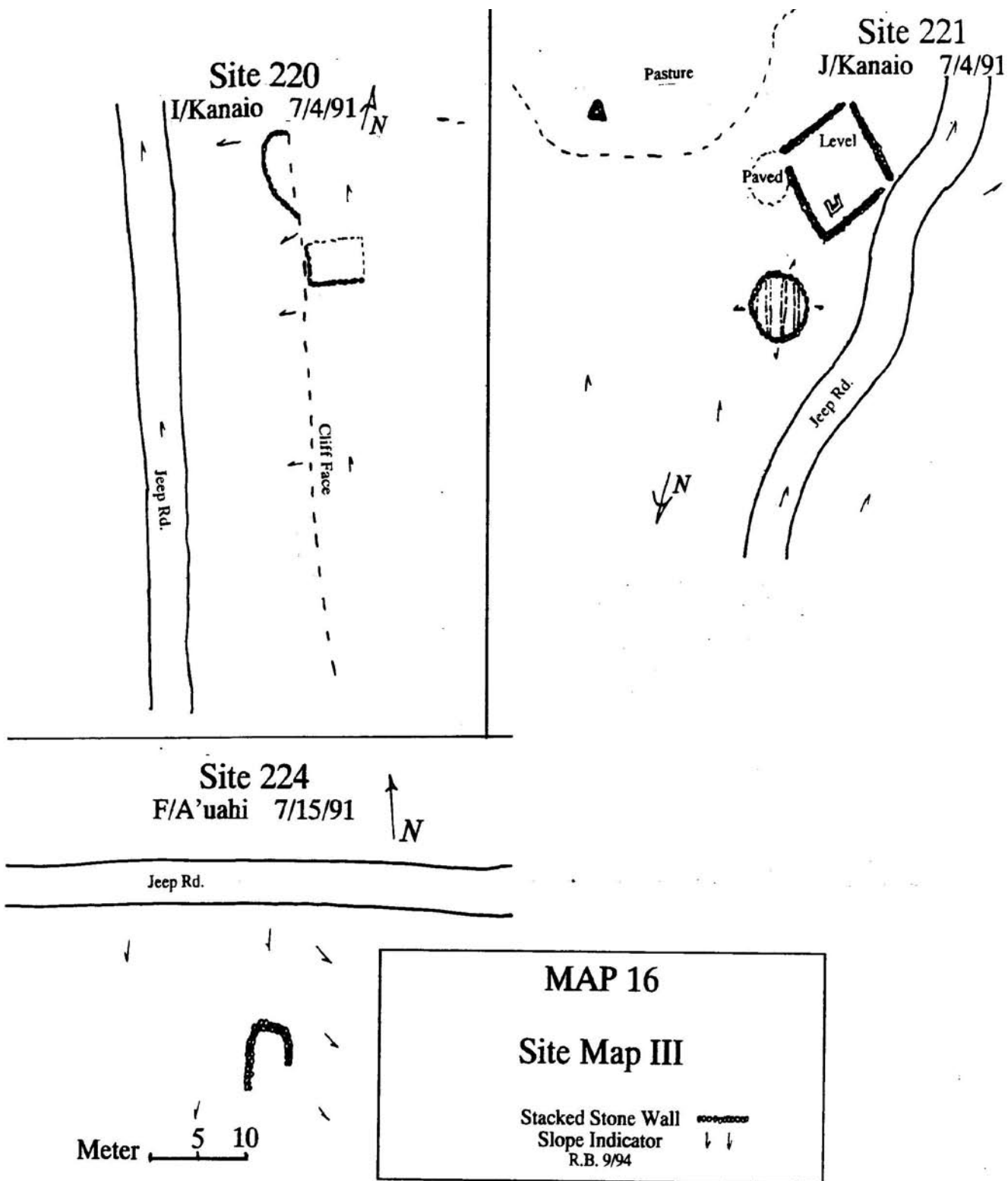
E/A'uahi 1/1/92

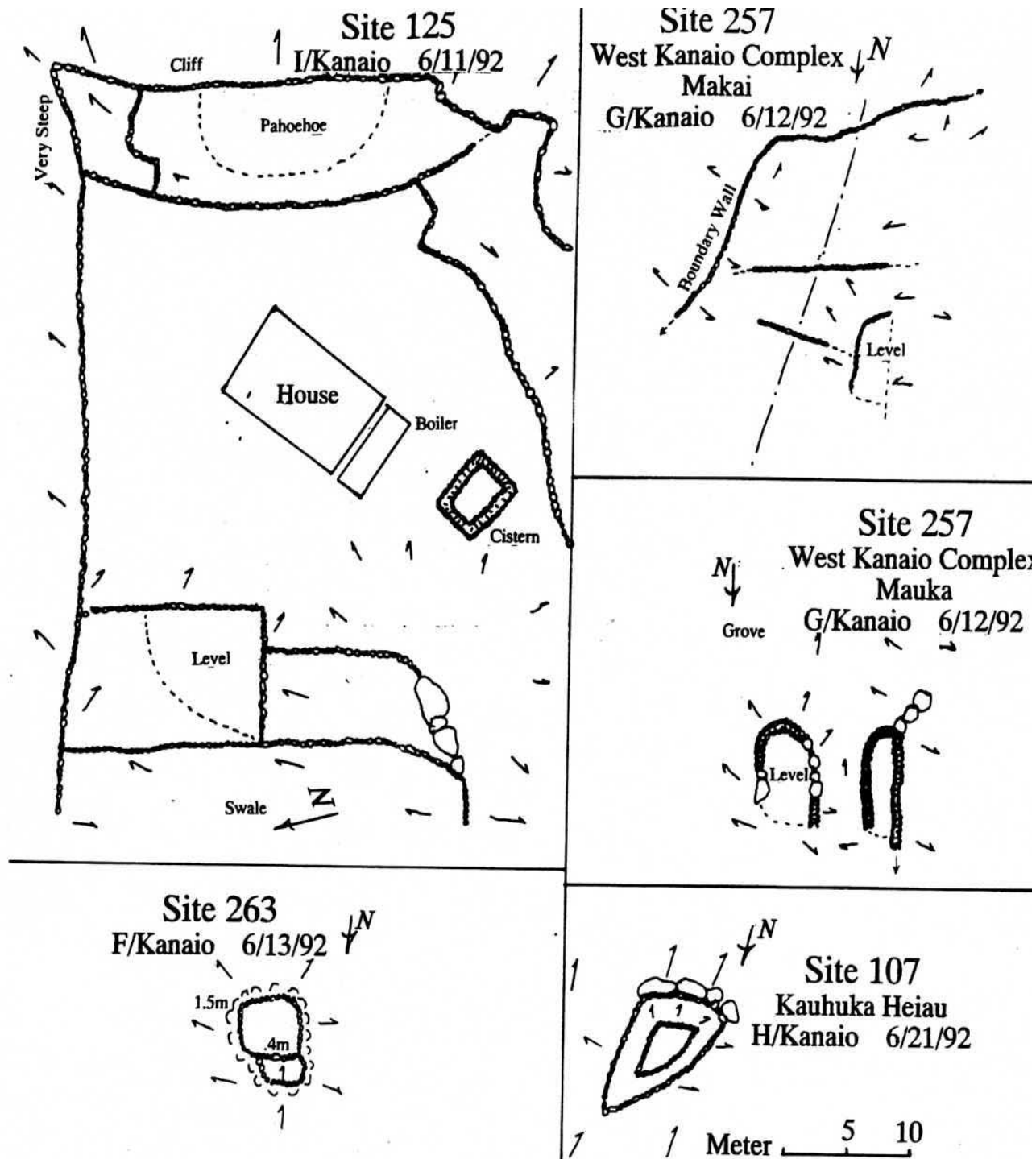
Meter 5 10

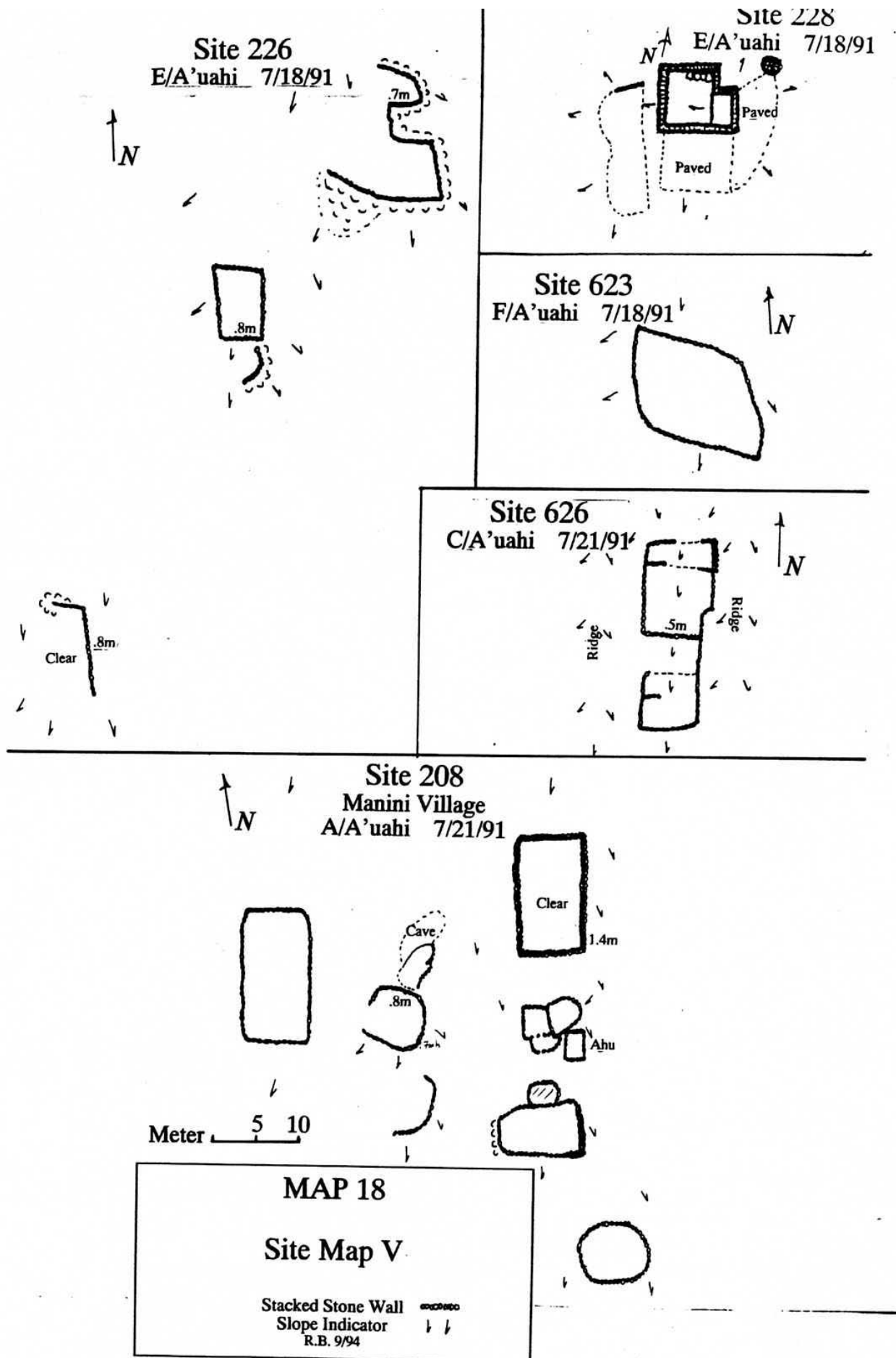
MAP 15

Site Map II

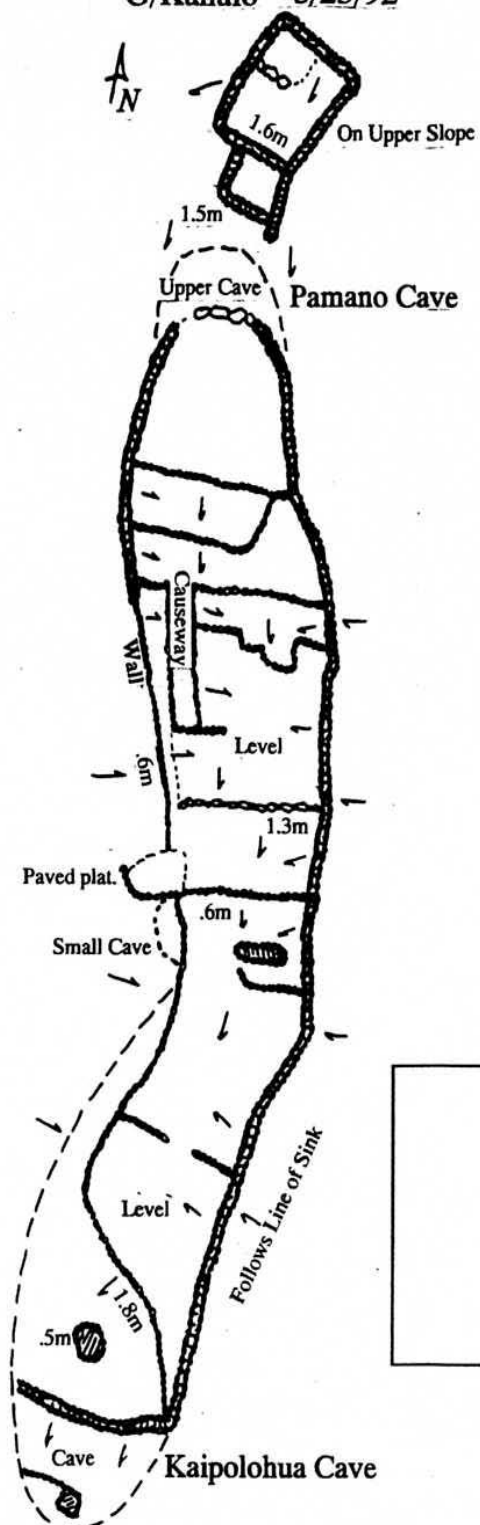
Stacked Stone Wall
Slope Indicator
R.B. 9/94



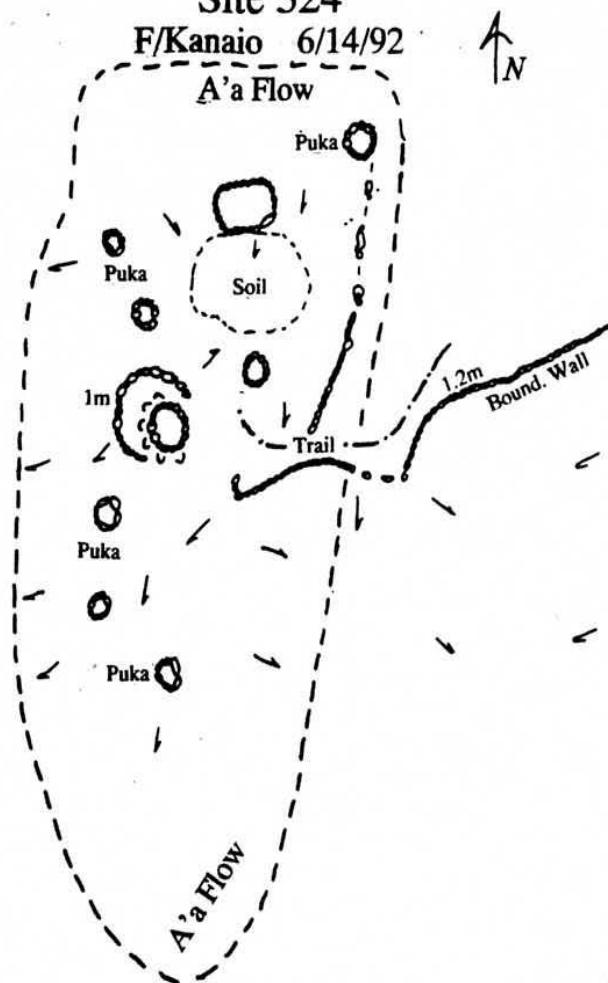




Site 126
Kaipolohua Complex
G/Kanaio 6/23/92





Site 324
F/Kanaio 6/14/92

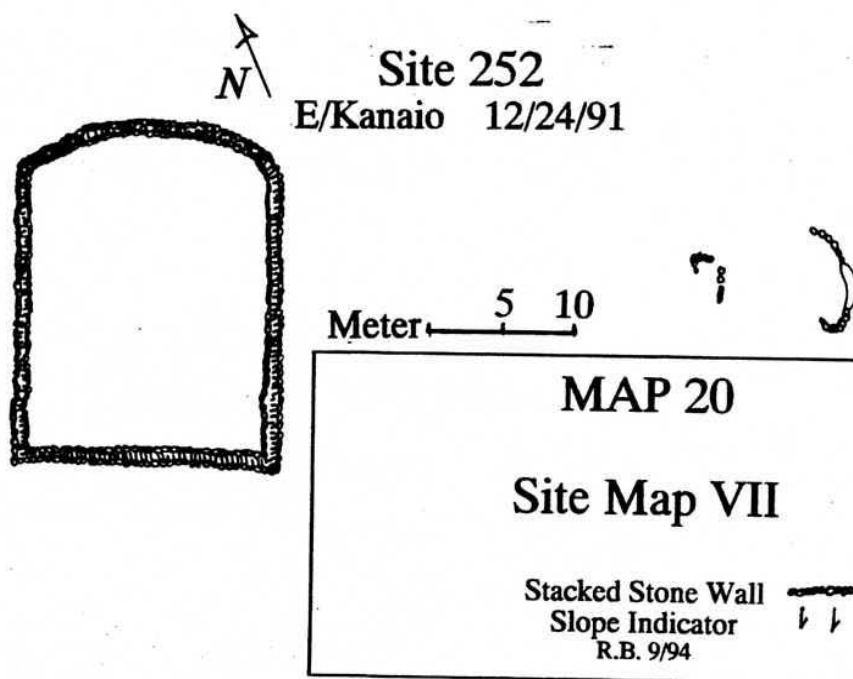
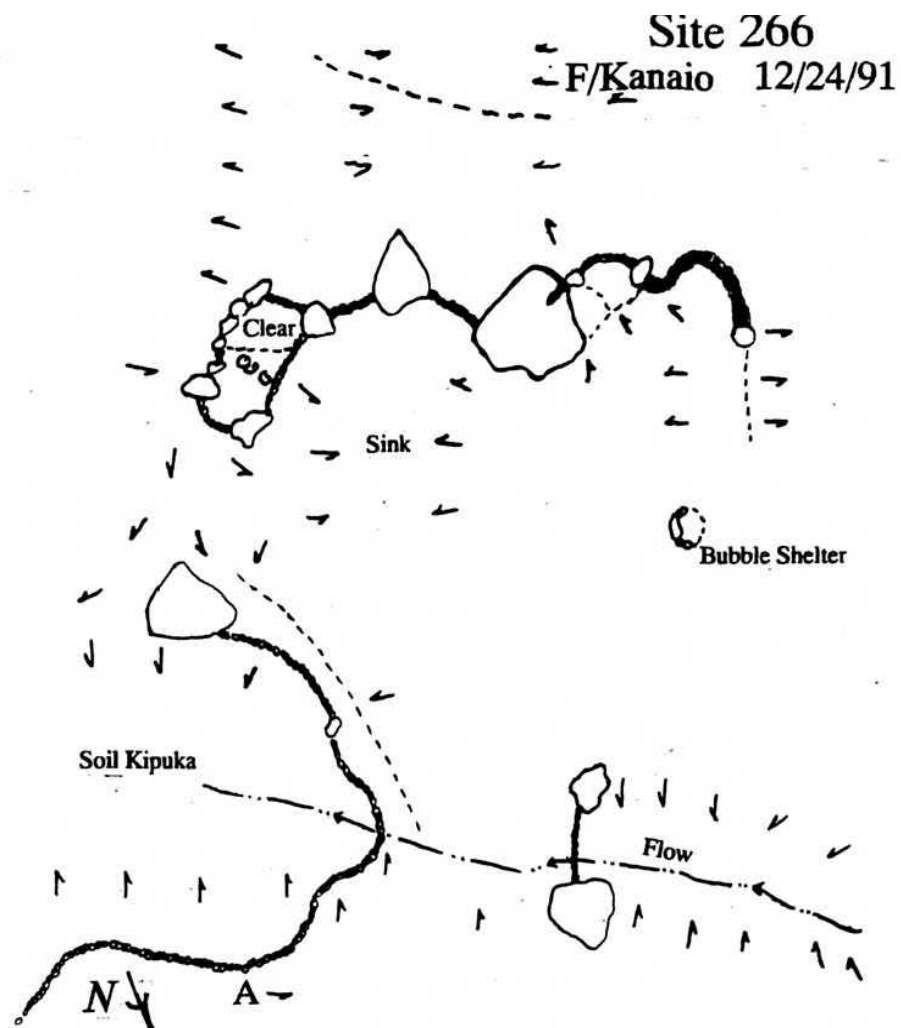


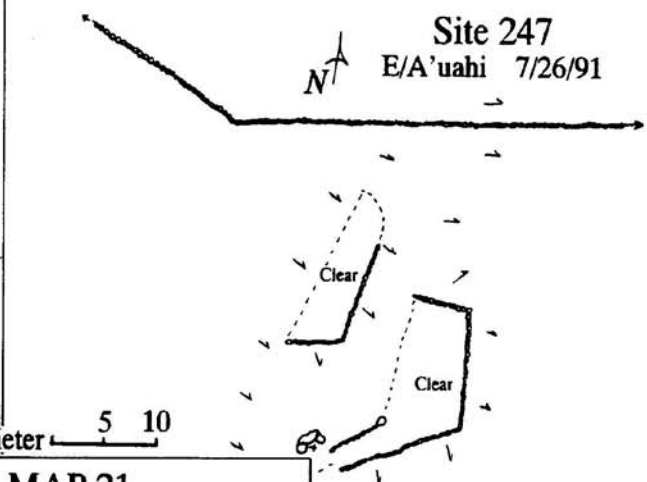
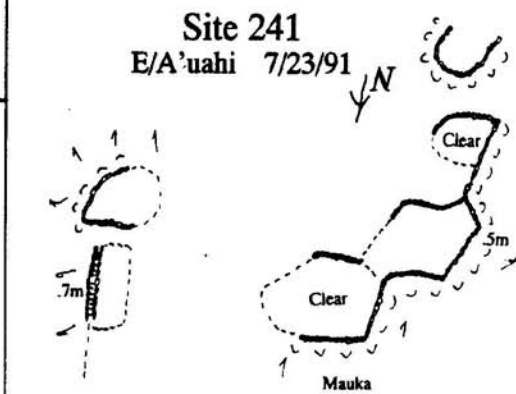
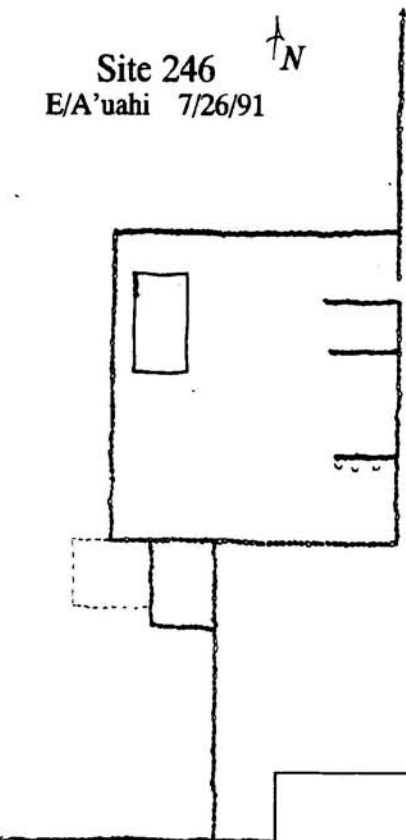
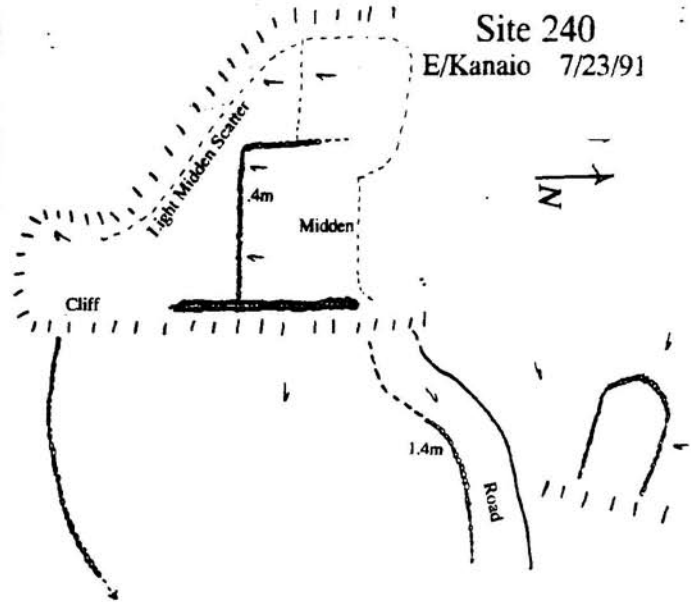
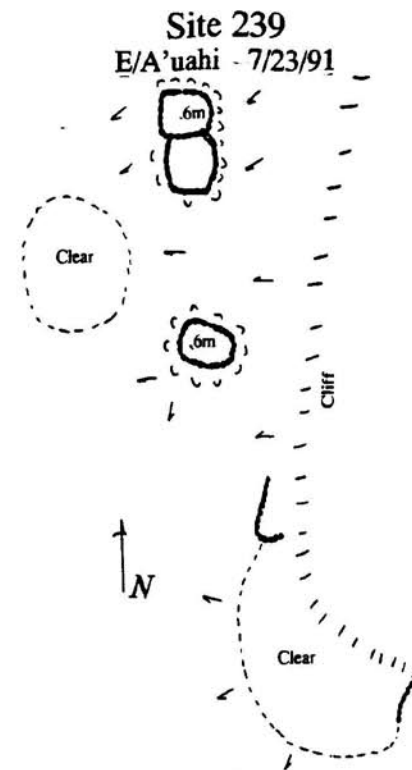
Meter 5 10

MAP 19

Site Map VI

Stacked Stone Wall 
Slope Indicator 
R.B. 9/94







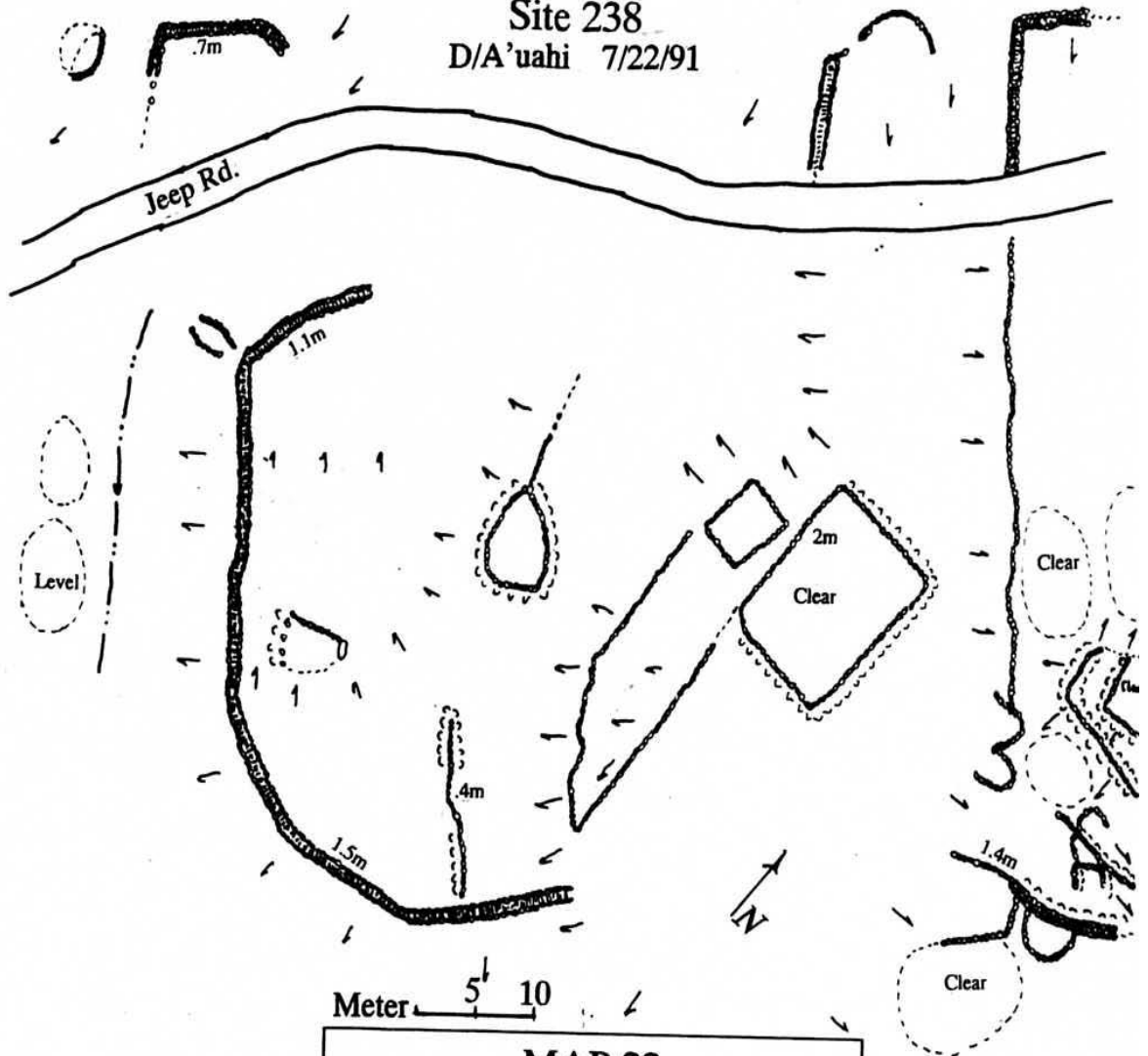
Meter 5 10

MAP 21

Site Map VIII

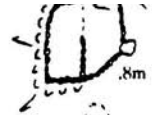
Stacked Stone Wall 
Slope Indicator 
R.B. 9/94

Site 238
D/A'uahi 7/22/91



MAP 22
Site Map IX
Site 238
Stacked Stone Wall
Slope Indicator
R.B. 9/94

Site 225
E/A'uahi 7/18/92



Planting Mounds



Old Jeep Rd.

Highway

Planting Mounds

MAP 23

Site Map X Site 225

Stacked Stone Wall 
Slope Indicator 
R.B. 9/94

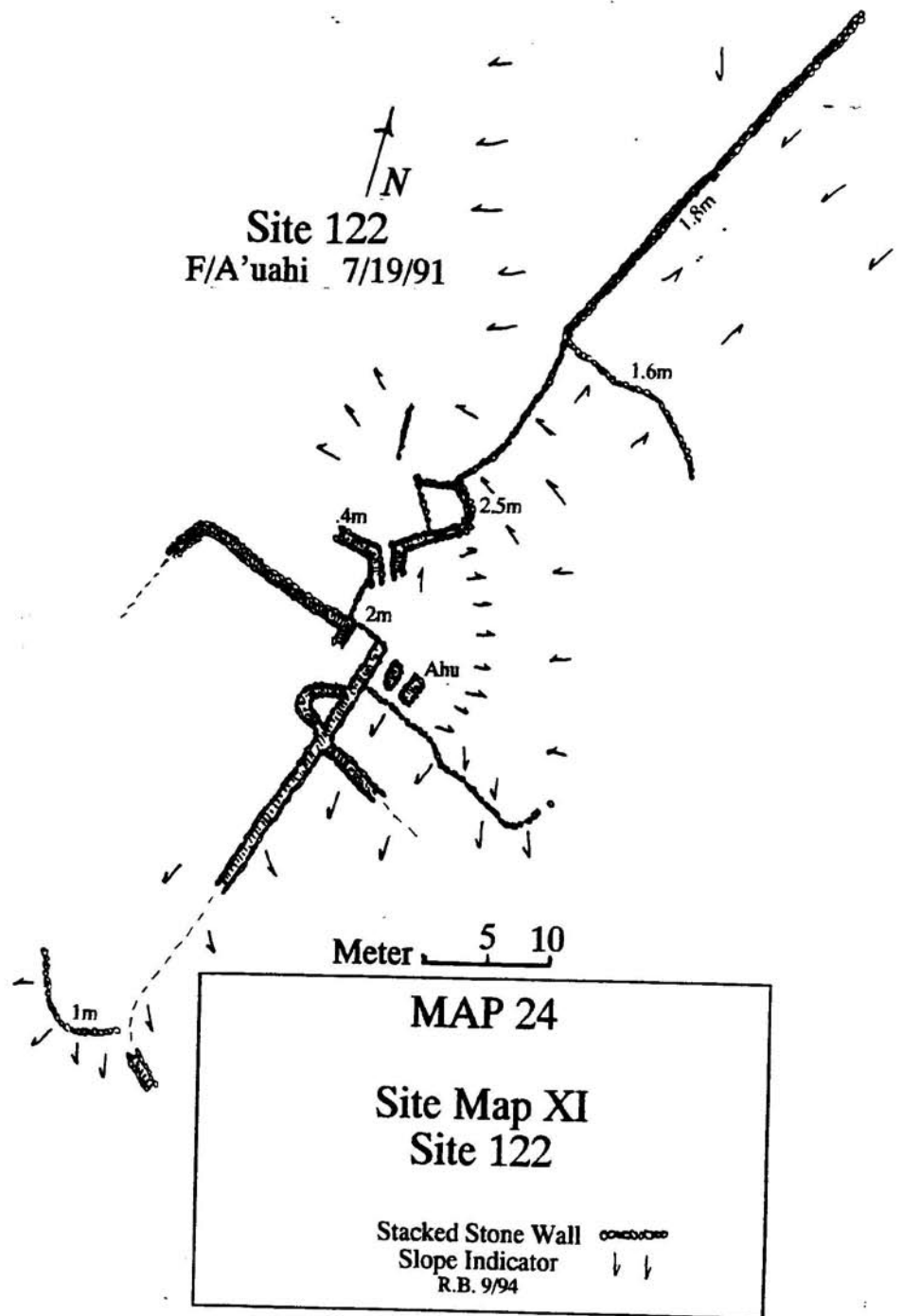
Meter 

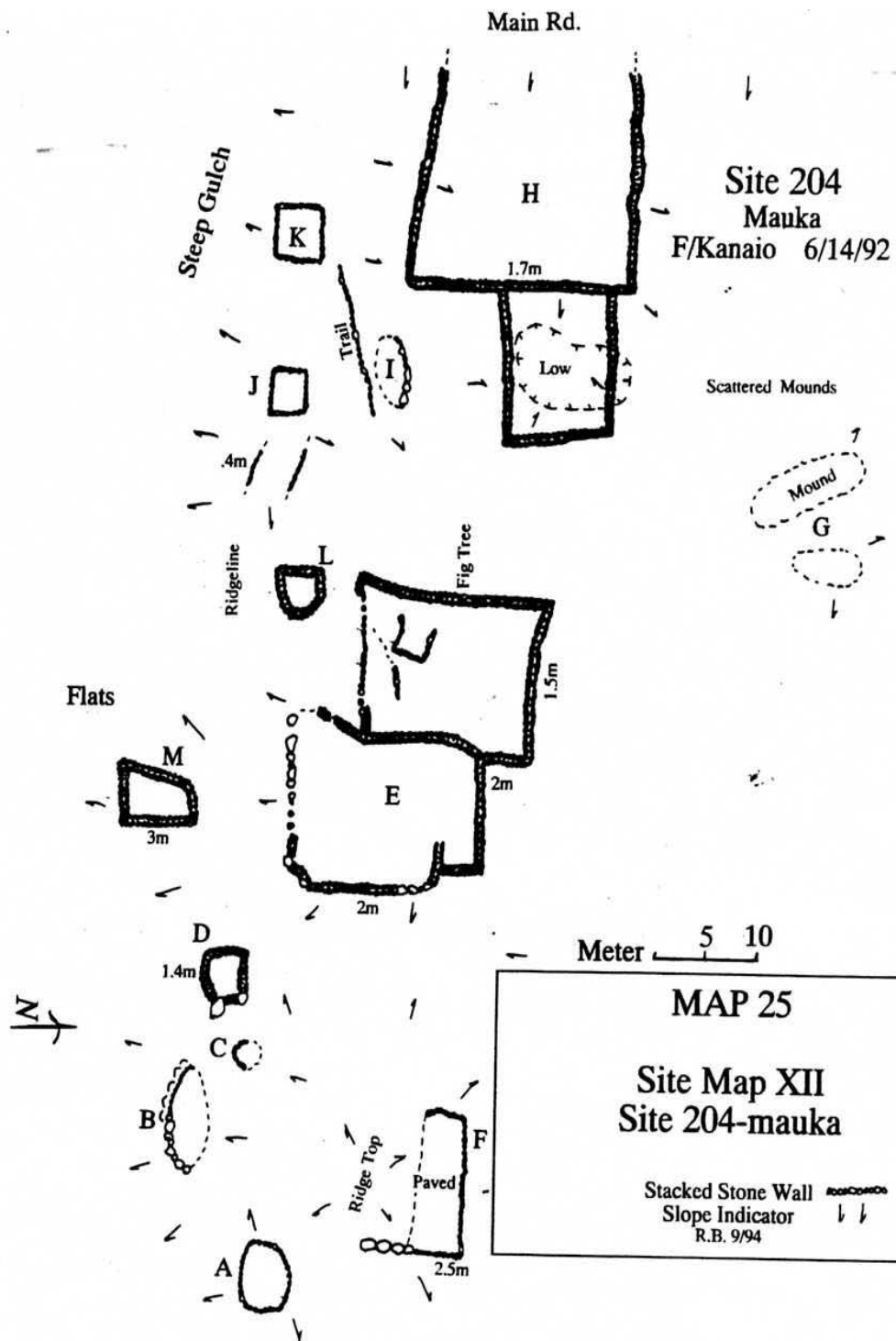
1.7m

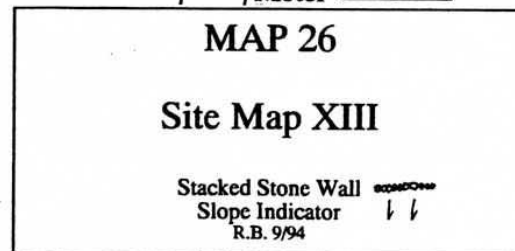
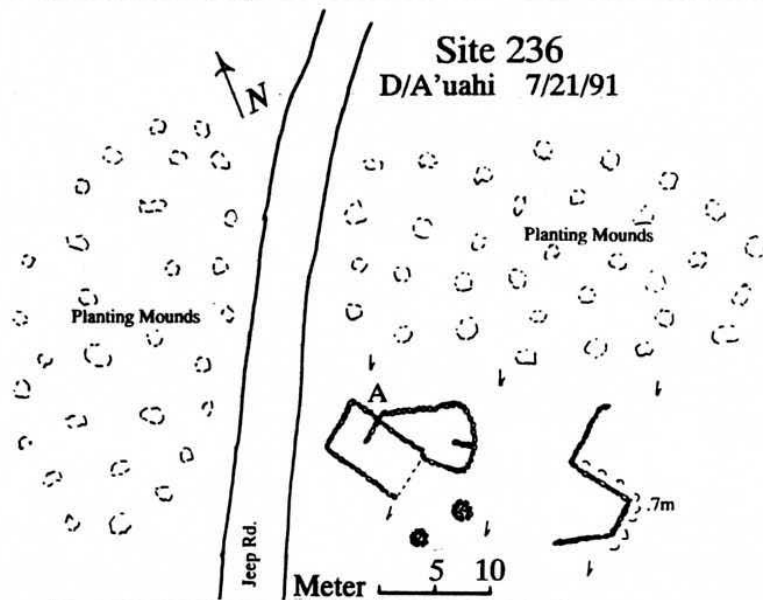
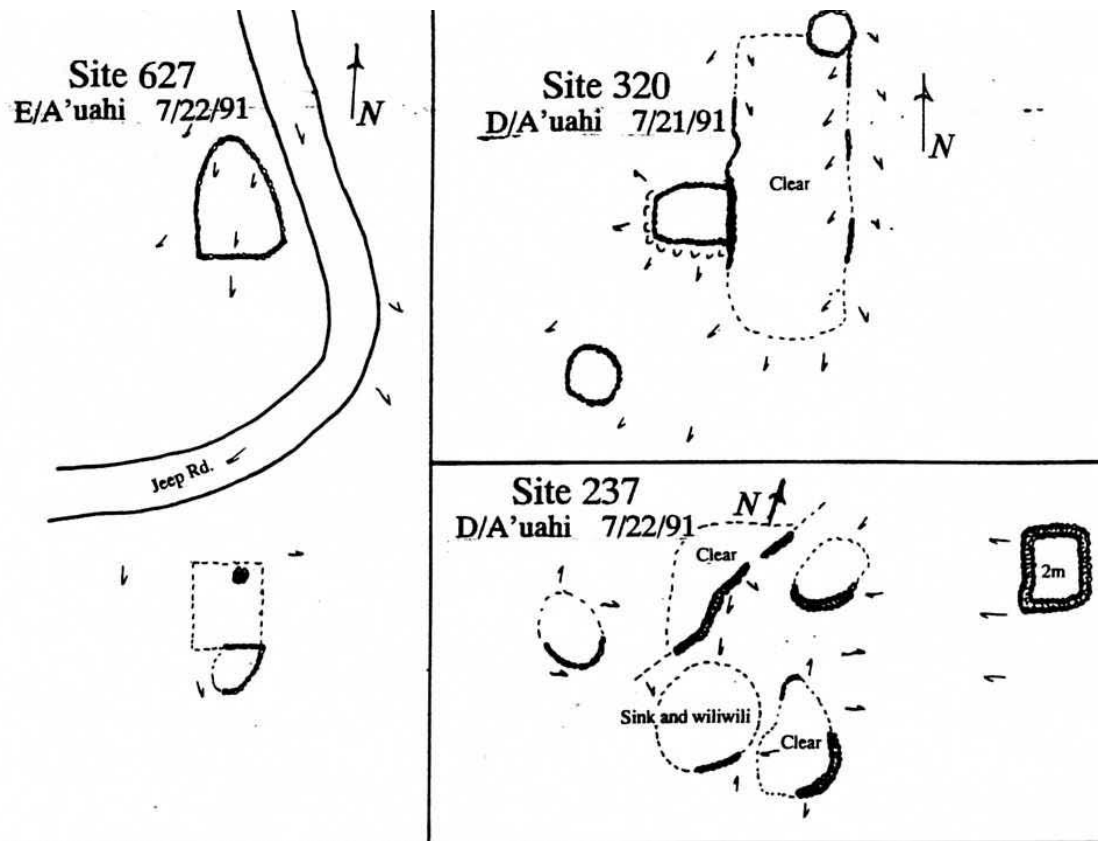
N

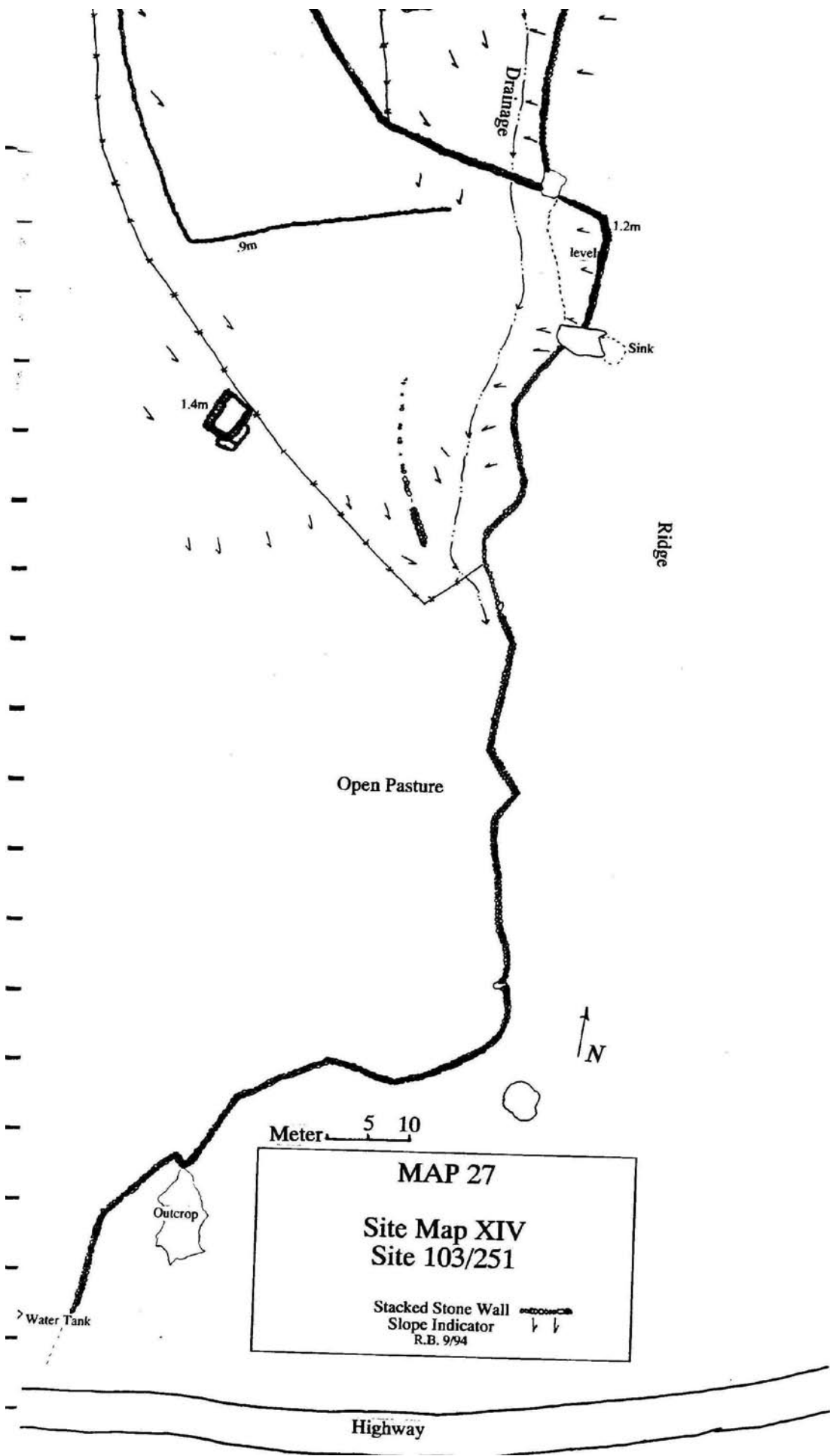
Cattle Crossing

54m









APPENDIX IV

LEGENDARY CITATIONS LINKED TO KANAIO AND ‘AUUHI

Kanaio-A’uahi Specific

in “The Banana Field of Kahuoi and Other Famous Places”, from Fomander v. V/III (600-04)

Kahuoi then went and lived at Keakamanu [footnote: Keakamanu, lit., bird laughter, or more properly bird shadow], and because he could not get enough to eat he kept wandering on until he found a favorable place, right above Waiohonu; while living there it entered his mind to plant bananas for himself, because he had noticed bananas growing about, and that is the banana field which we are hearing of.

While he was planting, he heard the voice of a bird, a paio [footnote: Paio, or Elepaio bird, while an attendant on canoe builders to direct them in the selection of koa trees free of defect, this is the first instance in which it does prophetic service over a banana field], and it said: “That is a favorable place you have selected for planting; that banana field of yours will be famous.” ... After he had planted the field, and noticed that the banana trees were growing well, he built himself a house. The house he built was of banana leaves. He also planted sugar-cane, taro and various other things ... (600)

... This man [Kinikuapuu] came from Kauai. He came with these fishermen and landed at Oahu, and from Oahu to Maui, landing at Kaupo. When he came from Kaupo, he arrived at this place above mentioned [Waiohonu .. in footnote noted as]. When they lived at this place they were great friends; there was plenty to eat; bananas, of course. (600)

Famine was raging below Waiohonu, near Hana, Maui... The famine had even reached as far as the *konohiki*’s place of residence, and the konohiki was also in distress on account of the famine. After that a widow had an idea to go and search for food for them. She said ... “I am going to search for some mountain *kalo* for food for us; do you prepare the wood ... “ She then started off to look for wild *kalo*. She followed the course of a stream. While going towards the mountain not a *kalo* could she find. It was already picked by those who had gone before. She kept on until she came to the tall woods when she found some mountain *kalo*. Others who had sought for food had not gone as far as this. She gathered enough for a large pile which she bundled conveniently for carrying. Then she kept going mountainwards, following the stream. She saw cane stretching out on the ground and then rising again, and bananas till they were over-ripe. She hastened to break some cane and to get some bananas, thinking to take home a bundle of sugarcane. Kahuoi heard the cane snapping and the noise of the banana trees as they were thrown down. So he went along to see what it was... [they became husband-wife](600-01).

[They had 2 children, a boy (Awahua) and a girl (Aea)] ...The parents went to their cultivating, while the children went to the stream to dig ditches. While so digging, the sister’s ditch was broken prematurely, and she was carried along by the water without the brother’s knowledge. While the brother was digging away at his ditch he happened to glance around and the sister was nowhere in sight, so he started to hunt for her, thinking he could find her quickly. He saw her at Paliakoe, so he chased after her. When he arrived there she had got to Waiailio [footnote: A point on the shore line of the Lualailua division of Kahikinui], and thus he followed after her until she was finally carried out into the ocean. At that time she threw her ivory necklace upon the beach at a place known as Waioaoaku, and it is so named unto this day. The brother was also carried along, and when he came to this place he saw the necklace of his sister there, so he threw his loin-cloth, Puakai[footnote: Puakai, lit., sea-flower], and it landed by the ivory necklace of his sister. They were taken by the current until the sister was landed at Honuaula [footnote: Honuaula is the name of the southwest district of Maui, one cove of which is noted as visited by La Prouse on his fateful voyage in 1786], Maui. The brother landed at Puuloa[footnote: Puuloa, Pearl Harbor], (Oahu). The brother married Halawa [footnote: Name of a division of land in the Pearl Harbor section], while the sister married Kahimanini, who belonged here on Maui. (602)

[Parents noticed they were missing, mother started to wail, father Kahuoi said not to worry]... Her husband [Kahuoi] answered: “Do not mind, they have been taken by their grandparents.” The ditches which the children dug were named Waiohonu, that was the name of the brother’s, and Kahawaikukae was the name of the sister’s ditch .

...In the eastern part of this field of bananas stands a large stone, and it is called Pohakuhale [footnote: *Pohaku*, stone; *hoele*, to go or come; hence, wandering stone]. This stone was called by that name because of the wanderings of the person referred to above [Kahuoi]. Piikea [footnote: Piikea was the Princess of Hana who was sought and won by proxy as wife of Umi, of Hawaii, subsequently enlisting his aid in defense of her injured brother’s cause, they invaded the district and captured the supposedly impregnable fortress of Kauhiki] brought it from Hawaii and left it there, and it is there today. In the northern portion of the banana field are the canes of Piimaiwaa

[footnote: Piimaiwaa was one of Umi's famous warriors; the one who captured Kauiki]. They are there to this day. The banana plants from this field were planted in many other places, some of them on Hawaii, but I do not know their story. Some of them on Oahu, some on Kauai, and that is the curly banana of Kaualehu; but the explanations concerning these fields and persons I know not... Another thing: it is thought that this banana was brought from Kahiki by Ahuimaiaapakanaloa [footnote: Ahui-maia-apa-KanaIoa, so divided, becomes the "mischievous KanaIoa's bunch of bananas"; KanaIoa, one of the principal deities of Hawaiian mythology, though not noted for beneficent gifts. Another division, such as Ahui-maia-a-pakanaIoa, makes it the "banana bunch of PakanaIoa."], one of the brothers of Pele. That is perhaps where Kahuoi got his banana, and yet again it may have been his own.

D.K. KANAKA (604)

Patterns of Land Division and Control

A modern Hawaiian who has worked in the land office in Honolulu gives the following explanation of the old land system; the *kuhina nui* carried out the order of the chief. He ruled over all the land and portioned it out in large parcels to several *kia-aina*, each of whom portioned out his area into *okona* which were in turn divided into smaller strips called *ahu-pua'a*, so called because a pig was the tax placed upon each. Over each *ahu-pua'a* was placed an *ali'i-ai-ahu-pua'a*. The head over the *ahu-pua'a* was called the *konohiki* or the *ahu-pua'a* might be subdivided into smaller parcels each of which was placed under a *konohiki*. This man managed the property for the chief and was responsible for the yield of the farmlands and for keeping up the fishponds. Narrow strips of land called *mo'o-aina* were divided off from the larger and these were again divided into *pauku* and these *pauku* into individual garden plots called *keihapai*. The workers of these plots kept up the land under the direction of the *konohiki*. If an *ahupua'a* turned out to be too small to cover the size specified a small piece was added from another area and this was called the *lele*. If wider subdivisions were made of the *ahupua'a* than could be described as a *mo'o-aina*, the piece was called an *ili*. (Beckwith 1932:173)

Agricultural Patterns in Dry Land Areas

Taken from M. Beckwith's Kepelino's Traditions of Hawaii (1932:152-160).

Dry Farming of Taro in Kona, Hawaii

There are many ways of planting taro. One way is called "prodding," another "steering," another "covering," another "mounding," another "stopping up," another "leaf filling."

The prodding method consists in prying up the earth with a sharpened stick or *O-O* until it is very soft, then planting the tops.

The steering method is similar, but in this case the earth is pushed up to one side and the plant inserted in the hole.

The covering method consists in making good large holes and softening well the earth within before putting in the plants.

The mounding method consists in piling up the earth into good-sized mounds, in which the cuttings are planted. Taro thus planted is really a beautiful sight.

The stopping-up method is employed in planting taro in the uplands where tree-ferns grow..

The leaf-filling method consists in digging large holes and filling them with candlenut leaves and covering them with soil. After some weeks the leaves are decayed and the taro is planted. A plant thus handled may grow to seven feet and over and the taro may weigh twenty pounds and over. According to the depth of the fertilizer, so is the height and size of its growth.

Taro planted in dry lands is an excellent thing, an amiable friend and one pleasant to the heart of man. The leaves, stem and blossoms have a pleasant smell in the patch...

When the taro began to grow and the leaves were a little developed, then the work of covering was begun. Three or four days, perhaps, of hard work, then the patch was covered. This meant filling in the holes into which the plants were set close up to the plant with trash. Good trash for filling is the *aeiki* fern, the *mana* fern, the tree fern, the ginger leaf and the coarse grass called *kukaepua'a* or "pig's dung." These are the best kinds of trash for fertilizing..

This was the work of covering. If the trash used from the tree fern there would be no more trouble, nor would there be from the other kinds, none of them would sprout except the grass. If that was used for filling during the rainy season, it must be pulled and cleaned after two days. In the dry season it would make no trouble.

Here is another caution. It was not good to cover the patch with soil without letting the hole dry. It should be allowed to dry first and then covered over, throwing all bad trash elsewhere...

Cultivation of the Taro Patch

Hoing and hilling, called *olao*, consists in pulling up the new grass from the patch, then covering the plant again.
 Softening, called *ekueku*, consists in working the soil about the plant to soften it and allow it to grow more rapidly.
 Mounding, called *apoapo*, consists in filling in the patch of taro or potatoes with new soil about the plants.
 Weeding, called *aili*, consists in pulling the grass in order to let the plants grow and prevent the choking of the growth of the shoots...

Potato Growing

For farming on upland potatoes are the best crops. Taro is also good, but where there is scarcity of rain taro will not grow so well.

Clear the ground of vegetation and let the earth live. Then put the potato cuttings into bundles, ten or more in a bundle, and keep them fresh from withering for three days. Plant at the proper time when the soil is soft and the stubble will not hurt the cuttings.

In planting the slips, poke the sharpened stick in three times into the soil, raising it in order to break the soil, then heap the soil into mounds and put two or three cuttings into each mound, covering with trash so that the cuttings will not wither or the earth lose its moisture.

The cultivator must weed out the new growth of weeds from his patch. He must round up more soil and soften the earth about the hills as the slips begin to grow.

He must push down the soil about the plant and wind the vine back about the main stem... (Beckwith 1932:152-56)

General Calendrical Patterns

Hawaiian Calendrical/planting cycle: taken from Fornander V. V/III, Anon(662-666)

“The Days and the Months” and M. Beckwith’s Kepelino’s Traditions of Hawaii (1932:82-96):

The traditional Hawaiian calendar was a lunar calendar divided up into 12 months of equal length (360 days): 1. Makalii

2. Kaelo 3. Kaulua 4. Nana
 5. Welo 6. Ikiiki 7. Kaaona 8. Hinaialeele
 9. Mahoe-mua 10. Mahoe-hope 11. Ikuwa 12. Welehu

The year was divided up into 4 parts:

La’a-ulu (Time-of-Growth): the months of Kaulua, Nana and Wele, because in these months the *hoi* vine, the starch plant, the *pia* vine, the ginger, the tumeric and the yam begin to grow.

Kau (Dry Season): the months of Ikiiki, Kaona, Hinaialeele, because in these months the land is covered with good things.

La’a-make (Time of Ripening): the months of Mahoe-mua, Mahoe-hope, Ikuwa, in these months the *hoi* vine and the rest of the and the winter begins.

Ho’oilo (Rainy Season): Welehu, Makalii, Kaelo.

Together these 12 months make a year, called makahiki.(Beckwith:82)

Month	Western equivalent	Importance
<i>Makalii</i>	December-January(lunar)	Was named after Makalii, a the great man famous for his farming. It was during that month that he cleared his patches of land and planted up to the following month of <i>Kaelo</i> and the fruit grew in the early days of the growing season, such as the <i>hoi</i> vine and other plants. <i>Makalii</i> is not the first month of the wet season, but the fifth, and <i>Kaelo</i> is the last of the wet season. During the month of <i>Makalii</i> the inside stalk of the tree-fern begins to grow firm and sweet, for the various edible fern-stalks do not thrive in the wet season and are retarded in their growth, their leaves become yellow and during these months they are free from the rats; for the snow-covered mountain is too cold for the rats so they descend to the plains and the sea-coast. Hence the name <i>Makalii</i> , meaning “little place” for the rat. During the months of <i>Kaulua</i> , <i>Nana</i> , <i>Welo</i> , and so forth, the rats ascend to the mountains and the edible ferns are not safe from their nibbling. During the wet season nothing in the plains is safe from the rats, everything is burrowed out by them. During the last months of the wet season, in <i>Welehu</i> , <i>Makali</i> , and <i>Kaelo</i> , the rat makes its nest in the potato hills and returns to the mountains in the month of <i>Kalulua</i> as it begins to grow warm. By the month of <i>Nana</i> a

large number of rats have returned to the mountain and by the month of *Welo* there are no rats left in the plain ... That month was established as the New Year and on the first day of the month, that is, on the night of *Hilo*, began the tapu period of three days in which to pray to God to give all good things that year.(Beckwith:85-86)

Kaelo December-January

...day called Maui[29th] in the evening when the moon sets then plants them. He then waits still stormy months over, and long after... (Fornander) *Kaelo* is the second month of the year and the last of the rainy season. It was named *Kaelo*, "The water-soaked," because the food-plants such as the arrow-root, the *hoi* vine, the yam, the tumeric, the ginger, did not grow in that season; not until the dry season did they put forth fresh shoots. These plants are called the signs of the dry and the wet season because they flourish in the dry or *Kau* and die down in the wet or *Hooilo*. *Kaelo* brings heavy rains that make the ground slippery, a dark sky with thunder and lightning, and so forth. The ginger and the tumeric being to grow on the last days of *Kaelo* and the first of *Kaulua*. The starch plant, the arrow-root, the yam and the *hoi* vine begin to form in the month of *Kaelo*, swell and wrinkle in the month of *Kaulua*, and their shoots appear above the surface in the month of *Nana* and spread over the ground in the month of *Welo*. So that month is called, "The standing-tails", *Ka-huelo-ku*, because the plants stand up like tails. In the months of *Ikiiki*, *Kaaone* and *Hinaiaelele* these plants attain their proud growth. This is during the dry season, not the wet. By the time of the dying season, the *Laa-make*, during the months of *Maboe-mua* and *Maboe-hope* the tubrous growths are matured and the plants die down. *Ikuima* is the last month of this period, and *Welehu*, *Makalii* and *Kaelo* are the last three months of the wet season. During the six months of the wet season the food is ripe for cutting. The *ni* also matures during this season. Hence it is during the wet season after the plant dies that the *hoi* vine, starch plant, arrow-root and yam ripen; during the dry season when the plant is in full growth the fruit is shriveled. *Kaelo* is the last month of bad weather. There is thunder, lightning, rain, wind and so on, even though the storm-wind from the south has not blown during *Ikuima*, *Welehu*, or *Makalii*.(Beckwith:86-88)

Kaulua January-February

On the day of Lono, in the evening, he crops some more stalks of sweet potato varieties: *hualan_po_loepaa*, *awapuh_wahiapele*, *pikonui* and *kuapa*. Sets them aside as with ones above till ...

Kaulua is the third month of the year and the first of the dry season. This is month for the bird-catchers to find birds in sheltered places before they have fully feathered. In that month they go up to the mountains ... while the birds are regaining their feathers after moulting. For the bird-catcher the name *Kau-lua* means "bird-in-shelter," but the wise know that the real meaning of the word in Hawaii is the "twofold" (*lua*) nature of the month, neither warm nor cold, for in this month the sun proudly takes its place in the dry season. Such is the meaning of the word in Hawaii--Kau-lua, warm and cold combined.

Kaulua is the first month of the growing season, the month of March, and it is the time when the fledglings chirp in the hollows as they begin to feather out.(Beckwith:87-88)

Nana February-March

On the day of Kane [Fornander: 27th of month] goes to look at field planted in *Welo*.(Fornander)

Nana is the second month both of the growing period and of the dry season, and the fourth of the year.

Nana means living in warmth, because the cold has almost disappeared with the month of *Kaelo* and is entirely gone by *Kaulua*. In this month of *Nana* the mildew left by the rains of

the wet season is gone from the plants. Gone is the feeble growth of the ginger and the crouching and cold of the little growing things on the surface of the earth; for the sun has moved up above them, the soil has become drier as the water left by the rains evaporates, and the earth is beautiful indeed during this month with the thrifty growth of every living thing. Each growing thing has fine new shoots and the baby birds have flown away from their nests and settled down to live in the warmth.

Life is the principal characteristic of the word *Nana*. It is a sunny month, but showery. In that month the farmers enjoy the fine growth of the taro, potato, sugar-cane, gourds of every kind, the banana and everything else that was planted in the last months of the rainy season, that is, in *Makalii*, *Kaelo*, *Kau/ua*. And in the month of *Welo* the farm is at its best...(Beckwith 88-90)

Welo March-April

During this month have the rain of Pookole, the rain which we style a cloudburst - then the farmer proceeds to crop off stalks-- he gathers the following types of sweet potatoes: *poe*, *apo*, *kapopa*, *mohibi*, *uli* and *paa*. Wraps them in bundles and then waits till days when Pleiades rise in the morning - then proceeds to plant them.(Fornander)

Welo is the third month both of the dry season and of the growing time and the fifth month of the year.

Welo stands for "tails-that-stand" and "seeing-things-thrive" because of that month the earth is beautiful, all things grow well, the flowering trees blossom, the farmer exclaims with pleasure over his fine clumps of sugar-cane, thrifty banana plants and all other things he has planted. Thus *Nana* and *Welo* are productive months in Hawaii. Those are good months for the land.

In this month of *Welo* there is trouble to be feared in Hilo because of the melting of the snow on the mountain and among the tree-ferns in the warm wind, and the rising of the water in the streams... It is a productive month good for growth, the *obia* tree leaves afresh... (Beckwith:90)

Ikiiki April-May

The time of light summer showers. Of misty rain, that is when the rain is light and is easily scattered by the wind, on the day of Mohalu [Fornander: 12th day of the month] in the month of *Ikiiki* is the time to plant in manner noted above. At this time plant the potatoes: *waipalupalu*, *kokoakeawe*, *lauipa*, *heanau* and *haole*.(Fornander)

Ikiiki is the fourth month of the dry season and the sixth month of the year.

The name signifies "enough" because in this month earth and men have heat enough from the sun. It is warm, the earth is dry, hence the word "enough" means satiated with heat. You can count on a few showers, that is how the month is in Kona. In this month appear the first breadfruit, and the first showers reach it. If there are no showers the fruit withers up and falls. This is the month of *Ikiiki*, or June of the Roman year.(Beckwith 90-92)

Kaaona May-June(Fornander)

Kaaona is the seventh month of the year and the fifth of the dry season; it is month of small flies.

Kaaona signifies a *lehua* blossom because in this month light showers fall on the blossoming *lehua*. The mountain apple blossoms swell into fruit in the month of *Hinaiaelele*, a few fruit ripen in *Mahoe-mua* and the *Mahoe-hope* are the first months of the dying time. This is the signification of *Kaona*,--the blossoming *lehua*.(Beckwith:92)

Hinaiaelele June-July

Must wait till these months past before checking on potatoes planted in *Ikiiki*. Then wait a while longer till the grass grows before weeding - the single weeding will be sufficient till the potato is ripe. After weeding, leave it for many days ... when goes back take out the first

potato and give in ceremony to Keaonui [Fornander: Keaonui, large cloud, supposed to personify a deity].(Fornander)

Hinaialeele signifies dark clouds. In that month the sky is dark with rain-clouds and the mountain apples ripen. The sky is filled with heavy rain-clouds and plants are weighted down with ripened growing things. In this month orphan children, widows, and the aged of the upland plains rejoice because the life of growing things returns to the plains. Little flies gather about the growing things on the hillside and upon the cool uplands. For *Kaona* and *Hinaialeele* are the months when little flies gather on the blossoming *lehua*, and late showers fall in *Hinaialeele*. Hence the orphan children laugh. The month takes on a dark (*eelele*) beauty, thus:

1. The heavens are “dark” with heavy rain-clouds.
2. The leaves are “dark” with maturity.
3. Fruit of every kind has grown “dark,”--the breadfruit, the mountain apple, the orange, the coffee, and other fruit.

It looks as if the growing plants repented of their growth, for the months of the dying time and of the wet season draw near.(Beckwith:92)

Mahoe August

Wait till after first Mahoe is past, and then during 2nd Mahoe on the day of Lono {Fornander: 28th} goes to fields planted during Ikiiki to get some potatoes for food, taking some to the heiau as the god will return on that night to ‘partake of the food of his planting devotee’ .(Fornander)

Mahoe-mua is the first month of the dying time and of the rainy season and the ninth month of the year. In that month the rapid growth of the *hoi* vine, the yam, the starch plant and the arrow-root is checked and the tumeric and the ginger do not put out fresh growth but begin to look old. The *hoi* vine, yam, starch plant and the arrow-root have already formed their tubers but they are not fully ripened; they are still growing a little. The tumeric and ginger are checked in their growth. The *hoi* vine, yam, starch-plant and arrow-root cease to grow and gradually dry up as the dying time comes on.

The *Mahoe-mua* is the “first-born” of the months of bad weather during the rainy season. It means “first-born” in the bad season, for in that month such things begin as strong wind, rain, high sea, and so forth.(Beckwith:92)

The *Mahoe-hope* is the tenth month of the year and the second of the dying time and of the rainy season. It was so called because it is the “second-born” in the bad season. In this month the *hoi* vine, yam, starch-plant and arrow-root, the ginger and tumeric, are dry and brittle, prostrate, dead. The starch-plant and *hoi* vine are now mature. That is the time when they are full of meat and are to be found by hunters through the underbrush before the vine has become rotted. So also with arrow-root, tumeric and ginger,--their ripe growth lies in the ground. Such is the nature of this month.

The plants mentioned above are those whose ripening marks the time of growth and dying and the changes of the wet and dry season and are hence used to distinguish the seasons.(Beckwith:92)

Ikuma September-October(lunar)

Occurs the rain Pohakoeleele [Fornander: Poha koeleele, bursting, pattering]; on the day called Hua [Fornander: 13th day of lunar month] at noon, a person goes to plant the following stalks: *bualani*, *holceo*, *lopa*, *lilcolehua* and *kawelo* [Fornander: varieties of sweet potato]. He leaves them for 2 months, then goes to inspect them so see if growing well. But if in the winter season when rains are plentiful then the shoots will die.(Fornander)

Ikuma is the eleventh month of the year and the third of the wet season and of the dying

time of the year.

Ikuwa means “deafening” because it is the season of the worst storms. A month of dark rough seas, wind, thunder, lightning and unceasing rain, that is what *Ikuwa* signifies. In this month the bad weather of the rainy season has taken full possession. It is a month of rough seas and high surf that lure men to the sea-coast. For expert surfers going upland to farm, if part way up perhaps they look back and see the rollers combing the beach, will leave their work, pluck ripe banana leaves, ti leaves and ginger, strip them, fasten them about their necks and stand facing the sea and holding sugar-cane in their hand, then, hurrying away home, they will pick up the board and go. All thought of work is at an end, only that-of sport is left... All day there is nothing but surfing. Many go out surfing as early as four in the morning,--men, women children ...

Such are the signs, character and doings of the month of *Ikuwa*. *Ikuwa* is a month of “shouting” from above, shouting from below. Men shout, women shout, there is no one not shouting; hence the name.

And during that month men and women prepare good things beforehand for the holiday that is coming on the last day of *Welehu*.(Beckwith:94)

Welehu

Welehu is the last month of the year, the fourth of the wet season and the middle one of the bad season. *Welehu* means “rotten” because it is the last month of the year. It is a going, a death, that is, rottenness,--the year does not return again.

The month is cold, snow covers the mountains, it is wet and chilly in the mountains with the frequent rains which come in the wet season--a light steady rain called “big head rain” because the skin of upland dwellers creeps on the head and the skin blanches in the cold. *Welehu* is the holiday month of Hawaii. It was a joyous month, for in that month came the *Hi'umai*, or “Water-throwing” festival when the people of old Hawaii adorned themselves with many and beautiful ornaments. On the twenty-sixth day of the month the fun began, at the twelfth hour of the night, called the division between night and the coming of day. At this time torches were lighted and the night was burnt away by the candlenut torches. Everyone wore a good tapa garment and went to dive in the water or perhaps in the sea. This went on until day dawned, when everyone went to a feast and had much sport. The effect of holding this *Hi'umai* at night was that the crowd were excited as if with rum by the beauty of the ornaments, the splendor of the whale-tooth pendants, bracelets of sea-shells, feather wreaths and the fragrance of different tapa garments...

In that month the people of Hawaii rejoiced in the complete passage of the year. They went bathing in the sea while it was still dark, full of joy. On the first day of the month *Makalii* there was only offering of prayers, there was no sport. Hawaii prayed to its god to give all good things during the new year--vegetable food, fish, and a peaceful life.(Beckwith:94-96) Summer cultivation: farmer goes to mahakea [Fornander: makahea, a wild, uncultivated field]-- i.e., fallow, where ‘weeds grow in abundance’. He cuts the leaves and leaves them on the ground, the rain falls, leaves and dirt become wet - so stalks do not die when planted in summer as moisture held by leaf cover - ‘because the weeds cover the ground and retain the moisture of the soil’. But he cultivates in days of *Laankukahi*, *Laankulua*, *Laanpau*, *Olekukahi*, *Olekulua*, *Olepau*, *Kaloakukahi*, *Kaloakulua* and *Kaloapau* [...the days named are from the 18th-26th of the month, inclusive] as the best days to plant.(Fornander)

Kaonui

Goes to throw up the earth on hills of the potatoes, takes 1st one and again offers to Keaonui. *Welehu*=October-November; *Makalii*=November-December; *Hinaiaelele*=June-July; *Nana*=February-March. Waits through the 3 above till *Nana* in day called *Manli*, when go

and dig potatoes. Note that the ones dug up at this time will be small, but are consumed to keep from starvation-- main crop is planted at this time... On day called *Hilo* obtain other sweet potato variety stalks: *kola*, *ni/ca*, *pukeleawe*, *hiaka*, *lapa*, and *huamoa*, and prepare as with the others. Plant them in day called *Hoaka*. If the farmer can get by *Ikiiki* then he and family will not starve - on days called *Olekukahi*, *Olekulua* and *Olekupau* go and hill up potatoes [mound up soil]. Then wait till days called *Mobahi*, *Hua*, *Akua*, *Hoku*, *Mabealani* and *Kulu*, and last day *Akua* - visits potato field and prays to Kanepuaa for successful large potatoes. Then waits till *Kaloakukahi*, *Kaloakulua*, and *Kaloapau* go by, till day called *Kane*, when prepare nets to carry potatoes. On first meal prepare pig with the potatoes. Author notes only 3 potatoes per hill - one seen by author was 3' in circumference. (Fornander)

Ritual Calendar for the Year [from Fornander v. VI/I, Anon "Concerning Ancient Religious Ceremonies", pg. 30-34]

The following are months of war 'of the king and the priest':

<i>Kaelo</i>	December
<i>Kaulua</i>	January
<i>Nana</i>	February
<i>Wela</i>	March
<i>Ikiiki</i>	April
<i>Kaaona</i>	May
<i>Hinaialeele</i>	June

When arrives, priest declares no war, live in peace - fishermen prepare for kapus on fish. The evening of the day called *Hilo* Priest kapus the *opelu*, they offer prayers, sacrifice pig ... at night, sacrifice a fowl to king's ancestral god and his deity. No fires allowed, all noise prohibited - no crowing of cocks, grunting of pigs, barking of dogs - 'It was the most sacred night'.

The next morning took auguries for how the new year would fare, had ceremonies in the heiau. The day after this one {??} *opelu* fisherman is blessed by priest, then goes out fishing - again a most sacred day - no fires, no other canoes allowed on ocean - he lowers nets and prays to ancestral gods - hauls in *opelu* which were brought back. Further ceremonies with first catch given to priest--to deities, with some of first catch given to king-- then a further ceremony the next day called *Kukahi* [3rd night of new moon].

After this day women released from kapus and could consume fish. Restrictions on *opelu* were very strict and lasted for 9 days - canoes on shore could not go out to sea, canoes at sea had to stay out and could not come in till after the 9 day cycle.

Months of peace of the priest and king:

<i>Kaaona</i>	May
<i>Hinaialeele</i>	June
<i>Hilinaebu</i>	July
<i>Hilinama</i>	August
<i>Ikuwa</i>	September
<i>Welehu</i>	October
<i>Makalii</i>	November
<i>Ikuwa</i>	September

Was seen as the start of the new year at beginning of Ikuwa, on the night of Hilo [Fornander: 1st night of new moon]. Again had series of ceremonies at the heiau.

Kepelino Description of the Daily Lunar Calendar

The old Hawaiians as they counted the days of each month understood the nature of each. Some days were good for planting and some were not. Some were good for fishing, some were not. Some were windy and others calm. All these characters depended on the phases of the moon. This was not superstition but belonged to the old branches of knowledge of Hawaii... (Beckwith:98)

One night of the month was called Ku's, that is *Ku-kahi*. The naming of the moons is a very old thing. Papa and Wakea are very much later. The people of olden times took the first night when the waning of the moon could be clearly distinguished as a night for the worship of their god Ku, naming the night accordingly *Ku-kahi* so that there might be no confusion about the "first" day of worshipping the god. That day was set aside for the god.

So it was with the tapu of Hua and the tapu of Kane. The tapu of Lono was for thanking the god Lono for the whole month past.(Beckwith:112)

Hilo means just a narrow rim of light, hence it was called *hilo* because it was not clear.

Hilo was the first night of each month, and the day following was a good one for planting. Watermelon, gourds, bananas, sugar-cane, taro, potatoes, and so forth, if planted on this day would bear well. The potatoes would be large below ground, the plants small above ground, and so with all bearing things; bananas would be large and the stalk small. It was a day highly valued for planting. On the evening of *Hilo* there is low tide until morning. On this night the women fished by hand (in the pools left by the sea) and men went torch fishing. It was a calm night, no tide until morning. It was a warm night without puffs of wind; on the river-banks people caught gobey fish by hand and shrimps in hand-nets in the warm water ...(Beckwith:98)

Hoaka is the second day of the month and the name means "clear." On the evening when *Hoaka* rises there is low tide until morning, just like the night of *Hilo*. It is a favorable day for planting, but in old days it was a day of prayer. The *hoaka*, or arch over the door of a house, was named after the shape of the moon on that night, that is, concave with the points curving up on both sides like horns ... (Beckwith:100)

Ku-kahi On *Ku-kahi*, the third night of the moon, the moon is to be seen in the western sky. In old times that was the second day of the tapu of the god. Like *Hilo*, therefore, it was a day of death to man as a sacrifice for others. On one of those days the wrong-doer would be put to death. Such faults were punishable by death as breaking the chief's tapu or a temple tapu, putting on himself the malo of the chief or the skirt of a chiefess, murmuring against a chief, and so forth; the offender must surely die. Also if he was a traitor he died.

In old days, if no offender could be found as offering to the images, they took one born a slave (that is one of a despised class who could not associate with others) and sacrificed him to the images, for the death or the life of a slave was in the power of the chief. And if they had no man to sacrifice, then, to appease the temple (god) as false kuhunas said, pig, coconut, red fish were substituted to the number of four hundred pigs, four hundred coconuts, and an equal number of red fish and the same of skirts and loin-cloths, and so on, and so on.(Beckwith:100-102)

Ku-lua Rises on the fourth night of the month. On that evening the wind blows, the sea is choppy, there is low tide but the sea is rough. The next morning the wind blows gently and steadily.

On that day in old times the tapu was freed, the commoners could relax from the dread of the tapu and think of life, for they were now shielded. The kahuna prayed with a loud voice, saying "You are spared! you live!" and the people shouted all together from one place to another "Live!"

It was a day of low tide, the sea receded and many came down to fish.(Beckwith: 102)

Ku-kolu Is the first night of the rising of the moon. It is valueless for the farmer for planting potatoes, bananas, gourds; they would just shoot up like coconuts.

A day of low tide, but the wind blows until the *ole* night of the moon. Many fishermen go out during these days after different sorts of fish. The sea is filled with fleets of canoes and the beach with people fishing with poles and with women diving for sea-urchins, the large and the small varieties, gathering *limu*, spreading poison, crab fishing, squid spearing, and other activities.

During the wet season these are stormy days rather than clear; it is only during the dry season when these low tides prevail, that fish are abundant, the sea urchins fat, and so forth. This is a day when the sand is exposed, the day clear, the sea calm,--a good fishing day.(Beckwith:102)

Ku-pan is the sixth night of the moon. It is a day of low tide like the others until the afternoon, then the sea rises, then ebbs, until the afternoon of the next day. The wind blows gently but it is scarcely perceptible. The sand is exposed.(Beckwith: 102)

<i>Ole-ku-kahi</i>	is the seventh night of the moon. It is a day of rough sea which washes up the sand and lays bare the stones at the bottom. Seaweed of the flat green variety is torn up and cast on the shore in great quantity. The farmer does not plant on this day ... On this night it is light after the moon sets.(Beckwith: 104)
<i>Ole-ku-lua</i>	is the eighth night of the moon, it is the second of rough seas. Farmers generally dislike it for planting but it is favorable to some to make green things grow in the field ... It is a good night for torch-fishing for the sea ebbs a little during the night. This is the second of this group of nights.(Beckwith:104)
<i>Ole-ku-kolu</i>	is the ninth night of the moon. The sea is rough as on the first two days of this group. The farmers think little of the day. The tide is low and there is torch-fishing at night when the sea is calm. Some nights it is likely to be rough ... This is the third of this-group of nights.(Beckwith:104)
<i>Ole-pau</i>	is the tenth night of the moon. On this night farmers who are on the lookout for good crops plant their fields. It is a productive day, say the cultivators. On <i>Ole-pau</i> the breadfruit puts its strength into bearing, and so it is with other plants. No others days of the group are like this one. Cultivators do not think anything of the other days, but this is important to them ... It is the fourth of this group of nights and the last day of rough sea.(Beckwith: 106)
<i>Huna</i>	is the eleventh night of the moon. It is a day much liked by cultivators, a productive day, they say ... This is fifth of this group of nights. The tide is low and there is good fishing.(Beckwith: 106)
<i>Mobalu</i>	is the twelfth night of the moon. It is a good day for the farmers ... There is low tide and the night is the sixth of the group. On that night begins the tapu of the gods in the heiau and everyone goes to pray inside the heiau.(Beckwith: 106)
<i>Hua</i>	is the thirteenth night of the moon. In old days it was a day of prayer, but in these new days the farmers like to plant on this day anything that bears fruit (<i>bua</i>) ... The tide is low on that day and it is the seventh of the group. Such is the nature of this night. The moon on the night of <i>bua</i> is rounded like an egg (<i>bua</i>). (Beckwith:106)
<i>Akua</i>	is the fourteenth night of the moon. The name ("god") indicates a great moon, beautiful and well-rounded, because on this night it is separated from the great earth made by Kane, hence it is that the moon appears so clear on this night, so say the Hawaiian stories. That night and that day are tapu... This is the eighth of this group of nights. It is a day of low or of high tide, hence the saying: It may be rough, it may be calm. (Beckwith: 108)
<i>Hoku</i>	is the fifteenth night of the moon, a day well-liked by farmers ... It is the tenth[ninth] night of the group.(Beckwith:108)
<i>Mabealani</i>	is the sixteenth night of the moon. The day is liked by the farmers. It is a day of low tide... It is the tenth night of the group.(Beckwith:108)
<i>Kulu</i>	is the seventeenth night of the moon. The farmers put their trust in this day. The potato or the melon will swell large (if the plant is set out on this day), so say the farmers ... This is the eleventh of the nights of this group and on this night the sea gathers up and replaces the sand.(Beckwith:108)
<i>Laan-ku-kahi</i>	is the eighteenth night of the moon, a day rejected by the cultivator. The potato vine, melons, bananas, gourds if planted on that day become woody (<i>ho'olaau</i>) and do not form fruit. Some like it, however: "The fruit of the potato, the gourd, the banana and the rest will 'follow' (<i>ho'olaau</i>)," they say (punning on the name of the month) ... There is sea, indeed, but it is only moderately high. This is the twelfth night of this group.(Beckwith:108)
<i>Laan-ku-lua</i>	is the nineteenth night of the moon. It is a day much esteemed by the farmer. The sea is rough ... This is the thirteenth night of the group.(Beckwith:110)
<i>Laan-pau</i>	is the twentieth night of the moon. It is a day for planting. A day of boisterous seas. This is the fourteenth night of the group.(Beckwith:110)
<i>Ole-leu-kahi</i>	is the twenty-first night of the moon. These are the days for planting potato slips, banana suckers, and gourd seeds. A day of rough seas, so, that it is said, "nothing (<i>ole</i>) is to be had from the sea." This is the fifteenth day of the group... (Beckwith:110)
<i>Ole-leu-lua</i>	is the twenty-second night of the moon. The day is good for planting; a day of rough seas... This is the sixteenth of the group. (Beckwith:110)
<i>Ole-pau</i>	is the twenty-third of the moon. Its characteristics are like those of <i>olekulua</i> . It is the seventeenth day and last of the

	group. On that day begins the tapu.(Beckwith:110)
<i>Kaloa-leu-kahi</i>	is the twenty-fourth night of the moon. It is a planting day, but the potato vine, melons, or banana will run to stem and the fruit will not develop quickly. The weather is bad with a high sea. It is a tapu day for the god... This is the last rough day; the sea now becomes calm.(Beckwith:110)
<i>Kaloa-leu-lua</i>	is the twenty-fifth night of the moon. It is a good day for planting crops... On that day the tapu of the gods was freed in ancient days.(Beckwith:110)
<i>Kane</i>	is the twenty-seventh night of the moon. It was a day of prayer and on the day following, that of Lono, the prayer was freed. That day and the day of <i>Lono</i> are good days for planting potatoes. It is a day of very low tides, but joyous for men who fish with lines and for girls who dive for sea urchins.(Beckwith:110)
<i>Lone</i>	is the twenty-eighth night of the moon. It is a day for planting crops. The potato, melon, pumpkin, coffee, orange and all such things will blossom abundantly (if planted on this day). The tide is low, the sea calm, the sand is gathered up and returned to its place; in these days the sea begins to wash back the sand that the rough sea has scooped up.(Beckwith:112)
<i>Mauli</i>	is the last night that the moon is visible and the name means the "last breath." It is a very good day for planting, a day of low tide. "A sea that gathers up and returns the sand to its place" is the meaning of this single word. The moon rises just a little before sunrise and it is the twenty-ninth night of the moon.(Beckwith:112)
<i>Muʻjcu</i>	is the night on which the moon does not rise. The name means "finished" and it refers also to the "dying" of the moon. It is a day for planting crops, a day of low tide, when the sea gathers up and returns the sand to its place, a day of diving for sea-urchins, small and large, for gathering seaweed, for line-fishing by children, squid-catching, <i>uluulu</i> fishing, pulu fishing, and so forth. Such is the activity of the day.(Beckwith:112)

Divisions in Traditional Hawaiian Society (according to Kepelino)

The ancient Hawaiians divided their work into two kinds, work with the hands and worship. On the evening when the new moon rose until the next day was a good time for planting. On that night the tapu began and it was freed on the day of *Ole-leu-Ull*. There were four regular periods of prayer observed in each month. The Hawaiian people were a working people, not lazy. In the old days laziness brought lack. Here were those who did not work in the old days: favorite children, for whose indolence their parents were responsible; prostitutes, who were ceremonially unclean; the wandering class who had nothing to do; those who lived with the chief who acted as his attendants. All the others were workers.

The chiefs had work to do as chiefs in looking after the interests of the land and the people. The kahunas had work to do in worshipping one or another god. The raftsmen worked at one thing or another for their living.

Men worked at farming, fishing, building houses and at any other work by which they gained a living. The women's work was beating tapa, making designs, weaving mats, and other things by which they made a living.(Beckwith:98)

Basic kapus in force (1800):

1. It is not right for a man to eat with his wife.
2. It is not right for a woman to enter the *mull* [men's house] or house of worship.
3. It is not right for women to go to the men's eating house.
4. It is not right for women to eat bananas except the *pupuulu* and the *iholena* varieties.
5. Women must not eat pork, the yellow coconut, the *ulua* fish, the *kumu* fish, the *niubi* shark, the whale, the porpoise, the spotted sting-ray, the *kailepo*; all these things were dedicated to God[s], hence women could not eat them.

Secondary kapus:

1. There is to be one house (the *noa*) for the wife and the husband, etc.
2. There is to be a house (called *mua*) for the men's eating house.
3. There is to be a heiau for the images.
4. There are to be two eating houses, one for the men and another for the women.
5. There is to be a house (called *kua*) for tapa beating.
6. There is to be a house (called *pea*) for the separation of the woman when she is unclean.(pg. 64)

The entire group of people living on an island or group of islands was known as a people of *lahuL*. There were 3 social classes:

1. Ali'i [ari'i] or chiefs.

The class of chiefs held the highest rank of all, and the priests were classed with them. The two together comprised the class of chiefs.

There were many grades among the chiefs, some higher than others. The high chief was at the head of the government, under him were the lesser chiefs, the counselors, the governors, the landlords, and the commoners. The government was his and he decided everything pertaining to it. He was called the *Mo-i*, meaning that his word was over all... As for the chief or ali'i, the tapu is the characteristic by which his rank is distinguished above others.(140-42)

2. *Noa* or commoners.

The commoners comprise only those people who have no chiefly blood. A chief is known by his name. The name of a chief is tapu and cannot be given to a commoner or he would die. Hence the chiefs are distinguished by their names from the commoners and the commoners from the chiefs. This is a custom peculiar to Hawaii. Among the white people names are not significant, but to the Hawaiian the name is important.(142)

3. *Kauna* or slaves.

The slaves or *kauna* were people set apart from the rest and treated like filthy beasts. They could not associate with other men. They were called "corpses," that is, foul smelling things. They were not allowed to marry outside their own class. If they were married and bore children to one not a slave, then all those children would have their necks wrung lest disgrace come to the family and the blot be handed down to their descendants. The slaves were considered to be an evil here in Hawaii. They increased rapidly,--a thousand or more there were. They continued to give birth from the time of their ancestors until the present time; they could not become extinct. There are many walking about arrogantly today who by birth are "foul corpses." In old days they were just killed at will... And this class of slaves still lives under the masters. It was not a laboring class; the people were not selected to serve the chiefs; but on the tapu days of the heiau they were killed as offering to the idols.

The slaves occupied themselves with their own work. They had a separate piece of land given them by their masters where they built houses and sought a livelihood for themselves by farming and fishing. This land was tapu. Those not slaves could not till there or use its products. The commoner who trespassed on the land was put to death ... The houses of the slaves were tapu. No one not a slave could go there. If anyone not a slave was seen there he became like an eating sore, a disgrace to his descendants.

The slaves were so tapu that they could not bare their heads but must cover themselves with a wide piece of tapa with great humility and never look up. They were so tapu that they were not permitted to enter the house lot of other men. If they wished for anything they came outside the enclosure and spoke. But to the place of the chief who was their master they were at liberty to go. The slaves were very different in old times, a humble people, kind and gentle. They worked for a living much like those who work under contract, but they were despised in Hawaii and are so to this day; they are not regarded as like other people.(142-44)

System of Ho' okupu or Ritual Giftgiving (from Kepelino)

It was the system from old days to make an offering of gifts to the chief called a *ho'okupu*. Many brought gifts, but it was considered presumptuous for a commoner to bring a gift without the knowledge of those set over him. To avoid confusion the matter was handled thus. Each small farmer brought his gift to his landlord or *bakukihapai*; he gave all the gifts from his land to the head of the larger subdivision, the *ai-mo'oaina*; he to the *konobiki*, he to the larger landlords or *baku aina*, and the landlords to the district chiefs or *ali'i okana*; these, together with the landlords and land chiefs, gave to the high chief, and the high chiefs brought the gifts to the king.

This was a good institution and fitting to honor the chief...

When the commoners were ready with their gifts, the announcer or *Kalaku* called out with a loud voice at the hour of half after six in the evening as follows: "O high chiefs, landlords, chiefs of the *abupua'a* and the *okana*, O *konobiki*, O rulers over the *mo'oaina*, the *kihapai*, the *lapa*, the *kuena* and you landless. Tomorrow fetch wood, ti leaves, banana leaves, and all other necessary things and when you return cook the food. The next day bake pig, dog, turkey, chicken. Let the mountain chiefs bring petrels, geese, birds from their holes. Bring for the chiefs, bring for the small farmers, for the headmen, the *konobiki*, the landlords, the chiefs. Tomorrow morning is the day to bring your gifts. The *konobiki*, the landlords, the chiefs, let them bring. If there is lack the landlord will be discharged, the chief will be discharged. Let those above and those below, high-born and commoner, hear. Tomorrow in the morning is the time for giving gifts to the Heavenly One So-and-so." So spoke the announcer.

Everyone heard the announcement and made ready in the early morning. Soon the chiefs and the rest got the wood, food, ti leaves, banana leaves, and so forth and did as the announcer had said.

The landlords orders from their overseers the required number of calabashes of poi and of potato poi, the pigs, bunches of bananas,

sugar-cane and the rest according to the number of men on the land and their resources ...

This is the way in which the ceremony took place.

1. The small farmer gave to the head man of his land division.
2. This head man gave to the head man of the larger sub-division.
3. This head man gave to the overseer over the larger piece of land.
4. The overseer gave to his landlord.
5. The landlord gave to the chief landlord.
6. The chief landlord gave to his land chief.
7. The land chiefs gave to their chiefs from the ranking royal family.
8. These gave to their ranking lord.
9. These hereditary chiefs gave to the head chief.

As the gifts were presented, the overseer reserved two calabashes of poi and a pig for the two men under him and for the men of the land; the rest went to his landlord. The landlord reserved two calabashes of poi, two pigs, one dog for his overseer, the rest went to his chief.

The chief reserved five calabashes of poi, four pigs, five dogs for his landlord, the rest went to his hereditary lord. Later each person took these things to the high chief. The landlords and hereditary chiefs went ahead to the chief's place and sat down to await the coming of their overseers and lead men. When the overseer came he said to his landlord, "Here is the gift of our land, twenty calabashes of poi, ten pigs, twenty dogs, two men loaded with chickens cooked in ti leaves, ten bundles of turkeys, six bundles of young petrels, forty large bundles of pounded potato, ten bunches of bananas, five bundles of sugar-cane, six calabashes of sea-urchins, ten bonito fish, two times four hundred mackerel," and so on.

The landlord repeated to his chief the words of his overseer, then the chief said to the high chief, "O Heavenly One! here is the royal offering of your land from me," and he repeated the words of his landlord. So did each one, and the number of the calabashes of poi was perhaps not below 20,000 and the pigs 40,000 and other things innumerable. A million men could have eaten for two or three days without finishing the whole. Thus can be seen how energetic were the chiefs and the commoners, and this was a fine thing to see. The chief was honored in all ways.

The people of Hawaii were thus a lowly people, one serving another, giving gifts to each other in the olden days. To be arrogant was a terrible thing.(148-50)

Social Ranks:

1. The *Moi* or king, who was above everyone. This meant that his word was over all. The name is made up of two words, thus *mo* is a "gourd", *i* means "to speak," hence "a gourd to contain words," meaning that the important decisions of the government are contained within him. Hence the old Hawaiians called the high chief *mo-i* as meaning one who speaks for all.(142)
2. *Kubina-nui*, the chief counselor. The office of counselor was a very old one in Hawai'i. Such persons acted as counselors to the chief in all matters pertaining to the government and to the prosperity of the group.
3. *Kahuna-nui* or chief priest. The head priest lived at the chief's place and there performed the work belonging to his class. Every day he said the morning prayer for the chief, dedicated him, and so forth. He could not live elsewhere than with the chief, where he had a chiefly house held under the kapu of the priest. He was well looked after in the old days, but if the chief was angry with him he might be slain. The priests were born into a family of priests and ranked as of the chief class.
4. *Pukana-nui* or war leader. It was he who attended to the soldiers of each class and to the leaders under him.
5. *Hoa-ka'a-cana* or strategists in war. The counselors of war ... were to find out the opinion of the chief in regard to such matters, and if it was well, to agree, if not, to say no.
6. *Koa*, the warriors. They guard the life of the chief every day of his life and ward off enemies. Formerly this office was held by the *Kiui-poo*; it was only in time of war that fighting men were active.
7. *Poe-mo'olelo*, the historians. They were persons who kept correctly the genealogies of each district, memorizing them all well so as not to lose the record of each chief from generation to generation. The family of genealogists was born to the post.
8. *Kubikubi-pu'uone* or reader of omens. They were experts who understood the nature of the land, the things that grew on it, the character of the soil, whether productive or non-productive, the presence or absence of water, and so forth.
9. *Poe lavelave*, the workers. At the chiefs place there were many workers or *Poelavelave* of every description. Many of the commoners hung about there because they could find food without labor at the hands of the chief without soiling their hands. It was because they liked

idleness and pleasure that they gathered about the chief's place.

Signs sacred to ari'i of kapu rank:

1. *Puloulou* or kapu standard. It was set up at each corner of the chief's enclosure and covered with tapa to mark the sacredness of the enclosure. Anyone who came in without permission was put to death. At the sacred place directly in front of the house stood the sacred drum. It was death to step there; the chief alone and chiefs of his class could step in that place.
 2. *Abu-nula* or feather cloak and the *haka* or helmet of feathers.
 3. *Kahili* or feather standard.
 4. *Pae-humu* or sacred threshold. It was an enclosed platform around the chief's house inside of which it was kapu to enter. If a commoner stepped inside the enclosure he was put to death by the executioner. It was not permitted for a commoner to stand or sit on the *nio* or entrance of a chief's house. It was a very kapu place. If anyone sat there he was put to death by the executioner. If a commoner was sent by a chief to the chief, when he got to the house he must crawl; it was kapu to walk erect on the mats. It was proper for anyone who entered the chief's enclosure to take a bit of trash in his belt as a sign of humility. As soon as he stepped on to the stone platform in front of the house he advanced on his knees and, entering the house, went straight to the chief and bowed down before him in an attitude of reverence.
 5. *Nio* or high place.
 6. *Inoa* or name of the chief. The name-chant was a chant composed in his name. There were 2 kinds. Properly recited it was a good thing because it told his family history and revealed the rank of the chief. A second kind was of a riddling character made up of well-sounding words but containing a filthy meaning. In old days the chief's name chant was very kapu. It would mean death for the commoner to chant it. The chants were composed and chanted by the chiefs.
 7. *Kapu-nobo* or sitting kapu. When the announcer called "Tapu! sit!" those who were going about sat down at once without looking around for a convenient place to sit, lest they die. When the announcer had gone on, those behind him could get up.
 8. *Kapu-moe* or prostrating kapu. The prostrating kapu was to two kinds, either a kapu of the god or a kapu of the chief. The first was the strictest of all, the most implacable, the most sacred and the most to be feared. With trembling one sat in the heiau for fear of death. Not a chief, not a person of high rank, not even a favorite could escape the kapu of God. Anyone of them could be put to death by the high executioner of the kapu of the God if he did not sit properly in the heiau.
- The great executioner of the kapu of the Kahuna or of the God would watch the people as they offered prayer in the heiau and if anyone, either chief or commoner, did not conduct himself properly when the high chief knelt and offered prayer with the Kahuna and came bowing to his place, then the executioner would call to him, naming him "*aiaiohua*" and "*hoanvae pau*," and would lead him out of the temple and put him to death. Then he brought his body to the altar of the heiau of images.
- As to the prostrating kapu of the chief, when the chief wished to go forth the announcer went ahead proclaiming the kapu of the chief, thus: "Tapu! lie down!" Then everyone prostrated himself on the way by which the chief was passing ...
9. *Noboana-nihinihi*, a special kind of sitting kapu. (Beckwith:122-38)

APPENDIX V
GEOMANTIC SOURCE MATERIAL

From "History of the Hawaiian Priesthood Called the Order of Sorcery" by S.N. Haleole
Honolulu, August 13, 1862
in Fomander Vol. VI/I(56-64)

The Order of Priesthood

1. Diviner

A Diviner, a weather prophet, an architect were all called priests, and in these people were embodied the department of knowledge. They could read the omens in the clouds, whether favorable or unfavorable; good or evil; profitable or unprofitable; fortunate or unfortunate; or the death of a chief, or a land (overseership) withdrawn [f: This has reference to stewardship of a tract or tracts of land, the *konohiki* of an *ili* or *ahupuaa*, whose tenure of office was ever subject to the whim, fortune of, or change in the district chief, who in turn held under the king. Even a well-cultivated *ili* giving satisfactory tax returns of its products was, as likely as not, to be the envy of sycophant followers of the chief who would seek to supplant him], perhaps. These people could prophesy of coming events and reveal things which were hidden in secret places, and explain things which had transpired many years. From this department emanated certain branches, which were: the profession of praying to death, sorcery, and the practice of medicine; therefore they were all included in the order of priesthood.

2. Of the Diviner and Weather Prophet

A person who was called a diviner and a weather prophet meant the same office but with two separate branches of knowledge. If the office of diviner and that of weather prophet were so vested in one man, then that man possessed two branches of knowledge.

If a man possessed but one branch of knowledge he could not see into that of another. The architect could not perform the art of healing. But if all the callings of the priesthood were vested in one man, then he was called a "*pubiokaoka*," [f: *Pubiokaoka*; *pubi*, blow; *okaoka*, reduced to powder; broken up fine. The term implies one having multiple power, even as the wind in sweeping away all particles of dust.] because all the callings of the priesthood were embodied in him.

3. Meaning of Divination

Divination was an office in the priesthood whereby the diviner could discern the right and the wrong. Supposing a man, or a district chief wished to build himself a house, he must first send for the diviner to come and select a suitable site for it to stand, and when he had chosen it he would say to the owner of the house: "Here is the location for your house; live on this foundation until you are bent, dim-eyed, feeble and in the last stages of life." At the time that the house was to be built it was proper that the diviner should be sent for to see to the mode of its erection. He had the right to approve or condemn and pass upon it as all right. But if the diviner was not sent for from the beginning of the work on the foundation until the completion of the house, the diviner could come and condemn or approve.

4. Divining a Location for the House

If the diviner went and found a house standing on the edge of a cliff, and that the door of said house opened towards the cliffs, then the diviner would say: "This is a bad position; it is unfavorable (*leleopu*). The owners of this house will not live long ere they die unless they go away." If they were to be saved from death, to move elsewhere was their only safety. The meaning of the word "*leleopu*" was desolation, just like a lot of people falling down the precipice who could not go back again.

Here is the second: If a house was standing on a mound, or hill, then the diviner would say: "This is a bad position; there are two meanings to this situation, *leleopu* and *holua*; *holua* because there would be many people during the *holua* season, but after the sport was over the result would be loneliness. This house is like a *leleopu*."

This is the third: If a house stood in a place adjacent to a stone wall, and there was a hill directly at the rear of the house, if the door was facing the wall, then the diviner would say: "This is a bad situation; it is a *leleopu* position, but if a door should be opened at the back of the house, that would be well."

Here is the fourth: If the diviner saw that the house of a commoner stood in a nice level place which had not before been built upon, then he would say; "This is a good house, and the location *is* clear; a chief will enter *this* house, because a chief's house stands on a prominence."

Here is the fifth: If a house was built at the slope of the cliffs with the front of the house partly facing the cliffs, or *kabanahana pali* perhaps, then the diviner would say:

“This is a bad location; it is an *unaukaha*, and its meaning is the same as that of the house on the *leleopu* and *holua* sites, and the end would be the death of the people living therein; safety only could be had by leaving that place.

5. Other Unfavorable Locations

If a house was built right on a burying place, then the diviner would say: “This is a bad location, one of lamenting noises, which will result in the death of all, safety being only assured by removal.”

And again: If the location where the house stood was good, as also the position of the house, yet if the location was crossed by a highway which passed the door and continued on, if the door was at the corner, or at the front, then the diviner would say: “This is a bad location, an *amio* [f. *Amio*, liable to gusts of wind from the rear; whirlwind, etc.], and those who live therein would be afflicted with continual illness, safety being only in removal.”

And again: If a house was erected right in the temple [enclosure] with the knowledge of the builder, then the diviner would say: “This is a bad location; it is a deep pit because it is situated in a place of gloom. Not one of those who would dwell in that house would live. In the same manner that a man enters the high rolling surf, he would be lost.”

6. Divining on the Erection of Houses

If a house was being erected, and the posts were set and the plate for the rafters laid on and fastened by tying with ropes, and afterwards that which was fastened was taken off again, perhaps because it was found that the positions of the posts were not uniform, so that one or more posts must be drawn out of their holes, the diviner, on inspection, when he sees that the house was being built that way would say: “The house is improper; the owner will not dwell long therein before he goes to another place. In the same manner that he removed one of the posts, so would he discontinue to live in the house.”

If the house was being erected and the posts were set, the rafters put up and fastened, or perhaps battened with sticks and thatched and then taken to pieces, its divination was as those mentioned in the next above paragraph; but if the house belonged to the king and it was being thatched by an overseer of a division of land, or of a district, or of an island, then the divination mentioned in the first paragraph of this number would not apply.

If posts, however, were withdrawn while erecting a house for the king, then the tenor of a former paragraph in relation to the king's house so erected would not be exempted but applied; though if the house to be erected was a barn, then this divination would not apply to such house, or if the posts were drawn out, or taken to pieces again; it was applicable only to dwelling houses.

7. Faultily Constructed Houses

[Deals only with internal construction faults]

8. Divination of a Post Denoting Disease

[Deals only with internal construction faults]

10. Divining the position of Two or More Houses

If two, three or more houses were standing in a row, and one house was higher than the rest of the row, and that house was owned by a commoner, then the diviner would say:

“The owner of that house will become rich, perhaps a division land holder, or perhaps a district land holder.” But if two houses are in the same position, the owner of one being a division land holder and a low farmer be the owner of the other, and the house with the high roof belongs to the low farmer, the diviner would remark: “The owner of that other house will cease to be a division land holder and the owner of the high house will own the property.”

11. Divination of One or Two Houses Behind a Row of Dwellings

If one or two houses were standing in the rear of a row of several then the diviner would say: “There will be fighting amongst these houses. The melee will be started by the house in the rear; the conduct of the houses in front will make them enemies for the rear houses, and those living in front will become opponents for him or them who live in the house in the rear.” (56-64)

GEOMANTIC INTERPRETATION FROM WAIALEALE 1834

Summary of Locations and Results

1. *Eho*: On a high part of a mountain, with a door facing the sunrise[East]-light passes through house and out the door to the West [2nd door].

Result: House that plots rebellion for chief who is its owner (or others perhaps). A cruel death for owner and followers. The house

is like *nene* grass in the mountains, murmuring back & forth of good fortune and of trouble.

Example: House built by Kaowao of Kaupo on Haleakala. Kekaulike heard of the house, said Kaowao was 'rebellious and haughty chief' and defeated him and took possession of the house.

2. *Eho*: 'house that stands on a hill.

Result: Site of death. Unless it has a small mound in front, another in back--then 'not a bad site.'

3. *Waikalua*: House that stands below (base of slope/swale) a hillock. Doors on South and West side. If it has a 2nd house 'on the left' [from the drawing suggests on slope of hillock] changes predictions.

Result: House of prosperity for the owner.

With 2nd house--constant fighting between the families of the 2 houses, only resolved if the family of the house abandons house and leaves.

4. *Ilioha*: House built on a spot with the front of the house facing a descent to a freshwater pond. House on side of hillock, pond lower down but also on slope.

Result: House in which the owner will dwell for some time, house that is fond of pleasures for its owners and others in 'all kinds of improper things.' As a result of 'things committed in this house' the owner will wander from place to place to stay. 'House will be occupied by people who pretend to be possessed of the gods and ... they will reap many benefits through the peculiar practices of the ancients.'

5. *Haloko-i'a*: House built in slight hollow [illustration shows the house on a gentle slope 2/3 of the way down, wet-field down below] 'rather close to a taro patch', with that patch, or several, directly in front of the house, and with patches in back of the house 'are in a distance'; and water flowing through an 'aumai enters patches in front (directly) of the house, and both front of house and door face South.

Result: House in which the owner will have long life and many blessings obtained repeatedly. Many visitors, hospitality, no begrudging of anything, 'a kind heartedness.' If someone has predicted evil for the house, take a dog's tooth and place over the door.

6. *Paikala*: House on a level site, with the door facing South, 2nd house not in line on East side [apparently also has door to South according to illustration].

Result: House that brings sudden and cruel death to the owner or lingering/constant sickness 'in the family until death. 'To remove, plant an *awa* of *hima* variety at the door or reduce roof height till is equal with that of house on East side.

7. No name: "said to be an *aukui*" on Pukui's side notes: Illustration shows a house on level site, fresh-water pond on West side, door facing south. House in illustration is oriented on compass cardinal points.

Result: A house in which the owner will rise to an important position 'that will benefit him.' 'In olden times' owners became favorites of *ali'i* who made them 'care-takers of ahupua'as and chosen konohikis'. 'In this new era' they are appointed to Government positions .. 'their days are long in the work of the government.'

8. *Lonopuka*: House on a good site near where a stream flows in front of it [illustration shows 2 tributaries forming a larger stream], with water surrounding on all sides [streams], with door facing stream junction. [In illustration the house is shown on slight slope 1/2 way down with branches on either side forming down slope junction in front of the house]. Perhaps better if built in month of *Kaaona*.

Result: The house is one that 'receives all kinds of blessings constantly that are brought there by certain people ... and property is received very easily, without any trouble.'

9. *Hokii-moe-balan*: House built on a level site with depression on East side and high ridge 'perhaps on the same side'; doors face South and West.

If build a new house in the rear (2 or more fathoms away) from 1st house, with door facing West and another 'at the rear', with sides turning to North and South, 'that house site is a *Hokii-moe-balan*.'

Result: 1st house--Inside, where family sleeps, *bikiies* (couches) are made. Wife or mother of owner stays in house to beat her tapas. House excels at acquiring gain but 'never holding fast to it.' Owner always intoxicated with associates, much fighting later, family members will go elsewhere during fighting, return afterwards. Will be grudges that only exist when owner drunk then cease. 'This will go on until the house is old.'

2nd house--Outside all 'very nice to look at, but the inside will not be good until it is worn away with age.' Owner and family may occupy, but all the gain will go to occupants of 1st house. Unpleasant influence can only be removed by a ruling chief entering

the house, then' gain will be had.' It is a house where sickness is infrequent.

10. *Huliamahi*: The house is on level ground facing the mountains and hills, back near a sea cliff/sea coast where there is a strip of sand 'over which the waves dash.'

Front and back door [which faces West in illustration] are in line with each other and 1 faces West.

Result: If the owner holds a *konohiki* or government position then will not be long in this house before 'he will loose the position he holds from [to] another person.' An echoing (like many lamenting voices) comes to it from the sea cliff.'

Example: C.K. Kalani's 2 houses at Kipahulu and Hana. He was warned by S. Kahunanaiole Maunalua of house placement, but ignored the warnings and 'words were fulfilled to this day.'

12. *Mabiki*: No description, illustration shows a house near the top of a hillock (and partly hidden by the hillock).

Result: "A bad site." "Brings sickness and death." "A house of continuous pleasures; is of no benefit; one that takes away the husband or wife." There is no cure—unless wife of owner died 1st, then sickness will seize husband and others living in the house. Death will come to all eventually, also to others that 'may come later to live in it.' Evil will end only when house falls and breaks to pieces.

12. *Onaha*_(site), *Obai*(house). *Lonomuka* is another name for the house site. If 2nd house site is out of line at left corner then will have problems. Illustration shows 2 houses in rolling terrain, both in low spots, one to left on shelf overlooking lower terrain to left.

Result: A good site for 'gaining wealth, prosperity, and the blessings of life' for owner and family. No wastefulness, but a long life for owner--reaches extreme old age. 2nd house= wife of house owner will be taken by another man, owner have hard time getting back. If husband taken by another woman, will never return to wife.

13. *Kiaba*: no description. Illustration shows a house in low between two hillocks on a small flat--hillocks to height of roof (almost). House appears to be skewed in relation to the hillocks, with long side/door facing edge of lower hillock, one corner pointing at higher hillock--approximately a 30% angle?

Result: A 'bad site', with 'no gain or prosperity for the owner.' To correct--'straighten the east corner and the west corner.' If this done, then unpleasant influence will be removed for 'owner of the house, his family and guests.' No sickness, and '(a guest) will remain a long time ... spending several days or several times ten days ... then be stricken with sudden illness almost to the point of death.

Kneading, massaging, water and medicine are used to revive him.' There is reference to "fish of Kahoolawe, the uku"--will individual will die if he doesn't revive. The only help for the visitor is to spend 1 night and go away the next day--then will be rid of bad influence.

14. *Obiki*: The site is full of holes on either side that have been filled in--a bad site. In the illustration it is on a flat near a slope, at the base of the slope. The 2nd house on a low, irregular ridge upslope of the 1st house.

Result: The house will not be completed for the owner. 'Builder will have a fall, or wander away ... to live under others...' 'If a 2nd house is built, then both houses and the owners 'will be free of the unpleasant influence.' Dwellers of this kind of house always have large fish brought to eat-- 'the whole fish, not portions.'

15. *Pobuehue*: no description. Illustration shows a house in a cut? or excavated basement? as it is in a low spot on a flat, but the low has a flat base and fairly sharp edges and doesn't appear natural. Also the house is at an angle to the cut (maybe 30%), with a door on the short side.

Result: 'A sickly house and without profit.' A house where the husband is taken by another woman. The only cure is to move the house to another site, which will remove unpleasant influence. Discusses link to *uhu* fish as an image of not being 'caught doing anything he shouldn't and remains at home where there is safety.' Wife of owner and family will be well supplied with necessities and 'not fond of pleasure seeking. This woman will not pay attention to the falsehoods of any woman who comes with threatening words as they will only cause a fight.'

16. *Poobalua*: no description. Illustration shows a house at the base of a small hillock, short side at angle facing hillock, *with* the door in the long side aimed at an angle away from hillock on the flats.

Result: 'House of continuous pleasures for the owner... and wife and there is unhappiness.' House 'not occupied except to sleep in... when day comes (the occupants) go from house to house all day long.' Gain from *this* house doesn't last and is spent on 'this and that thing' till all gone and suffer poverty.

Example: The skating rink in Wananalua, Hana (built by H. Maineki Reuter, J. Pali Sr., J.E. Lyons, Capt.T Keneta) ...they received no

profits and it passed into the hands of others.

17. *Puuainako*: no description. Illustration shows the house near the top of a rounded hillock, on a sharp downward slope side. The house is at an angle with the door facing the top of a hillock. The solution is to 'raze the house and leave old site' and build a house on 'north side of the Puuainako site, moving it back so that the Puuainako will remain farther forward.' Move to back side of hillock? It is not clear from the illustration what this means.

Result: Not a good site. Owner will suffer lingering disease, then children, then relatives (such as consumption, asthma, ulcers, stomach aches, scrofulous sores on the neck, abscess on the back, impetigos and others). The only solution was to go away from this place 'and live elsewhere.' 'The gain is small.' The major solution is to raze the house and move-- 'Then it will be good.'

18. *Qhai*(site), *Obai-mae*(house--translated at *Wilted obai*). No description. The illustration shows a house on a small bump, with a second bump to Left. The House is at an angle (normal 30%), with the door on the long side looking upslope. The house is not really at the top of the bump, but one corner appears to be at the high point.

Result: A bad site. 'Death through all kinds of sickness... all kinds of evil influences from the (spirits) of the night.' Owner will suffer insanity and die. The only solution--destroy house, take timber to another site, burn all thatching. For a new house[?] fetch new timber from the mountains, 2 olapa (*Cheirodendron Gaudichaudii*), 2 ohia (*Metrosideros tomentosa*), 1 ahakea (*Bobea elatior Gaudichaudii*), 1 kawau (*Byronia sandwicensis* Endl.), 1 kolea (*Suttonia Sandwicensis*), 1 kopiko (*Straussia hawaiiensis*), 2 lama (*Haba sandwicensis*). 'Those who dwell in the house will be benefited.'

19. *Nalu*: no description. Illustration shows the house on the flat with a gentle upslope to the Right with two small sharp bumps to the West. The house shows short sides right at the bumps and slope with the long side facing directly away, door in middle of long side.

Result: 'a very bad site in which trouble and sickness constantly with the house owner and those who dwell in it...sickness comes constantly.' To remove the bad aspects the only option--make a low door in rear wall, have 1 door facing West and build a small house directly in front of it [door to west?]. 'That is, a place for the imu to be lighted [small house?]. If do this then 'contentment and the sleeping at night pleasant.'

20. *Ahamoa*(site), *Ahamoa*(house #1), *Nalu*(house #5): no description. Illustration shows a scattered cluster of houses in 2 irregular rows, with house #1 between two rows at Left end.

Result: 'not a good site for many to live on.' 'Fights day and night among the men ... women will be much worse and so will the rest of the families.' If children fight parents will side with their children, exacerbating situation. House #5 is house where words that lead to fights among families in first row (house #1-8). Then families 1-4 will fight each other, while houses 5 and 6 (whose walls are close to each other) will make peace, with help of house 8. If fight ends then it will be OK but house 7 will be the last to help. The greatest danger is fire--if windward houses catch fire, then they will all go up.

21. *Paemaia*: no description except...'according to the position of the houses, which is like that of the Ahamoa, except that there is one row of houses in this and two in the Ahamoa.' Illustration shows a staggered line of houses on a flat, with the line on a diagonal to house orientation, all houses with door in long side--last 2 to the Right have 2 doors on the facing side.

Result: 'not a good site'. Fire is to be feared... 'friendliness and contentment for all the house owners slight feeling of enmity but... not of any consequence...contentment, love and equality among them. Some sickness, but no quick death.' Houses 4-5 are the best. Houses 1 and 3 make complaints against houses 2, 4 and 5.

22. *Unau*: a site 'located behind a hill.' Illustration shows the house at right angles underneath an overhanging cliff, the house being on a lower flat. Door on long side [right angle to cliff].

Result: A bad site. 'A house that startles constantly (as though) the voice of a person were (calling) from above and it makes one jump with fear.' It doesn't matter if voice is good or evil. A house that 'causes the owner to wander and die elsewhere ... other people will live in the house and enjoy the blessings. His corpse will be brought back into the house after which it is buried. A good house 'for women to bear children in and for those who are trained for the hula and other forms of entertainment. Then there will be gain.

23. *Oenula*: has 'no bumps or hollows, and is in a level place. If one side of the house stands toward the East and other toward the West with door facing South and another door at back [North?], then it will be a good house. But if the house faces East with back to West will not be good in every respect. Illustration shows the good house at an angle with the door on the facing long side and on the Left short side. The 2nd house is illustrated at Right angles to first one and shows end-on view of house with

door in middle.

Result: #1 is a good site ... peaceful and prosperous.' #2 is not good. 'There will sickness and extravagance and one will not live there very long before going away and others will have the house and all the benefits.

24. No name/Nuu: #1= If the house which stands some distance away is in line with it, and the doors are in line so that the lights can be seen [through them] at night' then it will be bad. If plant awa of hiwa variety and makaloa sedge will remove the bad influence. #2= If a fruit tree grows in front of the 2 houses then site is called Nuu.

Result: #1='a quarrelsome and fault finding house.' #2= fruit tree will 'remove all traces of enmity.'

25. *Nini*: A terraced house, '(1) the two terraces are in front of the house, and (2) the sides.' Of stacked stone 'until the site is high, and pebbles are strewn here the house stands.' #1= If 1 terrace then it is good, 'with a door made at the rear.' #2= If 2-3 terraces, 'it is like the building of a large heiau ... only thing that will help ... have an expert kahuna enter it who knows how to observe omens and good sites, and he can tell what to do for the ailment of the house, that is, to dig a hole by the post' [to which ridge pole attached] on Left side of house and 'light a fire there and roast a pig indoors on the Western side, a brown speckled pig. Roast it in the middle of the house with the appropriate fish to free it (of evil influence)' -weke, kumu, awa, etc. Illustration shows a house on top of 2 terraces, at 30% angle to terraces, with a path coming up from left through middle of lower terrace (left side), and up through left 1/3 of upper terrace to door. Whole unit shown on a hill knoll.

Result: #1 is good (1 terrace), #2 suspect. Following likely applies to #2. 'A good site but...principal trouble is that when the house is completed and occupied by owner, his wife and family, they will not be there long enough for the thatching to dry, before the owner & his wife will die suddenly. The earth (on their graves) will hardly be grown over when there will be another death.' Eventually all the family will die. This kind of house noted by kahunas as type that 'Just one person or thing can destroy, until only weeds are left to occupy the land.'

26. *Paauki*: no description. Illustration shows the house on a flat, with notation of 'hedge of ti' at 30% angle, main door in long side with path leading from front of *ti* hedge to door (at diagonal), with secondary door in Left side.

Result: A 'good site to live on.' Owner will 'rise to wealth and honor. There is prosperity for the family to the end of their days ... no wastefulness or pleasure seeking in the life of the man who is recognized by the chiefs and the wealthy.

Example: John Kapena who died in Honolulu, was secretary to Kamehameha III till reign of Kamehameha V; held many government positions, and his son advanced in that school (Lahainaluna?). Illustration is of the house of Kalelealuaka, at Kahalepoi above Waipio in Ewa.

27. *Opua/Opua-waimaka-nui*: A two-storied house. No description. Illustration shows a western-style house on flat terrain with long-side facing, door in center, two windows symmetrical for first floor, large opening [window?] in the center of the 2nd floor. The sides and front to roof line apparently has a wicker/woven framing, either structural (for 2nd story) or represents an awning over front as has opening for door.

Result: '... the best site for a house to stand on.' A 'haven of wealth, constant gain and so on.' 'This house is like the rain cloud of Kona, Hawaii. .. It is beneficial to farmers. That is why this kind of house is called the Opua-waimaka-nui (Very tearful rain cloud).

Example: The illustration is of 'the late W.L. Moehonua's named Haleaniani, that is standing in Honolulu.

28. *Onehali*: the site name. If there is more than 1 house on the hill, then... 'if a house or several houses stand after the first house is built with a high hill behind them, the houses and front doors all facing the mountains...heiau should be before the first and third houses...owner of first house is an unbeliever, and one who denies God.' The 2nd house 'has the door slightly to one side.' Illustration shows a steep hill, with a heiau at the bottom, with a house #3 directly above the heiau and connected by a road/path from back(mauka) side of the heiau to the door of the house (middle long side). A second road (labeled as such) leads from the Left side of the heiau upslope, breaks into a Y with Right hand road leading to #2 (upslope on diagonal from #3). Again the road leads to a door at center of facing wall (as per #3). Left hand road leads upslope to #_ which is upslope and diagonal from #2, again road to door in center of wall.

Result: A good site, 'nothing is wrong with any part of it'. For 1st house (the unbeliever) ... 'will have some wealth but that wealth will be troublesome to him until it leaves him poor. Then end will be death for himself and his wife, and the house will go to another.' If 'holds a certain position, then he will no longer hold it but will live in contentment.' #2 house--'just man and will continue in a government position while his wife wanders about.' #3--if has held a position for a long time, he will leave it for another position.' A house 'constantly visited by the wealthy, by relatives and friends.'

Example= Illustration is of the houses of J.K. Iosepa, B.H. Kaiwiae and Piimaiwa at Hana.

29. *Pukui*: 'All houses that stand below by a stream or several streams in a valley, with cliffs on both sides'.

Result: 'all receive the same thing, whether death or life, gain or poverty. This is customary in the life of the Hawaiian people from very ancient times to this new period.'

30. *Oloke'a*: When large houses or smaller ones are built directly on a heiau site by a chief, a lesser chief or a *konobiki*, and are set up with all that is needed [for building], and when all of the sides are finished except the roof, the roof will not go on, after which the builder who planned the building on the heiau will die. The complex illustrated showing the Catholic church and surrounding structures included the dwelling house at Puuiki, Hana (vertical plan view only).

Result: As above. Also account from Hana with prophet(?) Helio Kekuadeau about Catholic church in Hana. Dwelling house at church will cause 'sickness of long standing' for resident. He (Waialeale) cites the various priests and their diseases.

Example: The story of Luau (prophet/kahuna) and King Kamehameha about chief Kanepaiki building a church on a heiau 'on the ahupuaa of Waiawa, above the maika playing field of Haupuu.' The chief died as per Luau's prediction. The Hana example of the Catholic church in Hana and predictions of Helio Kekuadeau with citations to show accuracy.

31. *Heiau Pookanaka*: Relating to a house built upon the site of a *heiau pookanaka*... 'if all traces of the heiau have not been removed from the house site' ... then when the house-warming feast is given there will be trouble. 'On the day for the roasting of the pig, there will be a fight between husband and wife, and the result will be the destroying of that house by fire, with nothing saved.' The illustration shows a house on a mound with the long side facing forward with door in middle. A note says 'the Number 2 on the diagram [however there is no #2 noted on the illustration] is the remainder of the heiau mentioned.'

32. Waialeale then follows with a short critique of the lack of proper geomancy in the urban areas: 'the towns of Honolulu and Lahaina, Wailuku, Hilo, Waimea, Lihue, Hanalei, the towns that are less in size than the big town of Honolulu--the houses are built to face two ways, facing this way and facing that way. Some are further back and some are forward and some are very tall, so that one can not tell the true nature of the house. The only things heeded are the receiving of gain and the dwelling within. Therefore some people who know how to observe the sites and positions of the houses (say); 1) the sites that are all earth in Honolulu are called "*One ai kanaka* (Man destroying sand) by the experts; 2) all houses that stand on this'. Unfortunately the Waialeale manuscript ends here "This manuscript is incomplete. M.P."

APPENDIX VI

LAND OWNERSHIP DATA AND LAND COMMISSION AWARD TESTIMONY

Royal Land Grants in Kanaio (with 1990 listed owners)

Por L.Gr. 5-3700, 6229 acres. State of Hawaii. Administered by Department of Land and Natural Resources. Leasee is 'Ulupalakua Ranch.

1506 = 2:1:02:23, 101 acres. Anna Tam Trust et al.

2856 = 2:1:02:21, 33.3 acres. 'Ulupalakua Ranch(1/2), Stanley & Juliette Goodness(1/4), Joseph Goodness(1/4). Leasee is 'Ulupalakua Ranch.

2843 = 2:1:02:20, 15.2 acres. Estate Schedule Book--multiple owners.

2842 = 2:1:02:19, 10.6 acres. 'Ulupalakua Ranch(3/4), Stanley & Juliette Goodness(1/8), Joseph Goodness(1/8). Leasee is 'Ulupalakua Ranch.

2822 = 2:1:02:4, 2.5 acres. Adam & Margaret Vares.

Por L.Gr. 3700, 2:1:03:50, 2141 acres. State of Hawaii. Administered by Department of Land and Natural Resources. Leasee 'Ulupalakua Ranch.

2993 = 2:1:03:19, 100.53 acres; Parcel 62. Estate Schedule Book (includes Adolph, Harry and Maria Piltz--heirs of Keoki Kunukau).

2338 = 2:1:03:8, 85.73 acres. Estate Schedule Book (includes 'Ulupalakua Ranch, Elena Punoho, John Kaanaana, Ben Kolohia, William, Joseph, George and Emma Kaloholula, Myrna Kitashima, Louis Deponte Jr.).

2987 = 2:1:03:39, 53.8 acres; Parcel 67. Estate Schedule Book (includes Adolph, Harry and Maria Piltz--heirs of Keoki Kunukau).

2994 = 2:1:03:27, 50.17 acres, Parcel 58. Estate Schedule Book (includes Adolph, Harry and Maria Piltz--heirs of Keoki Kunukau).

1242, 1246 and 1241 = 2:1:03:22, 48.2 acres. Vivian Kaiaokamaile et al.

3315 = 2:1:03:10, 41.3 acres. Estate Schedule Book (includes Stanley Kaipo, Juliette, Edna and Joseph Goodness--from estate of Sarah Mengler).

1286 = 2:1:03:20, 38.0 acres; Parcel 63. Kanaio Partners.

1248 = 2:1:03:48, 34.4 acres. 'Ulupalakua Ranch et al. 1249 = 2:1:03:18, 28.3 acres. James Halama et al.

1249 = 2:1:03:18, 28.3 acres. James Halama et al.

1249 = 2:1:03:18, 28.3 acres. James Halama et al.

1243 = 2:1:03:33, 27.5 acres. 'Ulupalakua Ranch et al.

2835 = 2:1:03:9, 24.1 acres. 'Ulupalakua Ranch.

1238 = 2:1:03:26, 21.6 acres. 'Ulupalakua Ranch et al.

1293 = 2:1:03:30, 21.2 acres. Vivian Kaiaokamile et al.

4897:1 = 2:1:03:52, 16.7 acres. 'Ulupalakua Ranch.

1240 = 2:1:03:53, 14.0 acres. 'Ulupalakua Ranch.

1280 = 2:1:03:23, 12.1 acres. Carolyn Van der Linden (trustee).

2339 = 2:1:03:11, 11 acres. William & Mary Olsen.

1507 = 2:1:03:24, 10.5 acres. Anna Tam Trust(4/7), John Donovan(1/7), Sidney & Elaine Somon(1/7), Mrs. M. Lono Estate(1/7).

1281 = 2:1:03:31, 9.8 acres. 'Ulupalakua Ranch et al.

1247 = 2:1:03:28, 9.6 acres. Anna Tam Trust.

7300 = 2:1:03:17, 9.3 acres. Lydia Poaipuni et al.

7230 = 2:1:03:16, 9.0 acres. Anthony & Anna Tam.

1237 = 2:1:03:21, 8.0 acres. August & Anthony Pacheco et al.

1239 = 2:1:03:29, 7.6 acres. Stanley & Juliette Goodness(1/2), Joseph Goodness(1/2). Leasee is 'Ulupalakua Ranch.

7301 = 2:1:03:12, 7.45 acres. Harry Pali.

7299 = 2:1:03:15, 6.2 acres. Lucy Mata et al.

7153 = 2:1:03:13, 6.0 acres, also 2:1:03:51, 4.0 acres. Henry & Doris Voss.

4897:2 = 2:1:03:53, 5.6 acres. 'Ulupalakua Ranch.

8459 = 2:1:03:46, 1.0 acre. Kanaio Reservoir.

5670 = 2:1:03:14, .5 acre. Hawaii Conference Foundation [Kanaio/Honua'ula Church lot].

Royal Grants not noted on 1990 Tax Map Keys:

4640 = Jas. H. Raymond, 657.00 acres, 1902/Kanaio; Book 23 5070 = Guy S. Goodness, .52 acre, 1907/Kanaio; Book 24

3082 = Jas. Makee, 420.00 acres, 1871/Kanaio & Mooloa; Book 14 1244 = 1.M. Painter, 49.76 acres, 1853/Kanaio & Mooloa; Book 6

1236 = H.O. Bucklin, 20.90 acres, 1853/Kanaio & Mooloa; Book 6

Land Commission Awards in Kanaio

3784

3784:1 = 2:1:03:40, 4.7 acres

3784:2 = 2:1:03:25, 2.1 acres

4151

4151:1[21] = 2:1:02:16, 2.22 acres

4151:1 = 2:1:03:36, 2.5 acres

5274

5274:1 = 2:1:03:35, 1.8 acre

5274:2 = 2:1:03:34, 6.2 acres

5274:3 = 2:1:02:6, 2.55 acres

5275

5275:1 = Parcel 65, 2:1:03:43, .7 acre

5275:2 = Parcel 57, 2:1:02:3, 2.49 acres

5275:3 = Parcel 56, 2:1:02:22, .4 acre

5275:4 = Parcel 155, 2:1:02:17, 8.37 acres

5278:1 = 2:1:03:44, .7 acre

5278

5278:2 = 2:1:03:37, .5 acre

5403

5403:1 = 2:1:03:45, .2 acre

5403:2 = 2:1:03:38, 1.4 acre

5403:3 = 2:1:02:15, 9.82 acres

Land Commission Awards in A 'uahi

7716

Ap. 3 = 1:9:06, 5252.872 acres

Land Commission Award Testimony for Kanaio

5274: Kaawaapahulu 8/9/49

Laeloa sworn he has seen two sections.

Section 1: Pasture in Kaimalo Hi of Kanaio ahupuaa. Section 2: Pasture in Kaimalo Hi of Kanaio ahupuaa. Section 3: Pasture in Kaimalo Hi of Kanaio ahupuaa.

Ancient land at the time of Liholiho in 1823, no one has objected to Laeloa.

<i>Section 1:</i>	Mauka	Laeloa
	Kula, Makai	konohiki
	Kahikinui	Kaauwaeaina

Section 2: The konohiki's land is on all sides.

<i>Section 3:</i>	Mauka	Laeloa
	Kula	Puapuu
	Makai	Kekoa
	Kahikinui	Hanpilo

<i>Section 4:</i>	Mauka	Laeloa
	Kula	Meo
	Makai	Kailikole
	Kahikinui	Mai

5278: Kainoa 8/9/1849

Kaawaapahulu sworn he has seen three sections. Section 1: Pasture in Pepehunui ili of Kanaio ahupuaa. Section 2: Pasture in Apuu ili of Kanaio ahupuaa. Section 3: Pasture in Kaimalo ili of Kanaio ahupuaa.

Inherited land from parents at the time of Kamehameha I, no one objected.

<i>Section 1:</i>	Mauka	Keaumiki
	Kula, Makai	the konohiki
	Kahikinui	Puupuu

Section 2: the konohiki's land is on all sides.

<i>Section 3:</i>	Mauka	Kekuhaulua
	Kula	Keaumiki
	Makai	Kaawaapahulu
	Kahikinui	Mai

5403: Mai 8/9/1849

Kaawaapahulu has sworn he has seen seven sections. Section 1: Pasture, taro, sugar cane, potato in Apuu ili, Kanaio ahupuaa. Section 2:

Animal corral and house lot in Apuu ili, Kanaio ahupuaa. Section 3: Pasture in Apuu ili, Kanaio ahupuaa.

Section 4: Pasture in Pepehinui ili, Kanaio ahupuaa.

Section 5: Pasture in Pepehinui ili, Kanaio ahupuaa.

Section 6: Pasture in Pepehinui ili, Kanaio ahupuaa.

Section 7: Pasture in haole potato in Kaeo ili, Kanaio ahupuaa.

Section 1 is inherited land from parents in 1819.

Section 2 from Waha in 1846.

Sections 3 and 4 are farming done here gratis in 1845.

Section 5 from Kaaikahala in 1846.

Sections 6 and 7 are farming done here gratis in 1845.

No one has objected to Mai.

<i>Section 1:</i>	Mauka, Kula	konohiki
	Makai	Kuhaulua
	Kahikinui	Waha

Section 2: The konohiki's land is on all sides.

<i>Section 3:</i>	Mauka	Kanana
	Konohiki is on the remaining sides.	

Section 4: The konohiki's land is on all sides.

<i>Section 5:</i>	Mauka, Kula	konohiki
	Makai	Kapahu

	Kahikinui	Kekuhaulua
<i>Section 6:</i>	Mauka	Kailikole
	Kula	Kaawaapahulu
	Kahikinui	Kekuhaulua

Section 7: The konohiki's land is on all sides.

5275: Kekuhauloa 8/9/1849

Mai sworn he has seen five sections.

Section 1: Taro ili in Apuu ili of Kanaio ahupuaa. Section 2: Pasture ili in Apuu ili of Kanaio ahupuaa. Section 3: Pasture ili in Kaimalo ili of Kanaio ahupuaa. Section 4: Pasture ili in Kuehunui ili of Kanaio ahupuaa. Section 5: Pasture ili in Ulupalakua ili, Kaeo ahupuaa.

Land inherited from parents in 1819, other sections are new lands (acquired).

<i>Section 1:</i>	Mauka	Keaumiki
	Kula	Mai
	Makai	Kanana
	Kahikinui	Kikane
<i>Section 2:</i>	Mauka, Kula	konohiki
	Makai	Kanana
	Kahikinui	konohiki
<i>Section 3:</i>	Mauka, Kula	konohiki
	Makai	Ohule
	Kahikinui	Waha
<i>Section 4:</i>	Mauka, Kula	konohiki
	Makai	Hanapilo
	Konohiki	konohiki
<i>Section 5:</i>	Mauka	Hulipahu
	Kula	Pualinui
	Makai	Kauhola
	Kahikinui	Nawaiki

3784: Ohule 8/9/1849

Meo sworn he has seen six sections.

Section 1: Haole potato in Kaimalo iLi, Kanaio ahupuaa. Section 2: Taro in Manokohola, Kanaio ahupuaa. Section 3: Pasture in Apuu iLi, Kanaio ahupuaa. Section 4: Pasture in Pepehunui iLi, Kanaio ahupuaa. Section 5: Pasture in Kaimalo iLi, Kanaio ahupuaa. Section 6: Haole potato in Keauhou ahupuaa.

Bequested land at the time of Kamehameha I, in 1819, no one has objected to Him (Ohule).

<i>Section 1:</i>	Mauka	Kuhaulua
	Kula	Kenui
	Makai	Kailikole
	Kahikinui	Meo
<i>Section 2:</i>	Mauka	Kanana
	Kula	Mai
	Makai	Kawaapahulu
	Kahikinui	Kanana
<i>Section 3:</i>	Mauka	Waha
	All remaining sides are konohiki's land	
<i>Section 4:</i>	Mauka	konohiki
	Kula	Kaauwaeaina
	Makai	konohiki

	Kahikinui	Puupuu
<i>Section 5:</i>	Mauka	Hanapilo
	Kula	Meo
	Makai, Kahikinui	Kekoa

Section 6: Konohiki's land is on all sides.

3784B:Puupuu 8/9/1849

Ohule sworn he has seen six sections. Section 1: Haole potato in Kaimalo iii, Kanaio ahupuaa. Section 2: Taro in Manokohola iii, Kanaio ahupuaa. Section 3: Pasture in Pepehunui iii, Kanaio ahupuaa. Section 4: Pasture in Apuu iii, Kanaio ahupuaa. Section 5: Pasture in Apuu iii, Kanaio ahupuaa. Section 6: Salt (bed) in Manokohola iii, Kanaio ahupuaa. Inherited land from parents in 1819, no one objected to Puupuu.

<i>Section 1:</i>	Mauka	Kuhaulua
	Kula	Kainoa
	Makai	Laeloa
	Kahikinui	Hanapilo
<i>Section 2:</i>	Mauka	Kuhaulua
	Kula	Ohule
	Makai	Mokualiiiole
	Kahikinui	konohiki
<i>Section 3:</i>	Mauka, Kula	Ohule
	Makai	konohiki
	Kahikinui	Mai
<i>Section 4:</i>	Mauka	Mai
	The konohiki's land is on the rest of the sides.	
<i>Section 5:</i>	This section is surrounded by the land of the konohiki.	
<i>Section 6:</i>	Mauka, Kula	konohiki
	Makai	sea
	Kahikinui	konohiki

4151: Kalawaiakumoku 8/9/1849

Kailikole sworn he has seen three sections. Section 1: Pasture in Kaimalo iii, Kanaio ahupuaa. Section 2: Pasture i Kuehu iii, Kanaio ahupuaa. Section 3: Pasture in Keaakolo iii, Kanaio ahupuaa. Land from Kaaikahala in 1847, no objections.

<i>Section 1:</i>	Mauka	mountain
	Kula	Puapua
	Makai	sea
	Kahikinui	Kaauwaeaina
<i>Section 2:</i>	Mauka	Nawelau
	Kula	Kailikole
	Makai	Makole
	Kahikinui	Keaumiki
<i>Section 3:</i>	Mauka	Puapua
	Kula	Nawelau
	Makai	Kapahu
	Kahikinui	Puapua

4144: Kaaeamoku 8/9/1849

Kailikole sworn Kaaeamoku's pasture land section is in Keaakoko Hi of Kanaio ahupuaa, it is ancient land since 1819 and no one has objected.

Mauka	konohiki
Kula	Kalaawaiaikumoku
Makai	sea
Kahikinui	Kaaikahala

Native Register Testimony:

3784: Ohule

Here is the claimant, Ohule. Apuu is the *‘ili*, 12 *kihapai*. Manokohala is the *‘ili*, 6 *kihapai*. Kaimalo is the land, 5 *kihapai* of Irish potatoes, 1 *mala* of sweet potatoes. In this land, a house claim. Waha is the witness. Puupuu is another witness. *Ohule*

3784B: Puupuu

Here is the claim of Puupuu. Kanaio is the *ahupua‘a*, Apu‘u is the *‘ili*. Within it I have 11 *kihapai*, 3 are planted and 8 are resting. there are 2 house lots, a pasture. An *‘ili*, Manokohala [has in it] Maauahi, 1 *kihapai* of sweet potatoes and 6 *kihapai* of Irish potatoes. Kaawaapahulu is the witness. Mai is another witness. *Puupuu*

4151: Kalawaiaikumoku

Greetings to the Land Commissioners of the *Mo‘i* Kamehameha III, the Independent Kingdom of Hawai‘i: I hereby state my claim for my *‘ili* of Kainalo. I have five claims in it: 1 *mala* of gourd, 3 fallow fields, 1 *mala* of Irish potatoes, a land, 1 *mala* of bananas. *Kalawaiaikumoku*

5274: Kawaapahulu

Hear Ye, ye Land Commissioners: I hereby state my claim for 13 *mom mau‘u* at Kaimaloo. The witness is Pohakunui. At Pepehunui are 6 *moku mau‘u*; the witness is Pohakunui. I believe I have a claim to these things. *Kawaapahulu*

5275: Kuhaulua Honuaula 12/30/1847

I hereby state to you, the Land Commissioners, my claim. At Apuu are 4 *moku mau‘u*. At Manokahala are 7 *mom mau‘u*. The witness is Kauaau. At Pepehunui are 2 *moku mau‘u*. The witness is Mai. At Keakoko are 2 *mom mau‘u*. At Kuehunui are 2 *moku*; the witness is Mai. At Maluaka is 1 *mala* of taro; witness is Piipii. 4 *mala* of Irish potatoes are at Kaimaloo. I believe I have a claim to these things. Farewell to you all, the Land Commissioners. *Kuhaulua*

5278: Kainoa Honuaula 12/30/1847

Hear ye, ye Land Commissioners: I hereby state my claim. I, Kainoa have some claims: at Apuu, 5 *moku mau‘u*, at Manokohala, 2 *moku mau‘u*, at Pepehunui, 3 *moku* of Irish potatoes. The witness is Kaawaapahulu. I believe I have a claim to these things. *Kainoa*

5403: Mai Honuaula 12/30/1847

Hear ye, ye Land Commissioners: I, Mai, have an *‘ili* at Kanaio; my claim is Waha. On the North is the mountain, on the East *aunahi*, on the South is the sea, on the West is Manokohala. The witness is Owaha. Furthermore, there is a pasture for animals-- the witness is Kuhaulua.

Furthermore, there is a house lot, bounded on the North by the pasture, on the East by some houses, on the South by a *kula*, and on the West by *kula* also.

Furthermore, there are some *moku mau‘u*. At Pepehunui are 4 cultivated *moku mau‘u*, a *mala* of gourd, a *mala* of sugar cane, a *mala* of taro and another *mala* of sugar cane. The witness is Makua.

Furthermore, one *mala* of taro is at Mooiki. The witness is Kaea.

Furthermore, there are 2 *mala* of Irish potatoes. The witness is Kuhaulua. I believe I have the right to claim all these things done with my own hands. Farewell to you all. *Mai*

Land Commission Award Claims in Neighboring Ahupua‘a

Native Register Testimony:

L.CA. 244: Despite notation not found in Native Register at v.1 pp. 159--relates to land in Wailuku.

2833: Kamaka Honuaula 12/26/1847

...I am Kamaka. At Waipao are 2 farms. The witness is Kala. Also, in Kalihi nui is 1 section of grass. The witness is Kawainui.

Also, at Papaanui are 3 sections of grass that are within the acre of the Haole but I think that I have the right to them. The witness is

Uluehu. Also, there is a houselot *makai*. On the North is the houselot of Pukui, on the East a houselot also, on the South is the canoe landing, on the West is the shore.

2399: Kalili Honuaula 12/26/1847

... Here is my claim for 2 Irish potato patches. Witness, Maaweiki. A section of grassland is at Papaanui. Witness, Kalama. At Mohopilo is a section of grassland. Witness, Kaokukea. My houselot is at Papaanui; on the South is Maluaka, on the West is the sea.

2405: Kala Honuaula 12/26/1847

.. I am Kala. At Waipao are 3 sections of grassland. 2 have taro growing on them, 1 has been taken into the acreage of the *haole*, but I think the right to it is mine. Witness, Kekuaauli. At Kalihi is 1 section of grassland. Witness, Kamaka. Also, there are 2 Irish potato patches at Keauhou, 2 at Palauea. Witness, Hihio. Also, there is a houselot *makai*; bounded on the North by the houselot of Pukui, on the East by the pathway, on the South and West by a houselot. Witness, Kamaka.

2529: Makaia Honuaula 12/26/1847

... At Papaanui are 2 sections of grassland, within the acreage of the *haole*. I think I have a right to them. The witness is Kala. At Uluehu is 1 *'ili*, Pololau. North is Waipao, East is mountain, South is the *'ili* of Kahihimanu, West is the sea. The witness is Paupau. There is also a house site. North is the household of Kala, East is the highway, South is the pali, West is the houselot of Mahakulani and the harbor. Witness is Kala. Also, there are 3 sweet potato patches at Palauea. The witness is Kala.

3676 Ap. 2: Maaweiki Honuaula 1/10/1848

... Here are my 2 houselots at Keawakapu; 1 is bounde_ on the North by the sand [beach] and the sea, on the East and South by the sand, on the West by a house lot. This is finished.

My other houselot at Keawakapu is bounded on the North by the sand and the road, on the East by a rocky *kula*, on the South by the houselot, on the West by the sand. The witness is Kalama.

I have a houselot mauka of Ulupalakua and the *kihapai*. The houselot boundaries are: on the North sugar cane, on the East, Government sugar cane, on the South, sugar cane, on the West, *apali*. This is finished. Hiapo is the witness.

Also, there is a *kihapai* in Kalihi, bounded on the North by Kalihi 3, on the East by a pali, on the West by a cattle trail. Kaku is the witness.

There are some Irish potato *kihapais* at Keauhou 4. 1 is bounded on all sides by *malaula* [probably *mala ula*, potato garden].

The 2nd is bounded on all sides by *malaula*. The 3rd is bounded on all sides by *malaula*. The 4th is bounded on the North by the road, on the other 3 sides by *malaula*. This is finished. Makahanohano is the witness.

There is a *kihapai* at Palauea, far mauka, bounded on the North by the valley, on the East by a *malaula*, on the South by a road, on the ... [not given]. These *'ilis* are in the *Abupua'a* of Keauhou. Their names are: Waakiona, Kekini, Hakoakoa, Hakai and Oopa; these are the *'ilis* which are much cultivated.

5331: Paaluhi Honuaula 1/10/1848

...I hereby state my claim for some *malas* of Irish potatoes. At Palauea are 2 *mala*, at Paeahu is 1 *mala*, at Keauhou is 1 *mala*.

Furthermore, there is a *monu mau'u* at Papanui {not spelled Papaanui}, within the acres of Kolopek *haole* [Kolopek the foreigner], which is mine. This place was a *mala* of sugar cane and was taken by the foreigner.

5455: Polena Honuaula 1/1911848

...I hereby state my claim for my 2 *monu mau'u*, in Kanahena at Koloa and Kukuiohua. The witness is Hika.

Furthermore, my house lot is at Moomuku. On the North is a road, on the East and South is the sea, on the West is a canoe landing. The witness is Kenui.

Furthermore, there are 2 *mala* of Irish potatoes at Keauhou. The witness is Maaweiki, at Honuaula.

Foreign Testimony:

2529: Makaia-Keauhou and 2525 mahoe-Palauea and Kalihi to G.M. Robertson, Wailuku 8/5/1854

It is difficult to make the survey of this correspond exactly with the testimony, but this is as near as I can make it and I believe he has got what is justly his due. *E. Bailey* {author}

2388: Kamaka 8/9/1849

Kekaula has sworn he has seen 7 sections.

Section 1= Pasture, Palaeua *ahupua'a*. Section 2= Pasture, Keauhou *ahupua'a*. Section 3= Pasture, Kalihi *ahupua'a*. Section 4= Pasture, Waipao *ahupua'a*. Section 5= Pasture 'ili of Polohau in Papaanui *ahupua'a*. Section 6= Pasture 'ili of Haleola in Mooloa *ahupua'a*. Section 7= Pasture 'ili of Kahua in Waipao *ahupua'a*. Section 1 from Hihio in 1841. Section 2 from Kamaka used it only for farming in 1844. Section 3 from Kaaihue in 1846. Section 4 from [for] farm use in 1846. Section 5 inherited land from parents at the time of Kamehameha I. Section 6 farm land in 1846. Section 7 ancient land since 1825, no one objected.

Section 1:	Mauka	Kaiuipauku
	Makawao	konohiki
	Makai	Pahua
	Kahikinui	Auwae
Section 2:	Mauka	Mahilaula
	Makawao	Kalapuna
	Makai	konohiki
	Kahikinui	Paahao
Section 3:	Mauka	Kaakea
	Makawao	Kaumana
	Makai	konohiki
	Kahikinui	Govt. trail
Section 4:	Mauka	Hulipahu
	Makawao	Kala
	Makai	Hulipahu
	Kahikinui	Hoai
Section 5:	Hulipahu's land is on all sides.	
Section 6:	Konohiki's land is on all sides.	
Section 7:	Mauka	Ka'a
	Makawao	konohiki
	Makai	sea
	Kahikinui	Paupau

2399: Kalili 8/9/1849

Maaweiki sworn he has seen 5 sections. Section 1= Pasture in Keauhou *ahupua'a*. Section 2= Pasture in Keauhou *ahupua'a*. Section 3= Pasture in Palanea *ahupua'a*. Section 4= Pasture in Kaeo *ahupua'a*. Section 5= Pasture in Mohopilo *ahupua'a*. Land from relatives in 1843, no disputes.

Section 1:	Mauka	Mahileula
	Makawao	Kamaka
	Makai, Kahikinui	Maaweiki
Section 2:	Mauka, Makawao	konohiki
	Makai	Kaili
	Kahikinui	konohiki
Section 3:	Mauka, Kahikinui	konohiki
	Makai	Maaweiki
	Kahikinui	Makahanoano
Section 4:	Mauka	konohiki
	Makawao	Maweiki
	Makai	Govt. pathway
	Kahikinui	Mahoe, Kohilae
Section 5:	Mauka	Mohopilo pali
	Makawao	Gov't. pathway
	Makai	Kaihe, Ohule
	Kahikinui	Ascending steps

2529: Makaia 8/9/1849

Kekukahiko sworn he has seen Makaia's land of 4 sections. Section 1= Pasture in Keauhou ahupua'a. Section 2= Pasture in Keauhou ahupua'a. Section 3= Pasture in Kealapani 'ili in Papaanui ahupua'a. Section 4= Pasture in Kailili 'ili in Keauhou ahupua'a. Ancient land since the time of Kamehameha I, on one has objected.

<i>Section 1:</i>	Mauka	Kapawaa
	Kula	Kaunuhipuka
	Makai	Paaluhi
	Kahikinui	Kekukahiko
<i>Section 2:</i>	Mauka	Pilipo
	Kula, Makai	konohiki
	Kahikinui	Kekaula
<i>Section 3:</i>	Mauka	Hulupahu
	Kula	Palalau
	Makai	konohiki
	Kahikinui	Kuaihapuu
<i>Section 4:</i>	Mauka	Keauhou pali
	Kula, Makai	konohiki
	Kahikinui	Kawainui

3676: Maaweiki Honuaula 8/9/1849

Section 1= Pasture 'ili of Mahau, Waakiona Hekini, Haakoahaa in Keauhou ahupua'a. Section 2= Pasture 'ili of Hakae, Oopa in Keauhou ahupua'a. Section 3= Pasture 'ili of Hakae, Oopa in Palanaea ahupua'a. Section 4= House site in Hakae, Oopa in Kaao ahupua'a. Section 5= Pasture in Keauhou ahupua'a. Sections in Keauhou from the king in 1840. Section 3 from Hihio in 1849. Section 4 from constructed by Maaweiki for he lived there initially in 1837, no objections.

<i>Section 1:</i>	Mauka	Gov't. pathway
	Makawao, Makai, Kahikinui	konohiki
<i>Section 2:</i>	Mauka	Polena, Kekau
	Makawao	Kauhola, Hulipahu
	Makai	Kaili, Nawaiki
	Kahikinui	Halulu, Makahanohano
<i>Section 3:</i>	Mauka	Kalihi
	Makawao	konohiki
	Makai	Maaweiki
	Kahikinui	Kanakaole
<i>Section 4:</i>	Mauka	Gov't. fence
	Makawao	Luakini
	Makai	Missionary land
	Kahikinui	?

1892 Tax Assessment Records relating to Kanaio

Jas. Dowsett [Ulupalakua Ranch]:

Pasture land 14,000 acres

Houses, cisterns, furniture

3000 head Cattle, 80 working Cattle, 100 milk Cattle
40 Horses, 1 Stallion, Mares and Colts, 8 Mules, Sheep

Kahoolawe Ranch

Buildings and improvements
225 head Cattle
16 Horses, 30 herd Horses, 2 Mules, 1000 Sheep
Leasehold, jewelry, furniture, 1 Boat

Punohu

Kula land in Kanaio, 17 acres

D.H. Aukai

Kula land in Kanaio, 6 acres

Kauahuna

Kula land in Kanaio, 14.5 acres

Kaholio(wahine)

Kula land in Kanaio, 39 acres
10 head Cattle, 4 Horses

Estate of Makuahine

Kula land in Kanaio

Chas. Ako

Land in Wailuku, 1/2 acre
Land at Keoneoio, 11 acres
House in Kanaio, 11 acres
5 Horses, 1 herd Horse

K. Auloolani

Kula land in Kanaio, 50 acres
Houses, 10 head Cattle
8 Horses, 1 Mule, Pigs

Kalani

Kula land in Kanaio, 50 acres
House, 1 Horse

Kuaana

Kula land in Kanaio, 10 acres
Houses, 2 Horses, Donkey

Estate of Kunukau

Land in Kanaio, 343 acres
Houses, 10 head Cattle
6 Horses, 4 herd Horses, 1 Mule, Donkey, Goats

D.N. Kaaikala

Kula land in Kanaio, 4.12 acres
Kula land in Kanaio, .12 acres
House, 5 herd Cattle
10 Horses, 2 herd Horses, 1 Mule, Donkey, Pigs

KANAIO HUI LAND, AND KUNAULA-LENA LANDS” (AT KANAIO)

[Access provided by Ulupalakua Ranch Ltd to Ranch Archives]

[Note: This archival and geneological analysis was conducted for E.D. Baldwin in 1937-1938 to clarify the various land claims in Kanaio that ‘Ulupalakua Ranch felt were of concern in terms of contested ownership. It appears that a major portion of the work was conducted by E.D. Baldwin directly, and involved not only archival collection (relevant court documents for example) but also interviews with various informants.

A flaw in the analysis is the nature of the informants, especially the Mr. and Mrs. Goodness, who though knowledgeable about certain aspects of the familial lineages, must be suspect as they were heavily involved in a number of land dealings in Kanaio. At the time of the interviews they were in the process of directly or indirectly acquiring a large number of portions, oftentimes through the geneological arguments they proposed to E.D. Baldwin. As they stood to gain or loose from the interpretations their advice must be suspect.

This document was intended to provide evidence to support a series of “1937 Partition Proposals” so that ‘Ulupalakua Ranch would be able to clarify all the titles in the area including those they had direct interest in. To illustrate their findings they developed a set of geneological charts which have been included in this appendix:

Chart I: A title chart of Honuaula lands inherited from Kunuhau by the children of Kunuhau and his wife, Kailaa;

Chart II: A title chart of lands willed by Kuhaulua to his children by Keaka, his 2nd wife;

Chart III: A title chart of lands willed by Kuahulua to his children by Kamaha, his 1st wife;

Charts A-I to B-2: A series of solutions (A and B) to ownership to all said lands);

Chart IV: The Kipahulu lands inherited from Kumukau by the children of Kumukau and his wife, Kailaa;

Chart C: A consolidated ownership summary.

The intent of the “solutions” was to permanently resolve all land conflicts and fix all legal land ownership and control over the various disputed lands, acceptable to all parties.

The basic data and supporting charts were obtained primarily fom Mr. E.D. Baldwin’s reports, record office searches, probate records, and a October 1936 conversation by L. J. Watson with David Kunukau and John Kunukau. This interview was principally confirmatory and somewhat supplementary information to that already obtained by E.D. Baldwin from other Maui members of the various families involved.]

Title Analyses and Geneologies re I “Kunukau and Kuhaulua Lands”

At Kanaio:

grant 2987 to Kunuhau (162)	53.66 acres
grant 3315 to Kunuhau (174)	42.04 acres
grant 1238 to Pupuka (No)	21.62 acres
grant 2338 to Kekuhaulua (132)	87.00 acres
grant 2993 to Kekuhaulua (164)	98.75 acres
grant 2994 to Kekuhaulua (165)	50.75 acres
Ka. 7275 to Kekuhaulua (211)	12.29 acres
grant 1286 to Kuhaulua (40)	36.88 acres

At Kipahulu:

grant 3248 to Kunakau (172)	30.00 acres
LCA 5004 to Kalele (205)	
also LCA 4668D to Kalele (201)	in abstract
grant 2628 & 3057 (13)	4.75 acres (143 & 167)

Kanaio Hui land:

grant 1506 to Kuilelani (No)
grant 1247 to Kapahu (No)

“Kauaaulalena Lands” (at Kanaio):

grant 1280 to Nahuewai (No)

Ka. 2784B to Puupuu (No)

grant 1507 to Kalula (No)

Ka. 3784 to Ohule (No)

by E.D. Baldwin Nov. 1937

1938 Status of Kunukau-Kuhaulua Lands

The partition proposed in [Charts] A & B Ltd. #140/1937 did not meet with the approval of Mr. and Mrs. Goodness.

Ulupalakua Ranch Ltd. #1/1938 and the map attached here to show the occupancy status of the lands.

The policy adopted with reference to the lands is as follows:

1. To continue the division in effect on the ground.
2. To inform the Tax Assessor of all ownership details as in "Solution A".
3. To attempt to perfect the Ulupalakua Ranch Ltd. and Goodness titles by the tax lien method.

L.J. Watson 3/19/38

Jan. 7, 1938

A&B Ltd.

Land Matters: Proposed Partition of Kunukau-Kuhaulua Lands

Refers to your letter #2 under date of Jan. 5, 1938.

The writer called upon Mr. and Mrs. Guy Goodness this morning and discussed the matter of exchange with them. Nothing definite was arrived at, as the possibility of eventual partition did not appeal to them.

Enclosed herewith is the reduced map of the Kanaio homesteads, which you sent up with your letter #140.

The lands mauka of the blue line, which follows the main road and arcs up to the Reservoir, is waste, makai is fair. Makai of the red line, described as old stone walls and fence, is now being used by the Ranch. Ownership of Kanaio lands have no more intrinsic value to the Ranch than the control of Molokini. An agreement of lease, net above taxes, with property owners, on lands the Ranch is using, will save a lot of time and effort, and we are sure will be accepted more readily, Ulupalakua Ranch Ltd.

by R. von Tempsky for Manager

Title Analyses of the Kunukau-Kuhaulua Lands, Kanaio Hui and The Kauaulalalena Lands:

With ref. to A & B letter #208, 11/2/36

Referring to Mr. Watson's solution 'A' and 'B' of the Kunukau-Kuhaulua, we wish to call attention to the fact that native Hawaiians, as a general thing, when deeding land do not pay much attention to the interest that they own in same but usually name the whole kuleana or Grant as if they owned same.

When I interviewed Kuhaulua-opio, or (Kaaikaula) during 1933 he only claimed an interest in grant 2338. This is clearly stated in my report of 9/13/33, or Kahukau lands Additional Report on the Kuhaulua branch of the family. But Kuhaulua-opio's deed has the appearance of conveying all of Grant 2338. Since 1933 Kuhaulua-opio has died.

There can be no question of the Kuhaulua Will which Will definitely sets out the manner of his distribution of his lands to his children. Legally the Will would hold against any other subdivision, unless a legal subdivision was made between the heirs. It is our opinion that whatever possible understood subdivision may have been made between the heirs that same was not unanimous and would not be legal against the Will, unless such subdivision had been legally drawn up and signed by all the heirs. It is again our opinion, under the circumstances, that the best thing is to stand by and a legal subdivision as that made by Kuhaulua's Will. If we take any other subdivision it may not be questioned yet there is the probability that having no real legal standing it would be open to dispute and attack at any time.

Kanaha and his brother, Ben Kolohia, are still alive and are and were entitled to consideration. Kanaha states that he owns an

interest in the Kuhaulua lands at Kanaio.

A portion of the Kuhaulua family tree should be amended as follows:

II. Keaka (w)(dec)

Husband Ben (dec)

Child= 1. ___ (w) dec. Did not marry, no children

2. Ben Kolohia (k) at Waikiki, Honolulu

3. Kanana (k) at Spreckels Beach, Maui

Mr. Guy Goodness, who is a large owner in the Kunukau- Kuhaulua lands, advises if there is such a Will by Kuhaulua (which he has not seen) we should abide by the Will. I have sent Mr. G. Goodness at his request, an abstract of Kuhaulua's Will.

Mr. Guy Goodness is well acquainted with the Kunukau family. He states that Joseph Kunukau was Kunukau's 1st child; that he died young, long before the death of his father and mother.

Kahele Kunukau, or Steven Kunukau, as Mr. Guy Goodness calls him, was the youngest member of Kunukau's family and died young. Mr. G. Goodness is also familiar with the deed of Kailaa, or Mrs. Kunukau, and states that the Kahele Kunukau mentioned in the deed was Kunukau's son.

Both Guy Goodness and his wife, Helen Goodness, are alive and living in Kanaio and have been my best kamaainas of Kanaio lands.

The geneology of Jerry Bums and Kahele Kamila Kamai we are giving with our Title Summary of the Kanaio Hui. Also in our Title Summary of the Kanaio Hui, we give the family tree of the Auweekoolani, Uweekoolani family.

The 1/2 of 1/7 of grant 1238, which belonged to J.D. Auweekoolani by deed 3/7/1901 -217/394 from Kapehe.

Data: From Tax Office, in regard to grant 1238 to Pupuka, which data is backed up by further information obtained at Kanaio.

J.D. Auweekoolani bought Mrs. Kaluna's 3 acres by deed 3/7/1901 - 217/394. J.D. Auweekoolani married Kanui Maii.

J.F. Auweekoolani died; left no issue; 1/2 of his property went to his wife, Mrs. Kanui.

Mrs. Kanui Maii Auweekoolani then married Jerry Bums. She died and Jerry Bums was her only heir. Jerry Bums willed to Gertrude Karoai, alias called (Kahele Malulani Kamai).

Mrs. Anna B. Kamai died leaving as he heir her only child, Gertrude Kamai. Gertrude Kamai then became the owner, through Jerry Bums' will, and inheritance from her mother.

When Gertrude Kamai died, her only heir was her father, Karoai, who sold to Mrs. Helen Goodness -- deed 10/14/1933 - 1217/357.

For the Probate of Gertrude Kahele Kamai -- See under Share 5 of Kanaio Hui, as set out in this statement under Kanaio Hui.

Kanaio Hui (Original Title to Same)

Deed: 5/31/1886 - 141/30 -- Kuihelani to Hattie P. Parker -- Conveys grant 1506.

Deed: 6/10/1895 - 154/294 -- Hattie P. Parker to the following 29 individuals-conveys grant 1506 and 1247: Grant 1506 contains 101.00 acres; Grant 1247 contains 9.65 acres, 1 share of 1/29= 3.815 acres, 1 share of 1/28= 3.95 acres.

Kanaio Hui Original Owners

List of Shares and Original Owners as Listed in Above Deed

- | | | |
|--------------------------|-------------------------|------------------------|
| 1. D.N. Kaaikaula | 14. Uilama Kuaana | 27. Likia(w) |
| 2. D.S. Kaaikaula | 15. D. Uweekoolani | 28. Kini Matsu(w) |
| 3. Keaumiki Kalani | 16. Mai Puleloa | 29. Kuliana Puleloa(w) |
| 4. Kalama Meo | 17. Konki Aho | |
| 5. Moanaliha Uweekoolani | 18. Kanakaaemoku Kalani | |
| 6. Lokelani Uweekoolani | 19. Nakaikuaana(w) | |
| 7. Kumoku Jr. | 20. Kaonohi Uweekoolani | |
| 8. D. Momona | 21. Iokepa Daniela | |
| 9. J.M. Kahuku | 22. Hoon(w) | |
| 10. N. Poaipuni | 23. Makahala(w) | |
| 11. Maunokawai Uilama | 24. Naehuelua(w) | |
| 12. Molina Kekahuna | 25. Kahele(w) | |
| 13. W.G. Kaonohi | 26. Keao(w) | |

Probate #2583, 4/21/1932 Estate of Gertrude Kahele Kamai(deceased) Late of Wailuku

Petition by C.M. Peters of Wailuku, Creditor of Estate. She died 2/9/1932, was residuary legatee of the Estate of Jerry Bums of Kanaio. The heir of said estate is her father, living in Honolulu, David Kamai. May 20, 1932, Manuel Asue appointed Administrator.

Inventory:

Grant 2239, cont. 11 acres, at Kanaio \$110.00

2/5 undivided interest in R.P. 4238, LCA 5403

(Ap. 1 -1.71 acres)

(Ap. 2 - 1.37 acres)

(Ap. 3 - 8.32 acres) \$45.00

2/5 undivided interest in grant 1237, at Kanaio \$30.00

2/5 undivided interest in grant 2842, at Kanaio \$20.00

2/5 undivided interest in 1 share Kunukau Estate, at Kanaio \$300.00

Grant 1506 and 1247, cont. 28 acres, at Kanaio \$280.00

Land at Ulupalakua, naer Kamaole to Mahi, to grant, 1 acre \$15.00

R.P. 4036, LCA 4780, cont. 12 acres at Kipahulu \$210.00

Grant 1527, cont. 9 acres at Kipahulu \$150.00

On 5/27/1933 - property handed to David Kamai, father of deceased, entitled to Estate.

#6, Uwekoolani(k)

Deed: 6/27/1903 - 249/204 - Lokelani Uwekoolani(k) heir of Uwekoolani to Jeremial Bums.

Conveys interest in Hui lands grant 1506 and 1247 (share #6). Jerry Bums died 11/8/1931. He willed to Gertrude Kamai(w) - Gertrude Kahele Kamai died on 2/9/1932. Her only heir her father, David Kamai. See Probate #5.

Deed: 10/14/1933 - 1217/357 - David Kamai to Helen Goodness. Current Owner: Helen Goodness.

#7, Humoku, Jr.

History: Humoku, Jr. is a son of Kekahuna and his wife, Kalama. The kamaainas state that he went to the Coast many years ago and has never been heard from since.

We give his fathers family tree - Testimony of Guy Goodness. [Note: See Figure 7]

Tax Office states Philip Haake paying taxes on this share.

#8, Momona

Deed: 10/27/1907 - 300/120 - David Momona to Miss Malaea Momona, Miss Pakekepa Momona and Daisy Momona.

Wife: Makiwi releases dower.

Conveys: I. Interest in grant 1247 to Kaupahu(k) Hui Land 3.8 acres.

II. Grant 1237 to Kukane - 8 acres which grantee acquired from Kapuni 2/21/1896 - 165/159.

Probate #1619 Guardianship of Malaea Momona, Pakekepa Momona and Daisy Momona - Petition by David Momona

Schedule of Property:

1. Interest in Hui lands at Kanaio grant 1247 to Kapahu and grant 1506 to Kuihelani.

2. Premises described in grant 137 to Kukane, situate at Kanaio and Mooloa--area 8 acres.

David Momona appointed Guardian.

Present Owners: Pakekepa(w) married to Pachedo. She is school teacher at Paia. Daisy(w) wife of Geo. K. Auwekoolani, Jr., of Kahului. Malaea Momona(w) of Kahului.

Children: Pakekepa Momona and Daisy Momona and also Malaea Momona, a child brought up by them since infancy, but not our child.

During August 1911 the widow, Makaiwi, married Ahina Apeau.

On 11/7/1911 Ahina Apeau appointed Guardian of said above minor children.

On 12/11/1911 Chas. Wilcox appointed Guardian of Pakekepa and Daisy Momona.

Probate #1654, Nov. 1911 Estate of David K. Momona(deceased) of Kihei Petition by Pakekepa(w) of Keokea Kula, he died 2/8/1911.

The heirs are: Pakekepa(w) minor, 8 years old.

Daisy(w) minor, 5 years old.

Makaiwi(widow) also since (deceased) Chas. Wilcox appointed Administrator.

The only property mentioned is his Homestead at Kihei, about 30 acres under 999 year lease.

#9, L.M. Kahuhu

He is reported to be dead. No one seems to know about him.

#10, N. Poaipuni

Deed: 8/31/1899 - 198/470 - Poaipuni and wife Nawahine to Lidia Makakehau(w).

Present Owners: heirs of Lidia Makakehau(w)(deceased).

History: Very meager. Lidia Makakehau(w) is said to be a grand-child of Makakehau Pahaa. Makakehau Pahaa, the wife of Auwekoolani I, was formerly married to Pahaa. We believe without any evidence from others, that Lidia is a grand-child from the Pahaa side.

Lidia Makakehau's grand-children were quite numerous, but just as to how they connect up we were unable to ascertain at present with our rapid examination, further than the following were Lidia's grandchildren:

3 Olsens - Willie at IDupalakua Ranch.

Henry at c.c.c. Camp Keanae. Lidia(w) at Honolulu.

John Raymond at Wailuku.

Fred Raymond at Honolulu.

Gertrude Kahele Kamai(deceased) - see Jerry Burns Probate #5.

#11, Maunokawai Uilama

History: Maunokawai Uilama has died. All that is known about him is that he is a son of Uilama Kuaana(k) -see #14.

#12, Molina Kekahuna

Deed: 12/27/1921 - 676/104 - Kalama Kekahuna, widow and heir of her son, Molina, to Molina Ah Sing, her grandson.

On the death of Molina Kekahuna, his son Molina Ah Sing would inherit his property, without the above deed.

For the family tree of Kekahuna see #7.

Present Owner: Molina Ah Sing at Ulupalakua and probably others of the Kekahuna family.

See family tree under #7.

Tax Office states Molina Ah Sing pays 1/2 the taxes and Kioloki 1/2 the taxes.

#13, Kaonohi

We find nothing about him.

#14, Uilama Kuaana

History: Uilama Kuaana is father of Maunokawai. Uilama(k)(deceased) - see #11. He lives at Kihei.

Tax Assessor states he pays taxes on both #11 and #14.

#15, Uwekoolani

Deed: 4/16/1918 - 495/195 - Joseph D. Uwekoolani and wife, Kanui, to Kalama Thompson.

Deed: 2/11/1929 - 987/419 - Wm. Thompson, sole heir of Kalama Thompson, to Philip Haake.

For family tree of Uwekoolani family see #3. Present Owner: Philip Haake, chemist at Puunene.

#16, Mai Puleloa

(All the kamaainas say Moi Puleloa is correct)

History is somewhat meager. Mr. and Mrs. G. Goodness state that he had no children.

He has a sister - "Kula", her husband Peters(both deceased). Had a lot of children. One is Mrs. Lei Wawaiole at Kula.

Another sister, Keaka(w)(deceased), husband Roberts(deceased). Children= 1. Thos. Roberts(k) at Honolulu; 2. Oliva(w).

#17, Konki Aho

Deed: 7/26/1898 - 181/247 - Kainea and husband Chongee Aho, to Hui Kuai Aina o Kanaio. Conveyed 3 acre interest, more or less, in Hui lands - grant 1506 and 1247.

Chongee Aho, also known as Lum Ho and Konki Aho, had 3 boys -- Konki Lum Ho of Paia, Henry Lum Ho of Kahului, and George Lum Ho of Kahului.

After father's death, George Lum Ho was adopted by George K. Uwekoolani, Sr.(see Probate #1734,8/31/1915) and his name was changed to George Uwekoolani, Jr., which is the name he now goes by. See #5.

Konki Lum Ho and his wife, Milika, of Paia stated to us that they did not know that they owned any land at Kanaio until a short time ago when the Tax Assessor sent them a notice. The real truth... is that the Tax Assessor sent the notice to Konki Aho, who was the father. Since the father's death, he being the oldest son as stated by Geo. K. Uwekoolani, he has taken his father's name and naturally thought that he owned the share in Kanaio Hui.

Both Konki Lum Ho, Jr. and his wife Mileka, swear that they never executed a deed to Jerry Burns.

Deed: 5/-/1917 - 472/225 - Tong Gi Lum Ho to Jerry Burns.

Conveys my interest in grant 1506, 1247 Hui lands.

The deed would be of no effect as the original Share 17 had been already conveyed.

There may be some truth to the statement by Konko Lum Ho Jr. and his wife, Mileka, that they had never executed the above deed. We were unable to gather any very reliable information about Notary Public Moses Kahimahu, who acknowledged the deed. He is now dead. His Notary Public Record Book, which must be filed with the Circuit Court, has not been filed.

After an interview with George K. Uwekoolani, formerly Goe. Lum Ho, we are thoroughly satisfied that Konki Aho of Kanaio Hui was the father. Geo. Uwekoolani states that his father lived at Kanaio and was known there as Konki Aho, or Konki Lum Ho, the name that his older brother has taken since his father's death.

This of course throws out 1 share formerly listed as belonging to Jerry Burns and reduces total of 28.

#18, Kamkaaemoku Kalani

Deed: 6114/1901 - 505/298 - Kanakaemoku to Burns #18. Jerry Burns died 11/8/1931. He willed to Kahele Malulani Kamai(w)(see Probate #2522). She died 2/9/1932, only heir was father David Kamai(see Probate #2583).

Deed: 10/14/1933 - 1217/357 - David Kamai to Helen Goodness.

Present Owner: Helen Goodness.

#19. Nakaikuaana(w)

Deed: 5/8/1917 - 472/226 - Kainea Ahsee and husband to Jerry Burns.

The interest of Nakaikuaana my(deceased) mother passes to Mrs. Helen Goodness as shown on record for #18.

Present Owner: Helen Goodness.

#20. Kaonohi Uwekoolani

Deed: 1/18/1926 - 813/2 - Geo. Kaonohi Auwekoolani Jr. and wife Daisy to Jerry Burns.

Jerry Burns died 11/8/1931 - to Kahele Malulani Kamai(see Probate #2522). From her to David Kamai(Probate #2583).

Deed: 10114/1933 - 1217/357 - David Kamai to Helen Goodness.

Present Owner: Helen Goodness.

#21, Iokepa Daniela (or Joseph Daniela Uwekoolani)

Deed: 4/16/1918 - 495/195 - Joseph D. Uwekoolani and wife Kanui to Kalama Thompson.

Deed: 2/11/1929- 987/419 - Wm. Thompson, husband, and sole heir of Kamala, to Philip Haake.

William Thompson(deceased) was a brother of Chas. Thompson of Makawao and Kamaole.

Present Owner: Philip Haake, chemist.

#22. Hoona(w)

Deed: 1/13/1898- 177/257 - Miss Daisy Kahelehoona Ielemia of Kanaio to Isabel Kunukau(w).

Deed: 2/10/1934 - 1316/424 - Isabel Kunukau Poli(w) to Guy Goodness. Isabel Kunukau was the only daughter of Geo. Kunukau. Her husband is Pali. Present Owner: Guy Goodness.

#23. Makahala(w)

Deed: 4/14/1929- 1025/443 - Makahala Ikoa(w) to George Kuaulalena, her son.

#24. Nachuelua(w)

Deed: 8/29/1896 - 164/218 - Nachuelua and husband Humoku, to Amoy Mock Sang(w) - her granddaughter.

Deed: 9/15/1919 – 529/52 - Ah Mock Sang(widower) father and only heir of Ah Moe Mock Sang(w) to Mrs. Kaanoi Uwekoolani.

Deed: 1/14/1925 – 759/259 - Mrs. Kaanoi Kauaulalena, formerly Mrs. Kaanoi Uwekoolani and Geo. N., her husband, to Kamala Thompson.

Deed: 2/11/1929- 987/419 - Wm. Thompson, husband and sole heir of Kamala to Philip Haake.

Present Owner: Philip Haake, chemist.

#25. Kahele(w)

Deed: 9/18/1896 - 165/156 - Kahele Akiu(w) to Lidia Makakehau(w) .. See #10 for history of Lidia Makakehau(w).

Present Owner: Estate of Lidia Makakehau(w)(deceased).

#26. Keao(w)

Deed: 11/7/1917 - 478/196 - Kaeo Pali to Sarah Antone. Deed: 5/1/1919 - 560/285 - S.K. Antone to Isabella Watson.

Deed: 5/3/1928 - 945/362 - David K. Antone and Mrs. Hattie Hose, husband and mother of Sarah Pali Stone, to Helen Goodness.

Deed: 5/28/1928 - 1031/203 - D.B. Haumea, father of Sarah Antone(deceased) to Helen Goodness.

Present Owner: Helen Goodness.

#27, Likia(w)(same as Lidia Makakehau(w) according to kamaaina) Present Owner: Estate of Lidia Makakehau.

#28. Kini Matsu(w)

Testimony of Guy Goodness(12/28/1936) - Kini Matsu is the wife of Tom Cook, surveyor, at Hilo. Mr. Goodness states that Mrs. Tom Cook has written over this share in the Kanaio Hui.

Present Owner: Mrs. Tom Cook of Hilo.

#29. Kuleana Puleloa

Deed: 12/15/1917 - 485/392 - Kuliana Niuwe and husband Peter, to Kamala Thompson.

Deed: 2/11/1929 – 987/419 - Wm. Thompson, husband and sole heir of Kamala to Philip Haake.

Present Owner: Philip Haake, chemist.

KAUAULALENA LANDS

It is very difficult at this late date to get information about the early kuleanas and grants as the original owners have all died out and most of their children have died, only leaving grand-children scattered aU over the Islands.

Kauaulalena, although raised in Kanaio, seemed even very hazy about his own mother's family. I found that he, as a young fellow, had worked with me in the Olaa woods on Hawaii. He states that he has only really settled at Honuaula since 1910.

His mother and his claim to all of the grants ... are based on the fact that his mother, when alive, and he since, have paid all of the taxes on same. Two of the grants he claims from his mother's inheritance.

He states that Puupuu and Nahuewai are the same man and should be called Puupuu Nahuewai.

Mr. G. Goodness and his wife Helen, were familiar with the Puupuu Nahuewai family and knew in a general way about Kahula and Ohule.

We will take up first together grant 1280 to Nahuewai and LCA 3784B to Puupuu. Under the name of Puupuu, I have seen two quite different family trees. Mr. and Mrs. G. Goodness seemed to be fairly well acquainted with their main children, but not so well with the grandchildren. Mr. Kauaulalena did not seem to remember much about his mother's family and it was hard work to get what I did from him. For a study I will give both the family trees:

Family Tree of Puupuu Nahuewai

(as given by Mr. Geo. M. Kauaulalena)

Family Tree of Puupuu Nahuewai

(as given by Mr. and Mrs. Guy Goodness)

From the above family trees, Makahala Kauaulalena's mother is one of a large family, or one of two children according to the G. Goodnesses.

It will be interesting to examine the deed: D.N. Kaaikala to his children -- 7/18/1898—18/348 - under Kanaio Hui #1, in which she states 4 acres in the real estate of my father Nahuewai Puupuu(k) (deceased) in grant 1280. Both of the above family trees contain in the name of Kaaikala as Aikala.

Kauaulalena's interest in grant 1507 to Kahula and in LCA 3784B to Ohule comes thru his deceased wife, Kaonohi Auwekoolani, as shown in Probate:

Probate #2455, 6/27/1931

Estate of Kaonohi Auwekoolani Kauaulalena (deceased) of Makena Petition by Geo. M. Kauaulalena, husband. She died 8/25/1930.

Inventory of Real Estate

1. Grant 1498 Ap. 2 to Manu, area 10 acres at Honuaua \$750.00
2. LCA 1507 to Kahula, area 3 acres at Honuaua \$150.00
3. RP 5970 LCA 3784 to Ohule, 2 acres at Honuaua \$100.00
4. RP 6394 LCA 5369 to Aina, 7 acres at Honuaua \$1,000.00
5. Interest in Estate of Kunukau, at Honuaua \$100.00
6. Interest in land situate in Kona, Hawaii as set out by Geo. M. Kauaulalena, Administrator \$100.00

Court finds Geo. M. Kauaulalena a sole heir ...

Kaonohi was formerly the second wife of Geo. K. Uwekoolani, Sr.

Grant 1507 to Kahula

The only information we can obtain as to how Kekahuna obtained this grant is that Mr. G. Goodness states that he knows that Kekahuna bought same from Kahula, also Mr. Geo. Kauaulalena makes the same statement.

Kioloki was a daughter of Kekahuna. For Kekahuna family tree see #7.

LCA 3784B to Ohule

The Ohule of Kanaio is a different man from the Ohule makai at Mooloa, Mr. G. Goodness and his wife knew Ohule; also Geo. Kauaulalena knew him, but they did not know about his family. I personally knew old man Ohule during 1884. At that time he lived up mauka of Kunukau's place at Kanaio on his kuleana. He was my kamaaina on the location of the Ahupua'a of Auwahi boundaries on which a certificate of boundaries was issued. At that time I only used him as a kamaaina and did not find out anything about his family but I am perfectly satisfied that he is a Kanaio man and not the Ohule of the makai lands.

The deed of 1924, Geo. Uwekoolani to Kaonohi Uwekoolani, is evidently by Geo. K. Uwekoolani Jr. to his adopted mother, Kaonohi Uwekoolani. Kaonohi Uwekoolani, also known as Kaanoi, after the death of her husband, Geo. K. Uwekoolani Sr., married Geo. Kauaulalena.

In conclusion we wish to state that we have only made a very rapid investigation of the Kanaio Hui shares and of the Kauaulalena lands. This investigation shows that there interest in many of the shares is very much involved and quite complicated. To unravel same would require hunting up numerous heirs, which would entail considerable time and expense which may be hardly warranted by the value of the land involved.

We think that the Kauaulalena lands can be taken over as an interest in the several lands mentioned. The Tax Assessor state that he is the only one paying taxes on these lands with the exception of grant 1507 to Kahula, on which several other members of Kekahuna

family are paying taxes (the Kekahuna family is under #7).

E.D. Baldwin

APPENDIX VII

PLACE NAMES FOR KANAIO AND A'UAHI

Compiled from:

Elspeth P. Sterling Sites of Maui manuscript; Inez Ashdown various ms;

L.C.A. Testimony: Native Testimony for Land Court Awards

Native Register for Land Court Awards

Pukui, Mary K., Samuel H. Elbert & Esther T. Mookini 1974(1981). Place Names of Hawaii(rev. ed.). Univ. Press of Hawaii: Honolulu.

Pukui, Mary K. and Samuel H. Elbert 1971(1979). Hawaiian Dictionary. Univ. Press of Hawaii: Honolulu.

Handy, E.S. Craighill 1940. The Hawaiian Planter: Vol. 1: Plants, Methods and Areas of Cultivation. Bernice P. Bishop Mus. Bull. #161.

Bernice P. Bishop Museum: Honolulu.

DLNR Historic Sites 1990. Files for archaeological sites within Kanaio-Lualailua Hills. Department of Land and Natural Resources: Honolulu.

Aiea: Boundary marker/ahu , where Kahikinui crossed old *alaloa*.

Lit.= 'Aiea= *Nothocestrum* tree. This land also adjoined Kahikinui [Auwahi] and where the boundary crossed the old alaloa mauka of Lualailua hills, was the ahu of Aiea. The old alaloa is quite a ways mauka from the present Government Road and overgrown with forest. This ahu was located on the mauka side of the old alaloa, and was a large and well built pile of stones and was the first real ahu puua pile of stones that I have seen.(Sterling:6)

'Aku: A *bo' oulu' ai* heiau.

Lit.= 'Aku= Endemic lobelia (*Cyanea tritomantha*), tree 6-9' high, clustered leaves (up to 28"x8")--leaves cooked and eaten like cabbage. 'Aku, a ho-oulu-'ai heiau lies on the seaward side of the road.(Sterling:1)

Alaha: A village complex in Kanaio.

Lit.= unknown. Site 50-14-1002= Alaha Village Complex: (Connolly 7/11/74). Also B.M. Bl-1-22. A village site on the coast with enclosures, platforms and spring, agricultural pits and a indeterminate ko'a. "Wakalani in place names, SE Maui, collected from Sam Po, 1966-67--from Chapman 5/12/66. Drive to Puu Pimoe--jeep road makai (key at Ulupalakua Ranch) follow to beach. Site there, around a small bay at edge of a'a flow at beach. Vegetation is kiawe and lantana. 36 features both pre-contact to historic cattle pen. Unusual in that no readily identifiable religious sites. Land leased to Maui Factors. On map are 2 bays noted--Kalapawai and Kalani Kanaio at 14-1002 complex. Nat. Reg. site 12/90."(DLNR File)

'Apu'u: An 'ili in Kanaio.

Lit.= 'apu= A taro cultivar, perhaps related to 'apu-wai. 'apu'u= Hill, mound. LCA test: #3784 (Ohule): Section 2--pasture in Apuu 'ili. Apuu is the 'ili, 12 *kihapai*.(1) LCA test: #3784B (Puupuu): Section 4--pasture in Apuu 'ili. Section 5--pasture in Apuu 'ili. Apu'u is the 'ili. Within it I have 11 *kihapai*, 3 are planted and 8 are resting. There are 2 houselots, a pasture.(1-2) LCA test: #5275 (Kekuhauloa): Section 1--taro 'ili in Apuu 'ili. Section 2--pasture 'ili in Apuu 'ili. At Apuu are 4 *moku mau'u*.(3-4) LCA test: #5278 (Kainoa): Section 2--pasture in Apuu 'ili. At Apuu, 5 *moku mau'u* ... (4) LCA test: #5403 (Mai): Section 1--pasture, taro, sugar cane, potato in Apuu 'ili. Section 2--animal corral and house lot in Apuu 'ili. Section 3--pasture in Apuu 'ili. I Mai have an 'ili at Kanaio; my claim is Waha. On the North is the mountain, on the East *aunwabi* [water channel], on the South is the sea, on the West is Manokohala ... Furthermore, there is a pasture for animals ... Furthermore, there is a house lot, bounded on the North by the pasture, on the East by some houses, on the South by a *kula*, and on the West by *kula* also ... Furthermore, one *mala* of taro is at Mooiki ... Furthermore, there are 2 *mala* of Irish potatoes ... (4-5)(LCA Award Testimony)

Auwahi/A'uahi: An ahupua'a.

Lit.= Smoky glow(Place names)//the misty-white smoke of the lava flows(Ashdown:13). [from The Story of Kihapiilani] ...

After a little while they went on to Auwahi for

which these few lines of song are the beginning:

Hot is Auwahi

Glowing, the lava of Hauaka'ie'ie

It wasn't long before they came among the wiliwili trees and 'akoko shrubs. They reached Ke-ahu-'aiea which is the boundary of Honua'ula and Kahikinui. They climbed above the witi hills of Luailua[Lualilua] and the stream of Waiahu'alele and reached Olepelepe, the place where one sees Kaupo stretched out and Ka-lae-ola-'ilio jutting out into the ocean ... (Sterling:4)
Auwahi Forest: On Oct. 3, 1964 I made the trip to Auwahi Forest in the company of Henry Alau, Jr. and Brother Charles from St. Anthony's School. None of us were familiar with the area or the plants however we spent some time in the forest and were able to identify several specimens. We also saw one peacock. We continued along the jeep road which finally brought us down to the main road, Piilani Highway, about 6:30 PM.

We went to Waihou Springs and Auwahi Forest Aug. 1969. The forest is deteriorating rapidly. Many of the trees are covered with a choking white moss and are dying or are dead.(Sterling:6)

Ahupuaa Stone: On March 15, 1883, we moved camp to Kanaio and pitched our tents near Kumukau's house. Kumukau was the leading character in this region ... The boundary work in this region was very interesting. One large ahupuaa--"Auwahi" was owned by Kamamalu, or rather Ruth Keelikolani at that time and this land was surrounded on all sides by Government land, so that I had to make a survey of Auwahi, the land was one of those awarded by name with no survey. This land also adjoined Kahikinui and where the boundary crossed the old alalua mauka of Lualilua hills, was the ahu of Aiea. The old alalua is quite a ways mauka from the present Government Road and overgrown with forest. This ahu was located on the mauka side of the old alalua, and was a large and well built pile of stones and was the first real ahu puua pile of stones that I have seen.(Sterling:6)

Heiau at Auwahi Site 185 [A37-12] Location= West of Lualilua Hills 50 yards South of junction of beach trail, on West bank of gulch. Description= A small heiau of rough lava blocks, dimensions 50'x60'. A low wall surrounds the inner court. At the North end is a platform 4' high. There is a smaller platform at the other end with a pit in it.(Sterling:6-7)

Best preserved but not studied site is Maonakala village near Keoneoio, and along with this sites at Make'e, A'uahi (now spelled Auwahi on maps) ... (Ashdown:13)

A'uahi= the misty-white smoke of the lava flows.(Ashdown:13)

Auahi or Auwahi forest: 50 species of native trees, once. Maui hibiscus grew ere. Mahoe tree--last one here. (Twin) Double fruit with, inside, a shiny "chestnut-brown" seed clasped in a scarlet avil[sp]? Olapa plant or Paliku. Kupaoa plant(Ashdown:14)

Hale'ahu: A place, residence in Kanaio.

Lit.= unknown. After Mauhu came to Hale'ahu- a wealthy native Ku'lani'paha'a lived there. When he died people dug up his property looking for money (none found).(Sterling:1)

Hanaka'ie'ie/Hanakaieie/Hauaka'ie'ie: Name for lava in A'uahi.

Lit.= unknown. After a little while they went on to Auwahi for which these few lines of song are the beginning:

Hot is Auwahi

Glowing, the lava of Hauaka'ie'ie(Sterling:4)

Upon their arrival at this place they began digging a pit which they left open on the top of the mountain. The rocks at Hanakaieie, at Kahikinui, are those that were dug up by Pele and Hiiaka. Note by EPS= This had reference to a cluster of rocks in a field or section of aa rubble lava in the uplands, said rocks being noted for their grouping rather than extraordinary size.(Sterling:4)

Hanama'uloa/Hanamauloa/Hanamuuloa village: Village site near Kiakeana Point, between A'uahi and Lualilua Hills.

Lit.= unknown. Hanamauloa, the largest village, is situated at the shore below Lualilua Hills. It contains ~80 sites of all kinds which is about 4 times as many as the average village contained. Not all of those sites were used as human habitation, and it is difficult

to determine which ones were so used.(Sterling:8)

Hanamauloa is a large village near Kiakeana Point. The trail here leaves the lava flow and comes out into a grassy basin. The trail itself is 6' wide and has curbs 2' thick of slabs of stone. 70 sites were seen in this vicinity including heiau sites 180, 183, 184. The 28 house sites are large, the platforms covered with pebbles and coral. There are several large caves at the shore *which* have been used for shelters and are still used by fishing parties. A windmill and wooden cabin show that the place was occupied at a comparatively recent date.(Sterling:8)

50-15-1164= Hanamuuloa Complex:(Hommon 1/30/78). Letter from Inez Ashdown to Frances Jackson, Historic Places Review Board 1/30/78. " ... 2. Recently I was

invited to accompany Rob Hommon [by helo] ... to overlook the Hanamuuloa site. I have been there many times on horseback

but must say that an entirely different view is presented from the air! Most of all, I was excited about the two Platforms having each a design upon the "floor", and made of what appears to be large white coral stones. I asked the two archaeologists if they had any ideas about what the markings mean; and also hoped they might let me have a report on their findings while they were studying the Complex from the ground that day. No luck so far. 3. We believed this complex to be a kind of 'industrial complex' where artisans of all sorts congregated to do everything from house-building to sharpening tools. We believed that the white-stone markings were associated with astronomy and navigation, both study and voyaging, etc... Anciently, all Honua'ula from Nu'u to include Pae'ahu was a huge village. Despite the earthquakes and lava flows the poe kahiko had held on and continued to dwell there. The heiau must have been both a school and place of worship, as in most villages. How the people walked, farmed, even remained upon that a'a lava area was a mystery to us. It has not changed today, either. Just the wondrous engineering and stone-masonry, the stone-paved wells and roads, all have seemed marvelous to me and my neighbors on Maui." [I. Ashdown 1/30/78]

A large coastal complex containing 97 features in 19 hectare area. Brief description by Walker (pp. 68, 93) as Hanamuulua Village. Located SE of Lualailua Hills along 840m of shoreline. Bounded on N by Hoapili Trail, to E & W are rough expanses of a'a without features. The Western 600m is a broad fan of alluvial soil deposited by small streams. The rest of the complex is bare lava with small pockets of alluvial soil.

Contains-- 4 canoe sheds; series of grinding depressions; extensive surface midden; 14 habitation enclosures; 58 temporary habitation areas (includes 24 oval enclosures, 10 rectangular enclosures, 14 C-shape enclosures, 2 i-shape walls, 8 terraced platforms); 12 stone-lined fireplaces (within 10 structures); 2 heiau (Walker's sites #180, #184), 1 possibly luakini; 1 ko'a.(DLNR Files)

Hekilipaihi/Hikilipahi: Fishing landmark.!/ Heki'i= a point, Olowalu quad.

Lit.= thunder.

When Punalena is in direct line with the depression on Ka-Iae-o-ka-ilio, it is there, at the same place, where Kiele is located.

The main landmark is Hekilipahi [Hikilipahi in Hawaiian text].(Sterling:10)

Holu Point: (Map, EPS)= Landmark.

Lit.= holu= Springy, pliable, resilient-- as a mattress, to sway-- as palm fronds; to ripple, as waves/ name of a star/ name of a god.

Honua'ula: A moku. Congregational church at Ka-naio and nearby land division, Makena quad, Maui. Cove and land sections, Kai-Iua, Kona; heiau for human sacrifices, Wai-pio Valley, Hawai'i. Valley, Wai-mea district, Kaua'i. Point, north Lana'i. Valley, south Ni'ihau. See also Pu'u-honua'ula.

Lit.= red land.

Area between Nu'u and Paeanu was called Honua'ula. Now commonly called Kahikinui.

Area has not been studied thoroughly by archaeologists but valuable as heiau, house sites, etc. remain from antiquity. The Pi'ilani paved road from Keoneoio to Nu'u is about all that remains of the trail built by order of King Pi'ilani who died in 1524. His son, Kiha, is credited, but he simply completed the road round West Maui.

The Lalani Pu'u or hills made by Pele mainly from lava flows; Pu'u Makua -600 years old; Pu'u Keonehuna -700 years old; Kaumahina, over 1000 years old; Pu'u Naio and Pu'u Ka-lua-'Olapa -300 years old; Lua Palani -300 years old; Pu'u Pi'imoe -200 years and still dormant. [all based on oral informants.]

Best preserved but not studied site is Maonakala village near Keoneoio, and along with this sites at Make'e, A'uahi (now spelled Auwahi on maps), lower and upper areas all the way into Kaupo.(Ashdown:12-13)

Hoapili trail is one name for Pi' ilani' a road, but only because the governor had workmen lay pili grass over it when Kamehameha III was traveling it on horseback, probably late 1825 or so.

When I lived at Ulupalakua, the Honua'ula area was rich with Pili grass, tobacco, cotton, Ilima, and other native plants and trees, particularly Noni, Kukui. Now koa-haole is overrunning everything. Pili grass is becoming extinct.(Ashdown:13)

The Ua-lani-pili used to make cloudbursts all in Honua'ula, along with the Ua'lani-paina rain of Ulupalakua and these 2 rains along with Naulu kept the land fresh. I do not see them anymore. Sometimes a Kilihune blows a bit of moisture, softly, but the land is too dry. Pili grass should be planted. Even the Wiliwili and Neneleau are dying ... Even the forest mauka seems to be disappearing.(Ashdown:14)

Honua'ula, the Rich, Sacred Earth... Each gully, hill, flatland, stream and area has a name which. properly translated, gives a

wealth of material upon which the proper translator can found the history and legend of a nation of residents here on Maui since antiquity. Each place-name is a part of a prophecy very meaningful to old and young people of today. At Kanaio, the Destruction, the man named Paea dwelt at Make'e and desired everything for himself. He brought punishment upon his wife 'Olapa and after destroying her was, himself, ground like stone into powder. His head and torso are Pohaku Paea at the Ana Muki; his lower body is Pohaku Paea in the Sea of Keoneoio where the spirits mourn at Ku-makena, Nahawale, and Maonakala which once was a thriving village. From there to Lelekea the Springs by Hale Ki' i the land is a picture of abandoned house sites, temples, fishing trails paved for easier travel, and dry river beds and once flowing Springs giving life to land and villagers.(Ashdown:14).

In Honuaula, as in Kaupo and Kahikinui, the forest zone was much lower and rain more abundant before the introduction of cattle. The usual forest-zone plants were cultivated in the lower upland above the inhabited area. Despite two recent (geologically speaking) lava flows which erupted from fissures below the crater and only a few miles inland and which covered many square miles of land, the eastern and coastal portion of Honuaula was thickly populated by Hawaiian planters until recent years. A few houses are still standing at Kanaio where the upper road (traveling eastward) ends, but only two are now occupied. A number of Hawaiian families whose men are employed at IDupalakua Ranch have homes near the ranch house. About these native homes a little dry taro is cultivated. Formerly there was much dry taro in the forest zone.(Handy:113-114)

Sweet Potato planting times: In dry localities wait until the ground has had several good soakings, then plant your slips and pray for more rain after they root; in damp localities wait until it is obvious that a rainy period has come to a close, then plant and hope for a season of light showers and plenty of sun. The Kona storms from December to February drench all windward localities which are generally dry in summer; hence late winter is a planting time in these places, but a time avoided elsewhere. However, the situation may be reversed, as recently at Ulupalakua and Makena on southwestern[?] Maui, where, after continued drought unbroken even in the winters of 1932, 1933 and 1934, heavy rains came in late spring of 1934, bringing conditions favorable to planting.(Handy:143)

The ancient Hawaiians planted potatoes in mounds (*pu 'e*). Where soil is powdery and dry, as at Ulupalakua and Makena on Maui, the earth is heaped up carelessly into low mounds spaced with no particular precision or care.(Handy: 146)

Between Makena and the lava-covered region of Keoneoio (another famous fishing locality) the coastal region includes the small *ahupua'a* of Onau, Moomuku, Mooloa, Mooiki, Maluaka, and Kaeko. According to old *kamaaina*, these *ahupua'a* had in former times a continuous population of fisher folk who cultivated potatoes and exchanged their fish for taro, bananas, and sweet potatoes grown by the upland residents of the Ulupalakua section. A few Hawaiians still live here. One living near Puu Olai has a sizable sweet potato patch in the dusty soil near the shore; another raises fine potatoes in a low flatland of white sand near the abandoned schoolhouse of Makena.(Handy:159)

From here (Kaupo) through Kahikinui, Honuaula, and Kula the sweet potato was the staple food for a considerable population, supplemented with dry taro grown in the low forest zones. This is the greatest continuous dry planting area in the Hawaiian islands. A few Hawaiians at Ulupalakua have sizable patches of sweet potatoes at the present time, and a few patches are still planted at Kaupo; but beyond this, the ancient subsistence culture has completely vanished from these *kula* slopes which are now given over wholly to ranching. The fishermen along the coasts of Kahikinui and Honuaula used to exchange their fish for sweet potatoes and taro grown by those living up on the *kula*; Hawaiian tradition gives ample evidence that the population of this now almost depopulated country was considerable.(Handy: 161)

Hulapapa: A place where Papanuiokane heiau is located.

Lit.= hulapapahehi= Dance in which dancers use *papa hehi--treadle* boards--said to have originated on Niihau.

Papanuiokane heiau Site 192 (Bl-27] Location= At Hulapapa, ~200' above the upper Kaupo Trail. Description= Platform 63'x44', of rough aa without pebbles or coral. Front is 3' high. Drums are heard from this heiau.(Sterling:3)

Hulapapa: A place where a heiau is, with a fig grove mauka of it.

Lit.= hulapapa= light brown, bay (as a horse). Another heiau is at Hulapapa, a fig grove lies mauka of it.(Sterling: 1)

Kaeko: An 'ili in Kanaio.

Lit.= ka'eo= Resentful, peeved, indignant. Lit.= ka'eo= Full, as food calabash//strong, zealous//hair gathered in topknot on head, as by priests for ceremonies. LCA test: #5403 (Mai): Section 7--pasture in haole potato in Kaeko 'ili. No specific Kaeko description: I, Mai, have an 'ili at Kanaio; my claim is Waha. On the North is the mountain, on the East *auwahi* [water channel], on the South is the sea, on the West is Manokohala ... Furthermore, there is pasture for animals ... Furthermore, there is a house

lot, bounded on the North by the pasture, on the East by some houses, on the South by a *kula*, and on the West by *kula* also ... Furthermore, one *mala* of taro is at Mooiki ... Furthermore, there are 2 *mala* of Irish potatoes ... At Kanaio are 3 *mala* of Irish potatoes.(5)(LCA Testimony)

Kahawaihapapa: A point near Uliuli village.

Lit.= unknown. Locat.= Village site of Uliuli located near the point of Kahawaihapapa ... A well built koa stands on the point a few feet back from the shore ... (Sterling:4-5)[see Uliuli village]

Kahikinui/Ka-hiki-nui: A moku. Land division & forest reserve, Lualailua Hills quad.

Lit.= great Tahiti(Place names)//the big horizon(Ashdown) Ka-hiki-nui= the big horizon. Named by Hawai'i-loa-ke-kowa, the first navigator.

Named the big island for himself, and others for his family. Pu'u Ani-Ani in Kahikinui is named for his father, Ani-ani-ka-lani, also a great navigator.

Hawai'i-loa "drew" the navigational triangle, from Maui to Kohala, Hawai'i, and to South tip of Kaho'olawe named Ke-ala-i-Kahiki [trans.= the-roadway-to-and-from-the horizon]. Kahiki doesn't necessarily mean Tahiti. Kahiki-ku is the entire horizon as far as the eye can see.(Ashdown:12)

Area between Nu'u and Paeahu was called Honua'ula. Now commonly called Kahikinui.(Ashdown: 12)

Kahikinui, the Broad Horizon ... (Ashdown:14)

Kahikinui is a vast arid waste covered with what is probably the most recent lava flow from the now extinct crater of Haleakala. It is now uninhabited. Fishing is comparatively good along its rugged shores, and in former times Hawaiians lived in isolated communities on the broken lava scattered from one end of the district to the other, close to the sea or slightly inland wherever potable water was to be found in some brackish well or submarine spring offshore. I am told by an old informant, born at Kanaio in the next *moku*, that the Hawaiians formerly living along the coast of Kahikinui had their plantations of dry taro and other edibles inland in the forest zone, where the forests along the southern wall of Haleakala came much lower and where rainfall was more plentiful than it is today.(Handy:113)

Sweet Potato planting'times:

At Kaupo on southeastern Maui planting is begun in August, when showers generally start, and no planting is done after April, when drought usually begins; but in 193334 the winter months were dry and rains came in the spring and summer of 1934. At Kipahulu on eastern Maui, just beyond the genuinely wet windward coast, there is normally one planting in September when winter rains begin in moderation and another in March when the heavy winter rains end and summer showers follow.(Handy:143)[see Honua'ula]

Where potatoes are planted in crumbling lava combined with humus, as on eastern Maui and in Kona, Hawaii, the soil is softened and heaped carelessly in little pockets and patches utilizing favorable spots on slopes. The crumbling porous lava gives ample aeration without much mounding.(Handy: 146)

From here [Kaupo] through Kahikinui, Honuaula, and Kula the sweet potato was the staple food for a considerable population, supplemented with dry taro grown in the low forest zones. This is the greatest continuous dry planting area in the Hawaiian islands. A few Hawaiians at Ulupalakua have sizable patches of sweet potatoes at the present time, and a few patches are still planted at Kaupo; but beyond this, the ancient subsistence culture has completely vanished from these vase *kula* slopes which are now given over wholly to ranching. The fishermen along the coasts of Kahikinui and Honuaula used to exchange their fish for sweet potatoes and taro grown by those living up on the *kula*; Hawaiian tradition gives ample evidence that the population of this now almost depopulated country was considerable. (Handy: 161)

Kahopeakawa'a: A landmark linked to or same as Puwai.

Lit.= ?

Kaimalo/Kaimaloo: An 'ili in Kanaio.

Lit.= kai malo'o= Low tide, as when much of the reef is exposed. *dry sea*. Lit.= kai malolo= quiet sea, as in a calm cove. LCA test: #3784 (Ohule): Section 1--haole potato in Kaimalo 'ili. Section 5--pasture in Kaimalo 'ili. Kaimalo is the land, 5 *kihapai* of Irish potatoes, 1 *mala* of sweet potatoes. In this land, a house claim.(l) LCA test: #3784B (Puupuu): Section 1--haole potato in Kaimalo 'ili.[no description](l) LCA test: #4151 (Kalawaiakumoku): Section 1--pasture in Kaimalo 'ili1 hereby state my claim for my 'ili of Kainalo. I have five claims in it: 1 *mala* of gourd, 3 fallow fields, 1 *mala* of Irish potatoes, a land, 1 *mala* of bananas. LCA test: #5274 (Kaawaapahulu): Section 1--pasture in Kaimalo 'ili. Section 2--pasture in Kaimalo 'ili. Section

3--pasture in Kaimalo 'ili. Section 4--haole potato in Kaimalo 'ili. I hereby state my claim for 13 *moku mau'a* at Kaimaloo ... At Pepehunu are 6 *moku mau'u* ... (3) LCA test: #5275 (Kekuhauloa): Section 3--pasture 'ili in Kaimalo 'ili. 4 *mala* of Irish potatoes are at Kaimaloo.(3-4) LCA test: #5278 (Kainoa): Section 3--pasture in Kaimalo 'ili at Manokohola, 2 *moku mau'u* [as Manokohola not listed in sections, must be Kaimalo?](4)(LCA Testimony)

Kaipolohua: A cave in Kanaio, possibly tied to Pamoe.

Lit.= unknown.

The Story of Kihapilani

... They [the chief's party] reached Ulupalakua, the place where Captain McKee's houses are. They went down the road used by the inhabitants, mauka of the hills as far as Keakohi, next to Kanaio ...

On this upper road ... in Kanaio, they passed the cave of Kaipolohua, seaward of place of Lono, son of Pamao, the person about whom there is a story full of pathos... (Sterling:4)

Site 50-14-1234= Kaipolohua Cave: (Hommon 10/31/73). A very large lava tube identified by Manu (Kuokoa Feb. 23, 1884) as cave of Kaipolohua. Located ~75m N of Highway 31 above Puu Pimoe (compass bearing to Pimoe summit is 183°).

Vegetation is koa haole and Apple of Sodom bush. Mr. Henry G. Voss of Kula is the owner of the property. Cave 56m long, 3.6m x 11.5m wide. No structures of cultural material noted. Just outside is 10m square enclosure--Voss says built tum-of-century as pig pen. Also terraced platform and retaining wall. Voss has been told that a former minister of the nearby Kanaio Church was buried in the cave in the 20th century. The smaller of the 2 terraced platforms may be the grave monument. Nat. Reg. site 12/90.(DLNR Files)

Kalaeoka'ilio: A fishing landmark. A point at Kaupo, Maui.

Lit.= the cape of the dog [Pele's dog].

When Punalena is in direct line with the depression on Ka-Iae-o-ka-ilio, it is there, at the same place, where Kiele is located. the main landmark is Hekilipahi [Hikilipahi in Hawaiian text].(EPS:I0) The landmark is located in Kipahulu [for fishing ground Kiele]. It IS the hill of Kalena, when it is in line with the depression at Ka-Iae-o-Kailio. The stone of the cape is its principal mark.(Sterling:I0)

Kalapa'ula: A place.

Lit.= unknown. Next to it [Hulupapa] is Ka-Iapa-'ula.(Sterling:I)

Kalena: A hill and fishing landmark. Land section & peak, central O'ahu.

Lit.= the lazy one.

Kalo'i: The ahupua'a bordering Kanaio to the west.

Lit.= unknown. Then the lower section of Kalo'i- have an 'ohe tree (not bamboo)- sap used to gum branches for bird catching for one of the trees listed by Kamakau as a form of female prison god (found on Maunaloa, Molokai).(Sterling:I)

Kalo'i House sites: Below trails and in vicinity of Black Sand Beach- a number of nice house sites. Behind are wells.(Sterling: 1)

Site 50-14-1238= Ka'loi Site Complex (Hommon 9/4/73). Near the Kanaio-Wawaloa (14-1002) complex. Covers 20 hectares. Probable h'eiau, 3 pahale (house enclosures), 14 wells, 2 lava bubble shelters, a koa (fishing shrine), 9 ahu. Several shelters excavated by Kirch & Chapman in 1966, including B.M. site Ma-B2-1 & M8. Three named bays on map at DLNR-- Wawaloa Bay, Paina Bay and Kalama Bay, none of which mentioned on maps or other accounts. (DLNR Files) [Likely from Chapman ms]

Kalua'ilio: Dog-cave.

Lit.= unknown. Kumukau's place= makai is a cave called Ka-Iua-'ilio (dog-cave). Is at the edge of the place where Pamano met his death.(Sterling: 1)

Kaluakakalioa heiau: In Lualailua Hills above Hanamuuloa village.

Lit.= unknown. Kaluakakalioa Heiau Site 183 [A37-3] Location= Above village site of Honamuuloa near water tank.

Elevation ~300'. Description= A good-sized walled heiau 48' square. The walls are built of massive blocks of basalt to a height of 6' and 8'. They are 6' thick and have image holes in the top as shown in fig. 56. The interior is divided into a lower and an upper court, each with its low terraces. The lower court is paved with flat slabs, coral, pebbles and cinders. The North East corner is the highest part of the interior.(Sterling:7)

50-15-183: Kaluakakalioa Heiau=(Hommon 9/4/73). Well preserved inland Heiau with complex interior features. Rectangular enclosure identified by Walker as Kaluakakalioa Heiau #183. 15m E of jeep road to Hanamuuloa Complex (15-1164) ~5 miles

from the shore. 25m SE of cattle trough, 50m S of watertank stone platform. After the gate, 1.8m down jeep road. Very well built, 15.5m x 16.1m, walls up to 1.9m high x 1.9m wide.

50-15-1160: Kaluakakalioa Cave=(Hommon 10/31/73). Lava tube with also numbered as B.M. Ma-A37-5. Named as is near Kaluakakalioa Heiau (15-183). Is ~600m to the NW of 15-183, 1.12km from the coast, 2° true to SE Lualailua Hill, 113° to the Watertank just N of 15-183 (foundations of tank). Go on Hwy 31 to Lualailua Hills locked gate .3 mile E of Lualailua Hills on ocean side, go on jeep road -1.9 miles to 15-183, then turn W down branch road, drive .3 miles N and W and walk W 55m. Weathered pahoehoe and soil pockets, lantana and low grass, with passion-fruit vines at the cave entrance. Formed by the collapse of a tube section, extends S of entrance for ~57m. About 7m outside the entrance have 2 massive (103m x 103m) walls which channel the tube into a narrow passageway. Floor rough, but there is a 3m x 3m cleared area, with coral abraders. In 1966 Ms. Jean Booth of Maui collected a cowrie-shell squid lure, a piece of cut wood and a bird-bone 'pick' from the cave (at B.M., catalog #206-208).(DLNR Files)

Kalua 'Olapa: A cave in Kanaio below Pu'u Naio(?) (Ash:15) [Note that Kanaio in this context is bigger than just the ahupua'a].

Lit.= unknown. Ka-lua-'Olapa= in Kanaio, below Pu'u Naio in the ili of Kalihi and mauka of Keoneoio. (Ashdown: 15)

Kalua Papaka: A cave in upper Kanaio.

Lit.= unknown. Ka-Iua-Papaka= in upper Kanaio-Papaka area. Has a large opening and, until a landslide occurred midway, you could travel to the beach at Ahihi Bay in that lava tube cave. (Ashdown: 15)

Kanaio: An ahupua'a.

Lit.= the bastard sandalwood tree... Location= Above shore trail several hundred feet near the aa flow on the Kaupo side.

Description= Large rectangular enclosure ~60'x60', of aa slabs (not chunks). In the walls are pieces of coral. Opening on the Kaupo side. Walls 10' high, 3' thick. Depressions on top of walls possibly for images. From shore trail to this structure are scattered a number of stone cairns ~6' high. Also in the vicinity are house sites, and semi-circular [C-shape] walls (for sweet potato). Against the lava bluff are shelter caves, on top of the aa flow are walls forming shelters. The area is surrounded by an aa flow (and is apparently an old pahoehoe flow). The old trail must run from here to Kanaio village-see Hawaii Terr. Survey Map 1929. (Sterling:2)

Ko'a Ho-4 [B2-6] Near the shore and below the trail and a little towards the Kula side of heiau [Ho-3] is a large pond (now dry). On the makai side is a rectangular platform which may be a ko'a. Coral on top. (Sterling:2)

[From Waiailio Village #2] On trail up to Kanaio [from village] 12 house sites seen, located on grassy bench among the lava flows, and several cultivation patches (potato likely). (Sterling:2)

From Hana-mani-o'a to Wai-aka-puhi we never fooled around with that sea. Pele had been angry with a certain man who was unreliable. She cooled her anger by destroying this Puhi-'o-'a there and filled his mouth with boiling lava. Plenty puki were there, huge ones. And the eel shadows were eerie. The Ua-Iani-pili used to make cloudbursts all in Honua'ula, along with the Ua'lani-pa-ina rain of Ulupalakua and these two rains along with Naulu kept the land fresh. I do not see them anymore. Sometimes a Kilihune blows a bit of moisture, softly, but the land is too dry. Pili grass seed should be planted. Even the Wiliwili and Neneleau are dying ... Even the forest mauka seems to be disappearing. (Ashdown:13-14)

In one sense, Ka naio refers to destruction, and it occurred in Kanaio in 1736 or so. Down near the shore is Ke awa naku (Ke awa nuku?) heiau. The Rolling Waters? or a harbor-- Or is it Kanahena where that harbor of Paako is said to be where people were "given to the mano"? (Ashdown:14)

Each place-name is a part of a prophecy very meaningful to old and young people of today. At Kanaio, the Destruction, the man named Paea dwelt at Make'e and desired everything for himself. He brought punishment upon his wife 'Olapa and after destroying her was, himself, ground like stone into powder. His head and torso are Pohaku Paea at teh Ana Muki; his lower body is Pohaku Paea in the Sea of Keoneoio where the spirits mourn at Ku-makena, Nahawale, and Maonakala which once was a thriving village. (Ashdown:14)

Site 50-14-1235= Cave of 7 Coffins: (Hommon 7/17/73). A lava tube bubble 100m NE of the base of Pimoe cone, surrounded by low rock knolls. Lantana main vegetation. Entrance sealed with a stone wall, nearby a small wooden shrine, shaped like a gabled house, with a statue of Christ and lamb and 2 votive candles. Did not enter. Went on 4/13 with EPS and two teachers from Maunaolu College to see the cave--a year earlier had 1 burial with jade jewelry. On 4/13 the coffins were open, the contents strewn round, jewelry gone. Cave now sealed, quite small. 7 coffins, most smashed. 8 crania seen. Burials apparently within last 50 years [though several coffins had square forged nails]. Later heard that a group of students (?) had

followed us there that day.(Soehren 1963 letter).

Site 50-14-1006: Kanaio Mauka Complex: (Hommon 8/15/73). An early historic house lot complex in an arid area. Consists of several enclosures, walls, and terraced platforms. Sparse lantana, koa haole and Apple of Sodom bushes, and at the NE corner a thick tangle of fig trees. A large terraced platform at the NE end is EPS HO-2 (B.M. Ma-BI-13). Go 2 miles from Highway 31-37 intersection, then 150m S to the site. Complex measures 105m (EW) x 70m (N-S) of a'a, most on flat ground or base of 5m cliff. Has both historic and pre-contact artifacts. Nat. Reg. site 12/90.(DLNR Files)

Kanaloa Point: A point.

Lit.= unknown. Lava tube with human remains and lava basin with pure fresh water near South shore Maui. From lower trail along coast, take the trail North along 1st gulch-1/4 mile East (Hana) of Kanaloa Point. About 1 mile up the trail, ~600' level, just off to Right, East, are 2 tubes. Upper one leads down into 2 branches. Water basin in Left, East, Branch.(Sterling:1-2)

Kapahuhu: A lava flow? in Kipahulu.

Lit.= unknown. At Kapahuhu, in Kipahulu, the lava went on a slant below Ke'aha-moa from Hale-a-ka-Ia to Luala'i Iua, and made 2 mounds, called Na-pu'u-mahoe (Twin-hills), that remain to this day. Above these mounds was the first long trail connecting noted places and between these mounds is the new government road being used now.(Sterling:10)

Kapapaiki: A place, where Momoku heiau was built by menhune.

Lit.= unknown. Momoku was the heiau that was built by the menhune[sp] at Ka-papa-iki.(Sterling:8)

Kauhuka heiau: ?

Lit.= unknown.

Kauhuka heiau Site 188 [BI-23] Location= 1 mile East of J. Burns house above the Kula trail, elevation ~700' (at Kaunu Keaha). Description= Small platform of basalt blocks on top of a rocky knoll. Measures 15'x17.5', average height of 3'. Likely a "Houlu ua" or rain shrine type as natives said that whenever the clouds gathered over this spot it would surely rain.(Sterling:3)

Kaunu Keaha: A place where Kauhuka heiau is located.

Lit.= kaunu= variant of kaulu= ledge, step, jog--as on a cliff// constellation Southern Cross// all species of trees (*Pteralyzia*) related to maile-found only on Oahu & Kauai// same as 'ala' a (*Planchonella*) tree// aulu (*Sapindus*) tree.

Kauhuka heiau Site 188 [BI-23] Locat.= 1 mile East of J. Burns house above the Kula trail, elevation ~700' (at Kaunu Keaha).(Sterling:3)

Kaupo: Quadrangle, village, old district, homesteads, trail, and gap, East Maui.

Lit.= landing [of canoes] at night.

Keahu'aiea: The boundary between A'uahi and Luala'ilua Hills, also (possibly) the boundary Honua'ula and Kahikinui (2nd is suspect).

Beyond Hanaka'ie'ie. Land section, Makena quad.

Lit.= the heap of 'aiea trees & shrubs. They reached Ke-ahu-'aiea which is the boundary of Honua'ula and Kahikinui.(Sterling:4)

We, O reader, shall move to Auwahi [going past] Ke-ahu-aiea at the boundary of Kahikinui and here we came to Honua'ula.

[Ke-ahu-aiea is on the boundary of Luala'ilua and Auwahi and the maps show Auwahi as in the district of Kahikinui. EPS]

Between the hill of Nale and Ke-puka-hala-malo at Auwahi, is the source from which Pele descended to a place called

Kuanunu.(Sterling:10)

Keakohi: Place next to Kanaio.

Lit.= unknown.

Keakoko/Keakoko: = An 'ili in Kanaio.

Lit.= ? LCA test: #4144 (Kaaemoku) only section-- ... Kaaemoku's pasture land is in Keakoko, ili...(2)(LCA Testimony)

Keanawa'a: A cave on the coast below Kanaio-informant name given by Ashdown to a burial cave.

Lit.= the canoe cave(Ashdown). Ke-ana-wa'a= is a burial cave on the coast below Kanaio and we called it so because the "coffin" was a canoe. (Jauquin "Jack" Freitas and other cowboys know these places well and perhaps the proper names also. "The Canoe Cave" simply is our way of identification.(Ashdown:15)

Keaoneulaula: Red ... Sand.

Lit.= the Red Sand.(Ashdown)

Keaukolo: An 'ili in Kanaio.

Lit.= unknown. LCA test: #4151 (Kalawaiakumoku): Section 3--pasture in Keaukolo 'ili. All testimony is limited to: ... my claim for my 'ili of Kainalo. I have five claims in it: 1 *mala* of gourd, 3 fallow fields, 1 *mala* of Irish potatoes, a land, 1 *mala* of

bananas.(2-3) (ICA Testimony)

Keawanaku: Site complex in Kaunauhane.

Lit.= unknown. Site 50-14-1280= Keawanaku Complex: (Connolly 11/5/73). Complex with 70 features around a small bay-- platforms, enclosures, shelters, religious structures, walls. Very dense habitation area. Includes Walker's Ku'ula Heiau site #193. Nat. Reg. site (12/90).(DLNR Files)

Keokea: Land section, village, and park, Pu'uokali quad, Maui.

Lit.= the white sand.

Keone'o'io: Land section and bay (also called La Perouse Bay), Makena quad, Maui.

Lit.= the sandy [place with] bonefish.

Kepukahalamalo: A hill in A'uahi.

Lit.= unknown. Between the hill of Nale and Ke-puka-hala-malo at Auwahi, is the source from which Pele descended to a place called Kuanunu.(Sterling:10)

Kiele: A fishing ground/spot.

Lit.= kiele= to emit fragrance//to paddle. When Punalena is in direct line with the depression on Ka-Iae-o-ka-ilio, it is there, at the same place, where Kiele is located. The main landmark is Hekilipaihi [Hikilipahi in Hawaiian text].(Sterling:10)

...The important fishing ground, of the places mentioned (La-pueo, Alena, Lualailua) is Kiele, belonging to the Ahupuaa of Lualailua. The landmark is located in Kipahulu. It is the hill of Kalena, when it is in line with the depression... at Ka-Lae-o-Kailio. The stone of the cape is its principal mark. It is 120 fathoms deep.(Sterling:10)

Kihe: Village, plantation, elementary school, boat landing, beach park known as Maipoina-'oe-'ia'u, Ma'alaea quad, Maui.

Lit.= cape, cloak.

Kiipuna: unknown.

Lit.= unknown. Heiau Sites (?) Heiau at Kiipuna, Ninaulua nui. Location= In the lava flows makai to trail between Waialio and Wahene. Description= Large open platforms of ilili and coral and pebbles, no wall. Not seen-reported by Ben Aikala, but his information is not reliable as he confused heiau and burial sites.(Sterling:3-4)

Kipahulu: A fishing ground landmark. Forest reserve, quad, village, district, valley, East Maui: home of Laka, a god worshipped by canoe makers.

Lit.= fetch (from) exhausted gardens (ki is short for ki'i). Pi is the fishing ground, and its landmark is located at Kipahulu.(Sterling:10)

Kohala heiau: unknown.

Lit.= unknown. Kohala heiau Site 189 [Bl-24]. Location= South of Kula Pipe line 1/2 mile East of J. Bums house.

Description= Rough platform of basalt blocks on end of a high ridge overlooking the sea. 53'x34'. Front is terrace 3' high extending 23'. Stone paving only 8' back. West side faced but no free-standing walls. Hill extends for level in front of platform and some of the open space may have been within the heiau confines.(Sterling:3)

Kohaluapapa heiau: A heiau NW of Lualu'lua Hills.

Lit.= koha lua = To resound loudly, as poi vigorously pounded. Heiau at Kohaluapapa Site 186 [A37-8] Location= North West of the hills on a high shelf of land. Description= A large walled structure of irregular plan. Total length of 110'.

Construction is of massive basalt with ilili, pebbles and coral scattered plentifully everywhere. Walls are massive, 6-8' thick and 4.5' high at West. The South side is terraced in 2 tiers on the rocky hill, and is open to the sea.. 4 main enclosed courts can be seen. A is unpaved, B is the central court rough paved where the principal ceremonies were likely carried out. At the West end are 2 pits or depressions without stone lined sides. C is a smaller enclosure probably for a house of some kind. The East wall is 6' high. Between C and D is an open platform terrace -2.5' above the level of D. D is a large court with a high wall on the East side and a low wall at the front, below which is a 2nd step terrace 5' high. The West end is open, there being no definite border but a large rock on which are some pebbles and ilili, perhaps an altar of some kind. Adjoining the heiau are a series of walls forming irregular enclosures extending to a large dwelling site on the point, which may have been the house of the Kahu.(Sterling:8)

Koholuapapa: A habitation complex in Lualu'lua Hills.

Lit.= unknown. 50-15-186: Koholuapapa Complex=(Hommon 10/30/73). An unusual inland heiau and associated possible kahu's house. Walker's site 186 (pp. 256) and BM Ma-A37-8. The complex consists of Walker's heiau, a probable habitation

structure that Walker believed was for the kahu, and an enclosure. The heiau is 250m W of the foot of the NWmost Lualailua Hill, 110m at 315° to the watertank on USGS quad (#15). Lantana, Apples of Sodom vegetation with 2 small mangoes growing in the heiau. The heiau has several stone-lined pits, appears that different sections may have had different functions. Has much coral. Habitation last used in historic (late 19c.early 20c).(DLNR Files)

Kuanunu: Famous lava flow/section at Puu o nole.

Lit.= kuanunu= hold in lua fighting.

Lit.= kuanu'u= Kauai name for maono--a basalt. [from The Story of Kihapiilani] They passed Kanaio reaching Puuonole where they tread the famous lava of Kuanunu ... After a little while they went on to Auwahi ... (Sterling:4)

Between the hill of Nale and Ke-puka-hala-malo at Auwahi, is the source from which Pele descended to a place called Kuanunu.(Sterling:10)

Kuehu/Kuehunui: An 'ili in Kanaio.

Lit.= kuehu= to shake, stir up, as dust//to toss up, as spray//to brandish, wave//to clear of weeds// to drive off, especially evil spirits (with tapa or ti).

LCA test: #4151 (Kalawaiaikumoku): Section 2--pasture in Kuehu 'ili. All testimony for the following:... my claim for my 'ili of Kainalo. I have five claims in it: 1 *mala* of gourd, 3 fallow fields, 1 *mala* of Irish potatoes, a land, 1 *mala* of bananas.(2-3) LCA test: #5275 (Kekuhauloa): Section 4--pasture 'ili in Kuehunui 'ili. At Kuehunui are 2 *moku* ...(3-4)(LCA Testimony)

Kula: Elementary school, sanatorium, land area, forest reserve, and former district, Kilohana quad, Maui.

Lit.= plain.

Kuwaiala'ilio: A cave near Hale'ahu.

Lit.= unknown. Sam Ka-lani-paha'u (his brother)[see Hale'ahu/Ku-lani-paha'a] built a grass hut near the cave Ku-wai-a-ka-'ilio.

Laeloa: A fishing ground landmark. Point South of Honauhau Bay, Hawai'i.

Lit.= the long point.

Lanikaula: A sacred kukui grove. Linked to Moloka'i grove-trees imported from there. A kukui grove on Moloka'i.

Lit.= the royal prophet//priest aristocrat.

Has kukui nuts from the grove of Lanikaula (Moloka'i)-this became a second grove also called Lanikaula.(Sterling:1)

Luala'ilua Hills/Luailua/Lualualaea: An ahupua'a. Quad, hills & land division, East Maui.

Lit.= two-fold tranquility. Site 182 [A37-7] Location= North side of hills near trail which comes up from South East.

Description= A small heiau in the a'a of rough construction made of basalt chunks and ilili. No pebbles, but some pieces of coral found. It is notched and shaped and measures 38' long x 23' wide. It is walled all around to a height of 2-3' inside and about the same in thickness. The highest part outside is South side, where the wall has been built up to 7'. A rough pavement covers the interior and at the East end a low platform 6 inches high occupies the space between the walls. The entrance is at the seaward side. A tiny enclosure 3' square and about the same height has been built into the corner of the jog on the outside. Naio branches and stones cover the opening, but only a large chunk of coral was found.(Sterling:7)

Site 184 [A37-6] Location= Along the shore 75 yards from Site 180. Description= A small L-shaped heiau measuring 25'x25'. Built of slabs of basalt some of which are placed on edge in a wall 3' high. On the seaward side is a step-terrace built of coral. There are low terraces in each arm of the L with chunks of coral scattered over them. The small square hole in the corner contained bits of sea urchin and other shells.(Sterling:7-8)

Water in Lualailua (Kahikinui, Maui trip with Mr. Lawrence, Oct. 1881). We finally located a waterhole up above Lualualaea (Lualailua) Hills, and pitched our main camp up there... Mr. Lawrence was making a general survey of Kahikinui and our 1st work was setting up our trig. station...Paiko's windmill is located below Lualualaea Hills, about a mile back from the sea, and is very interesting; we climbed down the shaft of the windmill into a immense lava tunnel cave, the lava tunnel being about 20'x20' on one side of the lava tunnel was flowing a beautiful stream of water. The stream I should judge was about 1' deep and 3' wide, flowing on quite a grade. The country is very barren around the lava tunnel, also there are no woods to speak of above on the Haleakala slopes, yet the natives speak that this stream of water never diminishes.(Sterling:9)

... Kalaula and Luala'ilua, are the names, means somet_ing. Names confirm a "legend" .(Ashdown: 14)

50-15-1389= Lualailua Terrace Complex:(Hommon 10/31/73). Dryland agricultural complex, arid area, near Hanamuulua Complex. @ small shelters (1 c-shape, 1 bubble shelter) and 10 rectangular terraces with front facing. "Previously unrecorded complex consists of 10 terraces with retaining alignments and associated shelters. Located ~300m NE of NE corner of

Hanamuuloa Complex (15-1164), 10m N of Hoapili Trail and ~300m from shore. Drive E on Piilani Hwy to locked gate on ocean side of road .3 miles from Lualailua Hills (key from Mel Landes/Maui Factors--the organization that leases the land from Haw. Homes). After gate 2 miles to shore to USGS bench 'VABM 26', walk inland to junction of jeep road and Hoapili Trail to NE corner of Hanamuuloa Complex (15-1164) then E along the trail 300m to the site. No surface artifacts.

50-15-1163m= Lualailua Enclosure:(Hommon 8/9/73). Rectangular enclosure without an entrance. The site is a rectangular enclosure referred to by the B.M. as Ma-A37-11, "walled enclosure without an opening". Located ~300m W of foot of NW most Lualailua Hills. Also ~35m E of water tank marked on USGS Quad (#15), and 90m NW of site 15-186. To reach it, go on Hwy 31 to point N of Hokukano cinder cone, then take the jeep road that leads N to Jack Freitas's house then E, towards Lualailua Hills.

The road turns S when it reaches N-W stone fence. Follow it till directly W of watertank. Relatively flat, vegetation lantana, scattered Apples of Sodom bush, scattered panini cactus. Land is Haw. Homes, leased by Maui Factors. Measures 10.6m x 17.7m, core-filled, 1.3m high x 1.2m wide, no midden visible. Likely historic (50-100 yrs old).

50-15-1161= Lualailua Cave:(Hommon 10/13/73). A lava tube apparently used by travelers as temporary camping place. B.M. site #Ma-A37-9 and M9 (Chapman & Kirch). Located W side of shallow crater just S of Hwy 31 as it curves S of Lualailua Hills. Bearings are 336° to W Lualailua Hill (VABM 1961'), and 230° to E. peak. Crater 50m in diameter, with lantana. An 'ohe'ohe (*Tetrasandra kauaiensis*) tree is at the cave entrance. Land is owned by Haw. Homes, leased by Maui Factors. Lava tube, mouth opens to NE, protected by rubble 2m high. Cave 9m deep, 5m wide, ~2m high. At the SW corner is a rough possible pavement with a rectangular fireplace. Cave excavated 1966 by Chapman & Kirch. About 5m NW is a smaller cave, 3.5m deep x 1.3m wide x 1.0m high with low rubble wall (1m) across entrance. No midden in either cave.

50-15-182= Lualailua Heiau: (Hommon 10/13/73). Notched enclosure Walker site 182, an unnamed heiau ~50m N of base of NW Lualailua Hills, 2.8 miles from coast. Thick lantana cover. 8m x 11.5m, walls 1.1m high x 1.1m wide. No midden, but notched enclosure frequently is a heiau in the Kula section of Makawao. Another heiau in the immediate vicinity was bulldozed by Elmer Davis in 1962.(DLNR Files)

Mahiehie: A place-Kaloi or Kalihi. Makai side of Pu'u Naio?

Lit.= mahiehie= redup. of mahie= Delightful, charming, pleasant. Next is place Mahiehie, on the makai side of Pu'u-naio, Kaula-Iapa, Pu'u-one, Ke-one-'oio.(Sterling: 1)

Makaniho: A place or area. In Kaloi or Kalihi.

Lit.= unknown. In Makaniho the 'a' alii are plentiful (both large and small).(Sterling:1)

Makee/Make'e village: Village in Auwahi.

Lit.= make'e= covetous, greedy, desirous to have, to have affection for. Makee is the site of a larger village and heiau described as Site 187. Extending back from the shore, eleven large dwelling sites were seen. A dwelling site is a platform or enclosure within which are one or more house platforms and smaller enclosures presumably part of the same establishment. A fine example of a site of this kind is located on the highest point of the village. The terrace is 60' long built up 9' at the front. A wall 7' high bounds it on the East, and forms a small enclosure on the North. The house platform is 14'x30' raised 18 inches above the terrace. It is paved with pebbles and coral, and in the center is a firepit. This was in all probability a chief's house.(Sterling:5-6)

Heiau at Makee Site 187 Location= At the village site of Makee at the shore, 75 yards above the trail. Description= A small heiau 60'x30' of the walled enclosure type with a high open platform at the South end. On the East and North sides are walls 6' thick and 8' high. At the South East corner is a hole opening into a tunnel which extends under the platform. The sides were walled with rock but the hole was too narrow for a man to crawl into with safety, as several large rocks had already fallen in, but nothing could be seen inside this platform, 25'x30' and 5' high was paved with pieces of a'a, coral and pebbles. Part of it had been torn away on the South side to build a modern cattle wall. A small narrow enclosure is shown against the East wall in the plan.(Sterling:7)

Best preserved but not studied site is Maonakala village near Keoneoio, and along with this sites at Make'e, A'uahi (now spelled Auwahi on maps), lower and upper areas all the way into Kaupo.(Ashdown:13)

Site 50-14-1472= Makee Village Complex: (R. Connolly 11/5/73). Covers 4 hectares.

Complex includes houseyards, rock shelter, platform, burials. Located on the coast and continues 300m inland. Rugged terrain, numerous a'a outcrops, small gully at E end of complex. Has 52 features with house-yards, rectangular and circular

enclosures, platforms, rock shelter, possible burials, trails, heiau. Walker #187 (pg. 257)--the one with the tunnel. Nat. Reg. site (12/90).(DLNR Files)

Maluaka: A place in either Kanaio or Kaeo ahupua'a.

Lit.= malua-kele= Trade wind, as on N Kauai. *damp Malua*. Lit.= malua= net mesh large enough for 2 fingers//sea breeze//depression or cavity of any size.

Manini village: Reef, East Maui.

Lit.= surgeonfish. [Note that this is seen in large numbers along this coast, at Hanamanioa and Keone'o'io.] At Manini is a village of 10 house sites with accompanying pens, burial platforms, and irregular enclosures some of which are places where tapa was dried out of the wind. The six large house platforms are coral paved with ends to the wind. They average 12'x25'. At the beach is a canoe shed. One spot littered with chips and fragments of beach stones was probably a workshop where adzes were made. None were found, but four stone squid sinkers were picked up.(Sterling:6)

Manokaahia heiau: unknown.

Lit.= unknown. Manokaahia heiau Site 191 [Bl-26] Location= Puki West of church 200 yards in a hollow open to the sea. Description= Open platform 60'x63' of rough lava. Front 3' high, back 1.5'. Wall 2.5' separates the higher and lower platforms. Upper platform is dirt and coral/pebbles. A grave has been placed on this heiau so that the natives speak of it as having lost its heiau standing and power. Drums and ukke music are heard here on the nights of Kane.(Sterling:3)

Manokohola/Manokohala/Manokahala/Manonokohala heiau: Manokohola heiau, also an 'ili in Kanaio where taro grown.

Lit.= unknown.

Manonokohala heiau Site 190 [Bl-25]. Location= Puki East of church 300' on level ground. Description= Irregular platform shown in plan (Fig. 61). 70' long, 2 levels to the interior.

Makai front is 3' high, drop of 3' to North East portion. Of aa block, ilili and coral. Drums heard from this heiau.(Sterling:3)

LCA test: #3784 (Ohule): Section 2--taro in Manokohola. Manokohola is the 'ili, 6 *kihapai*. LCA test: #3784B (Puupuu): Section 2--taro in Manokohola. Section 6--salt (bed) in Manokohola'ili. An 'ili, Manokohala [has in it] Maauahi, 1 *kihapai* of sweet potatoes and 6 *kihapai* of Irish potatoes.(1-2)

LCA test: #5275 (Kekuhauloa): no section listing but under testimony-- ...At Manokahala are 7 *moku mau'u*.(4)

LCA test: #5278 (Kainoa): no section listing, but under testimony-- ... at Manokohola, 2 *moku mau'u*...(4)(LCA Testimony)

Mauhu: A place in Kanaio.

Lit.= unknown. Place called Mauhu in the land section of Kanaio.(Sterling:1)

Miikena: Village, bay, landing, school, and quadrangle, East Maui.

Lit.= abundance.

Momoku heiau: A heiau in Luala'ilua ahupua'a, near Luala'ilua Hills.

Lit.= momoku= broken fragments//severed pieces//breaking forth, as of water from a dam. Momoku Heiau Lualailua is the Ahupuaa. Momoku was the heiau that was built by the menhune [sp] at Ka-papa-iki. That was one of the heiaus built by the gods of this race of people (the Hawaiians).(Sterling:8)

Mo' oiki: A place in Kanaio.

Lit.= unknown.

Nale: A hill in A'uahi.

Lit.= nale= clear, bright//not fast, moveable, independent.

Niipu'umahoe: unknown.

Lit.= twin hills.

Ninalua nui: unknown.

Lit.= unknown.

Pahua: A fishing ground at Kanaio.

Lit.= unknown. Pahua Fishing Ground located at Kanaio. Laeloa is one landmark-when directly over Holu Point that is the upper mark. Puwai is the lower mark and is call_d Ka-hope-aka-waa. There is a cave at Kanaio. The stone within resembles a man standing when it appears slightly toward the windward side then you came over the spots 40+ fathoms deep.(Sterling:l)

Panui/Pa' anui: A place(?) mauka of Papapoanui O Kane heiau in Kanaio.

Lit.= see below(Ashdown). Panui is mauka of these Kanaio sites [Papapoanui heiau]. Paa= means solid, established, secure, etc.

Nui= means important, of great magnitude.(Ashdown:14)

Papaka: A place between Keone'o'io and Makena.

Lit.= unknown. Next is Papaka, where wauke grew. Then went down the road to Makena.(Sterling:l)

Papakea/Papaiki: A place in Lualailua above the Lualailua Hills.

Lit.= papa kea= white stratum, sand beach... Lit.= papakea= white spray, as of sea//to rise in spray, white caps. K.P. Emory in 1922 visited an inaccessible part of Kahikinui near Lualailua Hills and was shown what appears to be human foot prints in an old lava flow. 31 were counted, of which 20 were in pairs 3" apart. He concludes that they represent children's feet but is uncertain whether to regard them as true petroglyphs or as imprints made by children trapped on a lava flow. This last seems unlikely as the natives have no memory or even legends of any recent eruption of Haleakala. His conclusion is to regard the prints as petroglyphs but of a form very different from those on Molokai.(Sterling:l0)

These are to be observed on the pahoe-hoe lava which passed close to the North side of the inland hill of Lualailua, at a place called Papakea. The footprint petroglyphs are 30 in number, crowded into 5 small patches of pahoe-hoe, within an area not more than 35' in diameter, 200 yards North into the flow. They had been cut into the lava to the depth of 1/8-1/4". Most of them are 8" long. The longest measured 10", the shortest only 4". 20 of the foot-prints were arranged in pairs, 2" apart. They were pointing in all directions, but most of them into the flow. These foot-prints were shown to Kenneth Emory in 1922 by Joseph V. Marciel of Kaupo. Hawaiians had shown them to Marciel years before, saying they were footprints of Menehune people made while they were crossing the flow, carrying stone for the building of ho'alo'a heiau at Kaupo. Extensive weathering of the edges indicated that they were made long ago. A few of the petroglyphs were outlined, and some had the toes marked.(Sterling:11)

Footprints at Papiki [Coming from Nu'u to Lualailua Hills, Sterling] We were so glad when we drew close to the hills for our goal was just back of it. These were tall hills at 1500' above sealevel. There was a hill on the upper side and one on the lower and the road went through the houses standing there, the beaches, Makena, Ulupalakua and Kahoolawe. From here we went along the side of the upper hill down to this side and it wasn't long before we came to a rocky plain. Here we dismounted and tied our mules to stones. We walked to the place where the footprints showed on the pahoe-hoe lava, not far off. (Sterling: 11) 50-15-1162= Papakea Petroglyphs:(Hommon 8/14/73). Abraded petroglyphs representing human footprints. On a weathered pahoe-hoe outcrop -150m NW of the foot of NW most Lualailua Hill, 250m at 62° from USGS Watertank (#15). Terrain gentle slope, with pahoe-hoe and pockets of red-brown soil. Numerous lantana, some panini. Lesley Bruce showed the site (same directions as 15-1163m). A cairn of stones .9m high has been erected at the site. Petroglyphs in an area 11x 14m--though Emory found 31, we only saw 2 in good condition, 10 in fair condition. A number of other depressions obscured by lichen, 11 possible footprints. All from 14-25cm long, 6-8cm wide, .5-3cm deep. Both "clear" prints had all 5 toes and were of the left foot. One has an additional 5 "toe" marks just beyond the first five. Quite accurate.(DLNR Files)

Papanui O Kane heiau: An islet in Haiku quad, 3.13 acres, 40' elevation, Maui.

Lit.= Great Flat of Kane.

Papanuiokane heiau Site 192 [BI-27] Location= At Hulapapa, -200' above the upper Kaupo Trail. Description= Platform 63'x44', of rough aa without pebbles or coral. Front is 3' high. Drums are heard from this heiau.(Sterling:3)

Site 50-14-192= Papanuiokane Heiau: (Connolly 9/21/73). Walker's platform. Go on Puu Mahoe fork off Highway 31 after Ulupalakua Ranch and old school, past Puu Mahoe to 1st residential district. Here there is a road on the right that goes to Kanaio Church. Take the road and park at the church, then walk -700-800m due W of church to the site--at the same elevation as the church. Leased by Ulupalakua Ranch. Vegetation includes koa haole, lantana, yellow poppies, and Apples of Sodom bush. Cleared, roughly leveled with paving, 1 short wall and a stone-lined pit. Not very impressive. No visible uprights. Nat. reg. 12/90.(DLNR Files)

Papapoanui: A heiau in Kanaio, also called Papaoakane (?) or Papapoanui O Kane(?).

Lit.= unknown. Then comes the heiau Papapoanui or Kane. Pa= an enclosure. Paanui is mauka of these Kanaio sites.(Ashdown:14)

Pepehunui/Pepehinui: An 'ili in Kanaio.

Lit.= pepehi= to beat, strike, pound, kill//surface of tapa beater, sometimes the beater was so called.

LCA test: #3784 (Ohule): Section 4--pasture in Pepehunui 'ili. No specific testimony.(1)

LCA test: #3784B (Puupuu): Section 3--pasture in Pepehunui 'ili. No specific testimony.(1)

LCA test: #5274 (Kaawaapahulu): No specific sections, all listed as Kaimalo 'ili-- At Pepehuni are 6 *moku mau'u* ... (3)

LCA test: #5278 (Kainoa): Section 1--pasture in Pepehuni 'ili. ... at Pepehuni, 3 *moku* of Irish potatoes.(4)

LCA test: #5403 (Mai): Section 4--pasture in Pepehuni 'ili. Section 5--pasture in Pepehuni 'ili. Section 6--pasture in Pepehuni 'ili. At Pepehuni are 4 cultivated *moku mau 'u*, a *mala* of gourd, a *mala* of sugar cane, a *mala* of taro and another *mala* of sugar cane.(5)(LCA Testimony)

Pi: A fishing ground in Lualailua.

Lit.= unknown. Lualailua Fishing Grounds. Lualailua is the Ahupuaa. Pi is the fishing ground, and its landmark is located at Kipahulu. When Punalena is in direct line with the depression on Ka-Iae-o-ka-ilio, it is there, at the same place, where Kiele is located. The main landmark is Hekilipahi [Hikilipahi in Hawaiian text]. It is a 120 fathoms deep.(Sterling:10)[Note--see Kiele]

Pi'ilani Bay: Named after chief Pi'ilani.

Lit.= unknown. Heiau Ho-2 [BI-31] Makai of Piilani Bay, -200'. Houses of Kanaio village almost directly above on the hill. Terraced platform built into a rocky hill. Faces mauka, ~7' high. Makai side is a natural hill. Nearby is abandoned house lots of fairly recent times. Old trail (see 1929 Map) must come through here.(Sterling:2)

PimoelPu'u Pi'imoe: A cinder cone in Kanaio.

Lit.= where Pele dug a pit.(Sterling) Pimoe= Where Pele dug a pit. Has kukui nuts from the grove of Lanikaula (Molokai). This became a second grove also called Lanikaula.(Sterling:1)

5 major lava flows= Ke-o-ne-hu-no; Kau-ma-hi-na; Kalua 'Olapa; Makua; Pimoe. Several unlisted, 1 is Wai-ola flow where beautiful water springs named Wai-o-kailio (water of the dog of Pele) still flow.(Ashdown:12)

Pu'u Pi'imoe= The hill where Pele went inland to "climb to sleep". 'Olapa is associated with the death of King Kekaulike of Maui (died 1736). Makua flow is the oldest.(Ashdown:12)

Pu'u Pi'imoe, where Pele went inland to sleep, is a burial place. Not only the "5 coffins", but much earlier hiding places.(Ashdown:13)

Pohakea: A hill near Pi'imoe.

Lit.= 'Sacred Sand'(Ashdown) white stone--poha short for pohaku. Hill east of Pimoe was called Pohakea (Suspended Sand). 7 coffins found there.(Sterling:1)

Pohakupaea/Pohaku Pa'ea: Islet at North side of La Perouse bay. Islet (.18 acres, 40' elevation), Makena quad, Maui.

Lit.= stone that lands [ashore]. Pohaku Pa'ea in the sea is the lower part of the man's body, and Pohaku Po'okanaka up near Pu'u Mahoe are the man, Pa'ea, of the Pele legend which puts the Pa'ea flow as the very final eruption, said to have occurred in 1736 when Pa'ea Kamehameha I was born and his grandfather, King Kekaulike, died. Pele went to Moku Hawai'i as his Tutu 'Aumakua and he could stop a lava flow by tossing some of his hair into it.(Ashdown:13)

Pohaku'ula'ula: A place above Pu'u Mahoe.

Lit.= Red stone. He ['Ele'io] went from Kekaha, turned to the leeward side of Maui and arrived at Honua'ula where he met a female spirit, Kelekeleiokaula. The woman whose name was Kelekeleiokaula was a virgin who had not known man. She had sickened and died and so he spirit went to meet 'Ele'io at Pohaku-'ula'ula. This place lies directly above Pu'umahoe in Honua'ula... After their conversation on the resting ground of Pohaku-'ula'ula, the spirit of Kelekeleiokaula accompanied him as far as the trail leading to her home and that of her parents.(Sterling:4)

Puki: A fishing ground landmark..

Lit.= puki= a carrying net// to check, curb, pull back.

Punalena: A fishing ground landmark.

Lit.= unknown.

Pu'u MahoelPu'umahoe/Na-pu'u-mahoe: A cinder cone in Kalihi near Kanaio. Hills in Makena and Na-hiku quads, East Maui. The last lava flow from Hale-a-ka-la (about 1790) came from the Makena hill at an altitude of 1,550'. It is believed that the flow was caused by Pele, who appeared incognito to a family and demanded a chicken; they refused, saying they had vowed it to Pele. Angry nevertheless, she turned the woman and the daughter into stone, said to be visible now. The husband and his small son ran to the sea, but Pele followed them and turned them into stones in the sea.

A Hawaiian Legend of a Terrible War Between Pele-of-the-eternal-fires and Waka-of-the-Shadowy-Waters. At Kapahuu, in Kipahulu, the lava went on a slant below Ke'aha_oa from Hale-a-ka-Ia to Lualailua, and made 2 mounds, called Na-pu'u-mahoe (Twin-hills), that remain to this day. Above these mounds was the first long trail connecting noted places and between

these mounds is the new government road being used now.(Sterling:10)

Lit.= twin hill.

Pu'uonole: A place beyond Kanaio. A cinder cone in Haleakala.

Lit.= weak hill ... [from The Story of Kihapiilani] They passed Kanaio reaching Puuonole where they tread the famous lava of Kuanunu ... After a little while they went on to Auwahi...(Sterling:4)

Puwai: A fishing ground landmark.

Lit.= unknown.

Uliuli village: unknown.

Lit.= uliuli= same as uli= any dark color (deep blue of sea, green of vegetation, etc.)//a kind of rock adzes made from//name of a star (unknown)

Location= Village site of Uliuli located near the point of Kahawaihapapa. Description= 21 sites of different kinds counted here, 11 identified as house sites. Several large enclosures with low walls, and house platforms inside measuring 25'x15'. May have been homes of chiefs, or 1 or 2 may have served as heiau as no definite heiau structures seen in this region. A well built koa stands on the point a few feet back from the shore, measures 35' long x 10' wide, but end instead of side is toward the sea. Platform 3' high with large stones set on edge forming its borders. Top fairly smooth with pebbles and flat stones. 2 pits on top and South end raised into a pile. At South end is low terrace which serves as a step platform. Another one is built at the South West corner and has a long gray sandy-looking stone across the top where it joins the main platform. This suggests the stone "Lohe" mentioned by Emory at the Kula heiau at Kaunolu on Lanai. Coral is strewn only on these 2 step platforms. The ruins of the old windmill pump and trough may still be seen, but the large square stone base on which the windmill stood should not be mistaken for a heiau structure. 150' North of the windmill is a great hole in the ground which is the entrance to a lava tube, in which under the windmill is the spring of fresh water which has the name Waiailio. The story is told of an old woman who lived a mile or so from shore who had a little dog that often used to disappear and then come back wet and muddy. As there was no water near her house the woman became curious and decided to watch where her dog went to find the water. She noticed that the dog disappeared into a small hole in the rocks, and attempting to follow she found herself in a large tunnel which led down to the shore. By following it she finally found the spring. The story does not seem so fanciful after one has seen the tube. It appears to extend indefinitely off toward the mountain, but was only followed seaward to the spring. as there are houses with stone walls and part of the timbers are still in place, it is not surprising to learn from Kaupo natives that this village had been inhabited till 35 years ago.

Salt from the sea spray collects in small pools on top of the rocks near the spring, and the spot was often visited by natives from distant places in order to procure the salt. Elsewhere, as at Nu'u, salt pans were made by making shallow depressions in large boulders.(Sterling:4-5)

'Ulupalakua: A place in Papa' anui. Settlement and ranch, Makena quad, Maui.

Lit.= breadfruit ripening [on] back [of carriers]. "Ulu"= breadfruit, to nurture the mind with food; "pala"= ripe; "kua"= back.

Image of the breadfruit coming to full ripeness while being carried on the back.(Ashdown:12)

Waha: An 'ili in Kanaio.

Lit.= waha= mouth//opening//inner surface of a bow//open top of a canoe//oral//talk too much.

Wahene: A place.

Lit.= unknown. Site 50-14-1001= Wahene Platform: (Connolly 7/20/73). Walker site #? pg. 263 listed as heiau or burial site. Presence of post holes in platform suggest a house site instead. Go to the coast as per 14-1002, continue .2 mile beyond site 14-1002.

1001 is on the seaward side of the jeep road. It is a rectangular platform 18m x 8m on a lava flow, 250m N of ocean. Nat. reg. 12/90.(DLNR Files)

Waiailio village: unknown.

Lit.= unknown.

Waiailio village #2 Location= On shore at foot of Kanaio trail. Description= 15 house sites, pens, canoe sheds and other enclosures. There is the only example of a stone house with a grass roof still in place (picture, see ms). Built close to the water's edge on platform 3' high, 25'x40'. House is 15'x30', 5' high, 3' thick. Edges of ratters rest on top of the wall, ridgepole is 10.5'

from the ground. Shells, coral and pebbles litter the platform. The door is only 4.5' high. Recent occupation (nails, bottles and trash)-- also rotten poi-pounding board and outrigger. Beams in the roof were nailed, not lashed. Original owner Kalani Paho (died recently) but the house represents the type probably common in windy Kahikinui. Well of brackish water near the house. Neighboring enclosure possibly for canoe. On trail up to Kanaio 12 house sites seen, located on grassy bench among the lava flows, and several cultivation patches (potato likely). (Sterling:2)

Waialio Village Sites. Waialio is the name given to the village at the foot of Lualailua trail. 27 sites were seen, 15 of them house sites, but no heiau structure. 140 house sites in all were seen in a stretch of 6 miles, from Manawainui Gulch to the foot of Lualailua trail. Assuming 6 persons to a house would give a population of 840 for this section of Maui. On the Kula Trail small village sites were found closely grouped in the vicinity of the heiaus. The house sites were not so elaborate or so large as those near the shore. Stone enclosures formed the basis of most of the houses, and similar smaller enclosures were pig or goat pens. In the rough country near Lualailua Hills certain structures were seen which may have been house sites or sites for some other purpose. On the edge of certain flattopped hills a stone facing had been built evidently to form a crude terrace 4-5' high. The structure at Kaulaula, 1/4 mile East of the cabin on the Kula trail is a double terraced hill 37' long. It is built of rough basalt blocks but does not extend back more than 6' from the edge. Coral was found on site and also chips and flakes of a fine-grained basalt such as is used for adzes. It was suggested by the guide, J. Burns, that trees for canoes were felled and roughly shaped here, as the forest formerly extended down much further than it does now. North of Lualailua Hills at the place where the trail comes up from the South East is a small village of 5 house sites and the small heiau described as Site 182. All were of rough basalt blocks. Small piles of stone nearby indicated potato patches, the only crop besides melons and gourds which can be grown in such rough country. Along the Shore Trail are scattered house sites and villages. 5 house sites were seen just West of Waialio at the foot of the Lualailua trail. (Sterling:9-10)

Site 50-14-1481= Kanaio Waialio Complex: (Hommon? 8/-/73) On the coast makai of Hoapili Trail. B.M. site #BI-39, Walker Waialio Village #2. "26 features densely distributed on the coast." "...a complex consisting of 35 features in a 144 acre (~120m x 120m) area. Canoe shed noted by Sterling (1962)." Name of complex "Kanaio Waialio, according to William Kauai Jr. of Ulupalakua. Located E of Alaha

complex (50-14-1002), W. of Makee complex (50-14-1472) and SE of Pimoe cone. Most features on barren a'ua lava around and within small, steep-sided depression (-38 x 22m) that opens on the shore. Sparse vegetation--includes kiawe, lantana, sisal and a few native plants [unspecified]. From highway turn S through locked gate NW of Hokukano cone (obtain key from Ulupalakua Ranch). Follow jeep road that goes around base of cone (E side) to shore at Makee complex (14-1472)--distance ~3.3 miles. Then turn right (W) to end of jeep road at complex, 1.4 miles from Makee complex. Surface midden in 22 features. Features unusually densely concentrated. 2 house platforms--includes Walker's thatched roof (Photo at BM, xerox at H.Sites). Also well, enclosures, trails, walls, platforms, canoe shed, salt pans. Nat. Reg. site 12/90.

Site 50-14-1165= Waialio Complex: (Connolly 8/14/73). Just across ahupua'a boundary in Lualailua Hills. On the coast is Waialio Village #1, on the coast W of A37-4, and E by a bay of Ninalii Point. The village site contains enclosures, platforms, a canoe shed and terraces. It is located 8 miles beyond the junction of Highways 37 & 31, there is a seaward dirt road, get key from Mel Landes (lives in Kula). Follow jeep road to the coast, turn W, continue ~1 mile. At the foot of the lowlands below Lualailua Hills at the shore. Covers 36 hectares. 19 features, no visible religious sites. Nat. Reg. site (12190).

50-15-1165= Waialio Complex: (Connolly 8/14/73). Village site with enclosures, platforms, canoe shed and terraces. Visited by Sterling 1963. Go on Hwy 318

miles beyond junction of Hwy 31 & 37 to seaward dirt road to locked gate (get key from Mel Landes of Kula). Follow road to coast; turn W and continue 1 mile. Site at foot of sloping lowlands below Lualailua Hills at the shore. Kiawe, lantana, sisal & an undetermined species of short grass. Site covers 36 hectares. 19 features--rectangular enclosures, terraces, walls, canoe sheds, platforms, C-shape enclosure. Midden (shell) present, also glass & pottery. No visible religious structures. (DLNR Files)

Waiaka'ilio: Spring in Honua'ula.

Lit.= water of the dog of Pele (Ashdown). See Wai-ola for details (Ashdown: 12).

Waiakapuhi: point in Kanaio. Islet (.1 acres, 40 foot elevation), Maka-wao, Maui.

Lit.= water [used] by the eel. Site 50-14-1800= 'Waiakapuhi': (Hommon 12/5/77). On the coast near Waiakapuhi. "Primarily platforms/terraces, of a'a chunks. Well-built and very well-preserved. "...agricultural terraces, walkways, platforms--very nice from helo photos (originally located by tour helicopter pilot who saw vandals at site). Nat. Register site. (12/90) (DLNR Files)

Waihou Springs: unknown.

Lit.= new water.

Wailea: Land area, Makena quad, Maui.

Lit.= water of Lea (canoe maker's goddess).

Waiola/Wai ola: Lava flow in Honua'ula.

Lit.= water [of] life. Several unlisted [lava flows], 1 is Wai-ola flow where beautiful water springs named Wai-o-ka-ilio (water of the dog of Pele) still flow.(Ashdown:12)

Wai ola Flow takes its name from the story: All Honua'ula (the Sacred Land/Earth of Maui), from Nu'u-Wai'u to and including Pae-ahu, and from beach to mountain summit. The Ali'i liked to dwell in Honua'ula--the final one I know about was Queen Kalola (daughter of King Kekaulike and sister to King Kahekili of Maui who died in 1794). Kalola was the last one to pronounce the sacred 'Kapu of the Burning Sun' of only the Maui ali'i (in 1790) in response to the Olowalu Massacre by S. Metcalf. Today the Wai-a-ka-ilio supplies water to be pumped clear to Luala'ilua and the "Kahikinui House" built by Antone Pico in the mid 1830's. It was used by Ulupalakua Ranch but is now leased to AMFAC for ranching.(Ashdown:12)

APPENDIX VIII

CONTEMPORARY ARTICLES AND INTERVIEWS

SAM PO INTERVIEWS AND ANALYSIS

The Sam Po information that follows was the result of interest pursued by Peter Chapman during his archaeological research in the Kahikinui area. In his desire to put the archaeological sites into interpretive context he contacted Sam Po as a knowledgeable lifelong resident of this section of Maui. While Sam was not apparently willing to assist in the area of Chapman's research he was more than willing to part with any information on the only area he felt competent to discuss, that being the Kanaio-A'uahi area. As noted in the text he felt that it was inappropriate that he discuss areas of which he was not a resident, and so these interviews stand as a remarkable legacy about which Sam Po is our sole major informant. After P. Chapman's initial interviews, conducted with Elspeth Sterling in 1966, Mary Pukui and Eleanor Williamson conducted a further series of interviews on related matters in 1968. Peter Chapman and Elspeth Sterling apparently kept in contact with Sam Po as a series of shorter question-and-answer sessions generated further information in 1967 and 1968. The interviews have been left in the chronological order of the dates during which they were collected.

July 5, 1966

Transcription of Interview with Sam Po, Senior, of 630 Kahana St., Paukukalo, Maui. Conducted by Peter Chapman with assistance of Mrs. E.P. Sterling & additions by Mrs. Po.

In order, abbreviations used: SP, PC, ES, MP

SP: Small names are not in the map.

PC: Even this map has more names than the ones you can buy in the store today. But still not enough. You and Charlie Aikala ...

SP: That's my cousin ... he working for George Carter ...

PC: He told about this Paena Point, and Wakalama, and some other names ... MP: Wakalani ...

PC: And some other names I had never heard before, ... so you fellows know them ...

SP: At the lighthouse .. you been the lighthouse? You seen the lighthouse, well from the lighthouse go over ... Now we tell that's Keawanaku...

PC: Keawanaku, that's where Charlie Aikala was growing up? Didn't he spend some time there?

SP: Noo ... after you hit Keawanaku, and then you hit Wawaloa. That's where my cousin was raised, at the bay where the kiawe [trees] and plenty stone wall.

PC: And the wells there? Not many places with water, otherwise.

SP: No. Get two, one for the animal: cow, horse, mule. That's below [west] of Paena, that's what my cousin told you.

PC: Now where is Paena? Is that the point? Here [on the map] is Keawanaku, then we go over the top to Wawaloa [Ray Bertram helps move the map onto the chair.] Is that the point out beyond Wawaloa?

SP: Okay, now you going up, towards Kaupo way [east]. This is Kalama ... MP: is mauka.

SP: Well, Papua's is only small name...

PC: That's just the kind we want...the small ones and the big.

SP: Well, between Wawaloa and Paena, that's Papua'a.

PC: Now what is Paena?

MP: Before you get to Papua' a, there's Pookohola ... [Actually, latter comes just east of former, not west].

SP: Paena is a bay...is a small bay, next Kalama.

MP: As you come from the lighthouse, that's Papali. He has skipped two, I think. Then Keawanaku, ... Where is that water call, where we used to stay fishing?

SP: Then between Wawaloa and Kalama, that's Paena then.

MP: P.A.E.N.A.

SP: And then before you leave Wawaloa, over there is Papua'a, and then Po'okohola, and then Paena. Each a little bay.

MP: Papua'a means pig pen.

SP: Then Paena, then Kalama, Kalapawai, Wakalani--where the old man's house, then Unalihi iti...

MP: You have to go slow, so he can get all those names ..

PC: ...

SP: When I stop, [dike? tight? tired?] already.

PC: Where we worked at Kalama, on the map it says there was a man long time ago, Pehano. At Kalama Bay there is quite a sink, where all the water would come, with lots of hala trees and milo...

SP: Yeah, yeah, that's the place, and makaloa [*Cyperus laevigatus*], to make leaf-mats ... and that water at Kalama, you cannot go in. If you go in, you drown: it's swampy ... and between Kalama, then hit Kalapawai, over there get one blowhole [between the two], that's Puhilele then.

PC: Then there's a well just on the other side [East of the blowhole], between Kalama and Kalapawai...lined and with some green stuff growing, and little red shrimp. Not on the beach, but a hundred yards or so from it.

SP: Kalapawai, that's the well...

PC: What does that mean ... rolled, rough?

MP: Well, I don't know very much Hawaiian.

SP: I can't translate right answer.

PC: Around Wakalani, there's the one nice big house up over the edge of the beach...

SP: Get two, one down on the flat, one on top the hill. Get stone wall.

PC: [Having Paena in mind, not Wakalani] Stone wall all round, and in the corner, there's a well, and inside a little house. A nice big yard, a well, good house. And they had some cotton growing, cotton bushes ...

SP: Yeah, that's where my grandfather stayed [at Paena, or at Wakalani? SP may have been misled by the switch of places, or may indeed mean Paena, because of the cotton] Get kiawe and cotton growing.

PC: What was his (grandfather's) name?

SP: That's between Kalapawai and Wawaloa, no Wakalani. PC: There's one tiny little bay there [actually Paena.]

SP: Yeah, got one cave. Topside of the cave, where that stone wall. PC: What's that little bay? Between Wakalani and...

SP: I forget already that name, a small name ... My grandfather's name is Kekahuna [Kekahona, Keka'ona?].

PC: And he lived in that little house?

SP: Well, that's where he go down see beach. In the olden times, when it rain down the beach, no rain up the mountain, all the people go down the beach, plant sweet potato, water melon, and pumpkin and all those down the beach. When they go down the beach, they carry dirt. Every stone got a little puka, they put the dirt in there and plant those.

PC: They carry the dirt down in a gourd?

SP: That's right, and plant the sweet potato, water melon, pumpkin. That's what they do. Some kind of vines.

PC: Then in a couple of months... [maturity of plants?]

SP: No more rain down the beach, up the mountain get rain, everybody go home up the mountain.

PC: Back and forth, eh? When some one family, they go down, do they always go down to the same place at the beach?

SP: That's right, the whole family go down that same beach. Each make their own stone wall, and put grass house, or lauhala (you know that weave hat?), they make their own.

PC: Then each family would have two houses?

SP: Plenty over there, one house up and one house the other side ... big stone wall, that's a big family.

PC: This is what we are trying to figure, where the wells and the water is, since there are so many houses down there ... but it must be, as you say, that they only went down when it rained, and then you could catch the rain in ...

SP: No, they have half water and half salt down the beach.

PC: But there are not too many wells ... was there more water before perhaps?

SP: You where get one stone wall up and one stone wall down the flat ... right next get one big well over there. When tidal wave fill up the hole, [now] nobody knows.

PC: Near this same place, where the cotton grows a little down [west], where there is a ko'a, there is a big hole just behind.

SP: That's the place, the tidal wave filled up about 9 or 10 feet deep. Hold enough water to support whole families.

PC: And then the salt gradually dries, and they can ... You can't water plants with too much brackish water, though.

SP: Noo ... you drink the water, sweet. Like you and I we cannot drink that water because [too salty]. But those people, they used to plenty of salt in it.

PC: Just a little more this side [west] of the place where the cotton is growing, there are a couple of stone platforms, not a house...

SP: Right there, that's the big puka. More you drink the water, more the water come. When we would first go down the beach, we didn't like that water, but after a little bit, then no trouble.

ES: What about the ahu in there? There are plenty.

SP: That's for in olden times, that's where they dry quilts: you know, each lady make their own blanket. And then when they wash, they make one foundation. And you think a heiau. But no, that's a place to dry blanket.

ES: Tapa, then. But then those round ahu, that are high.

SP: Oh, that kind. Not for boundary marking, but in older times, they put something in there for good luck, when they go out fishing. And then they mark on that, when they are out fishing. Yeah, you can see, and line up on two to know where you are. But that place in Kanaio, not too much. You go towards Kaupo side, between Kahikinui and Puu Lailua and Ka Ua Ula, and those places. Oh, good places. The people used to stay there before, I don't how many. That's the place where that German boy came here, and I walked with him [Walter Birgeman, 1934]. Eh, but he can walk. Only 2 papaya and lemon, go all day. Then we come home, my wife cook, and we eat heavy. He was collecting all those Hawaiian stuff ... not like today, with pocket knife, they used to make all their own tools. All that stuff you make with your hands.

ES: How about the heiau in there, do you know the name?

SP: In Kanaio, get one heiau, Kanaio up side. [not Kanaio Kai]

ES: How about that big stone wall, in back of where the cotton was growing, back up against the lava bluff ...

PC: With the walls about 10 feet high, and maybe inside 60 to 70 feet square.

SP: That's no heiau. See, before each king, maybe Kanaio and Ulupalakua side, they don't agree and make war, then maybe my side lose, then they put them [the dead] there and make one stone wall. A burial ground. Those times no more house for dead, like got now; just lay 'em and put stone wall.

PC: But this is walled around, high walls and nothing inside: no platforms, no houses. Not a corral?

MP: Could be a corral later, to keep their animals, but a long way to the water [wells at Wawaloa]

SP: For the goats, sometime they put sisal on top, the goat jump, no can come out. You come before my eyes all right, I can walk with you and tell you the names.

PC: Yes, we can go and find the places because they are still in good shape, but we do not know what place we're standing in: we don't know the name or the use, whether a house or corral: we don't have anybody else to ask. Then if we go over [east] a little bit from Kalani Kanaio and Kalapawai, just there are some very nice old platforms with black and white ilili. Now just next to these [B1-1/4] there are lots of low stone walls, quickly made and running across each other without much pattern ... Not house sites, but maybe walls for protection?

SP: Oh, yes, Wakalani, the other side that small little stone wall, one this side, one this side... that's where they dry fish each people get their own place [wall not for wind protection, but for dividing the area]. You know your place, don't go inside the other stone wall and pick up somebody else's fish.

MP: Just before you get to Wahane?

SP: No, just the hill go up the other side of Wakalani, there got plenty stone wall. The place we been hide the salt, and the name of the ahu on top, just there is Puu Lele. I think the salt still in there, that small little stone. We used to go fishing, half day nough, dry them on top the stones. The balance salt, we hide under the stone.

MP: Since the last time we went down, now about 26, 27 years. That is, my last time. He has been down, but hard for me.

SP: Yeab, I born and raised there, know all in and out that beach.

PC: When you get beyond [east of] Kalani Kanaio, then do you call it Pohakuloa, or Kapiala. Where there is a nice canoe shed on a grassy slope going right down to the water. And then right there starts the lava again.

SP: That's Kalua Kane, that, way over in the lava. That's a cliff during the WWII, soldiers put dynamite to make good bay, so that boats can come in easily.

PC: What's the name of the bay, and the area where there are some old structures back of the canoe shed, and in the flat under the kiawe trees on the east side of the bay. There are also some flat platform--or cleared areas in the midst of the lava flow: what were those used for? To spot schools of fish?

SP: No, that's for everybody sit down on top ..for dry the fish. They look fish.[section jumbled, drying fish=ES idea, but finished with SP saying for look fish=scouting platform?]

Sam Po Interview: Native Use of the Land

Vegetable: The *paha* or *ipu 'ala* of Sam Po's time was a melon with green stripes, which turned yellow between the stripes when it ripened. They were planted in gulches in an attempt to hide them because when they started to ripen they smelled quite sweet, tempting others to take them.

Cycle: In the days of Sam Po's grandmother during the latter half of the 19th century, the Hawaiians knew when it would start to rain, and they would walk down to the shore from the mountains about a month before the rains came. Carrying dirt down in *lauhala* baskets, they would fill holes in the lava in preparation for planting. They would subsist on various cucurbits grown in these pockets in the lava and nurtured by the rains while fishing activities were carried on. When the vegetables had matured and been consumed altogether, a period of about six months, the return journey to the mountains would be made.

The people fished and planted a little and went mauka when it got dry. On the journey down to the sea, Sam Po remembers that everyone including children always had to carry in some dirt in *lauhala* bags. This was used to fill holes in the lava in which they planted "Hawaiian" watennelon (*ipu ololo* and *ipu nubou-lani*--the latter with light and dark stripes), and pumpkin and *poha* or *ipu 'ala*, a very sweetsmelling melon.

Biography: Mrs. Sam Po signs herself as Minnie Kauhaa Po. She was born at Pukalani where the Tanizaki Store is. Her father came from Spain (carried by his mother) and was born in Kaupo. He was called Joseph La'anui by the Hawaiians. She has a photo of a nice-looking man, somewhat part-Hawaiian in looks.

Sam Po's grandparents were Kekahuna and his wife Kalama, who lived in a house near the shore at Wakalani. The house had an attached alcove at the SouthEast corner, and has been given the number BI-4. Nearby, the site cleared by Chapman and Kikuchi in 1966 was used by this couple as a *pakao* or goat pen, now numbered BI-18. Po recalls his Tutu was using the place up to about 1910, though he is not entirely sure.

Sam Po's grand-uncle Kalani-paha'a and his wife Pelekila built the hale pili at Wai Ilio, and were the parents of four sons: Palau, Kona-ai-moku, Ke-au-miki and Kualii. These would be his first cousins once removed in our terms.

Minnie is part Spanish, Sam is part Chinese. They are parents of 14, all but the youngest born at Kanaio. Asked his full name, he said Sam Kahikulani Po, and that Ka'uha'a had been added to his names later. [Mrs. Pukui was curious, but did not ask him the meanings, lest he take offense. Ka'uha'a means somewhat short in stature, and Kahikulani, the seventh ruler.].

Cycle: Planting could only be done after rains had fallen in the uplands. When the rains moved on to the lowlands, planting there followed with each family member taking large *lauhala* baskets of soil to pour into the hollows in the rocks. With them went the sweet potato slips to plant. Sam Po said "sweet potato leaf", but the Hawaiian term for a potato slip is *lau*.

Vegetable: Mrs. Pukui writes: "Sam Po told us that this area of Maui was too dry for taro growing, so the people subsisted on sweet potatoes and pumpkins which they grew themselves. Planting could only be done after rains had fallen in the uplands. When the rains moved on to the lowlands, planting there followed with each family taking large *lauhala* baskets of soil to pour into the hollows in the rocks. With them went the sweet potato slips to plant.

"They also grew gourds but he could not remember the names of the various kinds; only how they were prepared to be used as food containers. He mentioned a thickshelled variety called *nubolani* that did not have the typical gourd odor. The *ipu 'awa'awa maoli* gourd did have this odor. By the use of one word *maoli*, I guessed that it was to distinguish it from one that was not [indigenous or native]. *Nubolani* (New Holland) might have been an introduction at some time and forgotten as such.

"The native gourds when ready to be made into containers, were cut, seeds removed, and filled with sea water. When this lining softened, it was rubbed off with a kind of coral until only the shell remained. The soaking with sea water continued till no trace of gourd odor remained. We, of Ka'u, did the same with gourds, but I do not remember hearing of carrying soil to the lowlands near the shores for sweet potato planting. We did watch for the *kuana mua* (first shower) and *kuana hope* (second shower) to plant potatoes.

"Some of our potato names were identical with those planted in Kanaio, and some were not. The identical ones were *pikonui*, *pu* and *huamoa*. Those that varied were from Hawaii to Maui [respectively] were *mohihi-belemalie*, *likolehua-lahaina*, and , *awapuhi-kanau*. I had never heard of *unahi-uhu*, *malapa*, and *piulakaumaka*. The introduced yam they called *kane'obe* because it came from

there [on Oahu's North Shore].

"Sweet potatoes were the staple of this whole area from *mauka* to *makai*. They depended on brackish water when on the shores and springs inside and outside of caves inland. They grew their own tobacco."

Fishing: Mrs. Pukui writes: "Cloud observation was not done in [Sam] Po's boyhood, but moon phases and stars were [observed]. When the latter looked numerous and bright, that was the time to go to look for such shellfish and *kaupē'e* (*Nerita polita*) and other kinds that hide by day. Care was taken not to rustle or rattle the stones lest the shellfish drop and burrow to hide themselves. 'What nights were they?', I asked Po. 'Too long ago, I do not remember now.'"

Salt: Mrs Pukui writes: "When summer came, the hollow stones along the shores whiten with salt which could be seen from a distance. The sun evaporated the water in the hollows leaving salt. This brought people from the upland to gather salt for the year's supply. Salt had to be thoroughly dried before storing most of it in dry caves until needed. Wet salt carried on the shoulder caused an irritation on the skin. Even the skins of the *piula* [mules] burned and smarted from the moisture left in the salt."

Fishing: Mrs Pukui writes: "[Sam Po said that] salt gathering was also *manini* spawning time and they would be in the sea pools by the thousands. The transparent ones were the tastiest and the dark skinned ones were not, so they mixed them together in equal proportions when eating so that there would not be too much of the dark ones."

These would be the *manini* ' *olua-liko* mixed with either the *manini* ' *olua-pala-pohaku* or the ' *olua-ha'eka'eka*, the latter having begun to nibble at fine seaweed, causing their skins to begin to darken (Titcomb 1952, pp. 91).

Biography: Mrs. Pukui writes: "Sam Po told us that he was the oldest and only child of his father. His mother took a second husband, Po'ai-puni, by when she had more children. They were born in Kanaio. Sam Po married and lived with his wife in the same place. 13 of their children were born here and 1, the youngest, was born elsewhere. Four died, and were laid to rest here."

Place Name: Mrs. Pukui writes: "I asked whether the story [were true] about the carrying of breadfruit on the backs of men from a great distance, [which allowed it to ripen] on the backs, hence 'Ulupalakua, the name of the Ranch. 'True!!, he said, and added a riddle: *ku'u 'ulu pala ke kua* (my breadfruit that ripened on the back), now shortened to 'Ulupalakua.

"[He said] the place called Kipapa on the map is incorrect. My people knew it as *Papaula* (lobster-reef) and is a good place for ' *opibi* and lobster to this day." The parenthetical translation may well be Mrs. Pukui's own, as Mr. Po later told us that the place was Papa'ula, meaning red reef, from the occasions when low tides would allow the red seaweed to dry and be visible.

Vegetation: Mrs. Pukui writes: "Noticing many ' *inia* [pride of India, *Melia azedarach*] and camphor trees, I asked [Sam Po] about them. I knew that both were introduced but what did the Hawaiians do with them? Pieces of camphor bark were put in clothes chests to impact the fragrance and the ' *inia* wood made for saddles, *poi* and meat boards, and the leaves bailed to cleanse and heal skin eruptions."

Place Name: Mrs. Pukui writes: "Near where we stood [around ke-akua-muki and Po'okanaka] on, and in Kalalea, is a spot called Pahu'ai (*poi* barrel). This is not an old name; but one used when that area was still well-populated. Here, *poi* markers left the barrels of *poi* ordered from them. Then somebody from the various families would come for their *poi* barrel and after emptying and washing, return the barrel to Pahu'ai. Sam Po told us that this area of Maui was too dry for taro growing, so the people subsisted on sweet potatoes and pumpkins."

Vegetation: In response to questions put to Mrs. Pukui, Mrs. Williamson made the following notes: the *ipu anbolani* (literally New Holland melon) a melon with dark and light streaked rind. The *ipu'ala*--musk melon. I have seen some smooth skinned streaked ones when I was a child. Both of these are introduced.

Fishing: Mrs. Williamson continues (see above): The *humuhumu*, the mullet and the *abolehole* were all considered a pig, or *pua'a*, in that they were used as substitute for pig in religious ceremonies. The needle fish is ' *aba*--perhaps / *ca'aba* is a kind of humuhumu, for that is the "sea pig" with the rough skin.

Extracts from Pukui and Williamson, 1966: 1-12

Sam Po Biography: Relatives

Just beyond Makena we turned down a bouncing trail to a house enclosed by a stone wall. In the yard were fruit trees, blooming plumerias and browsing cattle. "Ah, my home town!", exclaimed Mr. Po. Just a little way on the seaward side stands "Honua'ula", the Kanaio Congregational Church.

Ahead of us [to the NorthEast of Kanaio Church], on both side of the road, were 2 rock pillars. The one on the seaward side bears the name of Pohaku-'ula'ula, where the piko (umbilical cords) of babies were hidden. Here all those of the Po family, for generations, were placed for safety. "No good for 'iole [rats] to get them, make thieves of children," said Sam Po. The stone is of the sort called 'eleku [coarse vesicular basalt (Pukui & Elbert, 1965:38)].

I listened with interest as I detected the constant appearance of "t" in his speech instead of "k". His exclamation of interest, approval or amazement was "Sa!" and of disapproval, was "Chah!"

We met Mr. and Mrs. Samuel Po at their home [630 Kailana St.] in Paukukalo. A pair of very gracious people. They told us that she is mixed with Spanish, and he with Chinese. Sam Po was born in Kanaio and loves the land of his birth, "my home town," as he calls it.

Asked what his full name is, he replied, "Sam Ka-hiku-Iani Po," and that Ka-'uha'a was added to his names later. The names roused my curiosity, but I did not ask lest he take offense. Ka-'uha'a means "somewhat short in stature" and Ka-hiku-Iani, "seventh ruler". Mrs. Po had called Napua Stevens to ask the meaning of the latter name, and to answer her question, I asked her to count the Kings of Hawaii from Kamehameha I to Kalakaua. When she said "seven," I told her that was the answer. It was an inoa po [a name for an infant believed received in a dream, which could prevent the child being sickly, (Pukui & Elbert, 1965:95)], given prior to the birth of her husband, Sam Po.

Sam Po told us that he was the oldest and only child [I] of his father. His mother took a second husband, Po'ai-puni, by whom she had more children. They were born in Kanaio. Sam Po married and lived with his wife in the same place. Lu'au was the son of his mother's brother, a man who tried to grow bananas in the same way as that of Po's tutu Kapiioha [see below], but not knowing the planting prayers, his bananas turned out puny.

Po said that his tutu Kapiioho used to plant bananas at high noon, wearing no clothing at all. He would tell his wife to keep the children in the house, so they would not interfere with his work. He liked the 'aki'ula [not in Handy 1940, Neal 1965, or Pukui & Elbert 1965], a variety shorter than the popo'ulu [mai'a-popo'ulu, short green trunk, fruit rounded and yellow, flesh salmon-pink; edible raw, preferred baked, one of two varieties not taboo to women in old times; root of young plants used medicinally] (Pukui & Elbert, 1965:205), when his bore fruit, they were in immense bunches.

Po said that his tutu Kapiioho used to plant bananas at high noon, wearing no clothing at all. He would tell his wife to keep the children in the house, so they would not interfere with his work. He liked the 'aki'ula [not in Handy 1940, Neal 1965, or Pukui & Elbert 1965], a variety shorter than the popo'ulu [mai'a-popo'ulu, short green trunk, fruit rounded and yellow, flesh salmon-pink; edible raw, preferred baked, one of two varieties not taboo to women in old times; root of young plants used medicinally] (Pukui & Elbert, 1965:205)], and when his bore fruit, they were in immense bunches.

His tutu [the same?] named Wakalani, at Kanaio beach [see Map 5], where there are numerous stone walls. His tutu had two shacks, one down on level ground [BI-4?] and one up on a mound [B 1-1?] which was a fish-observing place. When fishermen returned from the deep sea, they could be spotted from this place, and a call would go out that so-and-so was coming and to bring the vegetable food for the fisherman.

Mrs. Po's mother had a [cloth] quilt called Nani-o-Hilo [pride of India, *Melia azedarach*, (Pukui & Elbert, 1965:94)], for the foundation, and sewed the leather parts with strips of prepared goat hide.

Sam Po and his wife are the parents of 14 children, 13 born in Kanaio and the youngest away. Four died, and were laid to rest in Kanaio.

Sam Po: Biography= life history

Sam Po's education lasted only three months, at a place named Pamano for the man whose uncle destroyed him: there are two caves there, Ala-Io'ihii and Ala-poepoe, one higher than the other. The lower cave was for those in the lower grade and the higher for the upper grade. All lessons were in Hawaiian and the rules were as strict as those of any hula school (halau hula). They were not permitted to clap two stones together, nor to gaze at their own reflections in the water, and many more restrictions. He walked three miles each way from home to school, and wore the same shirt and pants for the whole week. Most of them had a very skimpy wardrobe because there was no money. It was for that reason that he had to quit school and go to work the whole day for a wage of only 50 cents.

We commented on the dryness of the area and Po said that when it was very dry, they were cautioned about matches and cigarettes.

Once a stranger came there, and was careless with cigars. The dry grasses caught fire, which burned over several hills. For several

years, after that, nobody bought charcoal. They obtained it from the trees that burned down in that fire. Charles Wilcox [Maui County auditor?, see Thrum, 1926:80; 1927:33], Sam said, was a courageous soldier who trained the men under him to notice how a gun was pointed so that they could duck, dodge, lift a leg a bullet pass, etc. "Best thing in Maui, the roads", said Sam. He and his friend John Haili, of Ka'u, Hawaii, built the road from Nianiau to Hale-a-ka-la. Looking toward Kahoolawe, Po mentioned a cowboy there when Angus McPhee [father of Inez Ashdown] and Mr. Baldwin had a ranch there. No crops, but plenty of sea foods. When no boats came, they suffered, depending on the regular arrivals for supplies. Sam Po remembered a number of the pastors of the Kanaio Church, called "Honua'ula".

During the time of Moses Ka-hiapo, every relative of the Po's was an active member of the church. Then one Christmas, he thought of giving gifts to the children. It was a memorable occasion for all, but Guy Goodness took him to task for it, which made Moses withdraw from the Church. Gradually all of Po's relatives also withdrew, until the Church stood empty. Sam Po later joined the Mormons, but when they discontinued the use of the Hawaiian language, he also discontinued his affiliation with them.

Sam Po 2-Day Interview

Field Trip to Makawao, Ulupalakua, Kanaio, Makena, Kihei--Maui.

M. Kawena Pukui and E. Williamson, July 27-31, 1966.

Notes typed by EW at Dowsett 8/8/66, largely from MKP writings.

July 27, 1966

(Following by EW)--Johanna Wilcox arranged to meet us at Kahului Airport upon our arrival. Her cousin Abner Delima, worked for the FAA at Kahului Airport. He took a few moments to offer his kokua in our quest for information on the area surrounding Kanaio. Delima is a native of Makena and knew the area from Mauka Ulupalakua down to the shore at Makena. Abner most cooperative and suggested several names of people who knew the area better than he did. When I said that Mr. & Mrs. Sam Po, now living at Paukukalo had been contacted by Peter Chapman of the Bishop Museum, Delima agreed that we could have no one better for the Kanaio area..

July 28, 1966

After breakfast, we met Mr. & Mrs. Samuel Po at their home in Paukukalo...

The Pos and I sat in the back seat, and the others in front with Elmer driving. I asked Mr. Po where La Perouse is, and he replied laughingly, "Hawaiian no got La-paroo, from where that kind name? The right name, Ke-one-o'io (Beach-of-the-bonefish) because plenty 'o'io there, before. Good place for catch 'o'io."

All the way he kept praising the road, "Best thing in Maui, the roads." He and his good friend, John Haili, of Ka'u, Hawaii, built the road from Nianiau to Hale-a-ka-la.

He would not mention the places we were passing, saying, "my old folks told me never to talk about places outside of one's own native district. One should only tell of his own native district, and be honest and truthful in telling it."

After staring at me for a while, he remarked "At first glance, I took you for a Haole, but after listening to your speech, I know that you are Hawaiian." I assured him that although I am half Hawaiian and half Haole, the Hawaiian half is twice as large as the Haole one--which is very true. He peered out of the car and remarked "Ua hamama O luna--(Open above), to which I replied, "A'ohe kau ao"--(No cloud rests above). It was true, for nary a cloud was seen and we knew that these will be no rain. I asked him whether naio trees grew at Ka-naio, and his answer was, "None, but mamane, kauila and nioi." By nioi, he was not referring to chili peppers but to a tree of the Eugenia species.

Looking seaward he said to EW who was studying a map, "The place called Kipapa in the map is incorrect. My people knew it as Papa-ula (Lobster-reef) and is a good place for 'opihi and lobster (ula) to this day. EW asked him what his full name was....

When we arrived at Ulupalakua, I asked whether the story I heard about the carrying of breadfruit...

Po pointed to a place makai of the road we were travelling and said, "That is Ke'eke'chia, the site of the McKee cemetery." I recalled reading about Kalakaua's friendship for Mr. McKee, called Kapena Ki or Captain Ki, by the Hawaiians.

We stopped at the post office where we were introduced to the son of Ikuwa Purdy, Hawaiian Champion Cowboy in Wyoming. This Purdy's son and grandson follow in the footsteps of their grandfolds before them cow-punchers.

There are two churches at 'Ulupalakua, one Saint James is Catholic. Next to the Protestant Church is a school house no longer in use.

We rode on, and at a marker on the mauka side of the road, Sam Po asked Elmer to stop. “O Po’o-kanaka keia.” (This is Po’okanaka-man’s head). He pointed to a rounded stone in front of the marker and said, “Aia ke po’o na Kanaka nei lai” (There is the head of that man), who was turned to stone face down. Long ago, Pele came this way and found a couple with a fine flock of chickens. She asked for one--just one chicken--but the man utterly refused to comply with her request.

His wife took him aside and said “We have so many, why not let her have the one she wants?” “No” he replied, then returning to the stranger who asked, he said, “My answer is no.” “Very well,” she replied, “I will go now, but I am sending someone else to visit you.” A few days later, she kept her promise, and the someone else she was to send was a flow of lava. The two fled for their lives, and before it caught up with him, he cried out to his wife, “Run to the sea and swim out into the water.” With this, he fell face down and was overwhelmed with fire. The rounded stone, which was the back of his head, remains to this day. His wife turned to run seaward and did reach the sea but not far enough to escape Pele’s wrath. She was turned into the stone, Pohaku-Pa’ea, which Pele, herself named.

In 1951, Rev. George Ka-ua-’ula-leua decided to break the Po’o-kanaka rock into pieces, but all of his attempts to break it failed. He became insane and later committed suicide by stabbing himself...

We went a little way beyond to Ke-akua-muki, where we got out and EW recorded in the warm sunlight.

Makai of where we were, Sam pointed out Pu’u-naio, and the small hill, Ka-lua-lapa, (the active-pit). Here Pele dug on her first arrival on Maui. The names Pu’u-naio and Ka-naio have my curiosity whetted, and I still wonder whether naio trees (bastard sandalwood) ever grew here at one time. I can not imagine the other naio (pinworms in dung or rectum) as being on a hill! [But in the taro from here? Pukui & Elbert HawD:239]

Beyond the cinder digging place, Sam Po refused to go. “No can,” he declared, “by-mby broke da ka’a, auwe! pilikia! Mo’ bettah da jeep,” so we decided to do accordingly, for he knows his homeland better than we. Near where we stood, on, and in, Kalalea, is a spot called Pahu’ ai (Poi barrel). This is not an old name but one used when that area was still well populated. Here, poi makers left the barrels of poi ordered from them. Then somebody from the various families would come for their poi barrel and after emptying and washing, return the barrel to Pahu’ ai. Sam Po told us that this area of Maui was too dry for taro growing, so the people subsisted on sweet potatoes and pumpkins which they grew themselves. Planting could only be done after rains had fallen in the uplands. When the rains moved on to the lowlands, planting there followed with each family taking large lauhala baskets of soil to pour into the hollows in the rocks. With them went the sweet potato slips to plant. He said, “sweet potato leaf” which was probably recorded but the Hawaiian term of a potato slip is *lau*. They also grew gourds but Po could not remember the names of the various kinds; only how they were prepared to be used as food containers. He mentioned a thick shelled variety called Nuholani that did not have the typical gourd odor. The ipu ‘awa’awa maoli (gourd) did have. By the use of the word, *maoli*, I guessed that it was to distinguish it from one that was not, and Nuholani (New Holland) might have been an introduction at some time and forgotten as such. The native gourds when ready to be made into containers, were cut, seeds removed, and filled with sea water. When the lining softened, it was rubbed off with a kind of coral until only the shell remained. The soaking with sea water continued till no trace of gourd odor remained.

We, of Ka’u, did the same way with gourds, but I do not remember hearing of carrying soil to the lowlands near the shores for sweet potato planting. We did watch for the kuana mua (first shower) and kuana hope (second shower) to plant potatoes.

Some of our potato names were identical with those planted in Ka-naio, and some were not. The identical ones were piko-nui, pu and hua-moa. Those that varied were:

Hawaii	Maui
Mohihi	Hele-malie
Liko-lehua	Lahaina
‘Awapuhi	Kawau

I had never heard of ‘unahi-uhu, mapala and piula-kau-maka. The introduced yam, they call Kane’ohe because it came from there.

Sweet potatoes were the staple of this whole area from ma uka to ma kai. They depended on brackish water when on the slopes and on springs inside and outside of caves, inland. They grew their own tobacco.

Cloud observation was not done in Po’s boyhood, but moon phases and stars were. When the latter looked numerous and bright, that was the time to go to look for such shell fish as kup’e (nerita polita) and other kinds that hide by day. Care was taken not to rustle or rattle the stones lest the shellfish drop and burrow to hide themselves. “What nights were they?”, I asked Po. “Too long ago, I

do not remember now.” This I did not say, but with us Ka’u folks, it was on the na po Kaloa or Kaloa that we went for shell fish. When summer came the hollow stones along the shore whiten with salt which could be seen from a distance. The sun evaporated the water in the hollows leaving salt. This brought people from the upland to gather salt for the year’s supply. Salt had to be thoroughly dried before storing most of it in dry caves till needed. Wet salt carried on the shoulder caused on irritation on the skin. Even the skins of the piula (kekake or ‘ekake [mule] to us Ka’u folks) burned and smarted from the moisture left in the salt. So it was imperative to dry the salt thoroughly.

Salt gathering time was also manini spawning time and they would be in the sea pools by the thousands. The transparent ones were the tastiest and the dark skinned ones were not, so they mixed them together in equal proportions when eating so that there would not be too much of the dark ones.

Sam told us he was the oldest and only child...

I asked whether there was (or were) a place where the umbilical cords were hidden. He told us that there were two, a rock named Pohaku-□

ascent) received its name from the long steep trail up to the hill.

Sam Po’s education last only 3 months... [educ. in caves section...]

Po told of the plovers that came there in their season. When they grew fat and the breasts darkened, that was when he and his cousin would shoot them as they rode on their horses after the day’s work. He used to broil his the day he shot them and it was not until later that he learned that his cousin cleaned, salted and put his plover away for a while. Then, he rinsed off as much salt as he could; made stuffing of Irish potato, onions, and whatever vegetables to make it tasty, then cooked the bird in ti leaves. “Very one,” our informant declared, “and the next time we got kolea, I stuffed mine with ‘uwala haole (Solanum tuberosum).” What I call ‘uwala kahiki, he calls ‘uwala haole and we’re talking of the same thing.

On the beaches where Po traveled in his youth, the mamane furnished them with fuel. Very hard wood that can bend the teeth of a saw.

Where the road branches to go to Pu’u Naio and Kaupo, that place is called Lala-kukui (kukui-branch).

Charles Wilcox, Sam said was a courageous soldier...

There is a spring near there called Ka-wai-a-Kekuhaulua or Kekukaulua’s-water. Kekuhaulua was an expert from Hawaii. No matter how Kekuhaulua gripped, grabbed and twisted him, the Hawaii man was able to free himself and come back at him. He was the most skillful opponent Kekuhaulua had ever faced, so to end it, Kekuhaulua swung an adz at his opponent, killing him there. The spot on which the Hawaii man fell was called Pu’u-hu-kukae (Hill-where-excreta-gushed-out). “We had a great expert in Kekuhaulua,” said our informant Po, but my admiration was for the Hawaii man who fought bare-handed until felled with a stone adze, but nary a word said I. This Kekuhaulua was the great grandfather of Jesse Kuhaulua, who recently came from Japan with some sumo artists to hold an exhibition here in Hawaii, then returned to Japan.

We had lunch on the porch of the Ulupalakua school house, after which we continued talking and EW recorded.

I asked Po whether they had the ko-a-uka and ko-a-kai system in which uplanders gave a portion of their crops to the shore dwellers who gave their upland relatives, sea food. (EW: Peter Chapman had left a list of questions and place names at the Ulupalakua ranch office which Peter wished us to ask Mr. and Mrs. Po.)

Wait, let me tell you a story. Once upon a time there were two brothers, Pu’upu’u the farmer, and Ke-au-miki the fisherman. They were newcomers here on Maui. One day Ke-au-miki saw smoke rising in the upland and remarked to his wife, ‘Pu’upu’u is filling his imu with sweet potatoes. We shall have something to eat with our fish.’ Pu’upu’u filled his own wooden bowls and those of his neighbors, and then went empty handed to ask Ke-au-miki for fish. ‘I am willing to give you fish to eat with your sweet potatoes, but what shall I eat with my fish?’ Pu’upu’u realized that his brother was right, so he turned about and hastened home to cook his brother some potatoes. Then returned with a supply, cooked and raw, to give to his shore dwelling brother. So people learned that uplanders should think of kin folks on the shore and the beach dwellers of those in the upland.

The wind that is kama’aina (usual) for Kanaio is Moa’e. When the Ho’olua blows it is rough and cold. Fishing is not good when it blows.

What Po called ‘auko’i pehu (cf Pukui & Elbert 1965:29), we call kauna’oa pehu [Cassytha filliformis= greenish-yellow dodder vine of laurel family--Pukui & Elbert 1965:127-128], or kauna’oa malolo. We found some by the roadside in ‘Ulu-palakua, where he pointed them out to us. This [? Where?] is the only locality in which it grows. Malolo fishermen take some along when they

go out to fish and use it to spread over the fish, that were caught to keep them from flying out again. He called the beach [variety?] Kauna'oa, kauno'a. I listened with interest as I detected the constant appearance of t's in his speech instead of k's. His exclamation of interest, approval or amazement was Sa! Of disapproval Chah!

Pohaku pa [where found?], when struck together, sparked and could produce a fire, he said. Sisal fibers make excellent material for fire starters. This pohaku pahe spoke of must be what we called pohaku paea in Ka'u, a flint.

Wai-a-ka-'ilio (Water-of-the-dog) was revealed by a ghost dog to a man during a period of drought. People sought everywhere in vain, then one morning, as the man sat outside his house wondering where next to look, he glanced up a hillside and saw a dog shaking himself as though wet. 'Only wet dogs shake that way', he said to himself, 'I wonder where he-found the water.' He went to investigate and found an opening which he enlarged. He went into a cave and found two pools with a partition between them built by the ancients. One pool was for drinking, the other for bathing. He hastened home to tell about the water he found, but never saw the dog again...

Po's wife was kapu to the eating of eel, but having had the kapu prayed away, she can and does eat puhi.

Sam said that when potatoes were not cooked in the imu, they were covered with hot ashes and embers. (The method is calle pulehu [Pukui & Elbert 1965:326]. Many people get the terms pulehu and ko'ala [Pukui & Elbert 1965:145] confused today.)

There were many goats in this region in his boyhood, both wild and domesticated. They were a source of milk and meat. Goat meat, dried in strips or whole with bones removed were good eating. His father was a saddlemaker who used inia wood for the foundation and sewed the leather parts with strips of prepared goat hide. Young billy goats were sometimes castrated and the hair of such goats were superior to the untreated billies. Where fresh water was available, male goats did not acquire the strong "masculine" odor which helped to increase the bad odor.

I asked whether they had the edible native 'uhini (locusts) that were once numerous where I came from. They did--among the wild 'ilima bushes, and ate them, broiled over a fire. Changes over the life of the land caused their disappearance. He spoke of another 'unihi, a non-edible one, that turned its head whenever it was asked the question, "E hele ana 'oe i hea? (Where are you going?) By his description, I guessed it to be the praying mantis.

I asked whether he had seen small 3-sided fences, some large enough for a single person to sit comfortably in and some longer than they were wide with enough room to accomodate several sleeping people comfortably. He had seen some at Waka-lani. The kae'a'e'a lawai' a (expert fishermen) used the small ones to sit in and lean against in fishing. In the walls (walled enclosures) the floor was spread with layers of nehe 'a'ala, (not the bidens, but a fragrant leaved plant) over which they laid a mat--or layer of pohuehue before covering it with a mat. (Ka'u people used the wild 'ilima, although the ki'a'ala was numerous at Waikapuna). Coconut leaves over poles made a comfortable covering to shelter from the sun or maybe a shower. The fishing shelters he knew of, were at Hina-ula and Wai-a-ka-puhi.

The people at Kanaio and Ulu-pala-kua grew onions called mahina (a white bulbed variety) and the kikania (reddish bulbed). His grandmother always reminded them that after planting 'ai (staple) they must also plant i'a (something to eat with the 'ai). Sweet potato planting was followed by onion planting. I don't remember seeing a kikania. It may be the purplish rooted one which we Ka'u folks called the kumakahiki (annual). It had to be pulled up at the end of the year, allowed to dry for about a month and then replanted. Otherwise it would wither away to nothing in the ground. The last time I saw the mahina variety was in Ka'u in 1935. After that, pau.

I not only listen to what our informant says, but how he says a word. The name Pauwela [of Haiku, Maui] is properly pronounced Pa'uwela by the way I heard him and Eddie Bauer pronounce it. Po uses the term ' ai waha for eating raw, more than we do. We used it for water melon and for muskmelon, but he uses it for raw sea foods, too.

Watermelons and muskmelons were cultivated in Po's birthplace and mine tpo--in the 1890's and the early 1900's. He gave me no variety names for the watermelons, but I have mine listed elsewhere.

EW asked about the pastors of the Kanaio Church, called Honua-'ula [cf-pp. 9]. He named all those he remembered. (1). Rev. Lukela who was sometimes assisted by a negro physician named Dr. Maples. (2). Dr. Charles Malaia (?) a Norwegian who married a Hawaiian. He was laughed at when he told the congregation that some day people would travel underwater and in the air. The laughter would annoy him but Sam Po lived to see the day when we travel up among the clouds. (3). George Ka-ua-'ulalena who committed suicide some time after attempting to break up the stone, Po'okanaka, to pieces. His assistant was Uahi-nui of Moloka'i. The two took turns in preaching on both islands. (4). Moses Ka-hiapo. In Rev. Kahihapo's time, every relative of the Pos were active members of the church. Then one Christmas, he thought of giving gifts and goodies to the children. It was a

memorable occasion for all but Guy Goodness took him to task for it, which made him [Moses] withdraw from church. Gradually all his relatives [Po] did likewise till the church stood empty. He later [Sam Po] joined the Mormons but when the use of the Hawaiian language was discontinued, he too, discontinued.

Mrs. Po has a knowledge of fence building and spoke of the pa niho kahi in this area, and the pa hiho lua as being superior to the pa niho kahi. The niho lua is a double wall filled in later with other stones.

We discussed edible weeds and named some: the pakai, popolo and 'aweoweo. Wild tomatoes went well with salt salmon that was cheap in the olden days. Fishing too, so there was not a dull moment going and coming with so many things to talk about.

July 30, 1966

EW's notes: We had an early breakfast in order to get to the Kahului Airport to pick up the Bishop Museum Willys station wagon jeep which Peter Chapman had left while he returned to Honolulu. The jeep was filled with gasoline and water, so we journeyed over to Paukukalo to pick up the Po's. They were ready and we loaded their lunch and large thermos of ice water into the jeep. Stopped at a service station in Kahului to have the tires checked.

We arrived at Ulupalakua post office and store where we met Bill Kikuchi and the other Bishop Museum field workers at 9 a.m.

[MKP's notes] Just before reaching Po'o-kanaka, Mr. Po said Po-poepoe and gestured toward it. Hawaiians never pointed with the index finger, bad manners.

As we came to Ke-akua-muki, they mentioned that the ghosts here made sounds to attract the attention of passing travelers. My curiosity was roused by this and I said, "In my home area, they whistled, (pio) and we were taught to turn and face the direction from which it came. This gave the name to the vise going up to Waiohinu, on the seaward side the name of Ke-akua-pio (Whistling-ghost)." That started the Pos talking and this is what they said. The muki sound was heard up where we were travelling, while the 'o (haloo) was heard on the makai side. Sometimes several unseen folks would see some one going by and would wonder whether he (or she) was a relative or a stranger. When unsure, they would muki or 'o to attract attention. To satisfy the ghost's curiosity, the traveller turned to face the direction of the sound. The Po's said that sometimes the ghosts would argue among themselves as to the identity of the passerby. "My descendant", one might say, and another might say, "No, mine" or a "total stranger". This would lead to the 'o or muki. They, the Po's, too were taught to face the sound and then continue on--no harm done. But let some one pass with cooked pork at night in some places, that pork would have to be dropped or else there would be some very unpleasant experiences. What was true with my own Ka'u people was true here too.

At Kalalea, when Pu'u Maoe could be seen, Sam Po pointed out the trail leading to Kaupo and Hana. Makai of Kalalea, an old trail is Ku-a-ki'eki'e, then Ka-Io'i, then Ka-Iapa-'ula. The hills ma uka of the road we're on were Ka-lua-o-pulani (Pit-of-the-rancid-odor) and Ka-nenelu (Bog).

The couple who raised chickens, and who refused to give Pele one, lived between these two hills. It was from here that they were forced to flee and were, changed to stones far from home.

Soon, we saw a glorious sight, poppies, yellow ones on both sides of the road, growing in the lava rocks. It was a glorious sight! This place bears the name of 'A-kanikolea, (Lava-rocks-where-plover-cries). We have the same name in Hawaii, too.

Ahead of us, on both sides of the road, were two rock piles. The one on the seaward side bears the name of Pohaku-'ula'ula, where the piko (umbilical cords) of babies were hidden. Here, all those of the Po family, for generations, were placed for safety. "No good for 'iole to get them", Sam Po said, "make thieves of children". This belief extended from end to end of our island group. The stone is of the kind called 'eleku [coarse vesicular basalt, Pukui & Elbert 1965:38]. The 'iewi of babies were washed and buried, with or without a tree.

A little way from Pohaku-'ula'ula led the Pi' i-loa trail, up to the hills above. Its steepness gave the place its name. When going upland, they did not pick the lehua lest they meet with rain. There were the lehua 'ula and the lehua kea, which they plucked only on their homeward way...

When the leaves of the kawa'u tree (Eagara dipetala) looked shiny and strong, that was the sign that the 'uwa'u fledglings were ready to be taken. This was one of the birds eaten by them.

We soon reached Guy Goodness's home, standing desolate and deserted, but surrounded by fruit trees and flowers, left to take care of themselves. A peach tree leaning against the stone wall had small peaches on them--the kind that was pointed at the tip. "That is the piki-pua-kea", (white-flowering-peach), declared Mrs. Po.

Next to the Jerry Burns home, also deserted, is a cemetery. Here rests Ikuwa Purdy (Hawaii's Champion Cowboy) and his wife.

Window curtains could still be seen hanging sadly from the window. A little way from here is Noho-kau an 'O'i'o'ina or nesting place for those coming up from the lowlands and going up to the highlands. Here, Mrs. Guy Goodness had her garden and she was often heard to scold angrily at the children here that they dubbed it, "Mynah Bird Hill". Mrs. G. was the "mynah bird". The real name is Noho-kau (Beating-place).

I could see why Mr. Po refused to go on the other day. The road was rocky, bumpy and rough. We all shook, swayed and jiggled.

Just before Noho-kau we turned down a bouncing trail, (that is, we bounced, not the trail) to a house enclosed by a stone wall. In the yard were fruit trees, blooming plumerias and browsing cattle. "Ah! My home town!", exclaimed Mr. Po.

Just a little way on the seaward side stands "Honua-'ula" [cf.-pp. 7], the Kanaio Congregational Church. Po shooed away the cattle, and failing to open the gate, everybody climbed the stone wall, but me. Old limbs could not make it. It was amazing to see a large woman like Mrs. Po scramble over it with graceful ease.

We had lunch under a tree which we Hawaii people call the Wili-laiki [Schinus terebinthifolius--Pukui & Elbert 1965:356; wilelaiki= christmasberry tree], and these Maui people call the pepa. To find out what her husband's name meant, Kahiku-Iani, Mrs. Po phoned NaPua while her program was in progress. NaPua did not translate it, but did learn from Mrs. Po that I am on Maui and what I am doing here.

To give Mrs. Po the answer she sought of NaPua, I asked her to count the kings of Hawaii from Kamehameha I to Kalakaua. When she said, "Seven", I told her that that is the answer to her question, Ka-hiku-Iani (The-seventh-ruler). It was an inoa po given name prior to the birth of her husband, Sam Po [A name for an infant believed received in a dream, which, received in this way, would prevent the child from being sickly. Pukui & Elbert 1965:95].

She told us that, as children they were told not to eat any food gnawed by rats, lest they grow up and marry a mate with wawae puho (legs with ulcerated sores). We were taught that rat-gnawed food was haumia (defiled).

Looking toward Kahoolawe, Mr. Po mentioned being a cowboy there when Angus McPhee and Mr. Baldwin had a ranch there. No crops, but plenty of sea foods. When no boats came, pilikia was theirs. They depended upon the regular coming of the boats.

We also talked of plants as we lunched. Small tomatoes once grew wild here and were excellent with salt salmon. The wilelaiki (Schinus terebinthifolius) was called Nani-o-Hilo, on Molokai, but here in Maui it is a plant with a daisy-like flower. The Maui name for poppies which are numerous here is pua-pope. Mrs. Po's mother had a quilt called Nani-o-Hilo, designed by a relative. It was buried with the former when she died.

Plumbago is called ilima-haole here. The 'aweoweo weed [see 'aheahea Pukui & Elbert 1965:607--chenopodium sahuense], cooked and pulverized with the cooked 'ala'ala o ka octopus [Pukui & Elbert 1965:15 "liver of squid or cuttlefish"] was used here as baby food. Mr. Po was fed on this in his infancy, "Where there were no ti leaves, what did you use as kauwae (imu covering)[Pukui & Elbert 1965:129--stemtied, fan-spread ti leaves]?" They used sweet potato vines. The fine young vines were laid on first, then the coarse vines which were cast aside after cooking, and the fine vines were eaten as palula [Pukui & Elbert 1965:288--"cooked sweet-potato leaves"].

There was also panini [Pukui & Elbert 1965:290--Prickly-pear, Opuntia megacantha (Mexican branching cactus)] which they gathered in season as pig feed. Care was taken in gathering to stand with the back against the wind and not facing it, lest the fine heu [fuzz] get blown onto one by the wind. The heu panini was as irritating as the heu of the sugar cane. These were brushed off with small branches, to be blown off by the wind before picking and cutting the fruit open.

We commented on the dryness of the area and Po said that when it was very dry, they were cautioned about matches and cigarettes.

Once a stranger came there, and was careless with cigars. The dry grasses caught fire, which burned over several hills. For several years, after that, nobody bought charcoal. They obtained it from the trees that burned down in that fire.

Makai of Kumukau's place is a cave called Ka-Iua-'ilio (Dog-cave). A dog hid here and stole chickens until it was caught and killed. It is at the edge of the place where Pamano met his death.

Po pointed out Pimoe where Pele dug a pit. On the left of that, facing the sea, is Ke-oneulaula (Red---sand) where some kukui nuts brought from the kukui grove of Lanikaula (Molokai) were planted and became a second grove bearing the prophet's name. A hill east of Pimoe bears the name of Pohakea, Suspended Sand. Found here were seven coffins, that of father, mother, daughter and grandchildren. There was money in each which was "collected" by collectors. We came to a place named Mahu in the land section of Kanaio. After passing Mahu, we came to Hale-ahu where Ka-Iani-paha'a, a very wealthy native lived. Many people came to

borrow money from him. He had but one living relative, a granddaughter named Mileka. It was she who found him after he had died in his home. After his death, people dug all around his home looking for his money, but no one ever found anything. Mileka married Moanalaha Uweko'olau and bore 17 children. Sam Kalanipaha'a, brother of the wealthy Hawaiian built a grass hut near the cave of Kawai-a-ka-'ilio. 'Aku, a heiau ho'oulu 'ai lies on the sea ward side of the road. Another heiau is at Hulupapa, a fig grove lies ma uka of it. Next to it lies Kalapa'ula. In Makaniho, the 'a' alii are plentiful, both the small and large varieties. Next to this we enter Kalo'i again, the lower section this time. It was a pleasure to see the 'ohe tree which is not a bamboo. It was large scalloped leaves about a foot long. According to our informant, Mr. Po, the sap of this tree was used to gum branches to catch birds with. This was one of the trees listed by Kamakau as the form of the female poison god found on Maunaloa, Molokai. Po also called it the papala kepau but I doubt it, as EW and I saw that one in Koha_a and it looked no way like this one--except that the use was the same, to catch bTds with. Next to this place Mahiehie, and on the makai side, u'u-naio, Ka-Iua-Iapa, Pu'u-one and Ke-one-'oio.

Next came Papaka, where wauke grew. We turned down on the road leading to Makena. A little way down we came to the house where the archaeological crew are at present. After passing Ke'eke'chia, we came to Lapa-koae...

Po said that his Tutu Kapiioho used to plant bananas at high noon, wearing no clothing at all. He would tell his wife to keep the children in the houses, so that they would not interfere with his work. He liked the 'aki'ula, a variety shorter than the popo'ulu, and when his bore fruit, they were immense bunches. [mai'a popo'ulu-Pukui & Elbert 1965:205]

Lu'au, the son of his mother's brother, tried to plant in the same way, but not knowing the planting prayers, his bananas turned out puny.

Uplanders would carry food grown mauka to take to the people at the seashore. From the people makai, the uplander would obtain (by exchange, gifts) food from the lowlands.

Uplanders carried soil in round lauhala baskets to the lower areas where there wasn't much soil and deposited this soil in the pohos (hollows) where food plants would be grown, such as sweet potato, melons, "any plant that can grow on the lowlands."

Two kinds of gourds, the native and the New Holland (introduced). The New Holland had thicker shells (skins?). Food containers were made from these gourds. Sam Po described process.

Ipu 'awa'awa, native gourd, "You cut out and open and when finished then scrape out the inner lining, let it stand with sea water, until the bitterness is gone."

Nuholani, New Holland, "Scrape (flesh) out, let it stand in the sun. Then rescraper more flesh until the shell is reached from the inside. Let it stand with water until the smell of the gourd is all out. Wash thoroughly using the white coral that is used to clean the bristles of the pig's skin. Ready then to use for food container."

More description on growing and shaping gourd while it was still on the vine.

More people lived inland than at the shore. Only one thing that would induce people to go to the beach to stay, and that was when there was a lack upland because of drought. People drank the brackish water, a mixture of sea and fresh water and it is such people who named the places in which they lived. A family would reside there where there is water, and another family would reside at another place where there was water. That is how it is said their places were named. Kaliwahine, Paena, Po'okohola, Papua'a, Wakalani, Kiwi, Ho'oma'ili'ili, Ho'owaiwai, Keawanaku, Punapuna, Kaulana, Keoneoio. There are many place names. This talking of ours is only wind. (Because we don't see these actual places, just talking of them).

MKP says your following questions are very un-Hawaiian. At what time of the year did they go fishing? How much fish did you catch? Sam Po says, "Fish were numerous, plenty for all when needed."

Fish were eaten broiled, raw and boiled. Names various fish, eels, turtle, some of which were caught by polefishing with hooks made out of the brass ring (put on the mule) which Sam Po shaped into the kind of hook he needed.

Sea urchins, crabs obtained and eaten.

Fish hooks were shaped differently for different kinds of fish. Story of why place was called Wai-ilio. [cf pp. 5]

Wind that comes from Kihei side is called Makani Ho'olua. "It's a piercing wind, pierces at my birth place". "Makani kama'aina oia ka makani Moae."

Goat grease put in with a wick of olona, was the light of days gone by.

Unihi [cf pp. 6], (crickets) were eaten by inserting several on a grass stem and toasted. Plentiful in early morning when dew was on grass. Disappeared with introduction of foreign birds.

Sam Po didn't think much of questions, How were stone walls built and what kind of stones were used?

Tutu named place Wakalani [B1-1 & 41, see Map 5, cf pp. 6] where there were numerous stone walls. Tutu had two shacks, one down on level ground and one up on a mound which was a fish observing mound. When fishermen returned from the deep sea, they could be spotted from the fish-observing spot and a call would go out that so-and-so was coming and to bring the vegetable food for the fishermen.

Some of the stone walls were temporary shelters for the fishermen, and others who stayed at the shore. The nehe was gathered and spread on the ground several layers and then the sleeping mats were placed upon the nehe [Pohue, beach morning glory vine spread over the nehe, then the sleeping mats were spread on the vines]. Nehe used because the cockroaches didn't like the smell of the nehe. It had a strong fragrance. Also used for tea and a piece cooked together with the 'uala, sweet potato, was flavorful. This is the nehe grown at the shore.

Other stone walls were used to protect the backs of the fishermen from wind, to lean against.

Some stone walls were for storing food, and ko' a.

EPS: Map Commentary Sam Po--May 26, 1967 69 years: Paukukalo, Maui
Going from La Perouse towards Kanaio

1. Pass Ka Lae O Papaka--then you come to a point called Hinaulua [Hinalua]--very good for ulua fishing.
2. Between Hinalua Point and the lighthouse, in the cliff and at the base is a shelf that forms a pond. At high tide the ahole comes in. This is called Piikaheka. [I have been swimming here. EPS]
Pii= to go inland (as incoming tide) Kaheka= rock basin where sea washes in.
3. Palihai is not familiar to him.
4. Charlie Aikala told me (EPS) that he was born and reared at Keawanaku. Sam Po says it was Wawaloa. No one lived at Keawanaku in his recollection.
5. Punawai (well) at Homaiwai that furnished drinking water.
6. Kane-wahine: Named for 2 sharks. Once there was an old man and woman who lived half way back in Kula [the Kula land?]. They raised potatoes and watermelon. (The watermelon of those days is not like today--large and sweet then). For some reason the chief wanted to kill the man and woman, so when they got wind of this they decided to seek a safer home. They found a cave in the ocean and became sharks. And so this place is called Kanewahine after the old man and woman who became sharks and made their home in a cave in the ocean at this place.
7. Alili is not familiar to him--Homoi-iliili, then Mana [must be main point-EPS], Kanewahine, Kiwi.
8. Awaiki--not Wawaiki "small harbor". Papua' a see: 28.
9. Paena is the bay-- Wawaiki is a little channel (inlet) Kaupo side of Paena. At Paena is the only place that Sam knows where they watched for fish. The 'o'io came in and were surrounded with net. He has not heard of Maka-kilo'i'a.
10. The house at Paena was only occupied 1 or 2 weeks at a time by a couple who lived in Kanaio by the name of Kanealalili and his wife Kanui. They came to get the hala leaves when they were ready for weaving. The house had a roof made with lauhala inside and pili grass outside. Sam remembers this--the house was referred to as Hale pili.
11. The following are in order, Puhilele [or Kaluapuhi], Papawai, Kalapawai, Alaha, Wakalani. At Kalapawai is the walled well.
12. At Wakalani in the water is a large boulder called Ala-poepoe it is there "a hiki i keia la" (unto this day).
13. Sam's grandparents lived in the walled house at Wakalani. This is the one that looks like a duplex near the shore. The Makai-Kaupo wing (smaller) used for cooking. Sam Po's grandparents were Kekahuna(k) and Kalama(w). The high walled enclosure in which Chapman and Kikuchi set up camp was known as Pa-kao or goat pen. As far as Sam can recall Tutu was using the place up to about 1910 but he is not exactly sure. He remembers that everyone including children always had to carry in some dirt in lauhala bags. This was used to fill holes in the lava in which they planted "Hawaiian" watermelon (ipu ololo and ipu nuhoulani--latter has light and dark stripe), pumpkin, and Poha. This is the old Hawaiian poha--very sweet smelling--also known as ipu 'ala(cantaloupe).
14. Ka-uka is a small channel (inlet) bounded by the point of Pohakuloihi and the point of Kapialu. The ahole come in here.

15. Kahoopupua'i is the flat area after leaving Wawaloa. There is a blowhole here which blows sideways instead of up and down--hence the name perhaps.
 16. The hale pili at Paena which Kanealailii and Kanui used [cotton house] had an imu outside the wall at the Kaupo-makai corner. You will see the 'ala stones.
 17. The shelter cave [Milo--M-6?] which we dug at Wawaiti[iki]. Sam and wife used this shelter frequently--water at this site but not really good for drinking. Sam left a surround net in the little cave behind here.
 18. Behind Pookohola are 2 punawai (wells) East (Kaupo) one for humans, West one for animals.
 19. At Paena were 2 large punawai. These are the big sinks or craters.
 20. Kokomana(k) and Hoohia(w) lived on Kalapawai side of Wakalani [I think he means that house back from the shore and near that dike]. There was also a family living in back at Alaha.
 21. Naupaka is the papa (flat), between Unalihi iti and Unalihi nui.
 22. Kanui's [from cotton house (#10)] brother Sam Pupuhi lived there at Kalua O Kane at that nice house site along the cliff. Milo and keawe tree there.
 23. At Kalua O Kane on Kaupo side in cove is a cave at ater's edge. It is said that after a fight the men would hide in the cave with their canoes.
 24. People camped at Waiakapuhi for 4 or 5 days because it was good for ulua. There is a punawai there.
 25. [with pond] Behind Kanaloa is a pond. Ducks, geese and the Makaloa reed for weaving fine mats found here.
 26. They used to hide the piko in Pohaku eaea--for safe keeping.
 27. At Kaho'opio can be heard a whistling noise--why no one knows but can be heard til today. Punawai here.
 28. In back of Pa-pua'a is a "sink" with a keawe tree makai of trail. Po and wife washed clothes here--nearer shore 2 punawai [see: 18--1 can show on photo Em-22 6/19/59(air)]--very good fishing here--moi, ahole, kala, and particularly ka'aha also known as 'ili pua'a (a fish with rough skin like Palani). Pa-pua'a is named for this fish--Papa-pua'a "coral flat where 'ili pua'a are."
 29. Sam, his tutu and several others put up the stone wall backing at punawai of Kalapawai to keep out cattle.
 30. Awaiki and Kalama are very close. [Wawaiki, not Awaiki].
 31. Po says Wahene.
 32. The 2 Wai-a-ilio are distinguished as Wai-a-ilio Hale pili and Wai-a-ilio Pama. Sam's grand-uncle Kalani-paha'a and his wife Pelekila built "the" house at Wai-ilio. They were the parents of 4 sons who were noted divers. Their names were Palau, Kona-ai-moku, Ke-au-miki and Kualii. The 3 younger brothers challenged Palau, the eldest, in a diving contest. This was held off Molokini where it is very deep. Ke-au-miki went first but he couldn't touch the bottom. Kona-ai-moku went next. He touched the bottom and grabbed a handful of sand but it filtered out of his hand on the way up. Then Kualii tried. He touched the bottom and grabbed a handful of sand. This he put in his mouth so that when he reached the surface he had proof and so he was judged the best diver.
- Naming of Wai-a-ilio-- Behind the walled well, in the same gulch is a spring in a cave--probably covered in sisal now. At one time Edward Baldwin wanted to blast it open and pipe the water for cattle but was stopped by Ikuwa Purdy.
- During a time of drought when the wells were all dry and the children were crying for water, a mother sat on the shore with her crying baby while the father went in search of water. The mother happened to look mauka and up on the rocks was a black dog shaking off himself as a dog does when he has gotten pretty wet. She saw nothing however as the opening of the cave was well blocked with stones.
- When she looked again the dog was gone. Her husband returned and she told him about the dog. He wanted to know how she knew the dog was wet--"Because he shook water off of himself," she answered. The husband went to the place and removed the stones so he could enter. It was dark so he lighted a kukui torch. Inside he found a hole with 3 steps down--at the bottom was gravel but because of lack of air the torch went out. He felt around and suddenly reached water.
- He filled a calabash and took it to his wife and child. Then he told all the others about the water. Later on in the evening the people all gathered to decide on a name to call the place. The woman who saw the dog suggested Ilio-wai. But another woman said that was too short and they should make the name longer--Wal-a-ilio-and so the place was named.
- Wai-a-ilio Pama--called this by the wife of Ka'anapu who lived there. The first man to have cattle there, the Portugese [Paiko, the spaniard] had a pump. Sam Po used it to go down in Raymond's time and work the pump--on Monday enough water was pumped to fill the trough and last all week.

33. He says--Make [see 60 and Make]--Hinaulua (#4)

34. Between Wai-a-ilio and Kanaloa--places located approximately as I am not familiar with the actual shore line (the trail runs inland).

Unalihinui--good place for 'u 'u. Kanaha--can see big cave here.

Kulanachu--high pali here. The home of the opihi--but can only be gotten in very calm weather.

Anapuka--A hole going through the rock here--hence the name ana puka, tunnel-natural arch.

Kumanawa--turtle grounds [I have seen turtles here--EPS].

?Kahuamanini [see 57--Kahamanini]--where jep comes down to water trough. [Manini] Kahamanini on map.

35. Sam Po does not recognize Niniali, Kamo, Pukaulua, Kauna [Kaunoa (1906-1904)]

36. Kou is the small bay where sisal is growing--then up a rise--salt gathered on flats here, behind Kahanu.

June 5, 1967

37. Wai-a-ke-akua near fishing shelters,--small gulch--formerly pump, shack there inland a bit--slightly east of site 184. This is the place Walker calls Kepalao and site 180. But Sam's Kepalao ["Lahua"] is further east.

38. Hinaulua [#1] near Lae O Papaka--good ulua fishing at this point. Hina= the name of the proper night in the month for fishing here.

39. At Punapuna--in the olden days this was the first place to get lime--the ponds there were dug to cool the lime after burning. Each family had own pond. The lime used in Kanaio church was obtained from here.

40. Papali area is the "dike" projecting into water before Keawanaku--surround 'o'io here. They would be caught by the "ton"--however, put in a canoe and taken to Kihei. Fish would spoil because it was too far. [In other words--here was great quantity but unfortunately it was too far to Kihei to get it to a "market. "]

41. Keawa naku--harbor of rough water.

42. At Hamai'ilili--when you try to land you "slide" in the ilili [a pebbly beach].

43. Kiwi--a good place for catching ulua. Eucalyptus poles 10' -15' long were cut and stuck in holes in the cliff. Attached to these was a line and hook. Then-- "ke kiwi ka la' au, pa'a ka ulua!" When the pole is bent, an ulua is caught. Hence the named kiwi--the place where this happens.

44. Mrs. Po was born in Pukalani where Tanizaki store is. Her father came from Spain [at least he started there] and was born in Kaupo--was called Joseph La'anui by the Hawaiians--[she has photo--nice looking man--Looks part Hawaiian]...

45. At Alaha are holes in the lava for pounding 'auhuhu, which was gathered on the way down. At the shore is an underwater cave where the 'auhuhu was put to poison the fish. Each family then took its share.

46. Kalua Kane [or Ka lua O Kane]... Kane was a shark who made his home here in an underwater cave--hence the name. It was his habit to go in shore where he planted 'awa, potatoes, poha (ipu ala)--when the "fruit" was mature he would remove the skin. He ate the meat and dried the skins to be taken back with him to his cave. These would sustain him until he could plant again.

In olden times this is what the people did--they dried the skins to be saved for times of wi, or famine. There is a fish called wi--this is a small black fish shaped something like a humuhumu fish. This small little fish comes by the hundreds--if you see "nui ka wi"--then this is a bad time for planting as it will be dry, and the bugs will devour your crops. The 'alalauwa (young 'aweoweo) indicate dry weather-draught --similar to wi.

47. A punawai at Wai-a-ka-puhi. 'U'u fish, same as mempachi.

48. Hina-ulua #2 (near Wai-a-ka-puhi) and Hina-ulua #3 (near Kalulu). Both good places for ulua. Here poles of sisal were stuck in the rocks and when they bent over you knew an ulua was hooked. Hiwa--to fall over.

49. When you hear the whistling sound at Kaho'opio it means its too rough and you cannot get opihi.

June 8, 1967

50. The poha or ipu 'ala of Sam's day [Persian melon or something??] had green stripes-yellow in between when ripe. They are planted in gulches in an attempt to hide them because when they started to ripen they smelled so sweet other people would take them.

51. The way the people lived in this are in the days of Sam's tutu. The old time Hawaiians knew when it was going to rain. When they were staying up the mountain about a month before the rain they would head for the shore to prepare for planting--carrying in dirt and filling holes in the lava--they would be ready to plant when the rains came. They would stay until the potatoes were

ready and on until they had all been used up (about six month he thought--in all) then return to the mountain.

52. When families went down to the shore they would divide--some would go to Kahakaaui for salt and the rest to Papali [Pape?] near Make. These were the best places for salt. see: 56.
53. Papa-'ula-Moanaliha [see 18 and Father of Mu'umu'u, father for Buubuu] "Mu'umu'u Uwekoolani, an old timer in Kanaio and father of Big Bill Uwekoolani of Ulupalakua (who died recently)--called mu'umu'u because he had lost a hand [Sam kind of indicated the left]. He said that if the flats (reef) appeared red it meant the tide was too low [for what--assume not good] and the limu had been exposed and was all dry--hence Papa'ula.
54. At Kalaupapa there is terracing for watermelon, potatoes, etc.--[slope is gentle and fairly grassy here I remember].
55. There is lime at Punapuna, a natural arch at Ana-puka. Moanaliha Uwekoolani had a grass house near Kanaloa [see 58]. "Road" going down to point from main trail. Pond with Makaloa reed below main trail--on the trail from Make to Wai-a-ilio, the trail makes a sharp descent as you come off the lava--this is Kanaha.
56. Papale, so called because one had to wear a hat when gathering salt here because it was so hot.
57. Kaha-manini. Sam didn't know but thought it might be because manini was such a soft fish you couldn't get it home fresh so it was split open and dried. Kaha--slice lengthwise...
58. Moanaliha Uwekoolani and wife Kaiwa [see 55] lived at Wai-a-ke-kua. He took care of the pump at Wai-a-ilio Pama in Dr. Raymond's time [owner of Ulupalakua Ranch 1901-1923].
59. At Naupaka [near Alena] were lots of eels, when you threw the net for moi you had to be quick in pulling it in or the eels would be attracted to the moi flapping in the net.
60. Puhi make. Sam doesn't know--but he's been told that certain days you cannot fish off here because its too rough. There's a hole off shore that blows like a puhi or blow hole and when it blows then the water is dangerous.
- From here on Sam does not know the names as it was out of his orbit. He refers to the lua mai'a or banana pit as Kamoamoa--Walker calls it uli uli.
- Sam definitely says Make and not Make'e or Maki (as in Capt. Makee).

Questions for Sam Po, on the Kalo'i Kanaio Coastline, and East. [EPS 1968 interview with Sam Po.] [For (1881) read (1894)]

Sam Po--answers to questions from Peter Chapman. He instinctively uses the "t" sound first--shifts to "k" sound when repeating. He frequently uses or drops the article before a name i.e. Ho'opupua'i--Kaho'opupua'i.

1. Does Papali refer to the point of land projecting out to the ocean before you reach Keawanaku, or to an area closer over to Punapuna, the fish ponds of Hanamanioa?
- A= For some reason he does not recall that dike projection in the water. As far as I can gather, Papali is more in the vicinity though--it is after the ponds at Hanamanioa. _ Mrs. Po says Papali at dike--see: EPS Papali= small cliff--reasonable name for here.
2. Was the name Palihao ever applied to the coastline before you reach Keawanaku, right around the place where the point of land projects into the water?
- A= He does not know the name Polihai.
3. At Keawanaku there was a grant of land made, [1392] to Kapiina of 1.31 acres around 1851 [or 1857?]. Did you know anything of him, or his descendents, and what they did with the land: how long it was used, and for what use? Was he perhaps known as Koolina [1881 *], Kupinu [1904] or Kapilina [1906]. [Kapiina on Grant, others on dated maps]
- A= These names are not familiar to him. As far as he knows use of land in this whole area was probably the same as he recalls of his grandfather's use. The people fished and planted a little--went mauka when it got dry--see: EPS 13.
4. Moving farther towards Wawaloa and away from Keawanaku, was the area known as Homaiwai and Homailili and around the point to Kanelo Wahine and Kiwi Point--was this area also called Aiili? To which place on the coast does that name refer--or does it name some point good for fishing out in the channel? Also, around Kiwi the name Kamanamana has also been used: is this correct or does the name refer to the whole point of land between Keawanaku and Wawaloa?
- A= Aiili is not familiar to him--see: EPS 7. He speaks of Mana or Kamana between Homailili and Kanewahine.
5. After you pass Wawaloa and the wells, around Ho'opupuwa'i and Papua' a there was a name used long ago on some maps: Makailoia [1904] or perhaps more correctly Makakiloia [1881 *, 1906]. Have you heard this name used for this area or anywhere else

along the coast?

A= He is not familiar with Makakiloia--Kaho'opupua'i--Papua'a see EPS: 15,9. I think what is Makakiloia on maps is Kaho'opupua'i to him.

6. There was a grant made to Pehano of 1.45 acres at Kalama, just at the bay, and probably around the wet land there with the wall around it. Did you know any of his descendents, and again; how was the land used, and for how long?

A= This is not familiar to him--(Pehano).

6a. I can see that Puhilele and [or] Kaluapuhi could be the same name for the-blowhole just beyond Kalama but when you go farther, and past Kalapawai, we reach Alaha or Papawai. -- These names go along for the same area of the shore--or is it true that one name is for the land a little behind the shore, and the other for the beach?

A= See EPS: 11 for order.

7. Just at Wakalani there is a place called Naea's Old House on one of the old maps [1906]. Did you ever see anyone living there, or know any of his people. Around Wakalani there are many old house platforms, with nice Hiili: were any of these used when you used to go there, and can you identify which one might be Nana's?

A= Na'ea means nothing to him--see: EPS 13, 20.

8. What does the name Kalani Kanaio mean, and have you ever heard the area called by you Pohakuloihi called by this other name?

A= He's never heard.

9. When you have identified whether Kauka is a small bay or a point of land just beyond Pohakuloihi, can you tell us whether the next point should be Kapialu [So Po], or ever had the slightly different name of Kapaala [1904] or kapiala [1881 *, 1906]?

A= Ka-uka is the small channel (inlet) bounded by the points of Pohakuloihi and Kapialu. Kapialu is all he knows.

10. Somewhere between Puhilele--Naupaka--Waihene [Wahene], the old maps gave the name to the bay there of either Ponakuli [1904] or Pohakuloa [1881/1906]. Have these names ever been used in your time, here or elsewhere on the coast?

A= He doesn't know these names--Pohakuloa might be Pohakuloihi.

11. Similarly, for the Wahene area, the names of Wahene and a little further around the edge of the bay Kukeakae were used on maps [1881/1906]. Is the Waihene [and perhaps Wahene] area that under the big kiawe trees, the place the land is smooth and sheltered above the ocean, with a nice offshore breeze?

A= He says Wahene--This is the bay and the area behind under kiawe--it seems to include the whole bay out to Ka lua Kane.

12. This place under the kiawe looks like it may be part of the grant made to Kalawaiakumoku, for 2.5 acres in 1862. Have you heard of him or his descendents, and can we learn how long his land was used and for what purpose?

A= Never heard.

13. Is the name further on down the coast of the bay here Kulua O kane [1904] or Kalua O kane [1881 *,1906]. And just where is the point of land still along the side of the bay or further along the coast near the place you have named Poonahoahoa. And is there one name you can give to that whole little bay where Waihene [Wahene] is, and to the land behind it where there are some nice house platforms, a well [dry] and the canoe shed on the beach slope?

A= Ka lua O Kane see: EPS 46. AS far as I can deduce--this is all Wahene.

14. Can you proceed in your mind along this coast and give us more of the small names for the old fishing places: names for the small places in between Pohaku and [Ka] Lalilali and Waiakapuhi and Hinaulua and Kowa'awa'a before you get to Kalulu?

A= see map.

15. And then further through Pohaku Manamana and Kanaloa and Make and Manini: what are the names for the places in between?

A= see map.

16. Around Niniali'i, the old maps use Kamoia, and then Pukaulua and then Kaunoa. Are these names familiar to you in the Niniali'i area?

A= No.

17. Now let us proceed along through Waialio Pama and note the names of the large and small places on the way to Kahawaihapapa?

A= We tried our best--see map.

18. As if all this were not enough, can you supply either a meaning, or story behind the naming of these coastal places which you know. This would be particularly good to know in the areas where so many names are found in such a short distance of coastline?

A= He really didn't know many. He kept saying no use making it up. The place near Wai-a-ilio that I put "Pi'oe"--should be Pi-o-e--that's the way Sam pronounced it. He doesn't know why or what.

Mu'umu'u is the father of Moanalaha who is the father of Big Bill Uwekoalani who recently died at Ulupalakua. [cf EPS:53]

Mu'umu'u is the one who said Papa ula was red from limu.

Talks with Mr. & Mrs. Sam Po at their home, 630 Kalani St., Paukukalo, Maui

[1st draft] [EPS 1968]

April 22, 25, 1968

Sam Kahikulani Po---Minnie Milaina La'anui Po.

Sam Po was born May 13, 1898. He was the son of Sam Po and Rose Kekahuna. He was born below the hill of Ke'eke'ehia at Ulupalakua. His mother had ridden on horseback from their home in Kanaio to attend a luau at Makena. Sam Po was born on the way home below Ke'eke'ehia. There were no houses at this place.

His father was Chinese-Hawaiian. He does not know if his mother's family was pure Hawaiian or not. Tutu Kekahuna was a fair Hawaiian as was his mother. [When I said 'ehu? Both he and Mrs. Po said yes. He showed me a faded picture of his mother and her sister, Manuheali'i. Both had white hair but Manuheali'i's skin was much darker than Rose's. Rose was good-looking, well-defined features. Sam's features are like his mother's.

Sam knows little of his father because he left home when Sam was around six months to a year old. When Sam was in the army at Leilehua [Schofield] during W.W. I, an incident occurred involving a man by the name of Po. The had apparently been fishing and diving quite a ways off Waikiki and was attacked by a large squid he was attempting to spear. His body was found at Waikiki by a tourist, washed up on shore entangled in the squid's tentacles. His friends called his attention to this and the police informed him that the man had been married to a woman from Kanaio. Sam attended the funeral and viewed the body but of course had no way of recognizing him, but he believes this man was his father.

Sam believes his mother was born at Kanaio although some of the family may originally have been from Makawao. She was the daughter of Joseph Kekahuna and Kalama and their children were:

Luka(w)('ehu—fair); Manuheali'i(w); Ki'o Loke(w); Sam's mother ('ehu—fair); Lu'au(k); Puhelani(k); Humoku(k); Kekahunali'i(k).

Tutu Kekahuna was known as Kekahuna Kuku'e because of his club feet. His home was across the road and just mauka of the Honau'ula Church at Kanaio, where Sam and Minnie Po later lived. He was a kahuna ho'ola, skilled in the knowledge and use of medicinal plants and herbs. Sam remembers once Kekahuna went to Kauai on a visit—but he does not know whether to visit relatives or because he was called to cure some one. Because to go on such a trip was an exceptional thing, Sam thought relatives might be involved. He went to a place where there was black sand. It was a steep place and one would slide back when trying to climb up. Sam thought the name was something like Kapo, Kapo'o. [Mrs. Po wondered if he could mean the Barking Sands [at Nohili]].

Kapi'ioho was the brother of Kekahuna and stayed with him. Besides knowing how to produce better crops of bananas than others, he was noted for his fine potatoes although the others laughed at his method of planting. He would plant his potatoes in mounds and the new shoots would come out of the sides, giving him a much bigger yield. These potatoes were named ko'ele palau.

Kapi'oho was the one who gave the name Wakalani to that place.

Kekahuna named Alaha and gave the name to Kalapawai. He was responsible for making the well there. It was for the animals to drink at.

Pohaku'uIa, where the piko were hidden was used as far back as the family had been living in that land.

When Sam Po's father left Kanaio, Rose Kekahuna became the wife of Keauhounui Po'aipuni. He was a saddle maker, having learned from his father. He sold his saddles to Ulupalakua Ranch to earn a living.

Rose had 17 children by Po'aipuni. Of these, only 3 are living: Lily Po'aipuni; Ella Po'aipuni; Jonah Po'aipuni.

They lived in the house which is a little mauka and to the East of where Robert L. Bishop is living now, at Kanaio. Sam grew up here.

It was from this home in Kanaio that Sam and the other children walked the 3 miles to Ulupalakua to attend the regular government school.

There was also a school at Kanaio. This was located below the flat of Pamano in the lava tube of Ala-Io'ihl. Kaipolohua was the name of this section of the lava tube which extends makai and is exposed again a short ways below the present government road. At this point in Ala-Io'ihl there is a small hole which goes down to connect this tube with the one called Ala-poepoe which is said to run all the way to

Ka-Iua-kane at the shore. It was into this hole that the bodies were thrown after battle, in the olden days. Later, dogs were thrown in to Ala-poepoe when they became destructive to property and livestock. Hence the name also of Lua-pepehi'ilio.

This school in the lava tube at Kaipolohua was conducted in Hawaiian and was for the purpose of teaching students the arts of fishing, planting, etc. Like the old Hula schools, its rules were strict and the students well disciplined. If rules were broken, a second chance was not given. Sam Po attended this school when he was _ years old but was expelled in two weeks for breaking rules. He was caught writing his name with his finger in the dust, clapping his hands with stones in each palm, and...

The teacher of this school was a man by the name of Kauwa. He was the mail carrier from Ulupalakua to Makena and made the trips at night with a lantern, on foot. And the remarkable thing was that he made it to Makena and back in an hour and a half! But he then married an old woman by the name of Nohoanu and suddenly his power left him and he could no longer accomplish this feat.

When Sam Po was 8 or 9 years old and in the third grade he had to quit school in order to care for his parents who were both ill, and to support the rest of the family.

Both parents were covered with sores. Sam would bathe them and put them in the sun and then apply a potion which he had made by pounding the leaf, young fruit and flowers of the popolo plant. This was done five times a day for five days when the sores would heal and the skin be free of scales.

Mrs. Po told of how she treated her daughter's sprained ankle by the same method of "5 kauna" only using a bitter tea made from the ha'uowi plant. A remedy for swelling is Hawaiian tea made from mamake leaves which one dried first and boiled in water or moa can be used in the same way.

At this time when Sam had to leave school, Dr. Raymond of Ulupalakua Ranch had planted acres and acres of corn for animal feed. Sam's first job was picking corn for 25 cents a day from six to six. Because he was quick and could pick more he was raised to 50 cents a day. He worked at this job for about four years.

He was then promoted to stone wall work for the ranch. This brought \$1.80 a day, 10 pounds of meat a week and 25 pounds of poi a month. They lived in tents during the week and returned home for the weekend. He worked at this for 5 to 6 years.

For the next 2 or 3 years he was a cowboy with Angus McPhee and then for 2 years with Alike Dowsett. Ajika Dowsett then returned to Parker Ranch and his son Edward took his place at Ulupalakua, but he was mean and hard to work for and after 2 years Sam quit the ranch and went to work for the County, on the road.

In 1916 and 1917 Sam was with the army at Schofield. He did not want to return to Maui but did so because his Mother was ill. At this time he took the name Ka'uha'a, from his uncle who had reared him--hanai.

He continued to work for the County until 1951 when he suffered an accident. A stone fell on his left hand, injuring it.

During all the years Sam was living in Kanaio he spent much of his free time fishing along those shores to supplement the family's food requirements, sometimes borrowing a mule and 2 donkeys from his step-father. He would leave Kanaio at 4:00 p.m. and go out to Kahikinui. On the return he would stop to throw his net where there were fish. Around 1945 he bought Willie Hoki, the white mule, for \$100 from Asing who was Manuheali'i's son. Willie Hoki knew all the fishing holes and would stop automatically at each one.

When Sam lost his job with the County in 1951 he had to find some means of supporting the family so he turned to fishing commercially. The family moved to Keone'o'io leaving the older children with Sam's brother in Kanaio. At this time Abner (1) Delima drove the school bus. He would pick up the children from Keone'o'io on in the up to Ulupalakua. Then he would run out to Kanaio for the children there. Sam's children would walk up the hill to the Bums house to catch the school bus.

For 8 years Sam fished commercially. When he was at Keone'o'io he would go as far as the grass house at Wai-a-'ilio by boat. If he walked along the shore, it would only be as far as the Kanaio area. He fished for akule, 'opelu, 'aweoweo, 'u'u, aholehole, uouoa...

In 1956 the family moved to Paukukalo because Sam was told the fishing was good along that shore. Robert, the youngest child and only one to be born away from Kanaio, was born that year at Maui Memorial Hospital.

Sam and Minnie Po were married in 1927 (1) at ? They had fourteen children, 10 of whom are living. They are: Joseph Kioki, 10/11/27(in Honolulu); Samuel Keauhouli'ili'i, 2/18/29(on Maui); Eddie Lono(died at 1 year and 2 months); Alice Kaulana, 2118/36(on Maui); Edward Na'aiohelo(died as a child)(premature baby); Bray Ilihune, 9/18/39(on Maui); Irma Luluhipolani, 7/17/42(on Maui); Gladys Luana, 9/30/44(on Maui); Chester Puhelani, 8/8/48(on Maui); Shaaron Kahikulani, 9/24/50(at Baldwin High); Mary Lou Lehua, 11/11/52(at Baldwin High); Robert Nohealani, 9/26/56(on Maui) (premature baby).

Mrs. Po says from Irma down the names have come through dreams except Mary Lou Lehua who was named by the district nurse in Kula.

Minnie Milaina La'anui Po was born at Pukalani, Maui (where the Tanizaki store now stands) 2/23/1913. She was the daughter of

Joseph La'anui and Kaulana Kaauwomonui, who was from Kaupo. Their children were: Alice Puakina (died); Adline Luluhipolani (died); Edward Kamauoha (died); Gladys Kelewaiku (Mrs. Chung--in Honolulu); David Kaluna Andrew Kaiona (died).

Mrs. Po says that her grand-father (father of Kaulana Kaauwomonui) and Sam's grandfather (Joseph Kekahuna) were first or second cousins, making Sam and Minnie Po distantly related.

Joseph La'anui was pure Spanish. The story is not clear as Minnie Po's mother died when she was 8 and she heard the story from her second oldest sister. Apparently the matter, along with others fled some sort of war or disturbance in Spain and set sail in schooners. In some way they reached the island of Hawaii. Here a Hawaiian fisherman found Joseph La'anui's mother at the beach picking up seaweed or whatever she could find to eat. She was already pregnant and Joseph La'anui was born on Hawaii and brought up by a Hawaiian named Kamauoha La'anui.

The Big Fire

Eden Low, a famous old time cowboy, often came to visit Dr. Raymond at Ulupalakua Ranch, especially when there was a big round up of cattle. One day he rode out to Lua Mamane and then to Ka-lepe-a-moa where he sat and rested. When he was through smoking his cigar he carelessly tossed it away. It landed on some moss which was growing on the kawa'u (pukiawe) bushes. Slowly it began to spread. Starting at Ka-lepe-a-moa it burned down past Manukahi (Manukani?), down to Palakalaho. From there it went mauka of Lualailua Hills to Kauaula, to Kaluali'i, to Kaimuhonu, to Pu'unole. Everywhere there was fire, to Pohaku nanaha, on to Pali'uala haole (so called because Wilcox's son planted red skinned potatoes here). The fire then turned mauka to Ke-lua-wai-a-ke-kuhaulua (a punawai), back down to Kanenelu, down to Kaluapalani (where old folks who refused the chickens to Pele and she chased them down to the sea--where Oliver White now lives at the old radio station). From Kaluapalani the fire turned up mauka of Pu'ukaeo, up to Waihou and Waikahi, finally stopping at Polipoli. The fire moved slowly due to variable winds which kept changing direction and blowing the fire up or down and back on itself.

As a result of this fire, the inhabitants of this area were furnished with a great supply of charcoal for the taking. Sam would go with a donkey and bring back 10 or 15 bags. The only hard wood that was considered good charcoal was the kumu pua (olopua). The other hard woods tend to crackle and throw off sparks (papa'a'na) and are not suitable.

Sam Po is the oldest living native of Kanaio unless his step-father's brother, Keala Po'aipuni is still living in Honolulu...

Interviews with Sam Po and Mrs. Po at Their Home in Paukukalo and on a Trip to the Shore in the Kanaio-Kalo'i Area

March 25 and 28, 1968

March 25, 1968--Sam Po's home on Kailana St., Paukukalo, Maui

Present: Sam Po, Mrs. Minnie Po, Peter Chapman, Elspeth Sterling (& Topsy the cat). Peter Chapman discusses with the Po's how he would like to question them and how we would like to make a trip to the shore below Kanaio. Mrs. Po is busy making cloth "carnation" leis for Genoa Keawe in Honolulu which will be taken down by Mrs. Kaopuiki. These must be done by Tuesday. Wednesday she works at the rummage sale so it is decided to go on the trip on Tuesday. Elspeth Sterling asks permission to take pictures while they are talking. They do not object.

Mrs. Po is now questioned about her background and a large photograph on the wall, of her father is discussed.

ES: And your father's name was what?

MP: Joe La'anui. He was brought up by the Hawaiians.

PC: Had he been born here?

MP: On Hawaii.

ES: And went to Kaupo?

MP: To Kaupo. He met my mother.

ES: Oh, he wasn't brought up at Kaupo.

MP: No.

PC: On Hawaii.

MP: On the big island. See the Spaniard landed there. These women had to get away from the battle ground but I really don't know clearly.

I heard it from my second oldest sister because I was at the time the age of 8 when my mother died.

PC: How many were in your family then?

MP: Twelve; twelve so right now there is one real brother, two sisters and myself 3. The rest all died. And that's the step-brother there

[pointing to a snap shot tucked the large photo of her father.]

ES: ... What were you going to say about the battle field?

MP: These women had to get away from the place--from Spain so they came on schooners. They drifted, kept on drifting 'til she got to this island on Hawaii. On the shore line she got off of the boat and where she stayed is in a cave I don't know where. So this man was a fisherman and went down to the beach seeing this woman at the beach picking up seaweed or whatever she can find to eat but - she was already pregnant with my father.

ES: So he is pure Spanish, then... She got here but was pregnant and there he was born here though...

MP: He was born in the Hawaiian Islands and brought up by this Hawaiian man, Kamauha [?] Laanui.

ES: On Hawaii, do you know what part of Hawaii?

MP: I don't know. It was on that genealogy book I had but my younger brother borrowed and hasn't returned.

---Discussion about getting the book back and we would have xerox copies made for her. Brother took it for records of Mormon church.

[He is living at Naska).

ES: Then your mother's name was what?

MP: Kaulana Kaauomanui.

---Discussion on spelling the name right, and what the meaning was which she didn't know. PC shows Sam Po a diagram of structures at Alaha and vicinity but he is confused by the drawings and cannot identify them.

PC: ...over this side Alaha and Wakalani is on the other side... This when you told me without this map and then way out on the point is nice, up above is one nice platform and nice walled house up there and I thought that's what you meant when you told me Pohakuloihi...

MP: That's not Kauka?

PC: Kauka is over further huh?

---Discussion continues and Sam finally gets oriented after the map is turned around to the opposite position.

PC: If you are standing on the land coming down Kanaio, coming down the jeep track, now and Puu Pimoe is over your left shoulder. Then you come down and way out on the point is one nice house and then back, back in here underneath the Kiawe tree is big, high stone wall over 8 feet high

--SP: Oh, [?] Wakalani

PC: Wakalani, then?

SP: Got one stone wall on top one small little hill. One stone wall down. Pohakuloihi. Then come to Alaha, then Kalapawai.--More chatter about the map.

ES: Pohakuloihi is where that house is.

PC: Now would this be Pohakuloihi?

SP: Yes.

PC: That point there.

SP: That's Pohakuloihi.

---PC: Then you come down the beach, down below and find one with this kind of little pen in front all joined up. This one with big high wall on two sides and then little bit wall behind but right there the lava goes up a little bit...

---Discussion goes on and Sam identifies Alaha.

ES: That dike is what he calls Alaha.

PC: Is the dike Alaha? Is this long

ES: You know the pali?

PC: The pali, rock that goes out--

SP: Alaha between Wakalani and Kalapawai. Alaha. Yeah, the flat long point.

PC: That's Alaha? The big pali that goes out.

SP: Yeah[pause). No, no.

PC: Not the pali but just before--

SP: Before the pali.

---Further discussion--somewhat confused regarding the houses in the Alaha-Kalapawai area. Visit later to actual location will clear this up.

SP: Now, let me tell you. You know that small little hill up, one small little, not too small stone wall, and then one stone wall down. Then going down to Kalapawai now--as you going down, one big stone wall there--that I know—

MP: Just before you get to that place—

SP: Who owns that house.

PC: Yeah. It was a nice little house.

SP: Yeah, yeah. Nice big stone wall. That's a —

MP: Used to have cotton-inside.

SP: No, no--before you reach the cotton.

PC: The cotton's over by Kalama.

SP: Yeah, yeah--Kalapawai, upside----- Discussion continues regarding house and cotton and which house had it.

SP: I'm telling you, behind of that cotton on your right hand when you're going down--as you hit Kala--Alaha, back little bit of Alaha get one big house there. Tj'tat's from Kanealali'ili'i.

MP: Almost pili to the a—

SP: Yeah

PC: Who's that then?

SP: Kaneali'ili'i.

MP: What's the last name from Kaneala?

SP: Well, I don't know his father but that's only what I know--Kanealali'ili'i, Kanui's husband.

MP: Koamoo[?]?

SP: No, no that's different, that's Hamau[?]?

PC: I remember that name--trying to find it.

---Discussion continues around "cotton house" and the owner.

SP: Because there are 2 Kaneala--Kanealali'ili'i and Kaneala Koamoo.

MP: And that Kanealali'ili'i, no more brothers?

SP: About that I don't know. I don't know from where that man came from, and married to my cousin.

MP: Was married to Kanui[?]?

SP: Yeah. I don't know from where that man.

ES: You know, one thing I always meant to ask him--at Alaha there is a wall platform near the ocean with lots of coral and its been washed out—

SP: That's the house that-

ES: Whose house is that?

SP: Kanealali'ili'i. He put up stone wall and put all those white coral inside, ready to build up the grass house--tidal wave come up, clean up the whole thing.

ES: Then right back from that you go towards that big high goat pen--it looks like there was a little roadway between two walls-----Sam is confused, thinking we are talking about Kalapawai now. It is decided to wait 'til we are there.

The weather conditions and the condition of the road down are discussed. Sam's brother said the road is good--a new road cut--goes past the water trough. Is not so steep as the former road coming up [later at the beach a fisherman told us the National Guard made the road. It is a well made road.]

Decide to wait until we are at the beach to talk about the houses there. PC then shows Sam Po sketches of houses at Kipapa to see if he has any explanation for the various types of structures.

Shows him air photos of areas near Waiapea.

Stone wall at Waiapea and structures are pointed out but it is difficult for him to orient to the air photos--however the stone wall recalls memories.

SP: ... That stone wall going up--you know those big stone wall--we the one been put that stone wall.

PC: Really! For what then, for the cattle?

SP: For the cattle--separate the cattle. If we put the bulls Kahikinui side, the other side of Waipea we put wahine one on this side so the bull won't go 'til the ceratin month to breed 'em up then—

PC: Put 'em over.

SP: Yeah. We the one been put that stone wall--right up to the big gate goin'-- ...

SP: Right up to... uh Kalualepo. You know Kalualepo?

PC: No, I don't know Kalualepo. This is a—

SP: Where we went I told you Kalualepo before we hit the big gate, go up and had lunch—

PC: Right, right.

SP: Well, Kalualepo and that big gate--that stone wall right down Waipea, we been put that stone wall.

PC: That's a long way. A good 3 miles anyhow.

SP: We put that stone wall for 50 cents a day--not by hour.

PC: What time was this, when?

SP: Oh--Dr. Raymond...1914.

---Discussion about how difficult it is to find records. Mrs. Po suggests contacting Inez Ashdown. PC says he has, but she really did not spend much time here.

ES: Do you think that stone wall would follow the boundary between two lands, like between Kipapa and Alena? Would they put that wall right down between two lands or would they have put it anywhere they wanted... The ahupuaa boundary--would that wall follow the land section--the division between one piece of land and the other?

---Discussion continues but Sam does not know what determined the placing of the wall.

ES: I am just curious whether they followed the land section or just put it as they felt it was suitable to the Ranch needs.

SP: Well, before the Ranch owned that place there--not owned but they leased. Well, don't have no fence... Well, they pick up the family from Kanaio, Ulupalakua, Makena, Kaupo. Over there put up stone wall. That's how we went, put up stone wall. You see, uh-- when they put that stone wall—

PC: How many fellahs were building it?...Maybe 1914-- You lived over there, stayed over there--every day.

SP: Oh, we take a tent... You know by Puu Lailua, the road go by the side of the hill before you hit Kalualapa, back of Kalualapa--Paliku. You know where Paliku? Below of Paliku one big flat. That's where the tent. We stay there.

PC: And then each day walk down.

SP: Yeah, walk, walk.

---PC: How many fellas working then?

SP: Well, we was working over there 18 about.

---PC enquires as to how long but Sam just remembers "a long time".

SP: When we put up that stone wall right up Kalualepo. Alright, then we put 'nother stone wall below Kalualepo. You see that stone wall going straight over to Puulailua? We the one been put that stone wall right over Puulailua, on side of Puulailua. Then hit this uh one nice house below Puulailua.

MP: Who used to own that place?

SP: Keokana [?], now Davis... Well, that stone wall, that stone wall from Kalualepo non[?] we put that stone wall right straight--even Auwahi.

---Discussion on stone wall continues. This is the stone wall running parallel and below the road from Kalualepo to Auwahi.

SP: Oh, we put that stone wall for a lousy 50 cents a day... Ha, from 6 to 6!

ES: I saw where somebody Kalalau died. Is that the fellow that—

SP: That's my uncle... He just died a couple of weeks ago [in Hana].

---ES asks if this is the man we should have talked to about this area as he was born at Lualailua.

SP: Well, when Kalalau was living over there, he's nothing but small. I'm older than him... Two time older than him, but funny I'm call him uncle.

---ES asks why we find both houses with stone walls and platforms for all grass houses. ES: ... you, know some of them just have the platform and they built the house out of grass walls and grass roof and some have stone walls and grass roof. Why not all the same?

SP: You see that stone wall and on the grass houses from down the bottom come up. You know people before if he build up stone--the centipede and rats stay in the stone wall. Now if you build up the grass from down, you know, I mean the ground right up the

centipede, no, no, no come and bite you because he going inside the grass. Stone wall no--the centipede come from outside go inside the stone wall, go right through on top your mattress, bite you.

---Asked if stone wall house was preferable because of wind, before centipedes introduced but he did not know a time without centipedes.

MP: Well, I was just thinking maybe there's certain place they have grass and certain place they don't have grass.

---Discussion continues as to why both types are found in some place. Mrs. Po thought some families might have a donkey and therefore could haul grass in more easily.

PC: When you build a, you or whoever--you want to build a stone wall house. Once you get the stone wall built up, how do you make the wood part for the,-- Do you have to make some kind of stick to put the grass on top—

SP: Oh--that's plenty. Milo and pau and paka.

---PC: And then you take these long poles” .. big long tree, and then what? You put the--first you make a hole in the ground and then put the rock wall around?

---SP: they put up stone wall--all square. Then they put--they cut one long, good size pole and lay on top the stone wall.

PC: Lay on top?

SP: On top the stone wall.

PC: Not standing up but lay'em out flat?

SP: Yeah, yeah. And then you lay the other one, the other side.

PC: Lying down the long way--along the wall.

SP: Then you go get the stick like this. They get the certain kind--sisal--they tied 'em. They tied 'em under. You know where that big stick they lay 'em like this? They put that stick on top, go on top. See like that. Tied 'em over here and tied 'em-keep a goin'. They don't dig holes.

PC: So, no post holes.

SP: No, no.

PC: If you get the stone wall like this. Two stone wall, maybe so high off the ground. Then you lay one stick on, on top?

SP: On top.

PC: Then you tie the other two ... you tie them on to this kind.

SP: Yeab, on top this.

PC: So you tie them on to that... Then you haven't tied this stick. It's just resting on top the stone wall, eh?

SP: Yeah.

PC: So when wind come along, lift the whole thing off?

SP: No!

PC: No? Too heavy?

SP: Too heavy. Oh!

PC: Then from the stone wall you have the grass hang down on the side?

SP: Yeah, yeah...the grass over the stone wall. When rain the water go right down.

PC: So the stone wall is inside...whole thing, everything tied together...just resting on the stone wall.

---Repeat everything tied together and resting on stone wall--too heavy to blow off.

PC asks why so many enclosures are found with no doors. How is entry made. SP puzzled. Conclusion is that original houses have later been used as pens etc.

PC: I have a feeling that maybe they blocked them up..

SP: Yeah, because have to get door.

ES: Would you be growing sweet potato or something in them and you built these fences to keep the cattle out...?

SP: In those days no more cattle.

ES: What about goats?

SP: Goats? Maybe goats but they tied the goats... They don't let go. Because if you let go the goat go and eat somebody else plant see, that's where fight come...

---The discussion continues for a bit.

SP: Because I don't think they get cow or--those people from Kanaio walk down. No more horse, no more donkey. They walked down...

When Kanaio no more rain, down the beach got rain, everybody go down. Plant potato, watermelon, pumpkin and all those kind. When down there no more rain the potato ready to eat already. Then when up the mountain rain, they all go home up the mountain, see? That's how Kanaio people live.

ES: And you told me that was about how many months? You told me they went down for how many months? They planted and they waited 'til the potatoes ripened and then ate them and then they went back.

SP: Six months they stay down. Six months. In three months times the potato eat. They wait for another three months if the mountain rain. That's when they go back. They get enough kaukau, pack this kaukau, go home up the mountain.

PC: And the kaukau they can take up the mountain?

SP: Yes, can take back up the mountain and plant potato and all those things, cane and banana and pumpkin and all those.

PC: Then from the beach though you can take up--dried fish...?

SP: Yes, yes--those days plenty fish.

ES: You said something too about they, you all had to carry the dirt in.

PC: From mauka you carried some dirt down, to fill up the pukas?

SP: No, no. You know some place get all dirt, eh? Some place get no more. They go over there and you know lauhala bag? They fill up inside and carry and throw 'em inside. Then they plant the pumpkin and whatever. You know those people work hard, more than what we work...And, and they live better. They live happy!

---Po continues about how much happier people were in those days. When something was put in the imu it was shared with all. Now, no one shares.

ES: Could they keep sweet potato?...they have to eat them right away or how long..

SP: Oh, a while--they used to leave that thing--some [soup?] just as good like swipes.

MP: No, but not the cooked.

---PC: When you grew [?] a lot, can you keep it--after you pull them out of the ground--how long can you keep it?

SP: Oh, I don't know--you can keep long---'til the shoot come out [soup--meaning juice?]. .. You throw that shoot [soup] and you cook 'em. The potato's just as good.

---SP: There's only two things the Hawaiians keep long, sweet potato and pumpkin. Pumpkin more long.

PC: Really? You have to take[?]

SP: Yeah, you have to broke 'em. If tap [tough?], ready already, you broke 'em. Because if you leave on a tree, the wine [vine], will come ripe too quick.

PC: So you cut 'em off before---

SP: Yeah, cut 'em off and put 'em on the stone or ?--oh that thing can leave, leave. More you leave, more sweet!

PC: But you don't have to open 'em up...

SP: No, no--you no open.

PC: When you want to eat, then you open.

SP: ... You see the stem--You no hemo [remove] the stem because over here going to be rotten--you leave that stem on. You cut here---

PC: Cut up above it.

SP: Yes, and then you put it on a stone--won't rotten, but if you broke the---

PC: Whole thing..

MP: the stem.

SP: Yeah, the stem--you broke 'em--over here is soft already--and little bit water go in there--spoil. Hawaiians used to leave this. If you broke 'em well, maybe one of his girl or boy broke...

MP: TOPSY (cat on the sink)

SP: Half day he no eat.

MP: Topsy! That's the cat there.

SP: Topsy! Get out! Come on!

PC: Then if you cut off the pumpkin then you can leave it for one or two months?

SP: Yeah, one of his child, maybe girl--broke the stem--that's half day you no eat. He give you lesson--no broke no more.

MP: That's the punishment.

PC: But then when you've got the pumpkin--you can leave 'em--you cut 'em off a little bit green--not quite ripe. Then you can leave it for how much?

MP: Couple of months.

PC: Then when you want to eat 'em--how you get 'em?

SP: Just get 'em, split 'em, hemo [remove] the seed--the seed they keep that.

PC: To grow again.

SP: No, no. They boil 'em. They dry 'em out. Then when you see the children's sitting down and eat--that pumpkin seed.

SP: They keep that.

PC: But not for growing.

SP: No, they keep the good seed. Same thing with sunny flower. Sun flower, that seed they keep. They don't throw.

PC: Then when you get the seed out of the pumpkin and then what do you do with the pumpkin?

SP: Boil.

----PC: It makes sort of a soft paste.

SP: Then they mix up in poi.

PC: Mix some poi with it?

----MP: Old Hawaiians used that for poi.

SP: Sweet potato inside and the pumpkin you mix [?] Whoh!

ES: You have a pumpkin poi.

----MP: You can't get poi so you have to use the pumpkin as your poi...

ES: I see, you make it as poi--like a breadfruit...

MP: Yes, something like a breadfruit

----PC: You think about some of the other plants that--was there breadfruit, growing down the beach, Kanaio on the other side? This is why the breadfruit they had to bring over from Kaupo side.

SP: Those days, no more.... The breadfruit just lately come in.

PC: Cocoanuts down the beach? No more cocoanuts.

SP: No more, no more.

MP: There were a couple of trees in Kanaio.

SP: Ah yeah, but just lately Kanealaliili been plant that with Kanui.

MP: By Wahene

SP: That cocoanut just lately come in.

PC: So over by Wawaloa too I think, over that side

SP: No ... Wahene, Wahene

PC: Yeah, but there is some other cocoanut I think also growing over by Wawaloa where the wells for the animal and all

SP: Unh, Unh! ... No more--only two, way over at Ka Lua Kane--only two. That's from my cousin and that man? Kanealaliili--when they go home down the beach they plant cocoanuts there. Just lately they plant. Before no more. Breadfruit, no more.

----Discussion continues about cocoanuts and why they were not planted at that place.

ES: When you lived makai, what else did you eat? You had the sweet potato, you had fish

SP: Pumpkin....those Hawaiian muskmelon and watermelon--Hawaiian kind, small, small like this, ripe already [indicates size, about 7" in diameter]. You remember one time you brought [to ES--I brought him a small watermelon of this size which was striped light and darker green] ... That's what they--They go down the beach--you know lauhala bag, something like that but they make big, they put the dirt inside there, they take 'em in the lava, hemo all the big stone, block 'em up the puka so the dirt won't go down and then you put the dirt inside there, plant the watermelon go on top the stone.

----Discussion continues about the round enclosures and shallow pits we have seen scattered through out the area and Sam Po agrees they are for planting.

ES tries to describe the stone ahu seen at Kalama and on up to the "Heiau Pa Kao" and asks if Sam knows what they were for.

SP: They make a small little mountain?... Why that, that's a--the olden [?] Hawaiian [?] people that's what I know, they make that for dry fish.

---ES explains that these ahu continue mauka almost to the "Heiau" in no seeming pattern--scattered but in this one vicinity.

PC suggests that they would not be carrying the fish in so far off the shore to dry.

Sam agrees. He knows the one near the shore were used for drying fish but is puzzled by the ones inland--doesn't off hand recall them.

PC brings up the subject of the ala nui or beach trail which is nicely paved in places, especially between Keawanaku and Wawaloa and asks if Sam knows anything about how it was built and who made it.

MP: The one we used to say when we always talk, you tell the Government road.

SP: Government road? Oh, that's old.

PC: But not for growing.

SP: No, they keep the good seed. Same thing with sunny flower. Sun flower, that seed they keep. They don't throw...

PC: Then when you get the seed out of the pumpkin and then what do you do with the pumpkin?

SP: Boil.

---PC: It makes sort of a soft paste.

SP: Then they mix up in poi.

PC: Mix some poi with it?

---MP: Old Hawaiians used that for poi.

SP: Sweet potato inside and the pumpkin you mix [?] Whoh!

ES: You have a pumpkin poi.

---MP: You can't get poi so you have to use the pumpkin as your poi...

ES: I see, you make it as poi--like a breadfruit...

MP: Yes, something like a breadfruit

---PC: You think about some of the other plants that--was there breadfruit, growing down the beach, Kanaio on the other side? This is why the breadfruit they had to bring over from Kaupo side.

SP: Those days, no more... The breadfruit just lately come in.

PC: Cocoanuts down the beach? No more cocoanuts.

SP: No more, no more.

MP: There were a couple of trees in Kanaio.

SP: Ah yeah, but just lately... Kanealaliili been plant that with Kanui.

MP: By Wahene.

SP: That cocoanut just lately come in.

PC: So over by Wawaloa too I think, over that side.

SP: No ... Wahene, Wahene

PC: Yeah, but there is some other cocoanut I think also growing over by Wawaloa where the wells for the animal and all.

SP: Unh, Unh!... No more--only two, way over at Ka Lua Kane--only two. That's from my cousin and that man ? Kanealaliili--when they go home down the beach they plant cocoanuts there. Just lately they plant. Before no more. Breadfruit, no more.--Discussion continues about cocoanuts and why they were not planted at that place.

ES: When you lived makai, what else did you eat? You had the sweet potato, you had fish

SP: Pumpkin... those Hawaiian muskmelon and watermelon--Hawaiian kind, small, small like this, ripe already [indicates size, about 7" in diameter]. You remember one time you brought [to ES--I brought him a small watermelon of this size which was striped light and darker green] ... That's what they--They go down the beach--you know lauhala bag, something like that but they make big, they put the dirt inside there, they take 'em in the lava, hemo all the big stone, block 'em up the puka so the dirt won't go down and then you put the dirt inside there, plant the watermelon go on top the stone.

---Discussion continues about the round enclosures and shallow pits we have seen scattered through out the area and Sam Po agrees they are for planting.

ES tries to describe the stone ahu seen at Kalama and on up to the "Heiau Pa Kao" and asks if Sam knows what they were for.

SP: They make a small little mountain? ... Why that, that's a--the olden [?] Hawaiian[?] people that's what I know, they make that for dry fish.

---ES explains that these ahu continue mauka almost to the "Heiau" in no seeming pattern--scattered but in this one vicinity.

PC suggests that they would not be carrying the fish in so far off the shore to dry.

Sam agrees. He knows the one near the shore were used for drying fish but is puzzled by the ones inland--doesn't off hand recall them.

PC brings up the subject of the ala nui or beach trail which is nicely paved in places, especially between Keawanaku and Wawaloa and asks

if Sam knows anything about how it was built and who made it.

MP: The one we used to say when we always talk, you tell the Government road.

SP: Government road? Oh, that's old.

PC:...That road though has been there a long time.

SP: Long time. Well, what my Tutu tell us that road, that's not from the man been fix that road. Menehune! One Menehune carry stone, one, only stone and oone carry--as soon as they set the road, set already. They don't come back and fill up.

MP: There's so many.

SP: That's what my Grand-Tutu say. Like you and me, we take one stone and take one stone--still gotta go back again and fill up--but those people No! As they set, going. No turn around and go back. The road is complete already.

---This raises the subject of how stone walls are made and PC asks him how they line up the wall when constructing.

PC:...How do you start? You take three or four stone an lay them up, lay them up this way, then go a little bit more and lay them up or do you--?

SP: You have to.

PC: But inside some walls—

SP: You gotta put waste

PC:--is thick inside, some has got a very nice smooth on this side, smooth on that side but inside all kapakahi any kind...

SP:...You know those small little ones inside there to hold the nice stone wall--won't collapse.

PC: So which do you build first--how do you start?

SP: You gotta put the thick first, the outside then you throw the waste inside--keep agomg.

---PC: So you lay one stone down then another stone, put some fill, lay another one, lay another one—

SP: Yeah, yeah...

PC: Then you come up and put one or two more, put the fill, then one or two more—

SP: Yeah, yeah. That's how we do it.

---PC: How do you make so straight--string?

SP: Before, no more that kind—

PC: Surveying equipment

SP: Yeah, no more. All eye work. Sshhtt--when you come the other side, straight. You know [look] that stone wall we put from down Waiapea up to Kalualepo, eh? No surveyor, that.

PC: When you build a stone wall for the cattle or for any other thing, some kind of stone walls I've seen have this nice and smooth on two sides then inside the fill. Some not like this at all. Some are all just heavy rock, maybe only two or three wide--not as strong then, I don't think. Not as strong a wall.

MP: No niho lua?

---Sam proceeds to tell how a good worker builds a good wall--a poor worker, if far enough away so the boss doesn't see it until too late, will build any kind of a wall.

PC: What do you call a double wall?

MP: Niho lua.

---PC: And then a single wall...

MP: What do they call the single wall? Niho kahi?

SP: Niho kahi.

MP: ... one tooth and two teeth

ES: So you have a two teeth wall and a one tooth wall

SP: ... Now you take human beings, same thing. Some fell a get two teeth. One inside and one outside the gum.

MP: They call it a shark teeth.

SP: A shark teeth, see? That teeth outside is only straight. The crowded one inside. Same thing like stone wall. If you don't put waste inside. That teeth outside going to fall in...

----PC refers to some of the single stone walls seen around Kahikinui which are not even fitted closely--So loosely made they can be seen through. Asks if these are perhaps made for a temporary need and it doesn't matter if they fall down after the need is gone.

SP: No. You know, not everybody good worker. Some fella aaahhh, the luna way up there, we put any kind, By the time the boss go back and checkup, too late already. Nobody work there. Let 'em go. --Now you take Kahikinui, that house we been go. You see that big stone wall? 3" wide on top and 4 feet down [?] That's one Hawaiian man from Kaupo been put up that stone wall. The cow pen.

PC: The cow pen. Narrow on top, though?

SP: That's 3 feet wide--on top. Under 4 feet.

----Indicate by gestures how the wall slants in at the top:

SP: And you look the big stone, about 4 feet or 5 feet high. You know the big stone!... He carry up..

PC: But that kind also has got the waste inside?

SP: yeah, yeah. Gotta put good waste inside.

PC: The waste then, what, maybe 3, 4 inches, small pohakus?

SP: Yeah, yeah. That man, top man. The name is Poouahi.

----PC: He built the wall around the--?

SP: Kahikinui

PC: The corral there.

SP: Yeah, yeah. He was the one.

PC: When did he build it, I wonder?

SP: Oh, that I didn't know.

PC: What you think? When were you born...?

MP: 1898

PC: 1898? He built this before you were born?

SP: Yeah, I see.

PC: You saw him build it?

SP: Yeah.

PC: SO he built it maybe 1910, when you were a little boy?

SP: I think 19—1915...

PC: Then before that there was Kahikinui house, and before that there was some stone walls some place there or was the whole thing built up at that time? Before—

SP: No that stone wall from the olden people before. Yeah, get but—

PC: But this corral was built—

SP: Yeah, that's only from that Hawaiian. He went down and get that Hawaiian to come up and put that—

PC: Who was that--Raymond then?

SP: Yeah, Dr. Raymond...1915, I think

PC: That house itself--that small house there.

SP: That's old house, there.

PC: That wooden house. You think that's what, before your time?

SP: I think they made that for a -- that's one Portugee.

MP: That house was built before you?

SP: Mmmmm! One Portugee, that.

PC: Well, this fellow Paiko-- They keep talking, is that the guy? Paiko?

MP: It must be that person...

SP: One Portugee, the one been feed the cattle first—

PC: Enos and Paiko and some of these

----PC tells about finding a document indicating Paiko rented land in Kahikinui around 1875--would like to know if and who other tenants might have been.

PC:...Raymond had it but was anybody using Kahikinui house before Raymond came along--for ranching?

MP: Before Dr. Raymond?

---SP: No

PC: No body using the place?

SP: No, I think that Portugee, I think. The one you talking now. He the one been put up that house.

PC: He put it up and then maybe he make and somebody else...

SP: Yeah, I forget the one. I know Dr. Raymond. When we go over there and work for Dr. Raymond the house already—

PC: Already there.

SP: That house and this house and this house--get three houses over there.

MP: And when was Alik Dowsett?

SP: No, Alik Dowsett was working with Dr. Raymond. McPhee was working with Dr. Raymond then afterward McPhee been change Kahoolawe--Kahoolawe. He take cattle on top Kahoolawe, mule and sheep. Then Alik Dowsett come. Then Alik Dowsett been work with Dr. Raymond and Alik Dowsett been stay over there a couple years. Then his boy come, Edward. That's the one, Edward--Alec Dowsett's son. The one lame—

PC: Edward?

SP: Edward. Well, he work with Dr. Raymond. When Dr. Raymond been work, work, work, Edward gone [?]. McPhee come back again. When McPhee been come back again, Alik Dowsett come. Them two was taking over. Dr. Ray? Jllond [?], see--from Dr. Raymond and Alec Dowsett he go, go, go--Dr. Raymond sold the place to Edward Baldwin—

PC: Frank Baldwin—

SP: Yeah, Frank--Frank Baldwin. So that's how those people move. McPhee came down Paia stay, work in the stables boss[?] Paia Plantation. Alik Dowsett been go back again to his old place, Parker Ranch--Edward--135-- Mrs. Po asks where McKee came in and is told. Further discussion about who was using this land at Kahikinui and when. PC comments that perhaps Raymond is the first to extend Ulupalakua ranching as far as Kahikinui and would have built this big corral therefore. Possibly between Paiko's time and Raymond no one was using the area. PC also brings up the missionary records that refer to Kahikinui Village.

PC:... At the village of Kahikinui. Well you know Kahikinui is what--which place you talking. So I wonder maybe this village, when the old people--your Tutu and all, when they spoke about people living Kahikinui, where did they mean? Where were lots of people living? Where was the village of Kahikinui?

MP: Most people was staying in Kahikinui, what part in Kahikinui?

SP: That I don't know...

---Blood curdling screeches from under the house--Topsy being pursued by an ardent admirer.

PC: When you think of the old days, you know, you speak before of everybody going down makai and spend six months and the rain come again in the mountain, everybody go mauka again, back and forth--but this in your mind, you're thinking of Kanaio--right?

SP: That's right.

PC: But then it must be the same no matter which place you are, so there were plenty people in Kanaio who did all this back and forth—

SP: Yesss.

PC: But I wonder how many other people out beyond Puu Lailua--lots of people also living out there--your time?

MP: Your time, plenty--people by Lualailua?

SP: Well, let me see--Kalalau, Keaukane, Kaalawai--I think that's the only people I know there...

PC: So maybe only four or five families?

SP: Yeah.

PC: And where did they live? Over by the Davis place?

SP: Kalalau live upside of Davis--Davis and one Tutu of mine over there--the feet like this--when she walk one lady [indicates pigeon toed]. That's my Tutu.

MP: Keokane's place?

SP: That's Keokane's place. Get a one more house down the cow pen. I don't know who own that house. The up side of the hill--you know the big hill? Puu lailua? As you're going the old road and between the hills, this side, you know, left hand side-

PC: Mauka side.

SP: Yeah, That's a Kaalawai's place--one lady with a man, Koonakike--That man, Koonakike was working with Dr. Raymond--with Alec

Dowsett.

ES: I think he's trying to ask you--you know where the old church is out there--Catholic church?

PC: By Kahikinui House.

SP: That's Puu Oneone, that. [Oni Oni?]

---PC: Mrs. Ashdown told me that's the hill, the puu is where this Catholic Church but your time this Catholic Church nobody, it's all still ruin, all broken down?

SP: Oh, my time it's all broken down. I don't know who.

MP: Puu Onioni, mauka side--you know when you make that turn go down then you see Kahikinui house. You see those ulu malino [sisal] on this side--who was staying there before?

SP: Well, that I don't know. Only that house in Kabikinui, that's the only one I know. Dr. Raymond he go over there and sleep and work.

---PC shows Sam Po a diagram of structures in the vicinity of Puu Onioni and Kahikinui house.

PC:... Over here this one road goes across, the Government road, this one road goes up Kahikinui House--this one down in the corner is this church, this Santa Inez Church. So this is Puu Onioni. O.K. Then, all this down here is one stone wall goes all the way down, makes a big loop. This must be again, cattle, uhn?

SP: Yeah, yeah. Right next to Puu Onioni?

PC: Yeah, over this side--you can see that line is all stone wall going down.

SP: That's all for the cattle.

PC: Well, inside there, inside there Bill Kikuchi, you remember the other boy that was with me--and we went down that time, one year ago we went and we found all kinds of structures inside--must have been a long time before some Hawaiian living on that place, you see; because one right inside there is this kind of thing, close to the road. The Government road maybe up here, you come down the hill a little bit and you find big house--one of the very few with a door and then some platform all flat, this ilili in the place--all flat low platform, but all this other little circle, and big thing here and some pens-- If you had something like this, what would you put inside that was maybe, this room and the kitchen--all wall all around. What kind of animal would you put inside? or kind of plant can you grow? Fairly big you know... What can it be for? Unless before it was one house and then they fix up the door

--SP: Yeah

PC: When you made the door--let's go into the house again for a second because we've got some here. When you make a door or make a house, some time the door open out where the wind coming in... Most of the time you open the door toward the east wind, eh? From Hawaii the wind coming

SP: Yeah.

PC: You have the door or that side, why? I should think you'd get all the rain.

SP: No. always get fresh.

PC: Fresh air--so you open the door to the East then. Some of this kind always facing away from the wind I think must be

--MP: Towards the beach.

PC: Towards the beach or towards the west opening up but just a little half circle, I think maybe only this high ... so you can get in under the rain maybe? Some kind of a kamala? And then there are some--another kind of house I think, like this sketch--some long one with door in the corner. Some however, just, I call them like horse shoe, three sides, three sides, heavy walls, the fourth side maybe just one, two stones--something like this. Sort of like a horse shoe. This is what it looks like. Wide across the back wall and then a nice wall on either side, then all this makai slope, down slope open and maybe a little bit pigeon toed ... at the front end and small always. It's almost like a type of house. I found a lot of this kindlots of other ones big and square

--MP: And that's a little one?

PC: And these are little ones.

MP: Could it be a place where they stored their food?

PC: Maybe.

MP: They don't put it where they sleep.

PC: Usually as big as this room only--quite small of every family to live in.

SP: Oh, maybe that's where they put their food.

PC: So we have to guess because we weren't there.

----Sam says that he hasn't been to a lot of these places so really doesn't know. The cave with ti leaf in it near a heiau and above Hanamauuloa is unknown to him.

PC:...but over this place the road comes down, down, down to HanamauJoa--Do you know that name, that Hanamauuloa Village, Wekea Pt..?

MP: Wai-ke-kua

PC: Do you know Hanamauuloa as a name?

SP: Hanamauuloa and Wai-a-kekuaand Kahakaauki and Kepalaoa

----Sam gives the names along the shore and Peter asks him again if he uses the name Hanamauuloa.

MP: That's on the flats there used to be an old windmill--? pump?

SP: That's Hanamauuloa.

----SP lists the name along the shore again. PC tells him he will put Hanamauuloa on Sam's map as it was left off by mistake. The discussion returns to the ti leaf cave and the adjacent heiau. Sam remembers this structure but does not know what it is. Jeanne Booth Johnson's cave is described but he is not familiar with it but he remembers the heiau near the water tank [Walker #183].

Sam is shown the stone walled house with the sisal growing in it [ES picture]. He verifies this as Kou.

PC: ... This is the last question I'll ask but over here Nakaohu Point, over here, one big bay comes in here, deep and sharp place--then I think you said Puhimake is somewhere along in here.

SP: Aaa, right here—

PC: Just below this big --? --? One big wall comes right down to the beach. Some kind of heiau there, I don't know but one wall comes right down.

SP: Right in front here.

PC: Right in front of this big square, M-11 down below, then Puhimake is a hole--?

SP: Right here.

PC: ... Out in the ocean? Outside

SP: Outside, Puhimake

PC: Is this because "dead eel" or what? This is where the eel would die or you could be killed by the eel or dangerous place to go? What's the story?

MP: You know the story of this place? Why they named it?

SP: I don't know. That's what my tutu was saying, this Puhimake.

ES: This place here with the houses is Puhimake.

SP: Yeah.

ES: And what's the name of the small bay?

SP: This nice bay--I don't know the name of this bay. This is Puhimake, this.

ES: Puhimake is where you dug--M-11.

PC: Just off the coast of M-11.

MP: Next to Puhimake what's the name of that place?

SP: No, next I don't know.

----Discussion follows about the bay and its distinct features--but Sam does not know any name for it.

PC starts to bring interview to a close. Mrs. Po mentions her third son, Bray who is interested in learning the names of the places--desires to learn from his father.

SP is telling PC about a cave that has alaea in it.

PC: Is this another place along there?

SP: Yeah, upside of Paena... Get one cave. Liilii bit of cave. On the ridge--inside there the name of the cave, alae [Alaea?] That's what I like to go there. I don't know if I going there [?] go up because it's no sense for me to talk to you. Then we go over there--then disappear. See?

PC: Then we'll go look for it.

SP: Yeah--If you go, no talk, see. Pilikia kakou! ... That's why I like go Paena--go get that alae [alaea]. That alae, that's for cure the people.

PC: Alae is the kind of dirt you can get in this cave--lepo ulaula? ... Which, the cave you call lepo ulaula?

SP: Lepo ulaula. Then we go over there. From the cave inside she come out the red dirt. That's what I like go down there.

----PC asks more specifically how you get to this cave.

PC:...and then we go Paena—

SP: Ah, up. You going up now. You leave Paena and go up.

PC: Kalama?

SP: No, no--straight up to Paena. We not going down. We not going Kalama.

PC: You mean--go mauka

SP: Yeah, we go mauka

PC: Up, I don't know .. MP: Up shoreline.

SP: Well, in Hawaiian, up-mauka.

----Sam apparently gives directionals, in Hawaiian--More explicit? [ES-I can't catch].

SP: Had one ridge. Over there get cave like this. That's where the alae in there--but no good we talk, we go over there--you talk and go, you no can find nothing.

PC: Right, right. So we won't talk about it.

SP: When we reach there. Everything quiet. Then you see, all comes from the edge, come outside... Hard to get, you know that kind. So that's why I like go over there.

PC: But this is from Paena, straight inka?

SP: Yeah, straight line.

PC: I have a feeling it might be M-8.

----PC explains we may have disturbed the cave, if this is the one. ES asks if it is above the "ala mui aupuni" and adjacent.

SP: Mauka of the ala nui aupuni.

MP: Not too far.

SP: I think about 50 feet away from the, 50 or a 100 feet from the government road.

ES: Oh, that's mauka though--no.

SP: Way mauka you can see that ridge and then that cave on the side.

PC: Let's go look!

----MP: Well, this was used by the Old Hawaiians, when you have a hemorrhage... You put a little water in and a teaspoon of that and you drink that.

SP: Pau, pau. No doctor can cure...

PC: And it's a red dirt?

MP: When you spit blood, that's what they use.

SP: You use that, pau.

----General conversation on what day to go. Then they arrange themselves for the picture--sitting on the couch while Mrs. Po is making silk leis. Tape recorders are discussed. Weather is discussed and final arrangements agreed on for the trip on Thursday.

The preceding units were made at the Sam Po home in Paukukalo. The following hour or two conversation will be hopefully at Ulupalakua and on the slopes of Kanaio in Sam Po's "home town". The first recorded conversation was on March 25th.

Interviews with Sam Po and Mrs. Po at their home in Paukukalo and on a Trip to the Shore in the Kanaio-Kalo'i Area, March 25 & 28, 1968

March 28, 1968. Jeep trip down to the shore in the Kanaio-Kalo'i area. Present: S.P., Mrs. Minnie Po, PC, ES.

PC: The following hour or two conversation will be hopefully at Ulupalakua and on the slopes of Kanaio in SP's home town. The first recorded conversation was on March 25th. This one today will be March 28th. Present starting time from Ching's Store, quarter of eight in the morning.

----Looking down on Cape Kinau, along the shore can be seen a small pond.

ES: Do you know that name?

SP: Yeah...

ES: Right in the lava but on the beach.

SP: That's Mokuha.

ES: Mokuha.

SP: Yeah, the old light house. Here, you see this one high stone now? Well, the husband over there. That's the wife.

MP: Pohaku Paea.

PC: Then you go a little bit more over this way and you see one pond.

SP: That's Mokuha.

----Repeat discussion on Mokuha and old light house...

PC: Then you come along a little bit ground, all the way around and you see a little bit of kiawe and some little bay there. We've walked that far. And the way around from Mokuha, all around a dip and little bit of kiawe. The first kiawe you see. What is that little bay?

SP: Oh, well... On this side here I don't know much--Only from this side here go [indicating towards Kahikinui] I know all the names. But Makena side aaaa-- It's only the big name I know. Kanahena and a-- over here by Puu Ola'i and --- the big name I know but the small name I don't know--but from Mokuha-- go-- and Pohaku Paea and come this side, well, I know li'l bit name.

----SP: Mahiehie. Get one ulu tree inside. Ka lua Mahiehie.

PC: And it's just near--further down inside, not where this kukui is?

SP: No, no.

PC: But down on the flat.

SP: Yeah, yeah. Right here.

ES: This is the one that shows on the map.

PC: Well, that's got a big.. ulu in it.

SP: Used to be breadfruit inside before and mango tree... Now make. Make die dead.

----ES attempts to get Sam to name the places close to and including Kamanamana in order to hear his pronunciation of Kamanamana.

ES: First you come to Homai-ilili, then you come to what place? And then you come to Kane-wahine.

SP: You going up Kaupo now?

ES: Yes, going towards Kaupo.

SP: Now, you leave Punapuna. Then you go Papali, then Keawanaku.

ES: No, I want to go this way-- Let's go back to Keoneoio. [ES got the wrong point so starts Sam over.]

SP: Well, this is the light house. Then we pass coming this side. Then Papaka. Papaka and then Kaulana then you come as far as Keoneoio.

ES: No, no. I want you to go to Kaupo from Kaulana.

SP: Kaulana, Papaka, then Punapuna, Papali, then come Keawanaku.

ES: Then you jumped a little-- Isn't Homai-ilili there?

SP: Now, wait-- Keawanaku now, then Homaiwai. That's the punawai. Then Homaiilili, then Kamanamana, then Kanewahine, then Kiwi.

----SP: Well, we hit Kiwi then that's that shore coming up, Awaiti. Then the cave, then Wawaloa.

----We continue on towards Kanaio.

PC: We have Paku? from Lapaulaula.

SP: Pau.

PC: Kalo'i, then Lapaulaula, then [Haku, Paku, Aku?] then...

SP: Mahu

----We start down the jeep road to the shore at Puu Pimoe.

SP: Used to be policeman.

MP: Yeah, who her name was?

SP: Chow.

PC: And she lived in that little house?

SP: Right here.

PC: Right below the hair pin turn coming down the first part... One big house right here? Just at the hairpin turn as you go down towards Pimoe

SP: Mauka of Pimoe. Ala-poepoe and then Keau.

PC: Keau is the land here?

MP: A lady.

SP: And the husband, Kawika Pali.

SP: Right over there. That small little hill there. That's Puu O Kahikinui? Pa Kao. George Bums pa kao [goat pen]. Puu O Kahikinui.

PC: Just on the mauka slope of Puu Pimoe... up side of Pimoe. Then this... lua right by the –

SP: Lua' Akeke... Right here.

---MP: Why they say that Lua 'Akeke--the cinders

PC: Cinder hole--just on the eastern mauka slope of Pimoe.

---Discussion about whether to get family data now or later. We continue down the road and stop on a rise overlooking the shore.

PC: From the Kaupo side--if we go over now to--form Wahene, then we go over, over and I can see the pali at Alaha.

SP: You like I tell you the names from Wahene? No, we go as far, this far of Wahene. Kalua-kane, Wahene,-- Wahene, and then Puhilele, then a --Kukui-a-kai, Naupaka, then come? Kapialu, Kauka and then Pohakulo'ih--ah--Wakalani...

ES: He gave another one in there...

SP: Kukai-a-kai...then Naupaka. Over there famous for uouoa. You know the kind fish-is good like mullet. ... Whooo--over there famous--uouoa. Ah, you look when they come inside by schools. I used to catch over there some time 30 to 40 one throw--Ho, nice fish. Hawaiian used to be 'ai maka, you know 'ai maka, eat raw. Hah-Schah! Well, then Kukai-a-kai and then Naupaka, Kapialu and then Kauka. Ah [can't catch but I think he says something like climbing around to Wakalani]. Then Alaka, then Kalapawai.

PC: Now you can see--and you get Wakalani and Alaha, then the one lapa goes out.

SP: Yeah, yeah that's Kalapawai.

PC: That's Kalapawai on the Keone'o'io side of that lapa--is Kalapawai.

SP: Yeah, Kalapawai.

---PC points out Wakalani and explains that the jeep will end up there and we will have to walk any place else we care to go. [New road put in by the Army or National Guard brought us out at Alaha.]

SP: You know what kind of tree is that? That's Iniko.

PC: Indigo?

SP: Iniko.

MP: They call it in English, Indigo.

---SP: This is the hardest grass for you to pull. Tough, you cannot. You use the pick. You gotta go with the pick...

PC: Good for nothing?

SP: The cattle eat this.

PC: There's a little curly leaf and little yellow flower...

PC: This big stone wall that runs across the road that we're going down to Kalapawai [we are getting near the beach now]. This is a sort of junk wall but they put it all the way across--before it was there?

SP: Yeah, yeah. Before they put stone wall over here, hold your animals down so the animals no go home. See, that's why they put stone wall.

PC: This stone wall then was for what animal?

SP: The horse, donkey or horse or mule, whatever you come down. PC: No more cattle?

SP: No more cattle those days. So they come down here they put their animal down. Naturally when you go home you just come short ways to come and catch 'em--go home. Now, if you let 'em go, they go home way up there--far, too far.

PC: So how far over this wall go?

SP: Go! go! Way over Wahene and then cross to the lava and then the horses cannot go the other side-- Then it goes way down Wawaloa.

PC: And beyond, Keawanaku side almost.

PC: This house--and then over there down below we see one.

SP: That's the only one I know.

PC: That one down there?

SP: That's my Tutu's--house, that's Kekahuna Kuku'e's house that.

MP: His grandfather.

SP: My grandfather.

MP: His mother's father.

SP: Where that car parking now. [Indicates the end of the former road at Pohakuloihi]. Then see that stone wall all down already? That's where my grandfather.

PC: Now who on the outside, on the top—

MP: Kauka.

SP: That's from my grandfather.

PC: Both houses?

SP: Yeah, when they hot down here, they go up there. Fresh air, cool—

PC: Now the house up on the top, that point there that's Pohakuloihi?

SP: Pohakuloihi inside the water.

PC: Inside the water?

SP: Yeab, yeah.

PC: Then that house they lived in when it's cold.

MP: ??

SP: No, I don't know but—

PC: But they built that house?

SP: Yeah, yeah. Kekahuna. That's a rest. When stay down here too hot, they go up there with the family.

PC: Then that's two houses. Then over here in this big kiawe—

SP: That's pa kao that.

PC: Pa kao? Is what?

SP: That's where they put the goats--goat pen.

ES: Where you camped.

PC: Now this one house—

SP: Over here I don't know.

PC: Up here we don't know--then we go down to the front one, quite close, is very nicely preserved.

ES: Before you move, is that big stone out in the water Pohakuloihi?

MP: The high one?

ES: The one that's in the water.

SP: Yeah, yeah.

----SP: Right next Pohakuloihi, that's Kauka.

----PC: Your Tutu used to plant lauhala in this little pocket? Don't go walking away so fast! ... He had a house here or just lauhala was planted. He didn't have a house here, just plant the lauhala.

SP: Yeah, yeah.

PC: And this is just inside Kalama, then.

SP: Give me a chance go over throw net.

PC: That's right, it's a nice low tide. So you're going to throw net I'm going to stop the tape recorder and take a picture instead.

----PC: Ko'a i'a means to—

ES: Ko'a is a coral or something and also a mound or a marker out in the ocean, it's a hole--(when certain marks on shore are lined up then one is over the fishing hole out in the ocean--fishing grounds).

----PC: Here's a perfect indication of the ahu and we were asking a long time ago even early 66--what about the ahu like this, all sprinkled around. There are the ones we mean.

SP: I know all these ahu that's only for dry fish, Kaulai i'a. When they go out they see the fish out on top the stone--so nobody take 'em away. See. Now if you dry here you don't know if the cat or mongoose or whatever--see but they put on top the high place so they can see--some other people come.

PC: The stone wall that goes around these three ponds, what was it put there for? So nobody could go inside?

----Discussion follows concerning the walls around the ponds.

SP: Go inside by and by sink... You know all these ponds, all these ponds danger you know for the animals.

PC: And the water, even if the animal drank the water not so good?

SP: No, they don't. They get the punawai here.

PC: Where's the punawai?

SP: Right next to this.

PC: Let's go look at that then.

935--- ES asks Sam about the ahu in back Paena-- They are similar to the fish drying ones in shape only higher. They are in the vicinity of the large stone enclosure which Sam calls Pa Kao (goat pen). At the moment he does not recall them.

PC: If we get closer and see then we'll get it straightened out.

SP: I know all this, that's all... Kaulai i'a.

----We stop and look at the beach vine with the small pale blue flower--Pa'u or Hiiaka.

----Proceed to a stone structure.

SP: If you see one side open??? kau kau/pa kao.

PC: Well, if there's one side open and it's about a yard and two yards across. This is the one that's just west [East?] of M6. The milo shelter...

SP: Yeah, they put kau kau.

PC: And this little one then would be built up just high enough to keep?? Then would you put a cover over it?

SP: No. They don't cover.

PC: But just a little open like this... What kind of kaukau would you store?

SP: Oh, punkin, water melon and sweet potato and banana—

PC: Not the fish?

SP: No. ??

PC: Well, you dried the fish though, and you want to dry more fish. When the fish dry already, then you take them off, where do you put them?

SP: Ah, you put then in Lauhala alid put them in there.

PC: In the same storage place, then?

----PC tells about finding lots of structures similar to these, up mauka which they called kamala because they thought they were some kind of shelter. Now he wonders if they were for keeping food, to which Sam agrees.

PC: So this one you think used long time ago by the people maybe staying over here.

SP: You know over here one cave.

PC: Yes, I know...

SP: Because I used to stay over there with my wife.

PC: But when you stayed in this cave, then they would use this place for storing the food.

SP: Yes ??

PC: But you'd stay for three or four months maybe, six months--then stay over here.

SP: Sure.

---Start towards the shelter cave M6. Several fishermen encountered. Sam comments on how people now days do not share when they have something. One of the fishermen turned out to be his nephew.

---At M6--Milo shelter cave.

PC: You can put the net and store inside--before we found one small box for the lobster.

SP: I used to sleep under there with my children, my wife--when rain, we go inside the cave.

PC: Two years ago we cleared all over--then we dug some small hole over there looking for the old fish hooks, put the dirt over this side that's why this dirt's now here. So we already dug this up. Then, when you were here though, this place in front with the milo growing has one stone wall around, inside there is some water, hunh?

SP: Get pond.

PC: That's still dangerous.

SP: Yeab, dangerous.

PC: Not a puna wai?

SP: No.

PC: Let's walk through maybe this way and you can show me the puna wai--up above. --- Area considerably overgrown with milo--trying to make our way through.

PC: But these little walls around this—

SP: That's ours—

PC: Place. You put these walls up?

SP: Yeah, yeah.

PC: Just for, for.

SP: For us. Sleeping--Over here nice before, you know.

PC: Oh, I know. We cleared it out and it was nice and smooth—

PC: But you put these walls up here, then?

SP: Yeah, yeah.

PC: And then all around the side--oh, over that side wall, there's one small flat little round place--uh, I wonder what that was for, just over behind you there--there's a place right in the front wall. It was about this big around and Just raised up a little bit and then had ili ili—

SP: I think that's where—

PC: Maybe you cook on it or?

SP: No--folks sit down, I think...

MP: That's the resting place where [interference makes it difficult to catch the exact words--but Mrs. Po tells that is where she used to put her babies to rest].

PC: Because it's right here--maybe you built it yourself, yeah? Right here on this side with the ili ili on it. It's right here. You built up so to put the baby on?

MP: Put the baby to rest on.

PC: Now our prehistory of Kalama Bay will be complete because we thought, ah, maybe 200 years ago somebody made a ko'a here ... and Mrs. Po made it for her babies [hilarious laughter from all].

MP: When I had my second child. [Samuel Keauhoul'i'ili'i, 2/18/1929]

SP: 'A weoweo.

PC: 'Aweoweo is what?

MP: The Hawaiian water cress [same as 'aheahea].

SP: Good eat! Lawalu Put in the ti leaf and roast 'em.

ES: You don't eat raw, though?

MP: No.

----Directly in back of M6 Milo Shelter.

PC: See, all back through here--I want to go where you remember the puna wai I think we can around this way and up--but in here all these walls, inside the keawe trees there, is another place to stay—

SP: No [Closer inspection shows not enough for shelter]

PC: These walls were put up--just what?

SP: Oh, before, plenty people, they stay

PC: Just stay, and put the wall up for protection?

SP: Yeah

PC: From the wind?

SP: Yeah

----In back of the shelter, Sam shows the small terrace with the straight curbing, which he made. PC neg. #16-35.

PC: You made this straight line here?

SP: Yeah.

PC: And what was this then? You covered it over with a—

SP: No. We put the mat and stayed here.

PC: You put the mat and stayed here. So you made these stones and brought the sand.

----SP deplores the fact that what used to be neat and clean is now a mess. PC agrees that even in the two years since they cleaned up the area it is all disturbed and overgrown.

PC: But this sand and ili ili and this line of rocks just behind, just mauka you laid down and then—

SP: Furthermore, we don't clean.

ES: Mrs. Po says that when you see a smooth, sandy place like that, this is where they came to sit and patch their nets.

SP: Yeah, yeah.

MP: When they go fishing--he and I used to go fishing, come back, dry the nets and then we sit—

PC: And patch and work here--because this is nice and protected from the wind.

SP: Yeah, cool.

PC: But the milo tree was growing then.

MP: There was a big milo tree.

SP: We used to clean nice and we stay with my children, hoa--go fishing, come back.

----PC: ... All these places, you can see a little flat place to work there, even on top of the cave there's one, is nice flat on top there.

SP: The people used to go there and take a rest.

PC: Now when you came down and stayed at this milo tree, how long? This would be for the five or six months you mean or for the short time?

SP: Nooo, many years ago.

MP: No, how long:--

PC: Each time you come.

MP: Just a couple weeks.

SP: Oh yes.

PC: Not six months though?

SP: No, no.

ES: That was when he was younger.

PC: When you were small boy, you'd come.

SP: Yeah—255

PC: I think I ought to get a picture of you with the line of rock just so everybody's convinced that we haven't got anything that is that far back. [PC neg. #16-35]

---Start to move on towards "cotton house" at Paena. Sam will show the puna wai for this place.

Before leaving

PC: The water at this milo shelter, right in the dip below us is too salty to drink, but Sam, you said that this place has got some water inside. No good.

SP: No good. Water behind here.

PC: But there's one, two three ponds the water's no good.

SP: Yeah, no good.

PC: But outside, one small puana wai.

SP: Yeah, yeah. One small little place...water in there.

PC: And is that paved? They've got some stone around?

SP: Yeah, yeah.

PC: Well, we might try to find it. I haven't seen it yet. But it's outside the wall that goes around--outside the pen-somewhere up inside the--little bit up mauka?--answer a little vague.

PC: Wawaiti?

SP: Wawaiti.

PC: Is just there beyond the--at the wall that is in the west of M6...

PC: After we pass Puhilele, then we get to Kalama, then from Kalama—

SP: Over here, Kalama pau.

PC: Kalama pau, right where this stone wall comes down, then Wawaiti begins?

SP: Wawaiti—

PC: Coming over now.

SP: See over there by that hill there? The other side, then pau--then Paena.

PC: Wawaiti and Paena... So Wawaiti is this point of land in between and just below the Cotton house.

SP: Yeah.

PC: Just in the middle of Wawaiti, Sam--before we get to the Cotton house, but maybe close enough, could they use this for food over here-- this place here shows little bit of low stone walls set up and smoothed over little bit on top here. You think this was for what?

---Can't hear Sam's comments--too far away.

PC: For the people to look you think. When they're out in the ocean they can look at this one, and then match up and fish in the right place. So you think this is a little ko'a. O'io ko'a right out there.

SP: We go over there by that cave and start our talking.

PC: O.K., but o'io is what you'd get out over here then?

SP: Yeah.

PC: Then this is a little ko'a?

SP: Yeah.

PC: This is the house we speak of as Cotton House.

SP: Yeah, that's my--Kaniala and Kenui.

PC: Kenui lived in there. Inside the wall is one house-over this corner is one small punawai, eh?

SP: Yeah [no?] punawai over there.

PC: What is in the corner over this side?

SP: Because they try... Over there, that's not punawai...that's for...

PC: They made a hole though in line.

SP: They made kalua pig, when they make luau they put their pig in there. The punawai down there-- You see the punawai down there?

---He points toward Keawanaku side of Paena.

PC: I haven't yet but we will pretty soon... I'm taking a picture of that ko'a now--that was for 'o'io...still this is Wawaiti--is that right, Sam?

SP: This is Paena.

PC: This is now Paena--Wawaiti just stopped.

SP: From there over.

---We go down to the shore. PC asks about a shelter but Sam not listening--is bent on showing the punawai in the ocean.

SP: Punawai down there. Get water.

PC: Punawai in the ocean?

SP: Yeah, but too high the water... You see that small little puka?...you see circle go like that...that's water inside there...fresh water.

PC: I see the green--triangle, the green rocks... That's the place where it's punawai when it's low tide. Well I'll take a picture of that too... That was the water for Cotton house?

SP: Yeah, yeah. No! When they go down no more water they come here, drink when low water.

PC:... Just for drinking--you couldn't fill up calabash?

SP: No, no--just for drinking.

PC: It's called Paena because landing canoe?

SP: Yeah, landing canoe. When rough, bring the canoe right in here.

PC: When it was rough and the water was high—

SP: Come right in.

PC: Oh, over the other side, in Paena.

SP: No, right this--bay. Get one more bay to in.

PC: And that's where they landed the canoe... The only safe place to land when it's too rough... But this little shelter now, this kind, right by the punawai. This kind of shelter is all made maybe last 100 years ago... But in the olden days were there shelters like along the beach, many?

SP: Yeah, plenty.

PC: What kind of wall would you call that, junk?

SP: Yeah. Just for protect the wind. Put tarp on top.

PC: But when you were small boy this kind of place would also be built and they put grass over--or whatever?

SP: No. They no put grass. They only fix stone wall and then they sleep over there. Before this place big. When the tidal wave come, push all inside here.

PC: Ah, so this was a lot lower here, the overhang.

SP: Tidal wave--ha, ha!

PC: Knock 'em down... That's the end of that roll of film. I'm starting a new one now just at Paena and below the Cotton House where we're standing looking over the bay.

ES: She told me how they surround for 'o'io.

MP: This is the 'o'io spot where Sam and I used to swim with the net out.

PC: Where it's nice and smooth water now?

MP: In here. There's certain time we see the 'o'io in the morning when we get up about 7:00 when we come over here and just catch the school coming in. Then we have the nets ready, two persons from this side goes in. One goes with the net leading the net across, the other stays with the end. The two on that side come just to slap the water so the fish go in.

PC: Push them into this side.

MP: Then he comes with the net and they both swim up to the net, the two sides meet.

SP: Big kind of 'o'io--You know can hold.

PC: How many can you get this kind with a net?

SP: Sometimes 40, 30!

----SP: Yeah, one time here, right here, this end here--then you cross. When you cross, it won't come back, it go the other side--go--and by that time the person the other side come in, clap the water--go back again, come over here. The net waiting over here for him. In the net now--pili kua. Pau.

PC: What's pili kau?

ES: Got him on his back?

MP: Yeah.

PC: Japanese lobsters you call them?

MP:... Japanese slipper lobsters...

PC: Where were they, in a little puka?

MP: You see that little point there, that little reef coming out.

PC: Just a little reef coming out on this side.

MP: It's starting to get high tide.

PC: But just here, down below.

MP: [yes]

PC: A little reef and maybe--how long were they? Small ones, but good eating?

----Go to the lauhala drying platform near the punawai at Paena.

SP: That's for kua lauhala.

PC: What would you do with that?

SP: They go pick lauhala, they come over here.

PC: Then dry them?

SP: All the wahines come over here dry' em up. Pau, and kua

PC: What is kua?

SP: Make 'em--[make them round] so they come round.

PC: Oh, roll them up.

SP: Yeah, roll 'em up. --All this here.

----Discussion what a nice structure the platform is but has been spoiled by the tidal waves.

PC: Now, we're standing here--Paena is the bay.

SP: That's right.

PC: Then we come a little bit over, Kaupo side from Paena is Wawaiti.

SP: Wawaiti.

PC: OK, then we come Wawaiti, Paena and now we're standing--this is still Paena?

SP: We're still in Paena now. Well, after we hit the Punawai--from there, right down.

PC: Is the punawai this big puka over here?

SP: Yes.

PC: I want to stop and take a--Sam was just telling me that this flattened area with this large rock here and out where the tidal wave probably smashed to bits--there, then back here with a good niholua-- This was drying the lauhala, the women would come and then roll it up-- But also not just lauhala, you could do any kind, fish nets or whatever—

SP: All small gravel, ilili but tidal wave been come, cover the whole thing-- Kua lauhala--kua lauhala.

PC: Kua lauhala means to roll it up?

SP: Yeah.

----MP: They bring and kaula'i, yeah?

SP: Yeah, Kua like this.

ES: Strip it.

PC: Pardon me, stripping it then.

SP: Make 'em flat... But over here the kaula'i pau, then they kua lauhala. Afterwards they kua, and then they ho'oka'a.

MP: Roll.

---ES: They dried fish here and then they dried lauhala?

PC: Or repaired fish net?

SP: No, no. They don't dry fish here--only for lauhala.

---SP: Is a good kind lauhala--the brown lauhala and the white lauhala.

ES: And they had both down here at Kanaio? You had the two kinds?

SP: Lauhala. Over there by Kalama. They cut the young ones on top. They cut, boil 'em and pau, they dry em.

PC: And that would come out white or brown?

SP: White. The brown ones, under...

PC: From the same plant you can make the white from just the young leaf—

SP: Yeah.

PC: I saw the punawai, two nice ones. I didn't try tasting. One is dried up or sort of slimy. The other one is way down inside and lots of broken glass and all messed up but I think there's still water there.

---Some discussion about the ahu in the vicinity of the "heiau-goat pen" but no conclusion. Sam calls the large enclosure inland form Paena pa-kao because in his day some one kept goats in it. He describes how the goats were kept from jumping out.

PC: I missed a little of the conversation.

ES: It was an enclosure in which to keep goats, and they put the Paka, sticks horizontal and then put matting over it. You know now you get a fence and on top of it they slant a barbed wire in (wards). The same principle, so the goats can't jump out.

---Old man Kauai, Willie's grandfather, told him it was for goats-- Never heard of it being a heiau [ES written note].

---PC: Everybody's goat goes inside there? Or only one family?

SP: Only one family.

PC: But my golly, they must have had a lot of goats!

SP: Sure!

PC: That's one big place in there.

ES: That's what makes me think it was used--something before

---We go over to the ko'a makai of the punawai—

SP: They get the fish, put them on the stone, see? Well, I think so but I never see no people live here.

--- Discussion follows about what a nice place this is to live at--then Sam goes down to find his lobster hole.

SP: Right over here, Paena. --Now, over here Po'okohola.

PC: So just by the punawai.

SP: Yeah, yeah. Straight from the punawai out.

PC: Then while Sam was looking for the lobster pits, I took a picture of the little wall protecting on the East side a punawai which seemed to be quite filled with sand. Is probably 150 feet to the West of the punawai, probably 100 feet just Southwest of that ko'a that we have not been able to get Sam interested in, because it's a little too old I guess.

--- Sam is disappointed because there are no lobsters today.

PC: Well, now this is Po'okohola still?

SP: This, Po'okohola. You see that high stone? From there, pau. Then the other side Papua'a.

PC: Then Papua'a you go til then Wawaloa.

SP: No, Ho'opupua'i.

PC: Ho'opupua'i, is this about where the walls are back there, the punawai--?

SP: Get puka. The water come inside whish.

PC: Is that the meaning then for that--?

SP: Yeah, Ho'opupua'i. The water come inside, boil[?] from this side, go outside--like that. I used to dive here—

---A discussion follows about the lobster hole and why there weren't any lobsters there. PC then asks about the lava bluffs across the little bay and wonders if there is any sand. SP says the white is coral. He also says that at where we were standing (Ho'opupua'i) was not like this before. The 1946 tidal wave brought up all the coral on the shore. Before it was all sand. PC suggests we go back to Paena and go into the shelter cave but SP is headed for Wawaloa with the intention of hitting the old trail and returning on it.

---A loli is seen in the water.

SP: This no good.

MP: That's called loli ka'e.

PC: The other kind with the flower in front is good to eat, huh?

SP: Yeah. --That's loli pua.

---ES asks if they ate the loli ka'e in times of famine (wi). SP says no. Everyone continues to look in the tidal pools...

PC: Papua'a is pau now and this is--. Now we start ?? Just around the bend--two nice little indentations.

SP: You know what kind of grass is this? It's sea akulikuli. --Before no more this. When the tidal wave--ay yah.

PC: This is the naio?

ES: False sandalwood, if that's what it is. Does it smell?

SP: No. When dry is smell.

---A discussion starts as to whether the land Kanaio is named because of the Naio trees.

SP: No, Kanaio is different. This naio--naio like means, you know the mosquito when they lay eggs--hatch inside the water like this. --
Naio io ['i'o?].

ES: Then the name of this land is the little wriggler—

PC: No, that's not what he's getting at at all. The name of the land is what?

SP: Ka-na-io, not naio. Now I'm making this not exactly right name but mosquito and they _? inside the water and hatch--from that name

----Start toward Wawaloa again.

SP: Ho'opupua'i over there--there, you see?

PC: That's the one, the little tiny blow hole just on the eastern side of Wawaloa beach.

SP: Yeah, that's Ho'opupua'i there.

ES: Yes, I remember he told me it went sideways.

SP: You watch.

ES: Oh, right here!

PC: Right that one, the little spit out—

SP: Over here Papua'a. Then come here, Ho'opupua'i--and then go over there by that point--you see that point there? That's Wawaloa.

PC: Just the beach, Wawaloa?

SP: Wawaiti over there.

PC: The little one with the coral inside.

SP: Yeah.

PC: Then Kanewahine is--?

SP: No. Over here, call Kiwi--go down there, then Kanewahine.

PC: On the point then, is Kanewahine.--Why don't I stop and take a picture of Wawaloa too, just because we're here. [Ho'opua'i--where it's jumping up.] Over this way Papua'a—

SP: Ho'opupua'i. Then over there by that point, pau.

PC: Ah then, Wawaloa.

SP: Wawaloa.

PC: Then the ala nui comes right down the hill by Wawaloa.

SP: Ke-one-'oi'o road.

PC: Wawaiti.

SP: Then all Kiwi-this whole are go down Kiwi--then Kanewahine.

PC: Kanewahine is about where the coral is? On the point?

SP: No. Inside of the point.

PC: Yes, that's a nice little blow hole. Sisal growing up in these places up here before. They must be used for the-- A lot of heavy construction right up in there.

SP: That's Puoina's place there Kealamia.

PC: Kealamia's here.

SP: George Kumakau--Imihia. Then that house the other side where they put that post--that's Kalei's.

PC: Each fella had one house, then?

SP: Yeah, yeah. Imihia, Kalei, Puoina, then Kealamia, George Kumakau.

PC: Who is it--?

SP: Ki-ala-mia.

PC: This one here. --But the one that has the sisal in it?

SP: Way up?

PC: Yeah--I've got you all turned around.

SP: That's Kalei.

PC: Then the other one?

SP: Imihia.

PC: Imihia, that's the one I meant. Kalei, then Imihia.

SP: Puoina, Kealamia, George Kumakau.

PC: But the way one my stick is in is Kalei.

SP: Yeah, that's Kalei. Hey, put all inside your book. [Was not able to get anything down in order because everyone moving around too much and talking. Have these few notes. Imihia's house behind blow hole. Makai-Kaupo side of this (the one with stick in it) is Kalei's. Trail is in the back of Kialamia's house. Puoina and Kumakau at Wawaloa. ES]

PC: These houses were built by these fellows?

SP: Each fella put them up--their own.

PC: Their own, not from their daddy.

SP: No ... These not from the olden people.

----Short discussion on stone walls versus grass walls and centipedes.

PC: But the stone walls down here, not so many centipedes?

SP: Centipede! That's where the centipedes came.

PC: Why then build with the stone walls, why not just the grass house?

SP: Yeah, but that's only the easiest thing for the people to put up--the grass, had to go way up the mountain and pull and carry so they just pick the stone and build up.

PC: So what over the top then if you're going to build all stone walls?

SP: Well, they had to--go get the grass.

PC: But you don't have to get so much grass if you make with a stone wall.

SP: If you make that stone wall grass from down the bottom go up--ohhh, plenty.

PC: So where you have lots of stone walls--not enough grass.

----PC: Imihia has his house just behind the blow hole. Then from the blow hole we get Imihia's house and then behind him inland a little bit is Kalei. And then over this way a little bit?

SP: Puoina [walk a ways] There! Right here by that wiliwili tree.

PC: Just by the wiliwili tree, right here a 100 yards from the shore, not even that.

SP: Now Kalei the other side where the “telephone” pole.

PC: Where my shirt was on the “telephone” pole (from a previous trip surveying) is Kalei’s.

---Long pause, walking again?

SP: And then Puoina, Kialamia.

ES: Mauka of Wawaloa, there?

SP: Yeah, right here.

PC: Right here--just behind the point here, where Wawaloa begins.

SP: Right next of the punawai wai inu, George Kumakau. Right next of the puna wai inu. You ever see that puna wai over there?

PC: I have, I think?

SP: Right next Kumakau. From there we? go home by the main road.

PC: What is a puna wai inu?

SP: Drinking water.

ES: Drinking water for humans and the other one is for animals.

SP: The animals down there, this one is for the people.

PC: These fellas were living the same time your daddy or with you? When did they build these houses?

SP: They live? their own. George Kumakau-- My tutu here, another tutu here, another tutu there. This one Imihia.

PC: But all these people living here at that time-- what time would you think they built the house, they put them up? Before your time.

SP: Before my time...

PC: But your tutu’s time?

SP: Yeah, before my time.

PC: Maybe 20 year before your born? 25 years?

SP: No, I don’t think 20—

PC: 18—

MP: 60’s.

PC: In the 60’s and 70’s they put them up and were living here that would make them then your Tutu’s generation.

SP: Because they’re still living when I big.

PC: When you were big they’re still living.

SP: Yeah, still living.

PC: So maybe a little bit later than 1960--maybe 70.

---SP: Well, I born in 1898.

PC: ... But even when you were 20 years old these people were still living?

SP: Still living!

PC: Still living over here.

SP: Yeah.

PC: Where did they live up mauka?

SP: No they live up a—

PC: Kanaio?

SP: Yeah, they live Kanaio. When no more rain Kanaio the beach rain like how now, the grass. Too much rain down here. Plenty grass grow. They all come home down here plant. Yeah, you see all that area over there up there, going to the lava? That place there they plant watermelon, plant sweet potato, punkin.

PC: All around the ala nui.

SP: Aaah.

PC: Then they'd stay maybe two, three four months down here?

SP: Then they go home. When they go home they take the kaukau from down here. Walk! No more animal.

---PC: Well, there is a punawai somewhere. I got a little confused. I think that this is a punawai here and I don't remember one being back at Wawaloa. I thought the punawai was over this side—

ES: There are two he told me.

PC: By Wawaloa is there a punawai?

ES: That one's for drinking. This one's for animals?

SP: The puna wai over here.

PC: The puna wai here is for people--No, for animals. Which?

SP: For the people. No more animal here. There's no road for the animals go down there. They no make road. Byrne for the animals go down there they kukae inside the water and -- They no make road. The people used to come there...go get water go back.

PC: And there's a similar puna wai for people at Wawaloa. Two, then? This is the one right here.

SP: Oh, that puna wai down there. That's a new one, they been dig. This, the old one.

PC: This is the oldest one down here. Now what you figure we're behind what now I wonder, on the beach. This then would be what land up here?

MP: Papua'a?

PC: Papua' a?

---PC: I'm going to take a little picture of that when you all walk ahead. Well, we've taken a picture of the puna wai to the East of Wawaloa, just below the great big rampart that they built. ... But this is the older one, then? The other one I didn't—

SP: The other one is new one. When George Kumakau moved there with his family then he started to dig.

---PC: But this one every one walk on the trail used before?

SP: Before that.

---PC: Gee, this section is in good shape though, this ala nui here.

---PC: This puna wai we just looked at is really, right straight behind Kalei's.

SP: That's what I told her ? behind Kalei's.

---Discussion begins again-on the ahu that are in the vicinity of what Sam calls the Pa Kao. he had some idea that there were two that lined up so that when at sea they formed markers for an ocean ko'a but he really doesn't know what they are or why so many. His classic comment, "Like those people, they know what they put."

MP: There's a lava flow coming down

---SP: You see this lava going up? Right next.

ES: Makena side of that lava flow, makai of Puu Pimoe [corrected--Mahoe] and before you get to Papaka ...

SP: Right over here close. That's Opalapulu Kalo'i, the other side. Then come Papaka.

MP: That uli-uli a'a is on the other side of Opalapulu?

SP: Yeah.

MP: Oh, it's in the?

SP: That's the one.-That's the one that goes to Makaniho.

ES: It's the Kaupo side of the uliuli a'a.

MP: Yes.

SP: You know that uliuli a'a, the other side? That goes to Makaniho, that. Lapa'ula'ula.

---SP: Because that's the only uliuli a'a over there, Makaniho. That's only Lapa 'ula'ula. But this side of Lapa 'ula'ula, aah, Opalapulu. Ma'o Kalapa 'ula'ula, ah Kalo'i kela. Kalo'i. Then Papaka ... [Beyond Kalapa 'ula'ula, ah, that is Kalo'i]...

ES: It's right behind Paena.

PC: Well, I'll take a photograph so that you can really figure out what we've been talking about.

SP: Right behind of Wawaloa. ES: Iuka O ka puna wai O Paena.

SP: Oh, that's where we stay now.

ES: When I look up there I see that Opalapulu is Kaupo side of _.

SP: _[Pa'a ai or?] malaila. Ka mo'olelo O ka Opalapulu mauka O ka puna wai O Paena. What do we day now. In the bag. [Has a good laugh.] Ma'o Makaniho, mauka O wawaloa ma'o... [interference of sound].

SP: Ah, Makaniho pela, going up to Lapa 'ula'ula.

---Conversation continues in Hawaiian--ES has trouble understanding. SP says take it easy "hopu, once in a while catch a little bit".

SP: Makaniho face to Opalapulu. Makaniho face to Kalo'i.

MP: Both sides.

SP: Both sides. Then Kalo'i face to Papaka.

---Boundaries repeated again. PC says he'll have to give Sam a wind hat. Talks about all that comes out of the speaker is the wind a whistling sound. This starts Sam off.

PC: That's what you sound like when you play it back. All you hear is the wind.

SP: Kani ka pio.

---This reminds ES of a song--tries humming.

SP: Kani ka pio. Mahea 'oe? Yes sir, where are you now? I'm over here by the comer waiting for you. Come on. Get a move. Chah. Kani ka pio. Mahea' oe. I still love you! Come on.

---We continue on the trail. Earlier SP had mentioned a cave in the ridge that he would show us but if one mentioned going to it then we'd find nothing. SP wanted to get the 'alaea from it to color the salt. PC tries to bring it up without really mentioning it.

SP: I know, but too far for me.

PC: Can you show me which one place? Up by the kiawe.

SP: This kiawe, next. See that dark. [Explains that the cave is to the right of the big kiawe in the ridge.]

PC: I see one big rock though.

SP: No. Way up.

PC: That's too far.

MP: Next to that ulu kiawe [kiawe grove/clump].

SP: Right next to that ulu kiawe. That's little bit too far for me.

---MP: I think on the front is covered with grass.

SP: Yeah, all the grass in front of it.

PC: So it's between the kiawe and that big round rock, both of which are up the ridge from M-8.

SP: You going over there?

PC: No.

---We reach M-8.

PC: You know this place, this cave over this side?

SP: Yeah--that's the ana for Paena--huna pa'akai.

MP: The salt. Where we hide the salt.

SP: You go over there and try look. Get stone wall inside. Keep the bag salt. Maybe get plate and fork and tin inside there.

---SP is stunned when he looks in the shelter and sees what's happened to it. PC explains that the museum excavated it and found many valuable artifacts from the old, olden days. We show him a picture of the artifacts found in this cave and tell him how old they might be. He becomes interested but is still a little upset at the upheaval.

SP: I used to put my food inside here.

PC: Now we've ruined it.

SP: I put over here plate, bowl, salt, soyu, coffee.

PC: Hide them underneath? Other people didn't know this place?

SP: Ah, they know.

PC: Everybody know but nobody takes it.

SP: Well, those days hardly any people come here. No more road and no more animal, you cannot. But I have mule, I have horse,

donkey.

PC: Is that the one you sold to Ah Sing--Not Willie Hoki.

SP: No, Willie Hoki's from my cousin Ah Sing--sold me \$100.

---Talk about Willie Hoki and how Sam saw his picture at the grass house at Wai-a-ilio. ES showed him--from Walker ms. Talk some more about how he used the cave to store food and gear in so as not to have to pack it back and forth. Pick it up on the way to Paena.

PC: Where would you stay then?

SP: Down that cave, you see that cave?

PC: Just down here where we're going to go now.

SP: Yeah, yeah.

PC: But nobody stayed over this place.

SP: No, nobody.

PC: Do you have a name for this place?...

SP: This?--No. [Ke ana pa'akai is what he called it earlier.]---Paena.

Talk about how many people have used the shelter for one reason or another. PC explains to Sam that we are trying to find out about the previous inhabitants and don't make a mess of the place intentionally. Perhaps in earlier times they used the cave to live in or to work in. Sam is shown a picture of the artifacts that were found in the cave.

Continue to talk about hiding things--too obvious, anyone can find.--- Go onto "Cotton house."

PC: Whose house was this?

SP: Kaniāla.

PC: And Kenui. Do you remember the name of this?

ES: There are 3 kinds...

SP: 'Auko'i...

PC: This little running--?

ES: I call it pilo ... It has a feathery flower like a passion fruit--and blooms at night. [SP calls this 'auko'i kumu. Two other kinds, 'auko'i hihi (with yellow flower, growing near old MDG warehouse on Kahului Bay), and 'auko'i pehu--]

SP: Yeah, that's Kaniāla li'ili'i and Kenui [Referring to owners of "Cotton House"].

PC: Now this corner over here, this puka that they've made—

SP: That's where they kalua pig—

PC: And Sam, when we looked, walked around this place and we didn't know anybody that knew anything about this place--before we even met you--...we say all this flat here with a wall—

SP: That's where they dry nets ... from there come over here, throw. So they dry the nets when they surround fish. These people over here.

PC: Did they plant the cotton there?

SP: Yeah, they plant that. You know why they plant that? Sometime those white spot on your face.

MP: Something like ring worm.

SP: Oh, the "tea", the fruit, [?] You make 'em like this, the juice come out, you put 'em, pau. No more.

PC: From the fruit.

SP: Yeah. Now you look that flower, byme by he come the fruit in the middle. Then when the fruit come, then after ward, ahh-cut,

all crack, the cotton come out.

PC: Good. I think I'll go take a picture of that for Harold St. John--It's the haole kind of cotton though, not the old, old kind?

SP: Aaaah.

-----SP: The name of that is kauwa puni ...

PC: That kind of plant and then inside, inside this little house, then they lived here then, would they put what over the top?

SP: Ah, they put--they never put grass. They bring tarpaulin or some knida certain kinda sheet, bedsheet. They put 'em on top.

PC: No sticks, just as high as that is there?

ES: Sam, you told me before that this house had a lauhala on the top and pili underneath--
or the other way around--not this house?

SP: No, Wakalani. Lauhala and pili on top.

PC: Just where we stopped the jeep? [At Alaha.]

SP: Right next. Where my tutu. That's only the house build up grass house. The most of this house, no more.

PC: Where the jeeps were parked, that house was the one that had some little bit grass on it?

SP: Yeah, you see those cars. Right there, by the stone wall. My tutu. [Pointing towards
W akalani.]

ES: That one had a pili grass roof and?

SP: Yeah, and lauhala inside and pili grass on top. Heavy rain water won't come in. -----PC: I just asked Sam about Kaniela and Kenui's house and when it was built and

he said that it had been put up probably the time he was born or a little before and that they were using it when he was a boy of 10 or 12 down here on the beach
and they put the stone wall and the house here so no one would come off the main beach and into their property. They couldn't stop people using the beach but they certainly raised a ruckus when anyone attempted to get into their own yard. I think we got the recording that they had put that hole in the SouthWest corner largely for kalua pig rather than any attempt at a puna wai.

PC: A short visit but a good one ...

ES: I never expected up to leave Alaha That's a long walk for you Sam.

SP: I walk today pretty good. From here go down Wakalani, I mean Wawaloa, turn around,
come menehune road ? down the beach. Auwe no ho'i kealoha e!

--- Sit back and rest a while a-n-d l-oo-k-over at Kalua Kane--idle chatter.

PC: We've just gotten back to Alaha and we're reading at 312. We're going to have a little lunch. Let's see what we listen to.

We came down between 8:20 and about 9:30 so we walked really now from 9:30 all the way out, I remember looking at my watch at quarter of eleven when we were standing at the puna wai at Paena and you said we goota keep on moving here and then it was quarter of 12 when we got out to Wawaloa moving here and then it was quarter of 1 by the time we were back at M-8 I think and now we're having lunch at 2:00... 4 1/2 hours we've been walking.

---PC: Sweet potato?

SP: Sweet potato is plenty kine—

MP: They have different names—

SP: Like lehua, other place--"Lahaina". Now my place Hele-maile, the other place Mohihi. The other place yam, the other place olena. You see, an kind dIfferent names. I come over there I ten, E! We go sweet potato over there, olena. Oh no! That's a--Kaneohe. See! You see? Plenty names. So I think the limu is the same thing but a-- I know limu and oluolu wa ena and _limu and an kinds. Maybe the other place Chop chop [?] limu that's a--oh, I don't know what to say the other... Then limu pakele-a-wa'a, plenty and limu 'ekahakaha--that's for the opihi, that... Over here got lipepe—

PC: By Alaha.

SP: Over here and wawae 'iole down here _Kalapawai, Wawae 'iole. Some Wawae 'iole, some place when you go you pronounce Wawai 'iole they tell you no, 'Ala 'ula. See an dIfferent kinds of names. Well, I don't know maybe Pukui's right maybe certain kind of

seaweed.

---PC: Naupaka?

SP: In the sea, puhi paka... Up on the land it's naupaka. In the sea, puhi paka.

PC: Were these names, up and down this coast, that we've been using all this time--you learned from, who used the names, who told you the names? How did you learn them and who else knows them? All these different names.

SP: My grand, tutu know all these names. I learned from my tutu, Kekahuna. That's my mother's father. That old man, he know all these grounds.

PC: And he's the one who lived in this little house where the jeeps are now?

SP: He know all the place, even my tutu wahine. Tutu wahine know all this place. I used to go with them fishing and they used to tell me my mo'opuna over here a certain name, a certain name 'til I think I'm only one the boy in Kanaio that know all the—

PC: Well, I wondered, you know, these are the names and he knew them and he taught you but I wonder how many people, as you were growing up,--everybody from Kanaio knew the same name?

SP: Nah.--Well, I don't know but—

PC: Other people use the same name?

SP: Wen, naturally the big name like Wakalani. Between Wakalani and Kalapawai they don't know. Then Kalapawai, between Kalapawai and Paena, they don't know.

PC: But the big ones

---SP: Ah, they know.

PC: The other people would know which ones--Wakalani, the big name then, what Kalapawai?

SP: Kalapawai and Kalama, Paena. Right between there, they don't know.

PC: So from Paena the next big name would be?

SP: Po'okohola, then Papua'a. Ho'opupua'i they don't know. Then Wawaloa.

---PC: So these names have been handed down to Kekahuna his father?

SP: From his father. Before that he learned? Before that, lotta people know these names.

---SP: Even this one here Alaha, they don't know. Kalapawai they know. Like Kauka. You look Kauka [Ka-uka], Pohakuloihi, Kapialu. All that they don't know. Unalihi-iti and Kukae-a-kai, Naupaka and all that. They don't know. Well lot of the people, even my cousins. He don't know ... I'm only one know all the places You take Willie Malie, he's not born this place. Maybe some place he know some place no. Now you take from his place, right down between Makena and Kihei. You ask him and he tell you the name of that place.

ES: Oh, he knows that side?

SP: Oh! His father go there fishing On this side here--same like me. The other side of Mokuha I don't know nothing.

---Pause. SP talks about the old jeep road down and how hard it was to go up.

PC: When's the last time you came down here?

SP: I think 1965 I think the last time I made this.

---Further discussion on difficulty of the road. See rain, decide to go home.

PC: Just where this house is. You see this small ahu right here and then that house, also used by Kekahuna?

SP: Ma'i-nu. I think Ma'i-nu's house, though, I think.

PC: And this was all put up also the same time, maybe same when you were small boy?

SP: Yeah, when I was born, I think. Because when I came down there was lots build like this. But they was staying here. Ma'i-nu then, then they flew up to Mahoe this side, where the brother stay, Alolani. His brother Ma'i-nu and the other brother, Alolani stay Pu'u Mahoe down. Kalalea was the name that place.

PC: So this was their land they wen between that place Kalalea?

SP: They come down here fishing and then the brother go home, stay with the other brother at Kalalea. You know where Charlie Thompson, upside of Charlie Thompson. Willie Thompson ... Kalalea.

PC: Then you feel that this house and some others here were probably... Were they built short time before you were born.

SP: Oh yeaah. I don't know how long but when I came this thing was built up. Maybe they built up before there, from there other people or I don't know but I think Ma'inu didn't build up this... Over there, one big stone wall, that's Kaniela-li'i'i that.

PC: He put up the Pa-kao over here?

SP: No, no that's from--that a--Kekahuna's brother, I think. Kapi'ioho. Kekahuna's brother. I think he the same been put up tha Pa-kao.

PC: Which is where Bill and I set up camp.--and this ahu here--nothing who knows?

SP: Maybe these people... When somebody make where they going to bury them? They won't put like this. They put them in a puka with nice stone wall cover. They don't put like this, no.

ES: But you told me at Wawaloa that some times when you couldn't dig down, you would cover them with stones on top.

SP: Just put them in a—

ES: But if no more than you have to put them on the ground and cover them over you told me.

SP: Yeah, yeah. Had to.

PC: If you bury somebody and can't put them in the puka then you build up then you would make it round on top?

SP: Yeah_ go up.

PC: Flat on top?

SP: Yeah. Put little bit stone in the middle.

PC: Not like this kind then?

SP: No. They won't put like this.

PC: I walked all around here. Up from the Pa-kao you come walking through all this land and there are lots of little puka's here where I think maybe it looked like you could grow some things. You see right in front here the kelea vine is growing. It's sort of up and it's raised and it's flat there. Places like that and other spots around. Would this be used--do you remember their growing food back here?

SP: All this place here got plenty, watermelon, pumpkin. Before, no more this kind grass, only nehe. There's two kinds nehe. Not those kind. Ones down...

---MP: Creeping.

SP: [Cannot make out clearly.]

PC: The nehe is this yellow sun flower, daisy?

---PC: What's the name of that yellow daisy like?

---ES: He's looking for the nehe hihi.

---PC: But then this raised up place right in front of us--over here where the kelea vine is growing--some places like that they would put the pumpkins or the vines?

SP: Yeah. Some place they put dirt inside... That's why you see all this grass grow. Over here all not _ stone but they hemo the stone, put dirt and then they put pumpkin.

PC: That's what it looks like when I climb up on the pali and look down. Each place... If you get up above some places, only the ilima's growing--so there are few places really where not just the grass growing but pockets that look like growing-- There look like about five or ten of them in here.

SP: You know those people, they work hard. What I mean, they carry the dirt hemo the stones then when--then they hemo little bit gravel and block up so the dirt no go down. Then they put the dirt in...

PC: I wondered about the rain washing all down but they line underneath—

SP: They put small stones to hold the dirt so sometimes those grass, nehe they grow eh? They put 'em under and they put the dirt on top then that thing, well rotten. Just as good like fertilizer.

PC: Then two or three months pau?

SP: Every three months, kaukau. Punkin, that's the fastest food grow.

---SP: Ipu 'ala, ipu nuhoulani and ipu Hawaii, all kinds of watermelons... Alala, that means that flat kind pumpkin for make pie--good

eating punkin, that's Alala that.

PC: That's the fastest growing?

SP: The fastest grow and good eating punkin too and you get this ipu kala ai [pala ai?] abhh, that's for the 'opelu, that.

ES: To make palu to chum with.

SP: Yeah...

PC: If you get that kind it's for the chum? You feed it to them?

ES: Make a mash of it?

SP: Cook

---ES: It attracts them when you throw it in the water and it attracts the nehu--or 'opelu.

MP: 'Opelu, that's for the 'opelu. They come in a school and then you have your net there.

PC: Then ... are they used as fish or as bait?

ES: As bait.

SP: You cook the punkin and you smash 'em, Pau, you put inside one handkerchief or anything like that. You put the net down. First you throw outside, you pull the handkerchief. The punkin goes _ . Then you go get the glass ahhh the 'opelu. Soon you throw, maybe 5 feet away from you or 6, 7 feet away from you. You pull the string the 'opelu the punkin ripe hemo. _ You catch the box and you look. Ooohh the 'opelu by the 100's. Then afterwards you throw right here. You no throw too far. You throw right here. The 'opelu come here. While you throw this punkin over here, hemo, you quick use the bag catch the 'opelu net you and I. You hold the other end, I hold the other end. Then the bamboo come like this. Let 'em go down. You see, if I let 'em go down, you _ of the bag while the 'opelu still spinning around over there, no let 'em go back. Go back, that's pau. You have to feed 'em again, feed 'em again. See, and this one put the punkin, soon I put the net down, I leave, see? I catch the punkin, I throw. Throw right next of the next. The net down already but still you even see the bamboo all around it. You throw right on top the bamboo. Hemo the punkin. The 'opelu right there. When he's eating you put the punkin inside throw it down halfway of the net. You pull 'em. The punkin over here tied already. They go inside the net, see? Then you catch the... all go down the bottom. Won't come up because he sees all the string. Shee, all the 'opelu go down--when you pull.

PC: Pull slowly then?

SP: No, you pull up. No let them come up again. They go down hit the bottom while you pulling the net up. Ah, pau. The 'opelu no can come up. All stay down...

ES: Ipu pala 'ai?

---A watery pumkin that you cannot eat but in time of famine and no food, you have to eat.

Sam Po and Minnie Po on Tape Interview

by T. Stell Newman and ESP Transcribed copy sent to P.S. Chapman on 5/6/71

[] comments on copy, not apparently Peter Chapman or Mary Pukui

SN: In the little fields at LPK, some of them are flat with nothing inside and others have artfully piled rocks around them about two to three feet high [Rock piles]. Could they have been growing sweet potatoes and yams in these' rock piles?

MP: They could be those little Hawaiian pumpkins--I don't see them now. [Yes, skinny, so thin, and the meat is so thick.]

SP: In the old days there was a large white flat stone with a hole on top of it [Auhuhu]. People used to bring their *aubuhu* (fish poison) and pound them in the hole of the stone. There was no bait in the old days. We'd weave our own lauhala bags, put the *aubuhu* into these bags and dive into the water. We'd throw the bag of *aubuhu* into a cave full of fishes: lobsters, eels, etc., come out of the water to wait for 5 to 10 minutes. Then all the fish would be dead and the people would gather them all up.

SN: Do they do that right along this shore?

SP: Yes, along the shore. Sometimes they get the black [?]-we used to say-- *papapohaku* and dig several holes. All the families combine together and we "go *ala*", i.e., pound *aubuhu*, put them in lauhala bags and place them in caves--ola.

SN: Our fishbone analysis showed many bones of the porcupine fish, do they eat them?

SP: Ah, balloon fish? We call them *kookala* (with long needles) or *oopuhui* (with short needles). The *oopuhui* is much more poisonous than the other. When the *Kookala* puffs up, he shows his tongue but the *Oopuhui* doesn't have a tongue-very poisonous. [Sam gives a complete description of a Filipino family in Hilo who died instantly from oopuhui poisoning.]

MP: [Sam pulls out] "plummet sinker" [from box] --Pohaku mana.[111988]

SN: We simply call it a plummet sinker but we don't know the Hawaiian name for it.

ES: What would you use that for?

MP: I think they would use it as a sinker because there's a little top on it...

SP: *No--ala*. You know this line--sisal--they would scrape off the pulp and put the fibers through the hole of a pipe and let it down like this, then spin them around [like this ...]

SN: Is there fish tied on to it?

SP: [No,] you spin the sisal with it--with four strands woven together, dropped through a pipe to stretch them.

SN: Its dropped and then spun so you twist the fibers...

ES: And while he's twisting the fibers the stone holds it down.

SP: But not this kind (of stone). You know *ala*--this real flat stone--round and there's a little head. That's what I saw my uncle do.

ES: You make your fish line like *that--olona*?

SP: Yes, *olona* or *sisal--any* kind of fiber. (Sam continues to demonstrate the use of the *ala*.)[I think this is correct, this *olona*.]

SN: This could be...

SP: [Resumes discussion of *ala*.] If you tie this to the pipe, it won't come off, but if you tie it on here, it will weave at the same time.
Pohaku Poo and Lehu.

SP: This is good for squid. You put the hook right here, the line comes out here: hold it in your hand and let the line down. The squid will come along and grab the whole thing; the hook will go inside (the squid) and then you pull it up.

SN: You say sometimes they put the hook coming out of the shell?

SP: The hook is tied with string, the string goes through [here] [the hole] and the hook can't come out... (demonstrates)

SP: Never seen it.

---SP: There are lots of things that the Hawaiians used to use that people don't know about. My grandfather (granduncle) used to catch squid. Those days they didn't use this type of line, they used *olona*. Uncle used a red stone--not this (*ala*) kind-for sinker.
(Demonstrates how the octopus lure is made)

SN: (Shows Sam a diagram of the octopus lure with a shank stick go-through)

SP: I don't think that is from here--maybe Samoa or some other place. Here, I've never seen my granduncle do that.

SN: What kind of hooks did they use? Metal or bone.

SP: Before they used "papes"(porpoise)--*naia*. Hawaiians kept the bones for hooks--very strong. I've never seen whale bones used, only porpoise. The porpoise bone is not as large as the whale. They make the hooks like this (demonstrates).

MP: Explain to them about the saddle rings.

SP: Ah, *keleawe--saddle* strap rings, not like iron rings. Used *maka'u keia* (bend it out). (Bending it a little ways in) This is for *oio* (bonefish).[for making metal 'hooks].

MP: But too small for *ulua*.

SP: You can catch *ulu* (menpachi) with a hook twice big as this (relates fishing adventures). Offshore fishes (*mo_popaa, hinalea, moano, weke, manin_ kala, ho'omanea, aawa*, etc.) have small mouths and you need small fishhooks. For ocean fishing you need big hooks... With this (___) hook you can catch *ulua*---maybe too *small--papiu*... but if the fish plays too much, the hook may come off. The round ones are better. *Ke ulumaika keia*. I've seen this. My tutu used to make them a little bigger, made it soft with a little hole where they put *kukui* and *olona* inside. This was lit and used to light your pipes.

SN: Could they have been used for a rubbing stone?

SP: Yes, rubbing too, but I think this is for pipes.

SN: Are they made out of heavy rocks for lighting pipes?

SP: No, this is too heavy--coral was used, it's soft.

SP: *Kolo pepeian*--earring. This wire is place here so your ear won't rot--won't get infected.

Cowry Shell Hook

SP: What kind of bone is this?

ES: Cowry shell--Leho...

SP: Oh, is this for shining hooks? (Demonstrates something) That one (715) [Artifact #'s--see plates in Fishing & Farming-- Also, this conversation is summarized there] is for *aawa, kaala, ea, poauau, pahan* ...

ES: *Manini*?

SP: No, for *manini* you need a certain kind--the more open hook. ES: This (___) kind?

SP: No, that shape is for *uhua*.

ES: What about this small one (2740)?

SP: That's for *menpachi, kupipi, mamu* and *humubumu*. But this (715) one is better.

SN: This one (2776) is a little bigger, would you care to comment?

SP: *Makauku1a* (lobster) shape. [but too small]

ES: This (___) size, what would you catch?

SP: *Poopaa, hinalea, opapalu, aweoveo*. It doesn't allow play because it's too open, you have to pull (or jerk) it up fast.

ES: How about this (3082) one?

SP: *Kokaula*. [Kukala?] You have 10 to 15 hooks on one line, lay that line in the water, wait at one end for a little while then pick it up. [for uku, ono, moia, ulaula]

ES: You use this size?

SP: No, a little bigger but that shape is still *kakaula*--same as this (2143).

ES: This (2143) size?

SP: This size is open, but still *kakaula*. But when the fish bites, the hook won't come off, this one (3082) will.

ES: What's this (2143) small one?

SP: *Kokaula*.

ES: But what kind of fish?

SP: *Uhu*.

SN: (following general conversation of no relevance here) Is this (865) for lobster? Same shape?

SP: Oh, yes ... but there, this (1261) is really a lobster hook. You can catch lobster with this one. That (865) one is too open. When the lobster comes, it catches here (tail) and goes backwards. When she reaches here (head) she turns around, lites herself up, touches the string with the antennae. One antennae brings the hook under the mouth and you hear the line go "kush-h-h"!

ES: What do you think this (1261) [2 piece hook] would look like if you have the other part?

SP: We don't have this here--certain islands use this. This is the right stuff for this--(1261).

Artifact #331

SP: We don't see this kind. I recognize the shape of this hook but we don't use it.

Artifact #1647

SN: Could that be for catching bonito? [Not for net making//black lure shank] SP: Hmmm--haha... (ESP changes subject to nets) .

SN: It has a little hole in one end... the hole through the top, could it be a lure with a hook on like this, that you tow behind a boat?

SP: Trolling? If we had the missing fragment of the hole, we could tell what it is.

SN: Here's one (1473) with a hole. Would that look like a lure to you?

SP: It's *upu--lebo* ... *no*, not *lebo* ... I have a friend here who makes small little pearl pieces and he made holes like this and put an *akule* hook on it--only the shank *akule*. It shines too. This I think, is for big fish--too big for *akule*.

Artifact #1751

SP: This, I think, was used for pocket knives--like this. See, the outside has to be long but it's broken. If it wasn't broken, we could tell, see? [Explains how it looks on knife]

SN: Have you seen something like this? [flint (chert)]

SP: *Pohaku abi keia*. You scrape this stone. The *hau* skin is dried and used for kindling to light fire...

SN: Do you knock it against a piece of metal?

SP: No, you get some kind of stone and rub it to start the fire. Paena, bigger ones there.

SN: We found a lot of little pieces, but no big ones.

SP: My grandfather would pick these up and keep them. Certain times he would look for rough stones like this but harder and use them to make fire.

SN: The geologist's term is chert and it's not found here. It's foreign.

SP: *Keia pohaku* ana--that's the name of this.

SN: There ought to be a lot of these in the islands because most of them would have come from the mainland in the bottoms of the ships as ballast and thrown out on the beaches.

SN: Slate pencil?

SP: *No, pohaku ho'okala--knife* sharpener. This is for rubbing, now this one is smooth--*pohaku ho'okala*.

SN: Now what would that () be?

SP: (No comment)

SN: Did you ever see a bottle with a ball inside to stop it long time ago. Like that? It's a little rough and it really wouldn't do a good job...

SP: I don't know (fumbles about--tool box)

SN: Did you see this little bit of metal thing? Would that be good for lobster?

SP: This is for *poopaa Idld* (hard-headed fish), *kupipi* and *mama*. [#340]

SN: Is this a bead or button or...

MP: I was thinking whether it's a fish eyeball?

SP: That is a fish eyeball, I think.

ES: Sam, it's got metal in the back, iron in the back and it wouldn't keep this long, would it?

SP: But in Hawaiian times, they had a liquid. Perhaps they took the eyeball and put in the liquid (probably a preservative) and made it into an earring. Like *iimi* or *kokuahini* (birds) glue, the fish liquid however, has *obe*, *kukui* and one more in it. (Further discussion follows) [glass bead?]

SN: Here's a tiny little thing. Have you seen that? --- Tiny hook (1 piece) #816

SP: I think this is a sample. It's used to compare the others with. And this L?) one is for *kaili*. You put one hook here, one hook here, put the lead here and put the main line where you hold it. You let the line down till it touches the bottom then jerk, and bingo! One fish, Then bingo! Another--two fishes, When the first fish is hooked, the other hook is allowed to play freely, This attracts the attention of another fish.

ES: What kind of hook would you use for eel?

SP: Anykind of hook, that's one stupid fish.

ES: What kind of bait?

SP: Anykind of bait, he'll eat anything.

Artifact #2106

SP: Never seen it. (Looks over several, puzzled by them). This island doesn't have this kind, not that shape. Every island has different kind. They don't make the same kind unless people share patterns.

--- Non-relevant discussion of "olden days"

SN: This is an old bottle that they chipped and used to scrape or something. Have you seen it used?

SP: Yes, for coconut. They break it into one piece, take out the meat and afterward the outside is filed and smoothed with this and then cut.

SN: Do you use this for anything but a coconut?

SP: You can use it for... (interruption)

SN: I have trouble telling a saw from a file.

SP: (No comment, ES rambles)

SP: It's for skinning.

ES: like leather? But it's not strong enough.

SP: Strong! If you have a red skin...certain kind of leaf...(discussion of bone picks interrupts)

Artifact #1392

SP: *Mamane* keia--that's hard wood--very hard wood. (4 people speak at once in muffled tones)

SP: This () is for fish: *mamo*, *binalea* ...

Pin Hook

SP: This is for *oopu* and frog.

ES: Freshwater.

SP: Yes, this clothespin [pin], you just bend it, tie string here and put a red flower here and throw it in. If we had this before in Kanaio, we would use this instead of making our own hooks.

---SN: [Nobody had ever seen this kind of hook before.]

SP: It's made out of shell. We make all of our hooks on the right in Maui. A different island would make it on the left.

MP: Sam has a different way of fishing from other people.

SP: On our island we make everything on the right, other islands, on the left. The string has to go out here. Now if we put it right, the string is going to be inside. Now on the left, you put the string on the outside like this.

THE MAUI NEWS--Sunday, May 25, 1986

KANAIO RESIDENT FINISHES AT HOME

By Ron Youngblood

The way to the Poaipuni place takes some travel, across Kula, through Ulupalakua and down the road to what might be called Maui's big sky country, Kanaio.

Getting from the road up to the house on the 9 1/2 acres of property requires more travel, through a series of gates punctuating a four-wheel drive track.

Jonah Louis Poaipuni Sr. is sitting in the shade alongside the house he built for his retirement years. The light-green structure rests on the same spot occupied by the house where Poaipuni was born Dec. 18, 1916.

Off to one side, Mrs. Beatrice Poahaipuni[sp.] tends a small fire under an iron skillet filled with sand and roasting kukui nuts.

Jonah Poahaipuni leads the way to the front of the house where folding chairs sit on the concrete pad in the shade of a tree growing next to the front door.

Poaiipuni speaks in a voice soften by years of isolation from modern, noise makers.

His hair, normally covered with a hat when he is outside, is full and white.

"There were 16 of us. Plenty died one, two months. What was left was eight," Pohaipuni was "third from the last" to be born and the only survivor today. "Four years ago, my sister died."

Although the family "always lived here" in Kanaio Village, Pohaipuni's father, Kehanui, worked for the Kahului Railroad and later, the county, living in Kihei during the week and coming home on the weekends. During the week, Pohaipuni's mother, Rose Kekahuna, tended the children and the home place.

"He would leave here Sunday morning and come back Saturday late, seven or eight in the night... On the way home he would pick up the groceries on a horse for the family." In addition to the store bought goods, the Pohaipuni family relied on good from the sea and what they grew themselves, "mostly sweet potatoes."

The children walked the three miles to school at Ulupalakua.

"We had a donkey we could ride, but had to look for the donkey in the pasture so we walked most of the time."

The story comes slowly, fitfully. Poaiipuni waits for questions and some of the best stories come much later after the notebook has been put away. He enjoys a reputation for wit and concise assessments but now he seems shy.

Poaiipuni said there are now more people living in Kanaio Village, reachable for most only by driving a torturous dirt road that winds around the hillsides, than there were when he was a boy. He remembers about 20 families living in houses scattered through the hollows and slopes around a church cemented together by lime cooked from coral.

Poaiipuni said his parents told him the coral was brought up from the ocean by a line of Hawaiians passing the coral heads from hand to hand. The coral "was put into an imu and cooked to make the cement."

During his boyhood, the sea not only supplied food, it also supplied a major necessity for the meat-eating families--salt. Poaiipuni said "we'd go down to the ocean, summertimes, me, my brothers, my mother. We'd pick salt."

As he explained it with a kind of verbal shorthand characteristic of island folk who live in remote areas--they often rely as much on body language and feeling to communicate as they do on words--his family would go to the shore where high waves had deposited water in rock hollows. They would scoop the still wet salt out of the depressions and put it in 100-pound bags. The bags would be stashed nearby for a few days to allow the water to evaporate off. Each of the bags would net about 50 pounds of salt. Poaiipuni said they would collect 12 bags for their needs for a year.

"We didn't have an icebox. We used the salt for everything we had--salt pork, salt goat, salt beef, salt fish." The fish was gathered by net, a practice Poaiipuni still follows although he no longer needs to rely on salting down the meat to keep it. His wife's kitchen is equipped with a propane refrigerator. They still have no electricity, no telephone and no television ("I don't miss it. I like to watch sports when I go down to my son's house in Pukalani.") There is one battery operated radio. Opihi was also a part of the Poaiipuni diet. (The rocky coast some miles below the village is rich with marine life but nearly inaccessible to outsiders.)

The food-gathering lessons learned as a boy are still fresh in Poaiipuni's mind. Later, during a lunch featuring wild goat and fish, Poaiipuni smiled and said:

"The only thing a man needs here is a net, a rifle and a horse."

Poaiipuni still throws net, hunts goat with a carefully maintained .223-caliber Ruger carbine, and rides his horses around the property. He has a telescopic sight for the rifle but said, "Scope is good for standing targets, not much good when they run. I usually use the open sights." Only another hunter can appreciate the skill involved in bagging wild goat in the lava fields below with a carbine and open sights.

"What I do is ride down, get a goat and leave it in the rocks and then go on down to the ocean to throw net." Once he has enough fish for his immediate needs, he heads back up the mountain, picking up the goat on the way.

When his doctor discovered he had a bad heart, Poaiipuni was told to curtail his fishing and hunting but "when I see that fish around there, nobody gonna stop me from using that net."

He rides his horses around the property to check the water lines and to make sure the Ulupalakua cattle troughs taking water from a small county line are not overflowing. His habit of keeping an eye on everything in the area and helping the newcomers and the children of the oldtimers has earned him the nickname "keeper."

Poaiipuni dropped out of school when he was about 13, taking a short-term job with Ulupalakua Ranch before going on to work

at the Haiku Cannery, construction jobs around the island and, finally, with Haleakala Ranch where he stayed for some 37 years before retiring at the age of 62.

"I'm married now 46 years," Poaipuni said. "I think I was about 22." He thinks about it a bit, adding that his bride, Beatrice, was "a Kaupo girl. Those days never had the road." He said he and Beatrice got together at about the same time the road between Kipahulu and Kaupo was finished by Depression era government (WPA) workers. The road, which replaced a torturous mule trail, was finished in 1937.

Jonah and Beatrice have eight children, six boys and two girls. He needs a bit of help with the number of grandchildren, calling "Ma, hey, how many grandchildren we get?" There is a short pause and Beatrice answers, "17."

In the early days of his work at the ranch, Haleakala included a sub-ranch in Kipahulu. That meant long cattle drives from Kipahulu around to Kula. The work was 12 hours a day, from 6 a.m. to 6 p.m. The cattle were driven mostly at night to keep them from losing too much weight. Pay was \$1.25 a day. His family lived in a house at the main Haleakala Ranch compound above Makawao. When not driving cattle, Poaipuni slaughtered animals and tended fence.

His bachelor days doing construction work included working for 50 cents an hour with E.E. Black when the company was building the final seven miles of road to the summit of Haleakala. "We'd go up in an open Model A Ford. Sit in back. It's what you call cold" when the car made its way to the top of the mountain in the early morning. This job included operating a jack hammer, chipping a roadbed out of the rock.

The road running between Ulupalakua and Kaupo, below Kanaio Village, was constructed by prison labor in 1947 "during Harold Rice's time. He was the chairman of the Board of Supervisors," the predecessor to today's county council. While the convicts worked on the road, they lived in a camp at the base of a huge cinder cone. The location is now the Army's firing range.

When it came time for him to retire, Poaipuni said there was never any question about where he was going to live--back on the home property in Kanaio Village where he began his life. He could have gone elsewhere since he owns parcels of land in Pukalani where his sons live with their families.

"I wanted to live here on my father's property. I never liked being in the city. I can do what I want, raise cattle, fish, hunt."

Poaipuni also had in mind protecting his family's claim to the land, particularly since Ulupalakua Ranch "is more real estate company than ranch these days." The property was "given to my father by the king, Kamehameha III."

A gallbladder operation and his trouble with his heart have slowed him a little bit but he still takes a great deal of pleasure out of donning his chaps, saddling his horse and patrolling the area. Later, during the picture-taking session, which included Poaipuni saddling up Tony, Poaipuni told about the time his son brought him back from dying.

As is his habit, Poaipuni was helping with a cattle roundup when his horse, "a good horse but kind of frisky" suddenly plunged into a gulch. The move caught Poaipuni by surprise and he went over the horse's head, landing heavily in the rocks. He suffered broken ribs, one of which punctured a lung. He was taken to the hospital where the doctors told his family they had done everything that could be done. Poaipuni was 67 at the time.

"They called my children on the Mainland. They came. They said it looked like I was finished. I heard this voice from way off. It said 'Come on, dad, you can make it.' The voice sounded far away even though he was standing right next to the bed." Poaipuni said it was the sound of his son's voice and a desire to hear it more clearly that brought him back.

The conversation that began out front continues during lunch. Beatrice Poaipuni watches closely to see the guest has everything he needs and is enjoying the meal. She had nothing to worry about, the goat, marinated in a Poaipuni recipe, was tender and tasty and the hospitality was without fault.

Jonah Poaipuni is asked about the difference in the Maui he knew as a young man and the one today.

"There are more people, more roads now. It's easier to get around with cars these days than when there were only donkeys, mules and horses." Is it better now? "In a way. During my kid days I only remember one time the doctor came. It was a healthier time then." Despite the isolation, or perhaps because of it, Jonah and Beatrice Poaipuni love living where they do.

"Get free air and you don't smell the machine pollution."

A major change in his life style may be in the near future. Plans have been made to construct a geothermal project about a half mile up the slope from Kanaio Village. "I don't know how bad it (the project) is. The way they say, maybe it's not too good."

The oldest resident of Kanaio takes the visitor out to his tack house where his cowboy equipment, including two old, handmade Hawaiian saddles, is kept. He demonstrates his prowess with a bull whip and while all of this is going on, offers stories about this and that:

--In the old days there wasn't nearly as much lantana around the Kanaio pastures. The pesky flowing shrub was brought in by a Dr. Raymond at Ulupalakua Ranch. "They kept inside a fence that was real kapu. No one could get in to take a cutting or anything but mynah bird went in and ate the seed and spread that lantana all over."

--Haleakala Ranch once had a water system that operated even in the driest of times. Above the Waiakmōi Reservoir there is a series of ponds. "In dry weather we'd go up to the seventh or eighth pond and siphon the water down to the pond where the ranch intake was. In real dry weather, might have to go up to No.9 or 10 and there were ponds above that. The ranch later took away all their system and relied on the county's."

--"You earn thy bread by the sweat of thy brow."

--When you have a dispute with someone you should "whack them in the head, not in the (other end)."

After the photos were taken, Poaipuni left Tony saddled up. Since he was dressed, he planned to take a look around the place. Beatrice Poaipuni worked in the neat-as-a-pin house surrounded by banks of brightly colored flowers.

"I enjoy my life, the way I live," Jonah Louis Poaipuni Sr. had said. It's easy to see why.

THE MAUI NEWS--Wednesday, January 6, 1993
A TALE OF TWO SYMPATHIES

In Kanaio, a Native Hawaiian's claim to homestead land is at odds with a state agency's attempt to protect the
remnants of native Hawaiian forest.

by Laurel Murphy

Kanaio--It is a barren, God-forsaken plot of land, a wedge of 160 acres on the eastern border of the lava county of Kanaio.

Yet a court battle is looming over the property--a clash of well-intentioned interests that symbolize the times.

On one hand is a full-blooded Hawaiian laying claim to homestead land his family has lived on for generations.

On the other hand is a state agency with the noble intention of preserving a precious remnant of the great native Hawaiian dryland forest that once covered the south slope of Haleakala all the way from Ulupalakua to Kaupo Gap.

On Friday, Edward Moanalili Uwekoolani, 56, will go on trial in Makawao District Court on misdemeanor criminal charge that he violated state Department of Land and Natural Resources property that in 1990 was set aside as the Kanaio Natural Area Reserve. He was cited in September for engaging in prohibited activities on the land where a temporary structure has been built.

Last Jan. 27, Uwekoolani filed a claim with the state Bureau of Conveyances for Lots 16 and 17 of Kanaio homestead land that family members staked out in 1911.

On Feb. 12, walking the land--which at that point had no signs indicating its status as a protected ecosystem--he ran into a state forester who told him he was trespassing..

The irony is that, by all accounts, the land to which Uwekoolani is laying claim is an insignificant portion of the reserve, with few native trees on it at all...

In fact, the architects of the reserve--Bob Hobdy, DLNR forestry manager for Maui, and Haleakala National Park biologists Lloyd Loope and Art Medeiros--originally recommended that only 240 acres be included in the protected area. Those acres did not include the land Uwekoolani is claiming.

According to Hobdy, the 240 acres contain 30 to 40 native species, many of them quite rare, and represent one of the few, salvageable ecosystems within the Auwahe Forest that once contained 250 species. The three felt this area had the best chance of restoration with the DLNR's limited funds.

When the proposal went to the Natural Area Reserve Commission in Honolulu, the Nature Conservancy spoke up for making it a 6,000-acre parcel running all the way down to the ocean. Ultimately, 846 acres was settled upon, much of it sparsely vegetated, and, according to Hobdy, of no real value to the reserve...

The problem: Uwekoolani's homestead dream fell into this parcel. "It ended up being a compromise," said Hobdy. "It was totally

well-meaning. We didn't realize we were going to run into this."

Ultimately, you could say, this is a tale of two sympathies.

TALE 1: Edward Uwekoolani remembers the moment quite clearly. He was standing on a puu not far from the house where he was born, newly returned to Maui after years away.

His uncle, the late Joseph Poaipuni, pointed out across the rough land to the remains of an old house in the distance, barely discernable in the koa trees. "You know, boy," he said. "I met your father in that house."

At that moment, Uwekoolani's aloha bloomed for his ohana, for his ancestors who fished in the lowlands and farmed in the uplands, for all the Kanaio families related to him who trace their lineage back of the great chief Kauaua of West Hawaii. Families like the Kaualelena, Kuaana, Kauhaa Po, Poaipuni, Kunakau, Aikala, Kuhaului.

This love for the land was not something he was consciously aware of as a boy growing up in Kanaio. Sleeping on the living room floor of a two-bedroom house with 16 brothers and sisters. Going to school in the three-room Ulupalakua schoolhouse. Playing hooky to follow his father down to the shore to fish.

The years had taken Uwekoolani away. He left Hawaii as a young man to join the military, married a woman with roots in Alaska, and lived there for 25 years before Maui pulled him home again in 1990.

But that day shortly after his return awakened something. As he put it: "My 'mana' for tha 'aina' began on that day."

Uwekoolani began researching his genealogy and came across a 1915 map of the Kanaio Homestead, part of a turn-of-the-century effort by the territorial government to settle then far-flung lands in such places as Kihei, Kula, Olinda, Haiku, Nahiku, Hana, Kaupo. Any nationality could apply, and many Maui families gained their land by fulfilling the requirements of cultivating the land, fencing it, and building homes. (This was a different program from the later Hawaiian Homes Act of 1921, which set aside homesteads for Native Hawaiians only.)

On the map was the record that Uwekoolani's granduncle, George Uwekoolani, and great granduncle, James Uwekoolani, had filed "preference right to purchase" applications for Lots 16 and 17, approximately 80 acres each mauka and makai of Kaupo Road, land the family had lived on for generations.

The claims, however, were never formally granted. The land was fenced and cultivated, and a house built on the lower lot, the remains of which were pointed out to Uwekoolani by his uncle that day. However, the land agent sent to review the claim reported he was "unable to find any known relation" and did not see a house on the upper property.

Uwekoolani, who now works as a hand for Haleakala Ranch, says he can prove his family was well-known in Kanaio at that time. "They were on the land before the homestead came in," he said. This makes him suspect the agent didn't visit the property at all.

In addition, Uwekoolani's brother remembers riding the land with his father and seeing a grass house on the uppermost portion, where remnants of a rock foundation now exist.

Although eventually the Uwekoolanis moved away and the land reverted to the state, others of his brothers and sisters have filed claims to the property. They are Charles Uwekoolani and Belle Kuailani of Paukukalo, Eva Dutros of Pukalani, Gertrude Namaau of Kihei, and his nephew, William Harvey Uwekoolani.

Over the months, a temporary ohana hale (family house) of blue tarpaulin and bamboo scaffolding has been erected on the land, along with water tanks and Hawaiian plants.

This, of course, does not sit well with the state.

Uwekoolani is a soft-spoken, humble man. "I don't want to be branded as an activist," he said. "This land is ours because of our sweat and blood. We deserve more than just some individual who didn't really go out to look and see."

TALE 2: It is lovely up in the 240-acre heart of the Kanaio Natural Area Reserve. Mauna Kea peeks through blue clouds far to the south and one looks directly into the curved, red belly of Kahoolawe at Kanapou Bay...

A stiff wind from the Big Island whipped around Maui forestry manager Bob Hobdy one day recently, as he climbed a knoll on Haleakala's south flank and pointed out some of the 30 to 40 native species still hanging on there:

The naio (the false sandalwood which gave the region its name); the wiliwili (a light wood used for outrigger canoe ama); the lama (sacred to the goddess of hula); the kauila (a hardwood used for tools and spears); the 'akia (used for fish poison); the 'akoko (used to snare native birds), and the halapepe, the mamane, the 'ahoe, ala' a and a'e.

Hobdy likes to imagine what the great Haleakala forest used to look like, banding the island with over 250 native species. He likes to wonder what it would take to alter its status as a dying, “geriatric forest,” incapable now of reproducing.

He ponders the Catch-22 created by the cattle and goats that have systematically destroyed the forest in the last 200 years through grazing. Tough kikuyu grass was grown to feed the cattle. The grass gives native tree seedlings room to grow. Then the cattle eat the seedlings, creating “a forest with no children.” But if you get rid of the cattle and the goats, the grass grows too thickly for the seedlings to grow.

“What do you do?” Hobdy asked.

The reserve—one of four similar efforts to protect rare ecosystems on Maui—is an attempt to answer that question. In this case, it is an effort to address the problem of an ecosystem “in a state of near-catastrophic collapse.”

The renowned botanist, Joseph Rock once studied this thick forest as part of an effort between 1909-1920 to catalogue the indigenous trees of Hawaii. When he came back in the 1950’s, it is said that he wept at the sight of how little remained.

“This forest is disappearing on us in a very quiet sort of way,” Hobdy said, looking toward the uplands where the trees have dwindled even in his memory. “It hasn’t become a major public issue. But if you think (protecting the forest) is important, this is an emergency. “

APPENDIX IX

The New Age Belief System and Developments in Kanaio

The New Age Belief System and Its links to Kanaio-'Auahi

The New Age phenomena, an outgrowth of a multitude of exploratory philosophical and religious dialogs undertaken by groups and individuals during the 1960's and 1970's has become a potent marketing and imaging force in modern American society. It is worth noting that one reason that the movement has become so powerful is not just the rapid increase in converts to several hundred thousand but also their socio-economic situation within Anglo-American society.

As Melton points out:

... the movement has been able to penetrate and even develop its largest constituency from single, young, upwardly mobile, urban adults. Such upwardly mobile persons are most accepting of the processes of transformation, which they know naturally accompany increasing career success ... New Agers are, as an affluent social group, among the most capable of providing firm support for a growing movement...(Melton 1990:XXX).

One of the more fascinating aspects of the New Age Movement is the tremendous diversity of approaches to achieving (and continuing the cycle) of transformations. The Movement is notorious for appropriation of spiritual beliefs, ceremonies, concepts and ritual tools from other diverse religious and philosophical orientations, most from non-Christian backgrounds, and the vast majority from non-European. There is a strong central belief in the 'primacy of native peoples' and a feeling that indigenous populations have a more clear understanding of the transformational process. This belief is based on the theosophical and parapsychological backgrounds of the New Age Movement and helps to explain the proliferation of both Native American and Asian ritual paraphernalia out of their traditional context. As Melton notes the transpersonal psychologists, who were a key synthetic element of the New Age development in the 1950's and 1960's, were in large part responsible for this in that:

Their methodologies separated particular practices (such as a meditation or yoga technique) from the religious ideological context in which they had been developed and justified their free movement from one to another. Now, for example, one could practice a Zen meditation without being a Buddhist or chant mantras without becoming a Hindu.(Melton 1990:xxvii)

While the phenomena is typified by its eclectic approach to techniques and concepts that seem to "work" rather than a truly coherent belief system, there are common underlying beliefs that link the disparate aspects together. Primary is the engineering or technical aspect -- much of the New Age phenomena is handled in a very pragmatic, rational approach, combined with more traditional concepts:

Any engineer will tell you that whenever two objects resonate in a harmonic vibratory state, energy is exchanged. And so, as Palonghoya beat his drum, life-force energy came coursing down into the navel of the Earth as the South Pole, and streamed down into the crystal at the center of the Earth. This magic stone redirected the life-force energy in all directions, like the fluffy seeds on a ripe dandelion head. The energy then rushed upwards, emerging from the Earth's crust. As the energy broke through the surface, the entire planet came to life. At some places the life force was more concentrated, due to the structural magic of Poqanghoya at the North Pole. These special nodes of concentrated vitality are the sacred places, the Hopi elders maintain. They are the "spots on the fawn," places of light, power, creativity, and healing. According to the Hopi, without these places and their powers, the world would fall apart.(Swan 1990:45)

As humanity rushes into an age of ever-increasing technological sophistication, and at the same time becomes more aware that technology unconnected to nature's laws is suicidal, it becomes apparent that traditional wisdom holds keys to restoring sanity and balance to our lives...

Carl Jung once wrote that people cannot conquer a new land until they have made peace with its spirits and their minds have sunk to the level of its indigenous inhabitants... What is needed is a new legitimate paradigm to "mind the Earth," as Joseph Meeker calls human-nature harmony. New words and concepts must be conceived and integrated into a new Earth language which can articulate a

consciousness rooted in an honest experiencing of place.

With or without Indian guides, there are certain places which draw us to them, and we need to pay attention to these feelings.(S'Yan 1990:76)

"The Mother Earth has special places to cleanse your body, mind, and spirit," asserts Lakota medicine man Wallace Black Elk. At such places the energies and spirit of the place are especially suited for absorbing negative energies, and recharging one's personal life force. The actual purification processes vary considerably...Hawaiians bathe in sacred waterfalls...

In the Indian world, health and wisdom arise from maintaining positive harmonic sympathy with the vital forces which keep life systems moving.. In the Indian cosmology, some geographic places are best for purification, and each of these places is unique in its own right.(Swan 1990:48)

...I have been gathering data on the phenomenology of personal experiences associated with certain places...the common element in all cases was a feeling of being drawn to a certain place by a pull which seemed to arise from a source beyond normal rational consciousness. Then, upon reaching the destination, an experience unfolded which was out of the ordinary in terms of inner experience.(Swan 1990:84)

A number of people interviewed described automatic unions they experienced with parts of nature while visiting sacred places. Having gone to a sacred waterfall on Oahu, a young man felt sleepy and lay down in the shade to rest. Suddenly he felt as if he were leaving his body. He surrendered to the pull and found himself drawn up into space until he merged with the sun. During this brief moment of union, he felt oneness with the fiery sun and experienced heat, warmth, and peace.(Swan 1990:90)

In reviewing the variety of unusual experiences reported...a common pattern emerges. Initially the people about to have the experience feel drawn to the place by a source beyond normal human consciousness" as if they were being guided to be at that particular place at a certain time. Surrendering to this magnetic pull, they travel to the place. As they reach their destination, a sense of emotional arousal and extra energy are present. Then something happens which seems to "trigger" their mental process, shifting their mindset into some new dimensions of consciousness. In this transcendent state, unusual events take place in which the normal time-space frame of reference is non-existent, and the personal experience is intense and engages mind, body, and spirit. While in this state of expanded mindfulness, an extraordinary feeling of unity with reality occurs, and unusual events happen in the surrounding world... Finally, when consciousness returns to normal, the participants integrate their lives at a new and more meaningful level, often resulting in changes in their careers and personal lives.(Swan 1990:104)

Note that this seems to be the pervading logic of life-histories for the haoles in Mauka Kanaio, though they went through this experiential cycle long prior to this exposition by Swan (most in the late 1970's to mid-1980's). This spirituality/discovery is also often brought up when the lack of concern for clear land title building rights are dialoged -- the feeling that they have been almost passive participants in an event, and that 'Kanaio' (as a superorganic entity) will provide or take of them in terms of residence and lifestyle.

"North of Honolulu on the New Pali Road, the turn-out at the summit for the Nuuanu Pali Lookout offers a spectacular view of the north shore of Oahu. Looking makai, which means "seaward", there is a large bright-green spot dotted with open water ponds. This is the Kawainui Marsh, the largest freshwater marsh in Hawaii, home of the endangered Hawaiian coot and the Hawaiian gallinule, the two birds which brought fire to the islands. In the Hawaiian traditional mind, this marsh was a very sacred place... Guarding the marsh are the *mō'ō*, two women who can change into the shape of lizards at will. They are the daughters of Haumea, the Earth goddess and mother of fertility who also resides here.

When one reads about mythic tales like these, they seem like great fantasies, perhaps inspired by unusual landforms. In the traditional mind, however, myths are forces and intelligences which live in the other world, and which can visit people in dreams and visions, or seep into their minds and move them to do certain things at various places. If one walks out onto Krider's rock, a house-sized boulder on the west shore of Kawainui, and someone mentions Haumea, people fall silent and some begin to cry. Kapunas (elders) like Auntie Thelma Bugbee say this is because Haumea's spirit is strong there.

The mythic identification of place, which Amanda Coomaraswamy called landa-nama, has tremendous importance to primal-minded people...

According to indigenous people around the world, the living landscape is filled with mythic beings who live at various places, and even when ceremonies are not conducted to propitiate the deities, seeing, thinking, and talking about these places can keep their values in mind, which aids cultural stability. In Polynesia, you can tell if traditional people like you according to which places they mention in their conversation, for to say the name of a sacred place is to call up its sentiments, which is like a gentle blessing.

People scoff about living myths, but those people who live around the Kawainui Marsh are not so skeptical. It seems that every so often the local police get a call from some worried person who has seen two women wearing white robes walking around out in the marsh, near the dangerous muds which could swallow them up. The police can never find these adventuresome women, but the calls keep coming in. Some say that this is to remind the people that the *mō'ō* still live and want their marsh to stay protected. (Swan 1990:63-64)

The Development of the Black Hat Temple in Kanaio

The history of the building of the Black Hat Buddhist Temple in Kanaio is useful both as a view of the power of the place, but also as a single example of the process by which members of the Upper Kanaio community ended up as residents of this section of Kanaio. The following discussion is based on a series of interviews conducted with several individuals, chiefly J. M. who is the constructor and caretaker of the Temple and grounds.

When he (J.M.) first saw Kanaio he felt a connection with the place and the people that had lived here in the past (the Hawaiians). Kanaio felt special, and had a very special nature to it.

In the early 1970's a member (D.M.) of a group out at 'Ulupalakua Ranch bought 20 acres in Kanaio that was being sold to cover a gambling debt. D.M. was into Zen at the time and saw the land as being suitable for a Zen retreat, so in 1973 several people moved out onto the property. The property included the old pastor's house (pastor to the Kanaio Church), lantana up to the top of the truck's cab, and was generally very dry, barren and forlorn. Given the lack of fences or marked features no one was really too sure what the property boundaries were, but given the lack of nearby neighbors, except for the Mendes downslope (Lower Kanaio), buildings were constructed based on estimated property lines. The community continued, with some growth and change of members, some leaving the island, others moving to Makena or Huelo.

J.M. noted that while some places in Kanaio are empty simply because they were never used, the mauka outcrop above the present temple is an example of a place which just appears to be empty but in reality has a feeling or imprint of past events, as the Hawaiians, because of their love of the land imprinted their energy on the land. In 1979-1980 the landowner (D.M.) decided that he wanted to do something with the property other than the meditation center, and wanted to sell the land. Prior to this several lamas including the 16th Karmapa were brought out to the meditation center by Upper Kanaio residents, which is a unique manifestation of the power of the place to attract such spiritually powerful individuals.

J.M. was involved in the construction of a stupa in Huelo during this period (1976), the second outside of central Asia. The Karmapa blessed the stupa with the Black Crown ceremony, and informed J.M. that he felt Maui was a "pure land" place, and suitable for a retreat. By 1980, now residing in Kanaio, J.M. felt (as did the lamas) that Kanaio was a suitable spot for another stupa, and possibly the retreat. So in 1980, when the Karmapa was in Honolulu, J.M. approached him and asked if he would be willing to bless the foundation site of the yet-to-be constructed stupa, and Lama Rinchin came over that year and inspected the location where the temple now stands. Originally the stupa was planned slightly downslope, but the mauka location has more spiritual attraction to J.M. and the others. When Lama Rinchin arrived in 1980, D.M. and H.M. were convinced to donate the property over, which kept the property clean and suitable for a retreat.

In 1981 J.M. moved up to the temple site and started construction of the stupa, temple building, meeting hall and meditation rooms. The stupa was constructed in 1981 and dedicated in 1982, and contains ashes of the 16th Karmapa who passed away in 1982. The temple grounds were blessed in 1982 and were completed and blessed in 1991.

The Stupa is set up in the center X of the four "visible corners of the property". Stupa are normally oriented with the Buddha to the east, but Lama Rinchin was there when they set it up and he shifted the east face to the south, and said that was the orientation that this stupa should have. (Field interviews 6/15/92, 6/16/92, 6/28/92)

Hunaism in Kanaio

This documentation is useful for understanding the pattern of ritual logic under which some of the mauka Kanaio residents operate.

As this material has not been evaluated to any degree in the traditional literature other references are not available. As the beliefs determine behavior in Kanaio it is at one level irrelevant to what degree the beliefs are valued outside the place. The documentation was kindly provided by informants during the talks we had in Kanaio.

The relationships between the Hopi, Daddy Bray and a spiritualistic belief system called hunaism are extremely complicated and worth a dissertation in their own right. The major relationship to Kanaio-'Auahi is that the belief system is prevalent among some of the mauka Kanaio community. The key point of focus is that this belief system delineates how they view themselves in relationship both to the landscape and the past Hawaiian inhabitants. It provides a link or relationship between the new (*haole*) and the old, and thus legitimizes their residence in Kanaio. It also provides a codified way of describing their views towards the environment and each other. The excerpts below have been taken from a manuscript by Carpenter(1992) and are quoted in full to minimize distortion from the original meaning.

Papa's [Daddy Bray] ancestors departed Heukovi village in Hopiland, near Oraibi, because they were Sun Clan People and amongst the strongest miracle manifestors of the Hopi -- just like Dan Katchongva was. They departed because Great Spirit of This Land and Life ("Maassauu" in Hopi language) TOLD them to go to the west as far as possible because there were people over there who were in great trouble. They went to the coast of California and some stayed there but others continued on to Hawaii and found the people under enslaving kings and dictators, and people actually eating each other. Yes they were killing each other and eating each other. They really WERE in BIG trouble because that kind of activity is a gross violation of Creator's Law in Order. Nowhere in this world was THAT practice in the Original Teachings of ANY one of the 3 to 5,000 Original Nations of Earth and I can prove that fact by the Writings in the Rocks, the Neolithic Inscriptions and ideagrams worldwide (and even including Antarctica, as we shall someday see). So Papa's ancestors became the strongest "line" of Kahunas in Hawaiian history and The Aloha Spirit DID survive in Hawaii, and right down to the present day. With all of this confusion and truth-seeking in the world today I think it is very important for us to tell the truth and help restore Creator's Law(s) in Order...

Another thing, I have been talking with Dan Budnik, former President of The American Photojournalists Guild who just returned from photographing rock writings along the Great Bend of the Lena River in Siberia. There are more petroglyphs per square mile, and in greater variety, than anywhere else on earth excepting Ayers Rock ("Loaf Mountain") in central Australia and around Oraibi Village in Hopiland. So I think Great Bend was a "staging ground" or "rest and rehabilitation center" or a "jumping off place" for the explorers and settlers on East-West Land as they went there from North-South Land (the Americas) during the 4 great "migration waves" to "The edges of the land." I have not yet seen the photographs he took... During our talk Dan told me of petroglyphs in Hawaii that show 4 different migrations there and he wants to take Hopi Chief Martin Gashweseoma there to try and read them... Martin is very good at reading rock writings and Dan and I both learned a little about it from the late John Lansa of Oraibi who was also very good at it.

Thor Heyerdahl's book "AMERICAN INDIANS IN THE PACIFIC" only tells of 2 migrations to Hawaii but there were Menehunes (black, tattooed smaller people already there when the first dictators arrived). Thor Heyerdahl also did not know about the migration of Sun Clan from Hopi to Hawaii after the first 3 migrations were completed and the people began to become corrupted again. So I want to see that rock with 4 different aged writings on it, and I think Martin should see it. And I think that the message on that rock may be of importance to many other people in this world at this time.(Carpenter ms 1992)

[The majority of the text comes from a transcribed interview by Day Gardner (1992?) of C. Carpenter.]

Daddy Bray told a story: he was living in a hotel room in Honolulu. He woke up early one morning, maybe two o'clock or so. There was a fire right in the middle of the rug in the middle of the floor. He thought the hotel was on fire. When he finally got his thoughts collected, a voice came out of the fire and told him to go to the Mainland and investigate a religious rebirth that was taking place there...

He came to the Mainland, and stayed with either...had met...during the time that Daddy Bray was a guide in the Throne Room in Honolulu, for the tourists.

When he was serving as a guide, he'd been told to teach white people, the Haolis, something about Hawaiian magic, and so he'd try. The other Hawaiians were really looking down on him for fraternizing with the Haolis. Still he had to teach them what he could because the aumakua told him to do so. Most of the white people didn't understand what he was saying, even though they had that white light around them. But a few did respond...

"But," Daddy Bray then said to us, "I've been here in Los Angeles. I've looked around for a religious rebirth, and all I can find is a bunch of religious cranks." "I don't know what I was sent over here for, but I do know that I don't belong here, and in four days

I'm going back home to the islands again."

So then he turned to me, and he asked me those four questions that Hopis ask of high-class people. Not that I was a high-class person, but I had some information. So he asked me (1) where I was from, (2) what my name was, (3) what my religion was, and (4) why I was there, in Los Angeles. In the course of answering those questions, I had a chance to bring out a brief review of the Hopi Message of Peace, which tells (1) where we as human beings came from (the underworld that was destroyed at the last great cleansing or purifying of wickedness off the face of the earth)--where we came from, (2) why we came to this land, (3) what happened to us after we came here (how we met the Great Spirit and received His permission to live on this land with Him provided we followed certain specific instructions as to our way of life and our religious practices); (4) what is happening to us now (the period at the end of this long era in which we're be tested and tried to see if we can remain faithful to our original instructions, no matter what happens to us...and then the last point (the fifth finger of the hand), (5) what may happen to us and all the life forms on this earth if we as human beings do not correct ourselves and our leaders in accordance with our own original instructions while we still have time--if we want to. Plain.

So as I answered his 4 questions to me I gave him the five basic points of the Hopi Message of Peace, and then I turned to him and asked him if he had any prophecies at all similar to these. I knew that Hawaiians did, but I was checking this guy out to see how much of a Hawaiian he really was. I knew Hawaiians had similar teachings or prophecies because I already had years of contact and exchanging of communications with George D. Robinson, who, though he was not descended from Kameamea -- whose blood line died out, for some reason -- he was from the side of the family whose blood line did not die out (an uncle of Kameamea's), and he still had the Hawaiian royal bloodline in him. I always had hopes that his descendents could reclaim the royal lands of Hawaii, which is a third of the land area of Hawaiian Islands and do a big thing over there. He wanted to start some villages for the old people, he said...Daddy and I went off to one side and talked more and more. He'd ask me questions. I'd try to give him more details on what I'd already told him, explaining all the while that I was just a messenger; I wasn't a leader. And what I was telling him was the best I knew, but it wasn't exactly right, and if he wanted to get it exactly right, he had to go talk to those Hopi leaders and get it from them face-to-face...

He [Daddy Bray] said, "They [‘aumakua] tell me this is the religious rebirth I was supposed to investigate, over in North America." He says, "In all my years in Hawaii, as far as I know, I never met another Indian. I certainly never heard of Hopis before... How'd the GoddessPele know what's going on in Hopiland? I want to go talk to those Hopi leaders."

So of course the answer to his question is a long story, but _ know how she knew what is going on over here. So he says, "But--since I represent a high-class family from Hawaii, I have to go in a traditional way, and that means I have to send a messenger ahead of me, one day, to let the Hopi leaders know I'm coming so they can prepare for me." ...and while he [Bray's son-in-law messenger] was visiting with them I'd tell other leaders, "Hey, this Hawaiian is coming. He may be the biggest Poakka in the world, I don't know, but he's got power. He says he's going to follow me one day. Maybe he will, maybe he won't."

"But his name is Daddy Bray. He was being raised by his Grand Aunt in the Court etiquette of traditional Hawaii. And Governor Dole heard about it. He was so afraid they were going to raise up this revolutionary Hawaiian leader-- The Big Five had already put down one revolution, you know--and grab control of the islands--so Governor Dole's co-workers are afraid of this young revolutionary leader coming up, so the Governor grabbed him--and used the word "adopted," adopted him, took him into the Governor Dole family. So here's this kid who'd been trained in Hawaii Hoomanamana, being raised by the Governor of Hawaii. So when the other Kahunas and chanters are being put in jail for practicing paganism, they didn't dare touch Governor Dole's kid. So he was allowed to practice openly, and therefore Daddy Bray became the most prominent or famous "chanter" or Kahuna in the Hawaiian Islands."...

"Well," he said, "they're laughing because one old man in the back of the kiva- when he saw Daddy Bray coming down the ladder into the kiva that old man said, "What village is that man from? His face is familiar, but I just can't place him."

That's when Thomas told him, "He's from Hawaii, in the middle of the Pacific Ocean, a third of the way around the world." So then I didn't feel so bad about thinking he was a Hopi when he walked into Wing Anderson's office. Even a wise Elder Hopi thought he was a Hopi.

And--he was! Come to find out--Because down in the kiva they compared migration stories (that's the histories), the present problems, the future prophecies, and in the process, the Hopis checked out a few key words to see if they were the same in Hawaiian language because, although the stories dovetail perfectly.

Every original, traditional, nation is also supposed to have a couple of words in the Hopi language, which strengthens the Hopi's

belief, or teaching, that when their Masaa (the Great Spirit of This Land and Life--they only now call him Bigfoot) split the people up into different nations. He gave them each their different languages. But he gave them a few words of the language he entrusted to the Hopi to every one of the Original Nations as one of the signs, or symbols when they reunite in these last days, that they really did all start from the same place, near where Grand Canyon is today.

So, it all started from there, when they were split up and sent out to permanently explore, claim and inhabit the land surface of earth. At first I thought the Hopi meant just North America. Now I think it's worldwide, as I talk to traditionals in different parts of the world. The point is that the Hopi couldn't find any Hawaiian words that dovetailed with theirs, and that was a mystery to them. Because everybody else they had compared Original Languages with DID have some words the same as Hopi.

During that meeting in Shogmopavi they told Daddy Bray from the Hopi Knowledge how his people had reached the western shore of North America. He didn't chant for them the Hawaiian history which tells where his forefathers came from the shores of Kahikiku, which the anthropology professors at that time said was Tahiti, but he said means "sunrise." We came from North America. The place we set sail from on the coast of North America had these gigantic trees growing right next to the ocean, which is what we made the dugout canoes out of to go out to Hawaii, and due East of it is a great grey mountain with snow on it all year round. "

Well, there are two places on the coast of North America which fit that description, and both places have got verbal histories of Indians that just disappeared overnight. The people who stayed behind and tell these histories don't know where they went, or where they came from. The strange people just mysteriously appeared, stayed around for awhile, until they learned how to work with the ocean aumakua (unseen helper persons from the lowest to the highest) and then suddenly disappeared.

So I don't know if it's down at Big Sur -- those Essalen Indians - that his forefathers set sail from, or up at Humbolt Bay, those Islands(?) west of Mt. Shasta, that his forefathers set sail from. But we do know that they left the coast of North America and to this day, after some of the Pacific storms, some of these great big logs from the Pacific Northwest wash ashore on the beaches of the Hawaiian Islands with "Weyerhaeuser" stamped on their butt. So there are currents and winds that can take people to Hawaii, even if they're just riding on a big log stamped with Weyerhaeuser on the butt.

But Daddy Bray didn't know how his ancestors reached the coast of California, Kahikiku. He'd met Jane Penn... And after the meeting with her, he said, "She was just like some of my relatives. Just exactly like one of my relatives." He said, "I think she's some kind of relative." Well, we found out in that Shogmopavi village kiva that she was one of Daddy Bray's relatives--more than 27 generations "removed", of course. Cahuilla (Kahweah) indians, descended from Hopi. Daddy Bray's family, Sun Clan family, descended from the Hopi village of Heukovi near Hotevilla and Oraibi.

The Hopi elders, through Banyacya, their translator and interpreter told Daddy about the village of Heukovi being given instructions by Maasau--they were Sun Clan people--to go to the West as far as possible, because there were people out there that were in big trouble and needed help. Hopis knew those Sun People left Heukovi Village and finally reached the coast of California, but they didn't...

So the Hopis told Daddy Bray that his ancestors left the village of Heukovi with this sacred instructions from Maasau, but the ? know if anybody had enough courage and enough strength, were sincere enough in their religion and were brave enough to keep on going to the west until they reached the Pacific Coast, til Daddy Bray come back to Hopi with his report and dove-tailing traditional histories. Well, he checked through and it was either 24 or 27 generations before that his forefathers left the shores of Kahikiku, and so it's been about a thousand years since the Hopi had received any word from the people who went to the west as far as possible. That day, and in that kiva was the first report that the Hopi had received back again. Yes, those oral traditions, those verbal histories contain factual information from those miraculous people that they had completed their duty, and were still fulfilling that duty as best they could, still accurate enough to where they were easily recognized and positively identified. So words don't have to be written down in black and white to be remembered...

So then when they were finished with that kiva meeting, he asked the Hopi if he could leave a blessing with them before he departed. And they said they would appreciate that. So then he brought out his "gift," his voice, his chant, and he sang his chant, and I noticed some of the old men looking at each other out of the comers of their eyes, down there, in that kiva. But I didn't know why those respected elders were doing that. Some time later Thomas asked me, "Did you notice those two men look at each other out of the comer of their eyes there in the kiva? do you know what that was about?"

I said, "No."

He said, "Well, that sacred chant, that Blessing Count that Daddy Bray was singing, was almost exactly one of the most sacred chants that's sung in the kiva. It's so sacred it's never even sung above ground. It's just sung in the kiva."

So when the Hopi heard that Blessing Chant in the kiva that “clinched it.”

Because in that ancient chant, he was using the ancient Hawaiian language and therefore revealed the Hopi words in traditional Hawaiian language they had been searching for, he was using the Hopi words. Yes, now we find out, after I’ve been to Hawaii... Craig Thurston ended up living on Maui in a teepee, and the tourists used to fly over and circle around over his teepees there, and said “This is the only Indian village in Maui.” He told me that from his studies the missionaries had somehow changed the Hawaiian language and taken all the “r’s” and put “l’s” in there, so that Haleakala Crater is really Hareakara -- like Ra in Egypt, for the Home of the Sun.

Isn’t that far out? And that ties in with George Robinson, descended from Hawaiian royalty. Daddy Bray was not descended from royalty directly; he was descended from the strongest Kahuna in the history of Hawaii, a man named Hewahewa. The Sun Clan people came over to “straighten those guys out” in their cannibalism, and in their blood rituals and ancestor worship as opposed to CREATOR worship, over there. There were still pacifists there in Hawaii when Bray’s ancestors arrived, but they were really being crushed in a hurry, and needed these pacifist Hopis to go in there and straighten out those bloody dictators. They weren’t straightened out completely, but at least the pacifists survived to this day. The Peaceful People (that is what the word Hopi means) are still there, the “Aloha Spirit” survives in Hawaii.

George Robinson told me his family history from the time they lived at the western end of the Sahara Desert, and the time when that “driest desert in the world” was all covered with grasslands. A lot of people started building cities there and thus, of course, became corrupted. So the country dried up and it’s dry to this day--the Sahara Desert. Then they people who wanted to survive, to be good moved eastward, he said, to a fertile valley, which he assumes is the Nile Valley, and settled that. There, in time again, they started building big cities again, and began having dictators again. So again the few righteous people had to split off from the overwhelming wicked ones. George said, “We looked, we travelled the whole earth over, in our spirit bodies, to find a spiritually clean and righteous place to migrate to, and,” he says, “we finally found this place Polynesia. It was almost on the exact, opposite side of the earth from Egypt. And in Polynesia we found Hawaiian Islands, also another island -- maybe Tibet, or someplace --” those were his exact words. But Tibet is not an island. Yet that is what he said:

“Another island -- maybe Tibet or someplace. Part of us went to this other island and part of us took the long migration to Hawaii, and” he says, “we took out time getting there to Hawaii because we knew if we settled down and stayed there for any length of time, we’d start building cities again, and we’d start eating each other again, and that way of life don’t work out very well,” he said.

So George’s ancestors finally waited until nearly the very end of this era before they went to Hawaii, the place they knew about before they ever departed from Egypt; Hawaii. He said that when they got there, there were already people there. He was from the royal class, big shots, the class that eventually produces those doggone dictators, “we have been in Hawaii ever since.” That was his story.

So Daddy Bray’s thing about Hareakara -- I mean, my use of that word Hareakara instead of the modern Haleakala -- illustrates the fact that the Original and Ancient Hawaiian language has been changed--and I can understand now why the missionaries would want to change it--dovetailed with what George Robinson told me. When I finally got George Robinson and Daddy Bray together, since they’re from different families, there was a little envy, or suspicion--mutual suspicion. But they were both working with the Goddess Pere, or Pele. So that was something they had in common between them. But there’s still this little family--not competition... well, different families have different responsibilities, and that “difference in responsibilities” manifested between them, but still they were cordial and friendly with each other and it was great to see them meet together...

Yeah, Daddy Bray had the strong miraculous physical power plus the healing power. George Robinson had the strong miraculous healing powers, plus other miracle powers.(Gardner ms)

The Bock Saga and Kanaio

Unlike the huna followers in Kanaio, the Bock Saga argument is not strongly tied to Kanaio by place-specific references but rather the interests of a particular resident. In order to minimize the distortion, I have quoted most of the first section below:

Long time before the appearance of the big religions that we know today existed one planetarian civilization: heathendom. The tradition of the SAGA dates from this time which lies much further back than our present world view may permit.

In this time that was called PARADISE people lived in harmony with nature laws and -powers. At that time the earth’s axis stood perpendicular to the sun. For this reason existed a land at the North Pole with a diameter of 250km where the sun never

went down but instead described a golden ring at the horizon. This land was called the ringland UUDENMAA, the sunland. Today it is a province in the South of Finland. In the time called PARADISE the South Pole was located in the ocean. The center of UUDENMAA was a city built on seven hills and seven islands. It was the cradle of mankind with the name HEL. The planet was divided into ringlands which all had a center connected with HEL. Inside UUDENMAA lived the ASER. In the outer ringlands lived the VANER who were descendents from the ASER.

Mankind was one family consisting of five classes: Piru-et, Rus-et, Jarl-et, Karlet and Trel-et.

PIRUET and RUSSET are the ASER in UUDENMAA, JARLET, KARLET, TRELET are the VANER outside of UUDENMAA. The ASER spoke ROT language (speak: root) from which today's Swedish originates. For the VANER they created in all ringlands the VAN language (speak: one), comparable with today's Finnish. PIRUET created RUSSET, RUSSET created JARLET, JARLET created KARLET and KARLET created TRELET. Thus a pyramidal family structure was guaranteed[sp].

The top of the pyramid was formed by the BOCK-Family (Piruet) which consisted of PER (The Allfather) and EUA(The Earthmother), BOCK and SVAN who created at least 12 sons and 7 daughters. The first son was RA (Ers), the first daughter MAYA (Maj). They became King and Queen of the family when they were 27 years old. They did not make any children, nor did the following ten brothers and 6 sisters. When the 12th son became 27 years old he took over the position of his father and became the new BOCK who again begot 12 sons and 7 daughters with a new SVAN -chosen among the Vaner.

Together with the DISAS (the stem-mothers) BOCK created the second class RUSSET consisting of RABIS, NARS, DISAS and SIENARES. The RABIS became the Allfathers of the ringlands outside UUDENMAA. The NARS represented the male part and the SIENARES the female part of the information system that spread out from HEL over the whole planet.

In appreciation of the BOCK - who is the LEMMINKAINEN, a temple was built into the earth 30km east of HEL. The upper part of this temple served ceremonial purposes. The larger lower part is a storehouse filled with artefacts and works of art of this heathen culture. It was extended over millions of generations until the Ice Age which was caused by the shift of the earth's axis 50 mill 10,008 years ago.

After this catastrophe, the so called first Ragnarok, about 50% of the Northern and the Southern hemisphere were covered with ice. Continuation of life was possible only in the equatorial area. In Europe the ice stretched as far as the Alpes and the Pyrenees. But as the warm gulf stream was flowing under the frozen surface of the ice covered seas into the Finnish gulf the region of UUDENMAA remained clear of ice. The ASER could live on in this area but were now separated from the VANER who resided south of the ice border. This period is called ALTLANDIS (All the land's ice) and marks the beginning of the arctic culture of the ASER. The VANER, surviving the catastrophe in the equatorial regions, developed during the 50 mill years into ten different races with ten different languages based on the VAN language and 10 different myths. The kings of these races were Allfathers in their empires as was PER BOCK in HEL.

ALTLANDIS was destroyed during the second Ragnarok 10 008 years ago when changing climatological circumstances moved the Scandinavian ice masses towards the South. The now white skinned ASER saved themselves, the knowledge of the past history and the treasures of the arctic culture,--like agriculture, livestock breeding, plants and animals. They went by boat to Gotland where they lived one thousand years- waiting for the time when UUDENMAA could be inhabited again.

9000 years ago the BOCK-Family moved back to Finland in order to reconstruct HEL, the system of the ASER in UUDENMAA and the VANER in the ringlands.

During ALTLANDIS the plan arose to reunite mankind into one big global family after the time of the ice-age. The result should have been the abolition of the pyramidal society structure after a period of 10,000 years. Therefore after the ice-age in every generation ten sons of BOCK and SVAN were sent to the ten Kings of the ten different tropical races. Their task was to construct a new information system. In the concrete execution of the plan, however, some of the more than 12 sons and daughters of the BOCK-Family went their own way.

The first break came already 9008 years ago as DAN and SVEN and their followers settled in today's Denmark and Sweden and founded two new kingdoms (Ynlinga-et and Pol-et which became later on the Vikings).

The branch of SVEN populated Sweden, Norway, Iceland and the North of England. Dan's branch expanded till the Alpes, the Pyrenees and the South of England. The old ASER system was only existing in Finland and Russia (Rusland).

This first break set off a chain reaction of events which resulted in the final destruction of the ASER system and HEL in the year 1050 A.D.

Similar situations arose as envoys from HEL declared themselves absolute, became Godkings. In that way social structures

which based on the principles of nature were destroyed. This happened 5000 years ago in Egypt due to Fa-Ra-Oden (Pharao), 3800 years ago in India due to Krishna, 3300 years ago in Palestina due to a women[sp.] called Murse (Moses), 2000 years ago due to Jesus and 1400 years ago due to Mohammed. The resulting religions spread like wild fire, the sources of wisdom dried up. By the year 1008 A.D. Europe was christianized, and only in Finland the old ASER system still existed.

On July 24th 1050 HEL was finally destroyed when Pope Leo IX. sent an army to Finland which had been recruited in Middle Europe.

The BOCK Family, knowing about the so called 3rd Ragnarok, already had sealed the temple in the year 987. Now they escaped to Korvatunturi in the North of Finland where they stayed during two hundred years. 1250 A.D. the family returned to UUDENMAA and divided itself into two branches: BOXSTROM and RASTROM. Since this time the SAGA has been the secret of these both families. It needs 20 years to be transferred, and everybody who had a certain title in the family learned and taught the SAGA.

According to the tradition of the family the very BOCK who lives (according to the family-counting: 10000 years after ice-time) 1984 - would have the right to bring the SAGA into the public. And so it is happening.

The LEMMINKAINEN Temple should remain sealed for 1000 years. Since 1987 a small group is working on the reopening. Today, in 1992, we are very close to our goal.(Rice 1992: 2-4)

On July 24 1987 POSITIVE FOUNDATION was set up in order to disseminate and promulgate the teachings and story of BOCK SAGA.

It is a non-profit Foundation centered on the island of Maui, Hawaii and will become a central archive for all materials in any form produced about the BOCK SAGA. In this form it can become an information centre accessible to anyone wanting to promote or support BOCK SAGA and the opening of the Lemminkainen Temple.(Rice 1992:32)

GLOSSARY

The terms of this glossary are taken from Pukui and Elbert (1964) with some additions based specifically on this project.

Abu: Altar, shrine or cairn. Frequently a cairn placed as a boundary marker.

Abupua`a: Land division usually extending from the uplands to the sea.

`Aina: Land or earth.

`A`a: A form of lava, vesicular, rough, and broken.

Akua: God, goddess, spirit, supernatural or godly.

`Aumakua: Family or personal god.

Ali`i: Chief, chiefess or noble.

Hanai: Foster child or adopted child.

Haole: White person, American, Caucasian or any foreigner.

`Ili: Land section, next in importance to *abupua`a* and usually a subdivision of an *abupua`a*.

`Ili`ili: Pebble, small stone, frequently used as floor paving on house platforms.

Kahuna: Priest or sorcerer.

Kalo: Taro (*Colocasia esculenta*), a kind of aroid cultivated since ancient times for food.

Kamehamehas: A dynasty of rulers (beginning with the founder Kamehameha I) of the Hawaiian Monarchy.

Ki: Ti, a woody plant (*Cordyline terminalis*). Formerly the leaves were put to many uses.

Kipuka: Variation or change of form, and especially a clear place or oasis within a lava bed.

Koa: The largest of native forest trees (*Acacia koa*), a valuable lumber tree.

Kokua: Help, assistant or co-operation.

Kona season: Name of a leeward wind, the season of such winds, when persistent tradewinds and related currents diminish.

Kukui: Candlenut tree (*Aleurites moluccana*), a large tree bearing nuts containing white, oily kernels which were formerly used for lights and are still cooked as a relish.

Kupuna: Ancestor, one who carried knowledge and traditions of the past.

Lo`i: Irrigated terraces.

Luakini: Large *heiau* where ruling chiefs prayed.

Maka`ainana: Commoner.

Mahale: The land division of 1848.

Makahiki: Year, annual, ancient festival.

Makai: Towards the ocean.

Mana: Supernatural or divine power.

Mauka: Towards the uplands.

Moku: District or island, made up of several *ahupua`a*.

`Ohi`a lehua: The plant (*Metrosideros macropus*, *M. collina*) which has many forms, from tall trees to low shrubs.

Pahoehoe: Smooth, unbroken type of lava, contrasting with *`a`a*.

Paniolo: Cowboy.

Pele: The volcano goddess.

Pili: A grass (*Heterodon contortus*), formerly used for thatching houses in Hawai'i.

Pu`uhonua: Place of refuge or asylum.

`Uala: The sweet potato (*Ipomoea batatas*).

Wilivil: A Hawaiian tree (*Erythrina sandwichensis*) found on dry coral plains and lava flows.

REFERENCES

- Agnew, John and Duncan, James, eds. 1989. *The Power of Place: Bringing Together Geographical and Sociological Imaginations*. Boston: Unwin Hyman.
- Aitken, Stuart. 1991. Person-Environment Theories in Contemporary Perceptual and Behavioural Geography I: Personality, Attitudinal and Spatial Choice Theories. *Progress in Human Geography* 15/2: 179-193.
- Altman, Irwin and Werner, Carol, eds. 1985. *Home Environments: Human Behavior and Environment*. New York: Plenum Press.
- Anon. 1991. Maui Gold Visitor Survey Results. In *Maui Inc.*, July-August 1991, pp. 27.
- Armstrong, R W., and Lewis, H.T., eds. 1972. *North Kohala Studies, 1970: Preliminary Results in Human Ecology*. Honolulu: Department of Geography, University of Hawai'i.
- Ariyoshi, Rita 1993. Luxury, Leisure and Legend. In *Spirit of Aloha*, March 1993, pp. 46-49.
- Ashdown, Inez 1977a. Place Names. Ms of 2/10/1977, Bernice P. Bishop Museum.
- _____. 1977b. Letter on Makena to La Perouse State Park to DLNR, 1/28/77. Ms. of 1/28/77, Bernice P. Bishop Museum.
- _____. 1970. *Ke Aloha o Maui: The Broad Highway of Maui*. Wailuku: Private Press.
- Austin, M.R 1976. A Description of the Maori Marae. In *The Mutual Interaction of People and Their Built Environment: A Cross-Cultural Perspective*, ed. Amos Rapoport, pp. 229-45. The Hague: Mouton.
- Barrau, Jacques 1958. *Subsistence Agriculture in Melanesia*. Honolulu: Bernice P. Bishop Museum Bulletin 219.
- Barrera, William 1974. An Archaeological Phase 1 Survey of Wailea, Kihei, Maui. Ms. Bernice P. Bishop Museum.
- Bath, Joyce 1983. Archaeological Survey of Makena Golf Course Well Sites, Tank Sites, and Access Roads. Ms.
- Bayliss-Smith, T.P., RD. Bedford, H.C. Brookfield and M. Latham 1988. *Islands, Islanders and the World: the Colonial and Post-Colonial Experience of Eastern Fiji*. Cambridge: Cambridge University Press.
- Beckwith, Martha, ed. 1932. *Kepolino's Traditions of Hawaii*. Honolulu: Bernice P. Bishop Museum Bulletin 95, Bernice P. Bishop Museum.
- Bedford, Richard 1987. Islands, Islanders and the World: Poverty in the Periphery? In *Geography and Society in a Global Context: Proceedings of Fourteenth New Zealand Geography Conference and Fifty-Sixth ANZAAS Congress (Geographical Sciences): Palmerston North, January 1987*, ed. Richard Le Heron, M. Roche and M. Shepherd, pp. 8-11. Wellington: New Zealand Geographical Society.
- _____, ed. 1980. *Perceptions, Past and Present, of a Future for Melanesia*. Christchurch: University of Canterbury.
- _____. 1977. *Compensating for Development: the Bougainville Case*. Christchurch: University of Canterbury.
- Berdoulay, Vincent. 1989. Place, meaning, and discourse in French language geography. *The Power of Place*, ed. John Agnew and James Duncan, pp. 124-39. Boston: Unwin Hyman.
- Bird, James. 1989. *The Changing Worlds of Geography: A Critical Guide to Concepts and Methods*. Oxford: Clarendon Press.
- Bishop, S.E. 1839. Hana Station Mission Report for 1839. Ms, Mission Houses Museum.
- Bonnemaison, Joel. 1985a. The Tree and the Canoe: Roots and Mobility in Vanuatu Societies. *Pacific Viewpoint* 26/1:30-62.
- _____. 1985b. Un Certain refus de l'Etat: Autopsie d'une Tentative de Secession en Melanesie. *International Political Science Revue* 6/2:230-47.
- _____. 1984. *Les Lieux de l'Identite: Vision du Passe et Identite Culturelle dans les Iles du Centre du Sud de Vanuatu*. Paris: Cahiers ORSTOM: Sci. humaines no. special consacre a l'Anthropologie Culturelle.
1981. Voyage Autour du Territoire. *L'Espace Geographique* X/4:249-62.
1980. Espace Geographique et Identite Culturelle en Vanuatu. *Journal Societe des Oceanistes* 68: 181-88.
- _____. 1979. Les Voyages et l'Entracinement: Formes de fixation et de mobilite dans les societies traditionnelles des Nouvelles-Hebrides. *L'Espace Geographique* VIII/4: 303-18.
- _____. 1977. *Melanesian Subsistence Production Systems: The road Bilong Money'(I) and the Ways of Custom*. Canberra: Development Studies Centre paper 3-7/10/77, Australian National University.
- Bordner, Richard 1980. Archaeological Excavations: Salvage of Features 1028-12 and 1028-13 for the Proposed Makena Road, Palaua, Honua`ula, Maui, Hawai'i. Ms. of 7/80, SRSC for EISC.
- _____, and Cox, David 1981. Makena Golf Course Extension: Archaeological Reconnaissance. Ms for EISC, 10/1981.
- Bostwick, Burdette E., Jr., and Murton, Brian, ed. 1976. *Puna Studies: Preliminary Research in Human Ecology*, 1971. Honolulu: Department of Geography, University of Hawaii.
- Bostwick, Burdette E., Jr., and Piianaia, Ilima. 1972. Some Implications of Environmental Perception for Development and Political Decision-Making. In *North Kohala Studies, 1970: Preliminary Research in Human Ecology*, ed. R W. Armstrong and H.T. Lewis, pp. 79-90.

- Honolulu: Department of Geography, University of Hawaii.
- Brookfield, Harold. 1984. Experiences of an Outside Man. In *Reflections of a Revolution: P Geography as a Spatial Science*, ed. M. Billinge, D. Gregory and R. Martin, pp. 27-38. London: Macmillan Press.
- _____. 1975. *Interdependent Development: Perspectives on Development*. London: Methuen.
- _____. 1964. Questions of the Human Frontiers of Geography. *Economic Geography* 40/4:283-303.
- Bruce, Leslie 1972. Field Report on Kanaio. Ms of 7/9/72, Maui Historical Society.
- Buck, Elizabeth. 1993. *Paradise Remade: The Politics of Culture and History in Hawai'i*. Philadelphia: Temple University Press.
- Buttimer, Anne. 1982. Musing on Helicon: Root Metaphors and Geography. *Geographiska Annaler* 64B:89-96.
- _____. 1976. Grasping the Dynamism of the Lifeworld. *Association of American Geographers* 66/2:277-92.
- Carlstein, Tommy. 1982. *Time Resources. Society and Ecology: On the Capacity for Human Interaction in Space and Time in Pre-Industrial Societies*. London: Royal Univ. of Lund, Dep't. of Geography: Human Geography #49, G. Allen & Unwin.
- Chandra, R. 1983. *Rural Development: Putting the Last First*. London: Longmans.
- Chapman, M. and Prothero, R.M., eds. 1985. *Circulation in Population Movement: Substance and Concepts from the Melanesian Case*. London: Routledge & Kegan Paul.
- Chapman, Murray. 1991. Pacific Island Movement and Socioeconomic Change: Metaphors of Misunderstanding. *Population and Development Review* 17/2:263-92.
- _____. 1990. Island Autobiographies of Movement: New Ways of Knowing? In *Colloquium, Journees d'Ethnographies, Centre d'Etudes de Geographie Tropicale, CNRS: Oct. 8-10, 1990*. University de Bordeaux: Talence.
- _____. 1987. Population Movement Studied at Microscale: Experience and Extrapolation. *Geojournal* 15/4: 347-65.
- Chapman, Peter and Kirch, Patrick 1979. .Archaeological Excavations at Seven Sites Southeast Maui, Hawaiian Islands. *Bernice P. Bishop Report* 79-1. Honolulu: Bernice P. Bishop Museum.
- Chapman, Peter 1965-1975. Field Notes, Maps and Interviews, Kanaio, Maui. Ms, Bernice P. Bishop Museum.
- Chapman, Peter and Sterling, Elspeth. 1968. March 25-28 Interviews conducted with Sam and Minnie Po, Maui. Ms., Bernice P. Bishop Museum.
- ____ and _____. 1966. July 5 Interview conducted with Sam and Minnie Po, Maui. Ms., Bernice P. Bishop Museum.
- Charmaz, Kathy 1983. The Grounded Theory Method: An Explication and Interpretation. In *Contemporary Field Research: A Collection of Readings*, ed. Robert M. Emerson, pp. 109-26. Prospect Heights: Waveland Press.
- Cherry, John, and Renfrew, Colin. 1986. EpiLogue and Prospect: Peer Polity Interaction and Socio-Political Change. In *Peer Polity Interaction and Socio-Political Change*, ed. C. Renfrew and J.P. Cherry, pp. 149-58. Cambridge: Cambridge University Press.
- Choy, Stephanie. 1976. The Role of Hunting in the Kalapana-Kaimu Hawaiian Community. In *Puna Studies: Preliminary Research in Human Ecology*, 1971, ed. Barry Bostwick Jr. and Brian Murton, pp. 9-12. Honolulu: Department of Geography, University of Hawaii.
- Churchill, Ward. 1992. *Fantasies of the Master Race*. Monroe: Common Courage Press.
- Clark, S.D. and Dixon, B. 1993. An .Archaeological Data Recovery Plan for Site 50-50-14-1028 in Palauea Ahupua`a, Wailea, Makawao District, Maui Island, Hawai'i, Ms. of 3/93, Bernice P. Bishop Museum Applied Research Group for Wailea Resort Co. Ltd.
- _____. 1992. An Archaeological Data Recovery Plan for Selected Sites in Paeehu Ahupua`a, Wailea, Makawao District, Maui Island, Hawai'i. Ms. of 3/92, Bernice P. Bishop Museum Applied Research Group for Wailea Resort Co. Ltd.
- Clark, S.D., Cammisa, A. and Cleghorn, P.C 1990. Archaeological Salvage Excavations at Site 50-Ma-B10-29, and Limited Monitoring of Site 50-Ma-B10-31, Makena, Makawao, Maui Island, State of Hawaii. Ms. of 11/90, Bernice P. Bishop Museum Applied Research Group for Hawaii State Properties, Inc.
- Clark, S.D. 1974. A Reconnaissance Survey of Makena Properties. Ms, Bernice P. Bishop Museum.
- Clarke, William C 1994. Afterword: Learning from Ngrapo: Indigenous Knowledge and Sustainable Agricultural Development. In *The Margin Fades*, ed. Eric Waddell and Patrick Nunn, pp. 231-66. Suva: Institute of Pacific Studies.
- _____. 1990. Learning from the Past: Traditional Knowledge and Sustainable Development. *The Contemporary Pacific* 2/2:233-53.
- Clarke, William C, and Morrison, J. 1987. Land Mismanagement and the Development Imperative in Fiji. In *Land Degradation and Society*, ed. P. Blaikie and H.C Brookfield, pp. 176-85. London: Methuen.
- Claval, Paul. 1988. France. In *Geography Since the Second World War: .An International Survey*, ed. R.J. Johnston and P. Claval, pp. 15-41. London: Croom Helm.
- _____. 1985. Nouvelle Geographie, Communication et Transparence. *Annales de Geographie* XCIV/512: 130-44.

- _____. 1984a. The Historical Dimension of French Geography. *Journal of Historical Geography* 10/3:229-45.
- _____. 1984b. The Concept of Social Space and the Nature of Social Geography. *New Zealand Geographer* 40/2: 105-9.
- Cleghorn, Paul. 1975. A Summary of Phase II, Part 2: Salvage Excavations at Site 50-Ma-BIO-1, Wailea, Maui. Ms, Bernice P. Bishop Museum.
- _____. 1974. Survey and Salvage Excavations in Specified Areas of Wailea Lands, Maui. Ms, Bernice P. Bishop Museum.
- Cloke, Paul, Philo, Chris and Sadler, David. 1991. *Approaching Human Geography: An Introduction to Contemporary Theoretical Debates*. New York: Guilford Press.
- Connell, John. 1991. Island Microstates: The Mirage of Development. *The Contemporary Pacific* 3/2:251-87.
- _____. 1988. Contemporary Issues in Island Micro-States. In *The Geography of the Third World: Progress and Prospect*, ed. M. Pacione, pp. 427-462. London: Routledge.
- _____. 1987. *New Caledonia or Kanay? The Political History of a French Colony*. Canberra: Pacific Resource Monograph # 16, Australian National University Press.
- Cooper, George and Daws, Gavan. 1985. *Land and Power in Hawaii*. Honolulu: Benchmark Books.
- Cordy, Ross. 1978. Preliminary Report Archaeological Phase I Survey of Proposed Golf Course Makena, Maui. Third Increment Fairways 1, 7 through 10, and 16 through 18. Ms, Bernice P. Bishop Museum.
- Cosgrove, Denis E. 1984. *Social Formation and Symbolic Landscape*. London: Croom Helm.
- Cuddihy, Linda and Stone, Charles. 1990. *Alteration of Native Hawaiian Vegetation: Effects of Humans, Their Activities and Introductions*. Honolulu: University of Hawaii Press.
- Curry, Michael. 1991. Postmodernism, Language, and the Strains of Modernism. *Annals, Association of American Geographers* 81/2:210-28.
- Curson, P.H. 1979. Migration, Remittances and Social Networks Among Cook Islanders. *Pacific Viewpoint* 20/2: 185-95.
- Davis, Bertell, and Bordner, Richard. 1977a. Archaeological Reconnaissance of the Makena Coast Road Realignment, Honua`ula, Island of Maui. Ms of 6/77, Archaeological Research Center Hawaii # 14-82.
- _____, and _____. 1977b. Archaeological Reconnaissance of the Proposed Realignment of the Makena Coast Road--Mauka Alternate, Honua`ula, Island of Maui. Ms of 11/77, Archaeological Research Center Hawaii # 14-82 IA.
- Decision Analysts Hawaii. 1988. Undersea Cable to Transmit Geothermal-Generated Electrical Energy from the Island of Hawaii to Oahu: Economic Feasibility. Ms. of 2/88, Decision Analysts Hawaii for Department of Planning and Economic Development.
- Department of Business, Economic Development and Tourism. 1994. *County of Maui: 94 Facts and Figures, 1994*. Honolulu: Department of Business, Economic Development and Tourism.
- _____. 1994. Geothermal Policy Statement. Ms. of 12/92, DBEDT.
- Department of Land and Natural Resources. 1993. Process for Designation of Natural Area Reserves. Ms. of Division of Forestry, DLNR.
- DHM Planners. 1987. Hawaii Deep Water Cable Program, Phase II-C; Task 1: Visual Impact 1\analysis of Proposed 300 KVDC Line. Ms. of 3/87, DHM Planners for Parsons Hawaii, HECO and DPED.
- Dicks, A.M., and Haun, A.E. 1987a. Intensive Archaeological Survey and Testing, Embassy Suites Hotel Site, Wailea Beach Resort, Land of Palauea, Makawao District, Island of Maui (TMK.: 2-1-08: 87). Ms. of 12/87, PHRI for Landmark Hotels.
- _____. 1987b. Intensive Archaeological Survey and Testing, Embassy Suites Hotel Site, Wailea Beach Resort, Land of Palauea, Island of Maui (TMK.: 2-1-23: 3). Ms. of 9/87, PHRI for Landmark Hotels.
- Dobyns, S. 1988. Archaeological Excavation in Coastal Areas of Papa`nui, Waipao, Kalihi and Keauhou *Abupua`a*, Maui Island, Hawaii (TMK.: 2-1-07: 36). Ms. of 1/88, Bernice P. Bishop Museum Applied Research Group for Makena Surf, Ltd.
- Donham, T.K. 1992. Summary Report: Surface Survey of Easement 1, Halemano/Piipii Subdivision, Kanahena, Honua`ula, Maui (TMK: 2-1-04: 98). Mi. of 12/92, State Historic Preservation Division.
- _____. 1990a. Archaeological Inventory Survey and Testing of a Potential Burial Feature, Palauea Subdivision Lot A, Land of Palauea, Makawao District, Island of Maui. Ms. of 12/90, PHRI for Murray Pacific Corp.
- _____. 1990b. Archaeological Inventory Survey Palauea Development Parcel, Land of Palauea, Makawao District, Island of Maui (TMK: 2-1-11: 3). Ms. of 12/90, PHRI for Kihara Development.
- Doumenge, Francois 1966. *L'Homme dans la Pacifique Sud: Etude Geographique*. Paris: Publication de la Societe des Oceanistes 19; Musee de l'Homme.
- Doumenge, Jean-Pierre. 1982. *Du Terrior...a la ville: Les Melanesiens et leurs espaces en Nouvelle-Caledonie*. Centre d'Etudes de Geographie

- Tropicale, CNRS, Travaux et documents de géographie tropicale no. 46. Bordeaux: CNRS.
- _____. 1975. La Vie Rurale de l'Île des Pins (Nouvelle-Calédonie). *Cahiers d'Outre-Mer* 28/109: 54-91.
- Driver, Felix. 1988. The Historicity of Human Geography. *Progress in Human Geography* 12/4:497-506.
- Duly, Colin. 1979. *The Houses of Mankind*. London: Thames & Hudson.
- Duncan, James S. and Ley, David, eds. 1993. *Place/ Culture/ Representation*. London: Routledge.
- Duncan, James S. 1985. The House as Symbol of Social Structure. In *Home Environment: Human Behavior and Environment*, ed. Irwin Altman and Carol Werner, pp. 133-51. New York: Plenum Press.
- _____. 1976. Landscape and the Communication of Social Identity. In *The Mutual Interaction of People and Their Built Environment*, ed. Amos Rapoport, pp. 391-401. The Hague: Mouton.
- Dupon, Jean-François, ed. 1981. *Atlas de la Nouvelle Calédonie et Dependances*. Paris: ORSTOM.
- Dye, Thomas. 1989. Tales of Two Cultures: Traditional Historical and Archaeological Interpretations of Hawaiian Prehistory. *Bishop Museum Occasional Papers Vol.29*:3-22.
- _____. 1979. Archaeological Reconnaissance Survey of Proposed Clubhouse and Approach Road Sites, Makena, Maui. Ms of 10/79, Bernice P. Bishop Museum.
- Eager, Harry. 1992a. Hawaiians agree Maui Factors should not stay at Kahikinui. *Maui News* 8/2/92.
- _____. 1992b. Kahikinui Range: What's Next? *Maui News* 3/8/92.
- _____. 1992c. It could be a place where Tahitians settled, or a poorly managed range. *Maui News* 3/8/92.
- Ellen, R. 1988. Persistence and Change in the Relationship between Anthropology and Human Geography. *Progress in Human Geography* 12:229-62.
- Emerson, Robert B., ed. 1983. *Contemporary Field Research: A Collection of Readings*. Prospect Heights: Waveland Press.
- Environment Impact Study Corporation. 1981. Archaeological and Historical Sites, Proposed Makena Road. Ms of 9/81, Environment Impact Study Corporation.
- Ericksen, E. Gordon. 1980. *The Territorial Experience: Human Ecology as Symbolic Interaction*. Austin: University of Texas Press.
- Erkelens, Conrad. 1993. Phase I Archaeological Investigation: Cultural Resources Survey, Hawaii Geothermal Project, Makawao and Hana Districts, South Shore of Maui, Hawaii: Research Design. Ms. by International Archaeological Research Institute, Inc., October 1993.
- Eyles, John. 1990. Who Defines and Manages the Environment? The Significance of Lay Senses of Place. *Geography Research Forum* 10:29-36.
- Fages, Jean 1975a. Les Tahitiens de Nouvelle-Calédonie en 1974. *Bulletin Société des Oceanistes* 16:652-98.
- _____. 1975b. Tourism Development in Guam and Tahiti: A Comparison. In *The Impact of Urban Centers in the Pacific*, ed. R. W. Force and B. Bishop, pp. 43-51. Honolulu: Pacific Science Association.
- _____. 1974. *Migrations et Urbanisation en Polynésie Française*. Papeete: ORSTOM.
- _____. 1972. La Communauté Tahitienne de Nouvelle-Calédonie. *ORSTOM series sciences humaines* IX/1:75-86.
- _____. 1970. *Tahiti et Moorea: Etudes sur la Société l'Economie et l'Utilisation de l'Espace*. Paris: Trav. et doc. #4, ORSTOM.
- Farrell, Bryan H. 1982. *Hawaii, the Legend that Sells*. Honolulu: University of Hawaii Press.
- _____. 1979. Tourism's Human Conflicts: Cases from the Pacific. *Annals of Tourism Research* 6/1979: 122-36.
- _____, ed. 1977. *The Social and Economic Impact of Tourism on Pacific Communities*. Santa Cruz: University of California Santa Cruz Press.
- Fornander, Abraham. 1919. In the Banana Field of Kahuoi and Other Famous Places. *Fornander Collection of Hawaiian Antiquities and Folk-lore, Volume V Number III*. Translated by John Wise, Edited by Thomas G. Thrum. Memoirs of the Bernice P. Bishop Museum. Honolulu: Bernice P. Bishop Museum.
- Frankfort-Nachmias, Chava, and Nachmias, David. 1992. *Research Methods in the Social Sciences, 4th Edition*. New York: St. Martin's Press.
- Fraser, Douglas. 1968. *Village Planning in the Primitive World*. New York: G. Braziller.
- Frierson, Pamela. 1991. *The Burning Island: A Journey Through Myth and History in Volcano Country, Hawai'i*. San Francisco: Sierra Club.
- Frimigacci, Daniel. 1977. *Tribus, Reserves et Clans de Nouvelle-Calédonie: Introduction à l'Histoire Autochtone (les ME-ORI)*. Noumea: Collection EVEIL.
- Geertz, Clifford. 1973. *The Interpretation of Culture: Selected Essays*. New York: Basic Books.
- Giddens, A. 1983. Comments on the theory of structuration. *Journal for the Theory of Social Behavior* 13:75-80.
- _____. 1979. *Central Problems in Social Theory*. London: Macmillan.
- Glaser, Barney G. 1978. *Theoretical Sensitivity*. Mill Valley: Sociology Press.

- Glaser, Barney G., and Strauss, Anselm L. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Golledge, Reginald and Stimson, Robert. 1987. *Analytical Behavioural Geography*. London: Croom Helm.
- Goodey, B. and Gold, J. R. 1985. Behavioural and Perceptual Geography: from Retrospect to Prospect. *Progress in Human Geography* 9/4:585-95.
- Goss, Jon. 1988. The Built Environment and Social Theory: Toward an Architectural Geography. *Professional Geographer* 40/4: 392-403.
- Gosser, D. and Cleghorn, P. 1990. Results of a Phase 1 Archaeological Survey of the "Southern Acreage" in Wailea, Makawao, Maui Island, TMK: 2-1-08. Ms. of 5/90, Bernice P. Bishop Museum Applied Research Group for Wailea Resort Co., Ltd.
- Gould, P. R. 1966. *On Mental Maps*. Ann Arbor: University of Michigan Discussion Paper no. 9.
- Gregory, Derek, Martin, Ron, and Smith, Graham. 1994. Introduction: Human Geography, Social Change and Social Science. In *Human Geography, Space and Social Science*, ed. D. Gregory, R. Martin, and G. Smith, pp. 1-18. Minneapolis: University of Minnesota Press.
- Griffith, James S. 1992. *Beliefs and Holy Places: A Spiritual Geography of the Pimeria Alta* Tucson: Univ. of Arizona Press.
- Grossman, Lawrence S. 1984. *Peasants, Subsistence Ecology and Development in the Highlands of Papua New Guinea*. Princeton: Princeton University Press.
- _____. 1977. Man-Environment Relationships in Anthropology and Geography. *Annals, Association of American Geographers* 67/1: 126-44.
- Hagerstrand, Torsten. 1982. Diorama, Path and Project. *Tijdschrift voor Econ. En Soc. Geografie* 73/6:323-39.
- _____. 1978a. Survival and Arena. In *Timing Space and Spacing Time: Volume 2: Human Activity and Time Geography*, ed. T. Carlstein, D. Parkes and N. Thrift, pp. 122-145. New York: Wiley.
- _____. 1978b. A Note on the Quality of Life- Times. In *Timing Space and Spacing Time: Volume 2: Human Activity and Time Geography*, ed. T. Carlstein, D. Parkes and N. Thrift, pp. 214-224. New York: Wiley.
- Halas, Susan. 1991. Count Your Blessings. In *Maui Inc.*, July-August 1991, pp. 11-36.
- Haleole, S. N. 1863. History of the Hawaiian Priesthood in Olden Time, Called Hoomanamana. In *Fornander Collection of Hawaiian Antiquities and Folk-lore*. Bernice P. Bishop Museum Memoirs Vol. VI Part 1, ed. T. G. Thrum, pp. 66-156. Honolulu: Bernice P. Bishop Museum.
- _____. 1862. History of the Hawaiian Priesthood Called the Order of Sorcery. In *Fornander Collection of Hawaiian Antiquities and Folk-lore*. Bernice P. Bishop Museum Memoirs Vol. VI Part 1, ed. T. G. Thrum, pp. 56-64. Honolulu: Bernice P. Bishop Museum.
- Hall, Edward T. 1966. *The Hidden Dimension*. New York: Doubleday.
- Hamilton, Lisa. 1994. David and Goliath. *Honolulu Weekly* 8/31/94.
- Handy, E. S. Craighill and Elizabeth G. 1972. *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. Honolulu: Bernice P. Bishop Museum, Bulletin 233.
- Handy, E. S. Craighill. 1940. *The Hawaiian Planter: vol. 1: His Plants, Methods and Areas of Cultivation*. Honolulu: Bernice P. Bishop Museum, Bulletin 161.
- Haun, Alan E. 1987. Archaeological Field Inspection, Embassy Suites Hotel Site, Wailea Resort, Land of Palauea, District of Makawao, Island of Maui, TMK: 2-1-23: 3. Ms. of 7/87, PHRI for Group 70.
- _____. 1978. Archaeological Survey and Salvage Excavations in Mooiki and Malauea, Makawao District, Maui Ms of 8/78, Bernice P. Bishop Museum.
- Hayes, Geoffrey. 1991. Migration, Metascience, and Development Policy in Island Polynesia. *The Contemporary Pacific* 3/1: 1- 58.
- Hodder, Ian. 1987. Converging Traditions: The Search for Symbolic Meanings in Archaeology and Geography. In *Landscape and Culture*, ed. J. M. Wagstaff, pp. 134-45. Oxford: Blackwell.
- Hommon, Robert. 1976. Results of an Archaeological Reconnaissance Survey, Water Line Right-of-Way of the Makena Water Project (phases I-B and II). Ms. of 1/76, Archaeological Research Center Hawaii # 14-72.
- Howard, Alan. 1990. Cultural Paradigms, History, and the Search for Identity in Oceania. In *Cultural Identity and Ethnicity in the Pacific*, ed. J. Linnekin and L. Poyer, pp. 259-79. Honolulu: University of Hawaii Press.
- Huetz de Lemp, Alain. 1966. *Geographie de l'Océanie*. Paris: Press Université de France.
- _____. 1957. Quelques Problèmes Humaines des Îles du Pacifique Sud. *Etudes d'Outre-Mer*. 8-9/57: 43-52.
- Huetz de Lemp, Christian. 1989. Un Exemple de Macrocephalie Touristique: Les Îles Hawaïi. In *Îles et Tourisme: en Milieux Tropical et Subtropical*, ed. Alain Huetz de Lemp, pp. 195-202. Bordeaux: CRET/CEGET Collection < Îles et Archipels > # 10; CRET.
- _____. 1980. Le Problème Foncier aux Hawaïi. *Cahiers d'Outre-Mer* 132:383-85.

- _____. 1977. *Des Iles Hawaïi: Etude de Geographie Humaine*. Bordeaux: Universite de Bordeaux These.
- _____. 1972. Les Chinois Aux Hawaïi. In *Etudes de Geographie Tropicale offertes a Pierre Gourou*, ed. P. Gourou, pp. 183-208. Paris: Mouton.
- _____. 1964. Le Tourisme dans l'Archipel des Hawaïi. *Cahiers d'Outre-mer* 617/65:9-57.
- Hyslop, John. 1990. *Inka Settlement Planning*. Austin: University of Texas Press.
- Jackson, J.B. 1984. *Discovering the Vernacular Landscape*. New Haven: Yale University Press.
- _____. 1970. *Landscape: Selecting writings of J.B. Jackson*. Amherst: University of Massachusetts Press.
- Jackson, Peter. 1990. Viewpoint: Exploring the Role of Geography. *Geography Research Forum* 10:91-103.
- Jensen, P.M. 1992. Archaeological Mitigation Program for Interpretive Development and Site Preservation, site 1030--Halo Point, Land of Palauea, Makawao District, Island of Maui. Ms. of 1/92, PHRI for Murray Hawaiian Ltd.
- Jourdane, Elaine. 1988. Final Mitigation Procedures at TMK 2-1-07: 79, Waipao, Makena, Makawao, Maui. Ms. of 10/88, Bernice P. Bishop Museum for S. & F. Land Co., Inc.
- Kamakau, S.M. 1976. *Na Hana a Ka Po'e Kahiko*. Translated by Mary K. Pukui, ed. Dorothy Barrere. Honolulu: Special Publication #61, Bernice P. Bishop Museum.
- _____. 1964. *Ka Po'e Kahiko*. Translated by Mary K. Pukui, ed. Dorothy Barrere. Honolulu: Bernice P. Bishop Museum.
- _____. 1961(1992). *Ruling Chiefs of Hawai'i*, Revised Edition. Honolulu: Kamehameha Schools Press.
- Kame'eleihiwa, Lilikala 1992. *Native Land and Foreign Desires: Pehea La E Pono Ai?* Honolulu: Bishop Museum Press.
- Kellerman, Aharon. 1989. *Time, Space and Society: Geographical Societal Perspectives*. Dordecht: Kluwer.
- Kennedy, J. and Bigelow, B. 1989. Archaeological Investigation and Recommendations for the Palma at Wailea, Wailea, Maui (TMK: 2-1-08: 83). Ms. of 10/89, Archaeological Consultants of Hawaii for McCormack Properties, Ltd.
- Kennedy, J. 1988. Results Concerning the Proposed Makena 700 Development. Ms. of 3/88, Archaeological Consultants of Hawaii for Phillip, Brandt, Reddick.
- Kent, Susan. 1987. *Method and Theory: Activity Area Research: An Ethnoarchaeological Approach*. New York: Columbia University Press.
- Kepler, Angela K. 1987. *Maui's Hana Highway: A Visitor's Guide*. Honolulu: Mutual Publishing.
- King, Anthony D. 1984. *The Bungalow: The Production of a Global Culture*. London: Routledge & Kegan Paul.
- _____. 1980. *Buildings and Society*. London: Routledge & Kegan Paul.
- _____. 1976. *Colonial Urban Development: Culture, Social Power and Environment*. London: Routledge & Kegan Paul.
- Kirch, Patrick. 1992. *Anahulu: The Anthropology of History in the Kingdom of Hawaii: Vol. 2: The Archaeology of History*. Chicago: University of Chicago Press.
- _____. 1985. *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. Honolulu: University of Hawaii Press.
- _____. 1971. Archaeological Excavations at Palauea, East Maui, Hawaiian Islands. *Archaeology and Physical Anthropology in Oceania* 6:62-86.
- _____. 1970. Archaeology in the Ahupua'a of Palauea, Southeast Maui. Ms. of 4/70, Bernice P. Bishop Museum.
- _____. 1969. An Archaeological Survey of the Alexander and Baldwin Property Surrounding Wailea, Kihei, Maui (TMK: 2-1-06). Ms of 6/69, Bernice P. Bishop Museum.
- Kobayashi, Audrey, and Mackenzie, Suzanne, eds. 1989. *Remaking Human Geography*. Boston: Unwin Hyman.
- Kolb, Michael. 1992. Diachronic Design Changes in Heiau Temple Architecture on the Island of Maui, Hawaii. *Asian Perspectives* 31/1:223-41.
- _____. 1991. *Social Power, Chiefly Authority, and Ceremonial Architecture in an Island Polity, Maui, Hawaii*. PhD. thesis in Anthropology, University of California at Los Angeles.
- Krasnick, S. and Mansur, J. 1987. Hawaii Deep Water Cable Program, Phase II-C: Task 1: Environmental Assessment. Ms. of 8/87, Parsons Hawaii for DPED.
- Krasnick, S. 1986. Hawaii Deep Water Cable Program, Preferred Route Analysis. Ms. of 5/86, Parsons Hawaii for DPED.
- Krasnick, S., and Chapman, G.A. 1984. Hawaii Deep Water Cable Program, Phase II-A; Environmental Analyses. Ms. of 3/84, Parsons Hawaii for DPED.
- Kubota, Gary T. 1992. Kula Farmers Wary of Urban Growth. *The Maui News*, Feb. 29, 1992.
- Kyselka, Will, and Lanterman, Ray. 1980. *Maui: How It Came To Be*. Honolulu: University of Hawaii Press.
- Lamb, Samuel. 1981. *Native Trees and Shrubs of the Hawaiian Islands*. Santa Fe: Sunstone Press.
- Leenhardt, Maurice. 1970. *La Structure de la Personne en Melanesie*. Milano: STOA.
- _____. 1947. *Do Kamo: La Personne et le Mythe dans le Monde Melanesien*. Gallimard: Paris.

- _____. 1930. *Notes d'Ethnologie Neo-Caledonienne*. Paris: Institute d'Ethnologie.
- Ley, David. 1989. Fragmentation, coherence, and limits to theory in human geography. In *Remaking Human Geography*, ed. Audrey Kobayashi and Suzanne Mackenzie, pp. 227-44. Boston: Unwin Hyman.
- _____. 1978. Tuan, Yi-Fu: Space and Place: The Perspective of Experience. *Annals, Association of American Geographers* 68/4:570-72.
- Linnekin, Jocelyn. 1990. The Politics of Culture in the Pacific. In *Cultural Identity and Ethnicity in the Pacific*, ed. J. Linnekin and L. Poyer, pp. 149-73. Honolulu: University of Hawaii Press.
- _____. 1985. *The Children of the Land*. New Brunswick: Rutgers University Press.
- Macdonald, Gordon, Abbott, Agatin, and Peterson, Frank. 1970(1983). *Volcanoes in the Sea: The Geology of Hawaii (2nd ed.)*. Honolulu: University of Hawaii Press.
- Malo, David 1951. *Hawaiian Antiquities*. Translated by N.B. Emerson (1898). Honolulu: Bernice P. Bishop Museum.
- Manner, Harley I. 1984. Vegetation Dynamics and Phosphate Mining on Nauru. *The Australian Geographer* 7/84: 173-85.
- _____. 1977. Biomass: Its Determination and Implications in Tropical Agroecosystems: An Example from Montane New Guinea. In *Subsistence and Survival: Rural Ecology in the Pacific*, ed. T. Bayliss-Smith and RG. Feachem, pp. 215-42. London: Academic Press.
- Maui Board of Realtors. 1994. *Real Estate: Maui Style*. Kihei: Maui Board of Realtors.
- _____. 1990. *Real Estate: Maui Style*. Kihei: Maui Board of Realtors.
- McDowell, Linda. 1994. The Transformation of Cultural Geography. In *Human Geography: Society, Space and Social Science*, ed. D. Gregory, R. Martin and G. Smith, pp. 146-73. Minneapolis: University of Minnesota Press.
- Meinig, D.W., ed. 1979. *The Interpretation of Ordinary Landscapes*. New York: Oxford University Press.
- _____. 1965. The Mormon Culture Region: Strategies and Patterns in the Geography of the American West, 1847-1964. *Annals, Association of American Geographers* 55/65: 191-220.
- Melton, J. Gordon. 1990. *New Age Encyclopedia*. Detroit: Gale Research Inc.
- Morgan, Joseph. 1978. The Tsunami Hazard in the Pacific: Institutional Responses in Japan and the United States. University of Hawaii Department of Geography Ph.D. dissertation.
- Murphy, Laurel. 1993. A Tale of Two Sympathies. *Maui News* 1/6/93.
- Murton, Brian 1987. Maori Territory. In *Southern Approaches: Geography in New Zealand*, ed. P.G. Holland and W.B. Johnston, pp. 91-115. Christchurch: New Zealand Geographical Society.
- _____. 1972. Some Aspects of a Cognitive Behavioural Approach to Environment: A Review. *New Zealand Journal of Geography* 53: 1-8.
- Newman, T. Stell, and Sterling, Elspeth. 1971. Interview with Sam and Minnie Po, Maui. Ms., Bernice P. Bishop Museum.
- Norton, William. 1989. *Explorations in the Understanding of Landscape: A Cultural Geography*. New York: Greenwood Press.
- _____. 1987. Abstract Cultural Landscapes. *Journal of Cultural Geography* 8/1:67-80.
- Oliver, Anthony. 1993. *The 1993 Almanac of Hawaii*. Honolulu: Mutual Publishing.
- Parkes, Don, and Thrift, Nigel. 1980. *Times, Spaces and Places: A Chronogeographic Perspective*. Chichester: Wiley.
- Pirie, Peter 1972a. Population Growth in the Pacific Islands: The Example of Western Samoa. In *Man in the Pacific Islands*, ed. R.G. Ward, pp. 189-218. Oxford: Oxford University Press.
- Powell, J.M. 1977. *Mirrors of the New World: Images and Image-Makers in the Settlement Process*. Folkestone: Dawson.
- Pred, Allan. 1984. Place as Historically Contingent Process: Structuration and the Time-Geography of Becoming Places. *Annals, Association of American Geographers* 74/2:279-97.
- _____. 1981. Social Reproduction and the Time-Geography of Everyday Life. *Geografiska Annaler* 63B: 5-22.
- Preziosi, Donald. 1979a. *The Semiotics of the Built Environment: An Introduction to Architectonic Analysis*. Bloomington: Indiana University Press.
- _____. 1979b. *Architecture, Language and Meaning: The Origins of the Built World and Its Semiotic Organization*. The Hague: Mouton.
- Pukui, Mary K., Elbert, Samuel H., and Mookini, Esther T. 1974. *Place Names of Hawaii*. Honolulu: University of Hawaii Press.
- Pukui, Mary K., and Elbert, Samuel H. 1964(1979). *Hawaiian Dictionary*. Honolulu: University of Hawaii Press.
- Pukui, Mary K., and Williamson, Esther. 1966. July 27-31 Interviews with Sam and Minnie Po, Maui. Ms., Bernice P. Bishop Museum.
- Ramil, Antonio. 1984. *Kalani `Aina: County of Maui*. Wailuku: Anvil-Maui Press.
- Rapoport, Amos. 1980. Vernacular Architecture and the Cultural Determinants of Form. In *Buildings and Society: Essays on the Social Development of the Built Environment*, ed. A.D. King, pp. 283-305. London: Routledge & Kegan Paul.
- _____. 1977. Australian Aborigines and the Definition of Place. In *Shelter, Sign and Symbol*, ed. Paul Oliver, pp. 38- 51. Woodstock: Overlook Press.

- _____, ed. 1976. *The Mutual Interaction of People and Their Built Environment: A Cross-Cultural Perspective*. The Hague: Mouton.
- Reid, Janice. 1972. The Economic and Social Significance of Hunting on the Island of Hawaii. In *North Kohala Studies, 1970: Preliminary Research in Human Ecology*, ed. R. W. Armstrong and H.T. Lewis, pp. 47-78. Honolulu: Department of Geography, University of Hawaii.
- Relph, Edward. 1985. Geographical Experiences and Being-in-the-world: The Phenomenological Origins of Geography. In *Dwelling, Place and Environment*, ed. D. Seamon and J. Mugerauer, pp. 15-31. Boston: Nijhoff.
- Renfrew, Colin 1984. *Approaches to Social Archaeology*. Edinburgh: Edinburgh University Press.
- Resnick, Jane M. 1977. A History of Vegetation Change: Man and the Vegetation at Honua`ula, Maui, 1786 to Present. University of Hawaii Department of Geography, MA thesis.
- Rock, Joseph. 1913. *The Indigenous Trees of the Hawaiian Islands*. Honolulu: Rock.
- Rodman, Margaret. 1993. A Critique of "Place" through Field Museum's Pacific Exhibits. *The Contemporary Pacific* 5/2 :243-74.
- Roe, M. and Cleghorn, P.L. 1990. An Archaeological Reconnaissance Survey of Parcel MF-11, Paeahu Ahupua`a, Wailea, Makawao District, Maui, Hawaii, TMK: 2-1-08: par. 42. Ms. of 5/90, Bernice P. Bishop Museum Applied Research Group for Wailea Resort Co., Inc.
- Rogers-Jourdain, Elaine. 1979a. Archaeological Reconnaissance Survey of Wailea Property in the Ahupua`a of Paeahu, Makawao District, Maui Island. Ms of 8/79, Bernice P. Bishop Museum.
- _____. 1979b. Archaeological Reconnaissance and Partial Phase I Surveys, Proposed Hotel and Residential Areas, Makena, Makawao, Maui. Ms of 9/79, Bernice P. Bishop Museum.
- Rosendahl, Paul. 1984a. Preliminary Report upon Completion of Field Work: Intensive Survey and Test Excavations, Wailea Point Condo Site, Wailea Point Development. Ms of 10/84, Paul. H. Rosendahl, Ph.D., Inc.
- _____. 1984b. Archaeological Field Inspection, Wailea Point Condo Site, Wailea Point Development (TMK: 2-1-08:86). Ms. of 6/84, Paul H. Rosendahl, Ph.D., Inc.
- _____. 1981a. Archaeological Reconnaissance Survey of Wailea Development Sites 37, 50, 51, Kihei, Island of Maui (TMK: 2-1-08: Portion 42). Ms. Of 4/81, Paul. H. Rosendahl, Ph.D., Inc.
- _____. 1981b. Archaeological Reconnaissance Survey of the Wailea Development Site 74, Kihei, Island of Maui (TMK: 2-1-06:Portion 42). Ms. of 1/81, Paul H. Rosendahl, Ph.D., Inc.
- Roux, Jean-Claude. 1985. Un Exemple de Migration-Enracinement dans le Pacifique-Sud: La Communaute Wallisienne et Futunienne de Nouvelle-Caledonie. *ORSTOM sciences Humaines* XXI/1:461-480.
- _____. 1974. Crise de la Reserve Autochtone et Passage des Melanesiens dans l'Economie de la Nouvelle-Caledonie. *ORSTOM sciences Humaines*: XI/3-4:297-313.
- Sahara, Tamotsu, et al. 1967. *Detailed Land Classification Island of Maui*. Land Study Bureau Bulletin no. 7, May 1967. Honolulu: University of Hawaii Press.
- Sahlins, Marshall. 1992. *Anahulu: The Anthropology of History in the Kingdom of Hawaii: Vol. I: Historical Ethnography*. Honolulu: University of Hawaii Press.
- Sauer, Carl. 1952. *Agricultural Origins and Dispersals*. New York: American Geographical Society.
- _____. 1925. The morphology of landscape. *University of California Publications in Geography* 2: 19-54.
- Saussol, Alain. 1988. The Colonial Chimera: Prom Annexation to the Re-emergence of Kanak Identity. In *New Caledonia: Essays in Nationalism and Dependency*, ed. Michael Spencer, Alan Ward and John Connell, pp. 38-55. St. Lucia: University of Queensland Press.
- _____. 1986. Du Front Pionnier ala Reforme: Colonisation et Problemes Fonciers en Nouvelle-Caledonie (1853-1985). *Cahiers d'Outre-mer*. 39/155:275-311.
- _____. 1984. Systemes de Production et Types d'Organisation Spatiale Induits par les Formes de Colonisation Rurale en Nouvelle-Caledonie. *Journal Societe des Oceanistes* XI/78: 5-15.
- _____. 1979. *L'Heritage: Essai sure le Probleme Foncier Melanesien en Nouvelle-Caledonie*. Paris: Societe des Oceanistes #40, Musee de l'Homme.
- Schatzki, Theodore. 1991. Spatial Ontology and Explanation. *Annals, Association of American Geographers* 81/4: 650-70.
- Schilt, A., and Dobyns, Susan. 1980. Archaeological Reconnaissance and Testing on Wailea Properties in the Ahupua`a of Paeahu, Makawao District, Maui Island, Hawaii. Ms of 3/80, Bernice P. Bishop Museum.
- Schilt, A. 1979. Archaeological Reconnaissance Survey of the Garcia Family Property at Makena, Maui. Ms of 10/79, Bernice P. Bishop Museum.

- Shapiro, W.A. and Haun, A.E. 1988. Archaeological Reconnaissance Survey and Limited Subsurface Reconnaissance, Murray Pacific Project Area, Land of Palaeua, Makawao District, Island of Maui (TMK: 2-1-23: 02, 2-1-11: 09, 12, 13,30). Ms. of 3/88, PHRI for VMS Realty Partners.
- Shimabukuro, Shinzo. 1976. Human Evaluation and Adjustment to Volcanic Hazard in Puna District. In *Puna Studies: Preliminary Research in Human Ecology*, 1971, ed. Burdette Bostwick, Jr., and Brian Murton, pp. 13-26. Honolulu: Department of Geography, University of Hawaii.
- Shun, Kanalei, and Streck, Charles. 1982. Archaeological Test Excavations and Monitoring of the Wailea Development Company Sewerline Construction from Polo Beach to Wailea Beach, Maui, Hawaii. Ms, Bernice P. Bishop Museum.
- Singleton, Royce, Jr., et al. 1988. *Approaches to Social Research*. New York: Oxford University Press.
- Sinoto, Aki, and Rogers-Jourdain, Elaine. 1979. Archaeological Phase I Survey of Makena Surf Property, Makawao, Maui Island. Ms. of 7/79, Bernice P. Bishop Museum.
- Sinoto, Aki. 1981. Report on the Phase 1 Archaeological Survey of a Proposed Golf Course at Makawao, Maui. Ms of 2/81, Bernice P. Bishop Museum.
- _____. 1978a. Preliminary Report on Archaeological Phase 1 Survey of Proposed Golf Course at Makawao, Maui Second Increment: Fairways 2 through 6 and Ulupalakua Road Realignment. Ms of 6/78, Bernice P. Bishop Museum.
- _____. 1978b. Archaeological Reconnaissance Survey of Makena Shores Property, Makawao, Maui. Ms of 8/78, Bernice P. Bishop Museum.
- Smith, David. 1988. Towards an Interpretive Human Geography. In *Qualitative Methods in Human Geography*, ed. John Eyles and David Smith, pp. 255-67. Cambridge: Polity Press.
- Soehren, Lloyd 1963. Field Trip Report--Maui, April 13, 1963. Ms, Maui Historical Society.
- Speakman, Cummins E., Jr. 1981. *Mowee: An Informal History of the Hawaiian Island*. San Rafael: Pucio Press.
- Stannard, David E. 1989. *Before the Horror: The Population of Hawai'i on the Eve of Western Contact*. Honolulu: Social Science Research Institute, University of Hawaii.
- Stearns, H.T. 1942. *Geology and ground-water resources of the island of Maui*. Division of Hydrography, Territory of Hawaii: Honolulu.
- Sterling, Elspeth P. and Summers, Catherine C. 1978. *Sites of Oahu*. Honolulu: Bernice P. Bishop Museum.
- Sterling, Elspeth P. 1968. April 22-25 Interviews with Sam and Minnie Po, Maui. Ms., Bernice P. Bishop Museum.
- _____. 1967a. June 5-8 Interviews with Sam and Minnie Po, Maui. Ms., Bernice P. Bishop Museum.
- _____. 1967b. May 26 Interview with Sam and Minnie Po, Maui. Ms., Bernice P. Bishop Museum.
- _____. 1966-71. Archaeology of Maui. Ms., Maui Historical Society.
- Stokes, Evelyn. 1987. Maori Geography or Geography of Maoris. *New Zealand Geographer*: 43/3: 118-123.
- Stokes, J.F.G. 1936. Letter to Dr. Palmer re Date of Last Lava flow. Ms of 8/26/36, Maui Historical Society.
- Swan, James, ed. 1991. *The Power of Place: Sacred Ground in Natural and Human Environments*. Wheaton: Quest Books.
- Tanji, Edwin. 1993a. Maui citizen planning under review. *Honolulu Star-Bulletin & Advertiser* 2/7/93.
- _____. 1993b. Lavish Maui links development floundering. *Honolulu Star-Bulletin & Advertiser* 8/15/93.
- _____. 1993c. Developers taking swing at golf club market. *Honolulu Star-Bulletin & Advertiser* 8/15/93.
- _____. 1992. Tourism boosters want to tone down Maui's tony image. *Honolulu Star-Bulletin & Advertiser* 9/6/92.
- _____. 1991. U.S. and Maui can't bridge water system gap. *Honolulu Star-Bulletin & Advertiser* 9/22/91.
- Thaman, R.R., and Clarke, W.C., eds. 1983. *Food and National Development in the South Pacific*. Suva: University of the South Pacific.
- Thaman, Randolph. 1994. Pacific Island Biodiversity: A Basis for Ecological, Cultural and Economic Survival. In *The Margin Fades*, ed. Eric Waddell and Patrick Nunn, pp. 49-65. Suva: Institute of Pacific Studies.
- Thrum, Thomas G. 1921. More Evidence of Old Temples. *Thrum's Hawaiian Annual and Almanac*: 146-47.
- _____. 1918. More Maui Heiau Sites. *Thrum's Hawaiian Annual and Almanac*: 125-28.
- _____. 1917. Maui's Heiaus and Heiau Sites Revisited. *Thrum's Annual and Almanac*: 52-61.
- _____. 1909. Tales from the Temples, Part 3. *Thrum's Hawaiian Annual and Almanac*: 44-54.
- Trask, Haunani-Kay. 1993. *From a Native Daughter: Colonialism and Solidarity in Hawai'i*. Monroe: Common Cause Press.
- _____. 1991. Natives and Anthropologists: The Colonial Struggle. *The Contemporary Pacific* 3/1: 159-77.
- Tuan, Yi-Fu. 1990. Realism and Fantasy in Art, History, and Geography. *Annals of the Association of American Geographers* 80/3:435-46.
- Vale, Thomas and Geraldine. 1989. *Western Images: Western Landscapes: Travels Along U.S. 89*. Tucson: University of Arizona Press.

- Venturi, R., Brown, D.S., and Izenour, S. 1977. *Learning From Las Vegas: The Forgotten Symbolism of Architectural Form*. Cambridge: Michigan Institute of Technology Press.
- Vogt, Evon. 1969. *Zinacantan: A Maya Community in the Highlands of Chiapas*. Cambridge: Belknap Press of Harvard University Press.
- Wace, N.M. 1980. Exploitation of the Advantages of Remoteness and Isolation in the Economic Development of Pacific Islands. In *The Island States of the Pacific and Indian Oceans: Anatomy of Development*, ed. R. Shand, pp. 135-42. Canberra: Development Studies Centre Monograph #23, Australia National University.
- Wagstaff, J.M. 1987. The New Archaeology and Geography. In *Landscape and Culture*, ed. J .M. Wagstaff, pp. 26-36. Oxford: Blackwell.
- Waialeale, D.K. 1834. The Book of Omens Pertaining to Houses. Ms, Archives of Hawaii.
- Walker, Winslow M. 1930. Archaeology of Maui. Ms., Bernice P. Bishop Museum.
- Walton, Beth. 1972. Archaeological Survey Palauca and Keauhou Section Piilani Highway, Island of Maui. Ms. Historic Preservation Report 72-2, Walton Enterprises.
- Ward, R. Gerard. 1986. Reflections on Pacific Island Agriculture in the late 20th Century. *Journal of Pacific History* XX1/4:217-26.
- _____. 1980. Migration, Myth and Magic in Papua New Guinea. *Australian Geographer* XI1/6:497-509.
- Whitney, Lois L. 1991. The Best of All Worlds. *Maui Inc.*, July-August 1991, pp. 55-61.
- Wilson, Alexander. 1992. *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez*. Cambridge: Blackwell.
- Youngblood, Ron. 1986. Kanaio Resident Finishes At Home. *The Maui News* 5/25/86 pp. A-3.
- _____. 1983. *On the Hana Coast*. Honolulu: Emphasis International.
- Zelinsky, Wilbur. 1975. The Demigod's Dilemma. *Annals, Association of American Geographers* 65/2: 123-43.