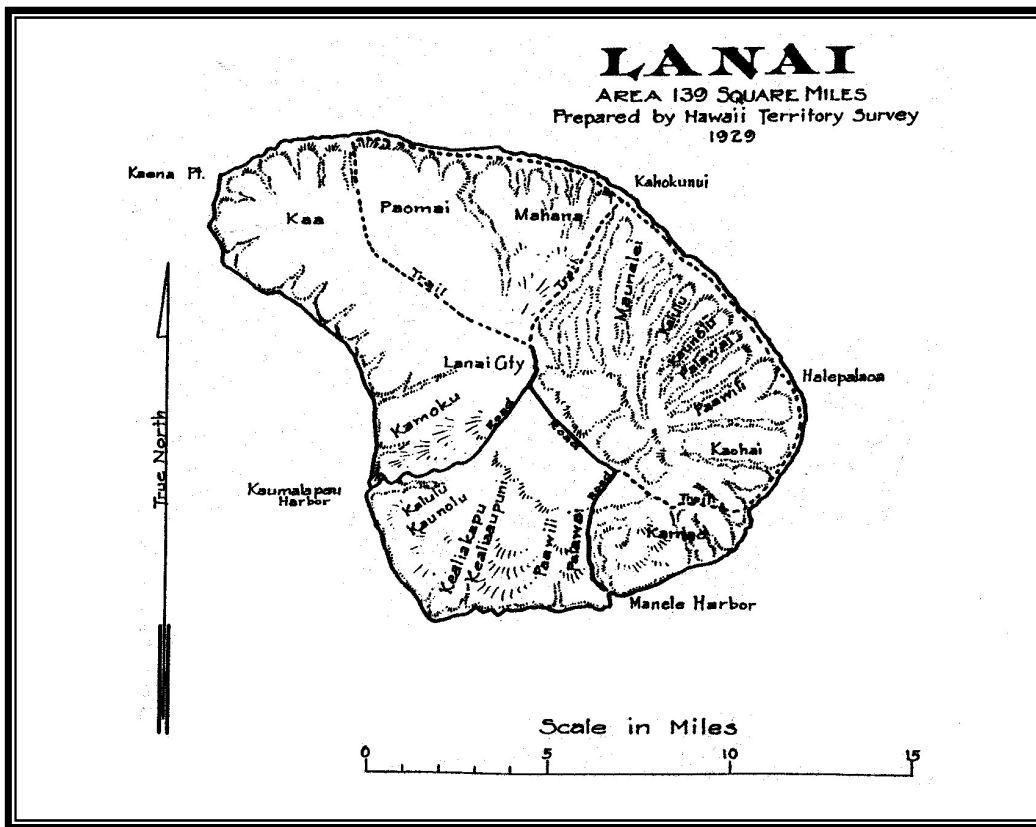


# CULTURAL AND HISTORICAL STUDY FOR THE ENVIRONMENTAL ASSESSMENT OF U.S. MARINE CORPS TRAINING:

## AHUPUA'A OF KA'Ā AND PAOMA'I, NORTH LĀNA'I (Lāna'i Overview TMK:4-9-02)



# CULTURAL AND HISTORICAL STUDY FOR THE ENVIRONMENTAL ASSESSMENT OF U.S. MARINE CORPS TRAINING:

## AHUPUA‘A OF KA‘Ā AND PAOMA‘I, NORTH LĀNA‘I

(Lāna‘i Overview TMK:4-9-02)

BY:

Kepā Maly, Consultant  
Cultural Resources Specialist

PREPARED FOR:

Department of the Navy

March 10, 1997 (ML03L-b)



**Kumu Pono Associates**

Kepā Maly, Consultant

Historical & Archival Documentary Research · Oral History Studies · Partnerships in  
Cultural Resources Management · Developing Preservation Plans and Interpretive  
Programs

## EXECUTIVE SUMMARY

---

Kepā Maly, Cultural Resources Specialist (Kumu Pono Associates), conducted a cultural and historical assessment study in conjunction with the preparation of an Environmental Assessment (BCH Project No. 642-0101) for proposed United States Marine Corps (USMC) helicopter training operations on Lānaʻi. The study area encompasses the north and northwestern side of the ahupuaʻa (traditional land divisions) of Kaʻā and Paomaʻi (Lānaʻi Overview TMK:4-9-02). The specific objectives of the study were: (1) Conduct archival research to provide a background overview of the pre and post contact history of the Kaʻā-Paomaʻi region; (2) Gather information from Lānaʻi residents regarding traditional Hawaiian lore and practices, cultural sites, traditional use of the land and natural resources, and current subsistence practices and access to the study area; and (3) Solicit community feedback on social and environmental concerns regarding proposed use of the study area for military training.

Archival research was primarily conducted between September-December 1996, with subsequent work done in February-March 1997. Interviews and consultation with island residents and others knowledgeable about study area resources were conducted between December 11-13, 1996. Follow-up discussions were conducted with interviewees to confirm the summaries of the interviews were correct, with the interview-consultation work completed on February 11, 1997. The combined studies determined that much of the cultural and natural landscape of the upland Kaʻā-Paomaʻi region has been significantly altered by erosion over the last 200 years. Some of the erosion is directly attributed to ranching operations that occurred between c. 1870-1950, and to a larger extent, is a result of the depredation by introduced ungulates (axis deer, goats and sheep). In nearly all areas of the leeward plateau and slopes, physical evidence of traditional Hawaiian occupation and land use has been washed away. A few of the informant interviews recorded information on some cultural sites and native lore associated with the Kaʻā-Paomaʻi region, with most of them recording knowledge of native plant communities, and their importance in the cultural and natural landscape of the study area. Additionally, nearly all of the interviews recorded the importance of the study area region in the subsistence and recreational hunting practices of island residents.

It is noted here, that all of the interviewees asked that representatives of the Marine Corps Command come to Lānaʻi to meet with community members to discuss the proposed operations, and work out a plan to minimize impacts on resident use and access of the Kaʻā-Paomaʻi region. The interviewees also recommend that the Marine Corps work with the Lānaʻi community and develop a plan for future use and stewardship of the land.

## CONTENTS

---

INTRODUCTION • 1

Background • 1

Historical-Archival Research • 1	
Lānaʻi Interviews—Resident Documentation • 1	
Study Presentation • 3	
Lānaʻi: A Cultural Historic Overview • 4	
Settling Lānaʻi: “He Moʻolelo no Kaululāʻau (a History of Kaululāʻau) • 5	
He Moʻolelo no Mākālei (a History of Mākālei) • 7	
Kaʻā: Native Traditions of the Land • 10	
Ka Huakaʻi Pele (The Journey of Pele) • 11	
Ke-ahi-a-Kawelo (The-fire-of-Kawelo) • 12	
Nā Wahi Pana o Lānaʻi (Famed Places of Lānaʻi) • 13	
Lānaʻi: In the Path of Warring Chiefs • 16	
Kaʻā-Paomaʻi, Lānaʻi: A Brief Overview of Historic Documentation • 18	
Lānaʻi: And Archaeological Survey (1921-1922) • 20	
Lānaʻi: Transitions in Population and Land Tenure • 23	
Historic Land Records of the Māhele (1848),	
and Survey and Boundary Commission Records • 24	
The Māhele (Land Division) of 1848 • 24	
Claimants of Land in Kaʻā in the Māhele of 1848 • 26	
Boundary Commission Records (1891) • 30	
Lanai Ranch and Lanai Company, Ltd. • 31	
Resident Documentation: Overview of Information Gathered as a	
Result of Interviews and Discussions (December 1996-February 1997) • 33	
Interview Methodology • 33	
Lānaʻi Interviews • 33	
Lānaʻi Interviewee Comments and Recommendations • 35	
Robert “Bobby” Hera • 39	
Meyer Ueoka (DLNR Wild Life Manager) • 40	
Kolomona Kahoʻohalahala • 44	
Albert Halapē Morita and Derwin Kwon • 45	
Ron Mcomber and Willy Alboro • 47	
Elaine and Sam Kaöpūiki • 49	
Pearl Ah Ho and Matthew Mano • 50	
Solomon Kaöpūiki • 51	
Edean Desha • 53	
Loretta Hera • 53	
Gaylien Kahoʻohalahala	
(with comments from Barrie Morgan of the Nature Conservancy) • 54	

## **ACKNOWLEDGEMENTS • 57**

## REFERENCES CITED • 58

### APPENDIX

Appendix A: Lānaʻi–Overview/Questionnaire • A-1

### ILLUSTRATIONS

Figure 1. Map of the Proposed Lānaʻi Training Area With Inset of Lānaʻi • 2

Figure 2. Portion of Emory’s 1924 Site Map of Lanai (BPBM Bulletin 12, Plate 1) • 15

Figure 3. Land of Kaʻā, Lānaʻi, looking across Kalohi Chanel to Molokaʻi  
(C. Wentworth Collection, May 1924) Bishop Museum (Negative No. CP 13184) • 20

Figure 4. Annotated Map Lānaʻi, Showing Sites and Locations Discussed During Interviews • 38

Figure 5-a. Communication: Meyer Ueoka to Kepā Maly, January 21, 1997 (page 1) • 42

Figure 5-b. Communication: Meyer Ueoka to Kepā Maly, January 21, 1997 (page 2) • 43

### TABLES

Table 1. Summary of Recommendations and Comments Gathered in Lānaʻi Interviews • 36-37

# INTRODUCTION

## BACKGROUND

---

Kepā Maly, Cultural Resources Specialist (Kumu Pono Associates), conducted a cultural and historical assessment study in conjunction with the preparation of an Environmental Assessment (BCH Project No. 642-0101) for proposed United States Marine Corps (USMC) helicopter training operations on Lānaʻi. The study area encompasses the north and northwestern side of the ahupuaʻa (traditional land divisions) of Kaʻā and Paomaʻi within the Aviation Training Boundary on Figure 1. The Marine Corps proposes to use this area for night terrain-level flights, landings and takeoffs by helicopters at specific sites, with the right-of-entry (training frequencies and hours) from the landowner, The Lanai Company (Castle and Cook).

### Historical-Archival Research

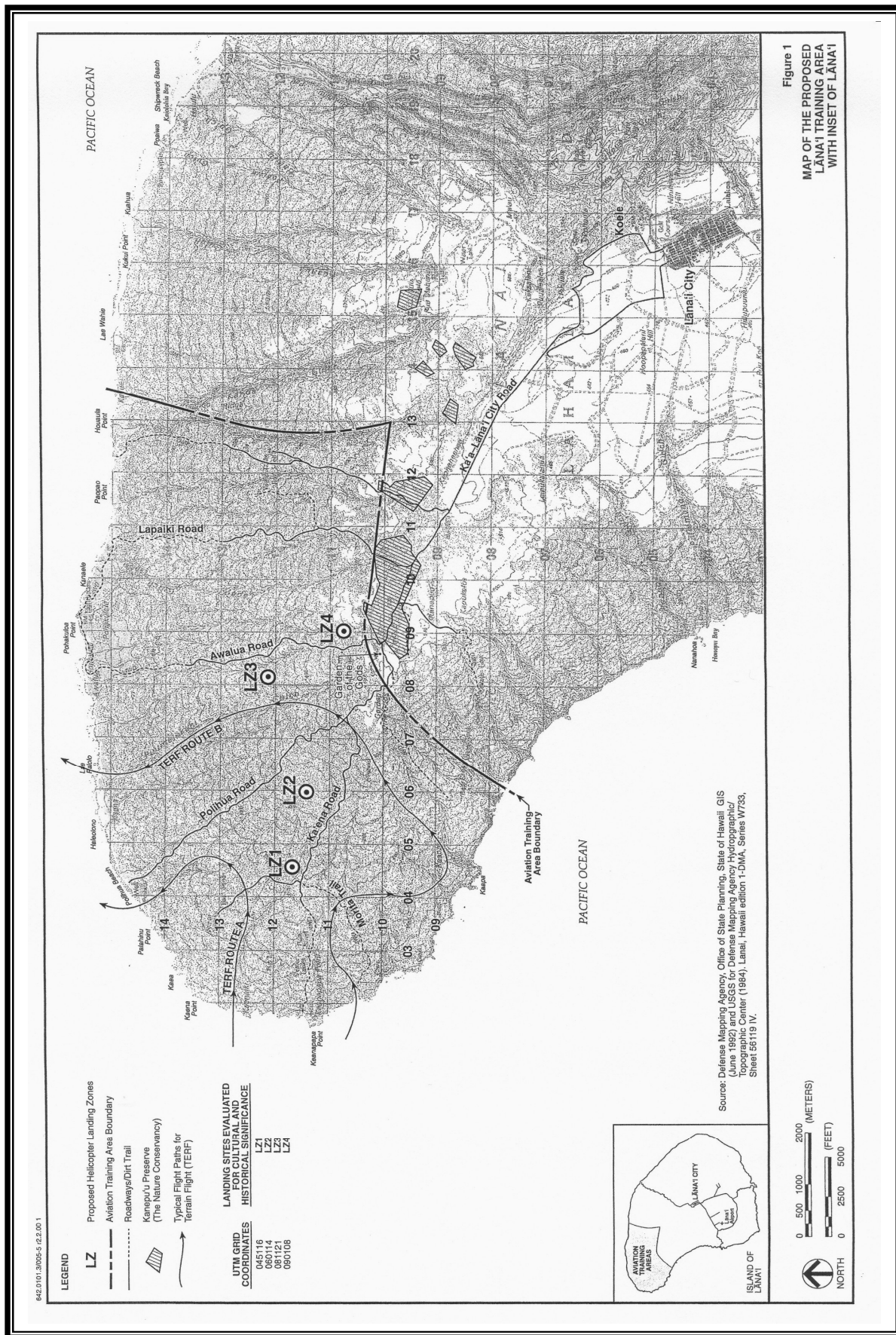
This study included a review of literature from a wide variety of sources, among them were manuscript resources (both in Hawaiian and English); land use records, including Hawaiian Land Commission Award (LCA) records from the Māhele (Land Division) of 1848, Boundary Commission Testimonies, and Survey records of the Kingdom of Hawaiʻi; and a limited review of previous archaeological studies (cited in text). Additionally, a number of primary publications by native historians and island authors were reviewed to glean any references for Lānaʻi. Research materials included, but were not limited to the writings of D. Malo (1951), S. Kamakau (1961, 1964, 1976, and 1991), A. Fornander (1917-1919 and 1973), K. Emory (1924), L. Henke (1929), J.W. Coulter (1931), G. Munro (nd.), L. Gay (1965), M. Beckwith (1970), Handy and Handy with Pukui (1972), and R. Schmitt (1973).

The manuscripts and publications were viewed in the collections of the State Survey Division, Archives of the State of Hawaiʻi, Library Archives of the Bernice Pauahi Bishop Museum, the Real Property Tax Office, the University of Hawaiʻi-Hilo, Moʻokini Library (microfilm collections), the Lānaʻi Community Library, and in the collection of the author.

### Lānaʻi Interviews—Resident Documentation

An important component of this study included several days of field visits during which the author met with native Hawaiian families (members of families with genealogical ties to the study lands and/or representatives of various groups) and other residents of Lānaʻi. The purpose of these visits was: (1) gather information on traditional lore and practices, traditional sites, traditional use of the land and natural resources, current access and subsistence practices; and (2) to get feedback from the Lānaʻi residents regarding the proposed use of the study area for military training exercises.

The Lānaʻi site visit occurred between December 11-13, 1996, during which time, fourteen people were interviewed. Two additional interview contacts were made before and after the sites visit, thus, a total of sixteen individuals participated in the Lānaʻi interviews. Prior to visiting Lānaʻi, a list of questions was formulated (Appendix A.), to focus discussions on



residents' concerns, and to solicit their recommendations regarding the proposed training activities (see specific comments in the Section titled "Lāna'i Interviewee Comments and Recommendations").

### **Study Presentation**

Because this study addresses two general areas of research (literature and informant), it is divided into two primary sections, one section for each area of research. Another component of work completed by David Tuggle (February 1997), in conjunction with the archaeological field survey work, provides readers with a detailed record of previous and current archaeological studies, and should be reviewed for further information on present-day findings.



## **LĀNA'I: A CULTURAL HISTORIC OVERVIEW**

---

Traditional accounts tell us that Lāna'i, also called Nāna'i, was born to a family of gods, or creative forces of nature. Wākea was the father and Ka'ula-wahine was the mother (Kamakau 1991:129). Indeed, in a Hawaiian genealogical context, Lāna'i, like it's small neighbors, was a younger sibling of Maui, and was thus subject to the elder's authority (cf. Malo 1951:55, 243). Geologically, the island of Lāna'i is approximately 13¼ miles long and 13 miles wide, and its highest point, Lāna'i-hale, is 3,370 feet above sea level. Lāna'i is the sixth largest of the major Hawaiian Islands (Pukui et al., 1974:128). To the north of Lāna'i, across the Ka-lohi Channel, is Moloka'i. To the east, across the 'Au'au Channel, is Maui, with the channel of Ke-ala-i-Kahiki and island of Kaho'olawe to the southeast. The southern and western sides of Lāna'i face the open ocean. Embraced as it were, in the bosom of its sister islands, Lāna'i's history, like that of Moloka'i and Kaho'olawe appears to have almost always been overshadowed by it's larger neighbor, Maui (and Emory 1924:21-22).

In conducting a literature study of Lāna'i, one quickly finds that little of its pre-contact (the period before 1778), and little of its transitional period history (c. 1778-1830) can be located. One can suggest that it is in part because of Lāna'i's relationship of subservience to Maui, and battles of the mid to late 18<sup>th</sup> century, which decimated the native population of Lāna'i, that legendary and early historic references for the island are limited (cf. Kamakau 1961, Fornander 1973, and Emory 1924, in this study).

While there appears to be only limited historic literature available, the information recorded by native and foreign writers like S.M. Kamakau (1961) and A. Fornander (1973), along the presence of a wide variety of cultural sites (particularly in the coastal region), and the occurrence of place names in the study area, tell us that there was a native presence in the Ka'ā-Paoma'i region (cf., W.D. Alexander, Reg. No. 153, 1875-1876; K. Emory, 1924; G. Munro, nd.; and L. Gay, 1965; in this study). Indeed, the occurrence of place names is an important indicator that the locations were significant in past times (Coulter 1935:10; and Solomon Kaöpūiki, Dec. 12, 1996, in this study). Named localities may have served as triangulation points such as ko'a (markers for fishing grounds); residences; areas of planting; water sources; trails and trail side resting places (o'io'ina), such as a rock shelter or tree shaded spot; heiau or other features of ceremonial importance; may have been the source of a particular natural resource; or any number of other features. Handy and Handy note that "Names would not have been given to [or remembered if they were] mere worthless pieces of topography" (Handy and Handy 1972:412).

Over the years, the author has conducted a review of Hawaiian language newspapers, indexing historic accounts, to date, only a few legendary references for Lāna'i have been located, with even fewer references to the lands of the present study area. Among the Hawaiian language legendary narratives located to date, that reference Lāna'i are: <sup>(1)</sup> "Ka Mo'olelo of Lā'ie-i-ka-wai" (Ku 'Okō'a, Dec. 13, 1862); <sup>(2)</sup> "He Ka'ao no Wahanui" (Ku 'Okō'a Dec. 1866-Jan. 1867); <sup>(3)</sup> "He Mo'olelo no Ka'eha" (Ka Hōkū o Hawai'i, Oct.-Dec. 1907); <sup>(4)</sup> "Nā Wahī Pana o Lāna'i" (Ku 'Okō'a May 31, June 21, and July 12, 1912); and <sup>(5)</sup> "He Mo'olelo Mākālei" (Ka Hōkū o Hawai'i, May 29-June 5, 1928), all but one of the accounts (no. 4 cited later in this study), make little more than passing references to lands in the region of Ka'ā-Paoma'i. The primary reference in the legends cited above, identifies Polihua, on the shore of Ka'ā as a canoe landing, and notes the prominence of Ka-lae-o-Ka'ena (the point of Ka'ena) on the rocky coast of northwestern Lāna'i.

## Settling Lānaʻi:

### He Moʻolelo no Kaululāʻau (A History of Kaululāʻau)

One of the earliest legendary accounts of Lānaʻi is dated in the c. 1400s by association with the ruling chiefs of Maui, cited in the account. In the narratives, the young chief Kaululāʻau, was born to Kakaʻalaneo and Kanikaniaula. Kakaʻalaneo's elder brother was Kakaʻe, and Fornander (1973) reports that these royal brothers jointly ruled Maui and Lānaʻi (Fornander 1973:II-82, 83). In the generations preceding, and early in the rule of Kakaʻe and Kakaʻalaneo, no one could live on Lānaʻi, because it was inhabited by Pahulu, a king of ghosts, and his hordes. Pahulu and his hordes killed anyone that went to Lānaʻi, thus the island was uninhabited, and there are several narratives that describe how Kaululāʻau came to free Lānaʻi from the rule of Pahulu, thus making it safe for people to inhabit the island (e.g., Fornander 1973, Beckwith 1970, Emory 1924). Below, is a paraphrased account of the Story of Kaululāʻau, collected by the author on February 21, 1975, from Tütü Ape Kauila (born in 1902), a native of Lānaʻi:

The youth Kaululāʻau was noted for his strength and mischievous deeds, but at one point, he so exasperated the people of Lele (Lāhainā), Maui, that his father banished him to the island of Lānaʻi. His fate was to be determined by his ability to outsmart Pahulu and his ghost warriors, the akua ʻino (evil ghosts) of Lānaʻi. Kaululāʻau was taken by canoe and left on the shore of Lānaʻi, near Kahalepalaoa, and was instructed that if he survived, he was to light a fire atop Lānaʻi-hale following the passing of several phases of the moon.

When the canoe departed, Kaululāʻau walked along the shore and met Pahulu, who had taken a human form. Seeing the youth, Pahulu inquired “Ihea ʻoe e hiamoe ana i kēia pō” (Where are you going to sleep tonight)? To which Kaululāʻau answered “Ma ka nalu līlīʻi” (At the place of the little waves). That night, Pahulu and his companions went to the area of the little waves, and threw stones into the water to kill Kaululāʻau, but Kaululāʻau was safely hidden away, and was unharmed.

The next day, Pahulu was startled when he saw Kaululāʻau walking along the shore, and he inquired where the youth had slept, and where he would sleep that night. This went on for some time, and each time, Kaululāʻau gave a different location, and each time, he thwarted the attempts of Pahulu and his warriors at killing him. Kaululāʻau knew that he could not continue evading Pahulu and his companions, so he formed a plan to rid the island of the ghosts.

The next time Pahulu asked “Ihea ʻoe e hiamoe ai i kēia pō?” (Where will you sleep tonight?); Kaululāʻau replied “Aia ma ka punawai malalo o ka pū hala i uka o Lānaʻi-hale” (There by the spring, below the pandanus tree in the uplands of Lānaʻi-hale). Kaululāʻau then started to make an ʻupena (seine net) for fishing. When he was done, he entered the ocean and began catching many fish. Each fish he caught, he took

out of the net and threw on the shore. The ghost warriors were curious about Kaululā'au's actions, and as they ate the fish, Kaululā'au called them out one by one to help him gather up the fish. As each ghost drew near to Kaululā'au, he grabbed them and entangled them in his net, drowning them. As the akua 'ino were drowned, a species of the weke (goat fish) ate them. Those fish are known as weke pahulu or weke pueo, and to this day, Lāna'i natives will not eat the heads of the fish because they are known to cause nightmares.

Pahulu observed that his warriors were not returning to the surface, and he asked, "Aia ihea ko'u mau koa" (Where are my warriors)? To which Kaululā'au replied "I ke kai, ohi ana i ka i'a" (In the water catching the fish). When Pahulu found himself all alone, he became frightened and fled mauka (inland).

Knowing that Pahulu would need water, Kaululā'au went to a punawai (spring) below the hala (pandanus) tree on the slopes of Lāna'i-hale. He hid there in the branches of the hala with a large stone perched in its branches. After a few days, Pahulu was in need of water and went to the spring. Not seeing any sign of Kaululā'au, he leaned over to take a drink, and right then he saw the reflection of Kaululā'au in the hala tree above him. At the same time, Kaululā'au dropped the stone on Pahulu, killing him; the spring is now called Punawai-pahulu. When the stone hit Pahulu, one of his eyes flew out of his head and landed near the shore at the white coral point of Ka-lae-hi. Where the eye landed, it struck the point and formed a hole. Today, that hole is known as "Kamaka-o-Pahulu" (The-eye-of-Pahulu).

His experiences on Lāna'i taught Kaululā'au to behave better, and when he went to Lāna'i-hale to light the fire, everyone at Lele, Maui rejoiced, knowing that Pahulu and his ghosts had been defeated. It was in this way, that people from Maui were able to begin living on Lāna'i (pers. comm., Tütü Ape Kauila, 73 years old; Feb. 21, 1975).

In another version of the account of Pahulu, the historian, Abraham Fornander (in Beckwith 1970) identifies Pahulu as a goddess who ruled Lāna'i, Moloka'i, and even parts of Maui. Beckwith (1970) recorded:

. . . About the time of Liloa and Umi, perhaps long before, chiefs flocked to Molokai. That island became a center for sorcery of all kinds. Molokai sorcery had more mana (power) than any other. Sorcery was taught in dreams. All these Molokai aumakua were descendants of the goddess Pahulu.

Pahulu was a goddess who came in very old times to these islands and ruled Lanai, Molokai, and a part of Maui. That was before Pele, in the days when Kāne and Kanaloa came to Hawaii. Through her that

“old highway” [ke ala] (to Kahiki) starts from Lanai. . . Pahulu was the leading spirit on Lanai. Lani-kaula, a prophet (kaula) of Molokai, went and killed off all the akua on Lanai. . . (Beckwith 1970:108).

### **He Mo’olelo no Mākālei (A History of Mākālei)**

Because there appear to be few, if any legendary descriptions of the native communities on Lāna’i (pre 1778), one account, recently translated by the author, is included here. Though the narratives make only a brief reference to the land of Ka’ā—in which the study area is located—they do provide us with a previously unavailable description of the life on Lāna’i, and shed light on the relationships shared between leeward and windward settlements on the island. The excerpted narratives come “He Mo’olelo no Mākālei” (A History of Mākālei) which was published in the Hawaiian language newspaper Ka Hōkū o Hawai’i (published between January 31 through August 21, 1928). The legend was submitted by Hawaiian historian and educator J.W.H.I. Kihe (writing under the pen name Ho’olaleaka’ūkiu), who was born in c. 1854. Kihe is highly regarded as a knowledgeable and respected historian, and was one of the native historians who translated the Fornander collection (1917-1919). The legendary events are set around c. 1200 A.D., by association with ‘Olopana’s reign on O’ahu. The following translations summarize the main events of the legendary account.

. . . Ko’a-mokumoku-o-He’eia (Ko’a) was the father and Ka-ua-pö’ai-hala-o-Kahalu’u (Kaua) was the mother. The children born to them were two daughters, Ke-kai-ku’i-o-Keawehala and Ke-kai-ha’a-kūlou-o-Kahiki, and a son named Mākālei. The name of Mākālei was given by the command of his goddess-ancestress who was Hina-i-ka-malama-o-Kā’elo<sup>1</sup> (Hina in the season of Kā’elo), who was a wife of the god Kū. Hina was a goddess of fishermen, agriculturalists, and various native practitioners, and as he matured, Mākālei was imbued with supernatural power from his kupuna (ancestress). . . (in Ka Hōkū o Hawai’i, January 31, 1928)

We join the account with Mākālei having gone fishing from ‘Āwini, Kohala, and hooking a great a’u (marlin), which he finally lands on Lāna’i:

. . . During the night, Mākālei and this supernatural fish of ‘Āwini encircled Lāna’i two times. In the early light of day, the fish began to tire, and Mākālei then pulled the fish close to the canoe. The size of this fish was truly unbelievable, it was almost seven anana (fathoms) long. Mākālei killed the fish and then landed at Ka’ōhai on the shores of Ka-ulu-lā’au (Lāna’i). The shore was filled with people, and Mākālei gave the fish to the residents, who kindly welcomed him and pleasantly cared for him. Now while he was staying on Lāna’i, he was greatly esteemed by the kama’āina, and he asked them if there was a fishing ko’a [fishing grounds marked by land based triangulation points] at this

---

<sup>1</sup> *Kā’elo*’ (cf. *’elo* - saturated) - a wet month in the Hawaiian calendar, January on Hawai’i; a season associated with short days when the sun is “below,” or at its’ southern extremity, and a time when a star of that name rose in the heavens.

place. The natives told him, “Kaunolū and Ke-ala-i-Kahiti are the famous ko‘a, there are many other ko‘a, but these are the foremost.

One day, Mākālei went with the people to the shore of Kaunolū and saw the ko‘a; indeed the natives of this shore were fishing there. Looking upon this scene, Mākālei told the native residents that were with him, “This kind of fishing is a game for the children of my land.”

The kama‘āina then asked, “Which land is that?” Mākālei answered, “It is Ka‘elehuluhulu at Kona, Hawai‘i; where the dark clouds settle upon the mountain in the rising calm, where the sun appears upon the back and sets at one's face. The land of Kona is indeed famous for its‘ calm and gentle seas, [the land which is ] also known for the streaked ocean where the ‘Eka breezes gently blow...” Thus Mākālei described Kona where the sun crosses over the back and then glistens upon the ocean.

Mākālei then asked, “Do you have an uhi (pā hi-aku), or mother of pearl aku lure, like the type being used by those fishermen?” Mākālei then took out his lure and showed it to those people who were with him. One person then told Mākālei, “The aku lures are cared for by the fishermen themselves for it is in their knowledge to care for the lures.” Mākālei then said, “If you have an ‘ohe (aku line boom) for us, I can try to use my lure Kolomikimiki. It is my inheritance from my ancestress Hina-i-ka-malama-i-kā‘elo.”

One of the people told Mākālei, “Let us go to that canoe which is resting on the shore, it belongs to my elder brother, Keömoku who is the head fisherman at Kaunolū.” They then went down to speak with Keömoku, asking that he give them an ‘ohe hī aku (aku line boom), which he did. Keömoku then asked, “Who is your fisherman?” And the people told him it is this young stranger. Keömoku then asked, “Does he have a lure with which to fish?” And they responded that the youth did indeed have a lure, and that was why they were asking for boom. Keömoku then told them, “So you have gotten your aku fisherman after all.”

They then paddled towards the place where the canoes were at rest upon the water. Mākālei then set his lure down, and he then asked his companions, “What are your names, that I may call to you to paddle as is my rule at the time of fishing. If the canoe does not move when I call out to the kāohi (paddlers who position or hold a canoe in place while aku fishing) to paddle, the lure will not be drawn through the water. Indeed, the fishermen lives (has luck) by the moving of the canoe.” They then told Mākālei their names; Pali was the man at the front (ihu) of the canoe, Malama was the man at the mast brace (ku kia), Pālāwai

was the man at the bailing seat (kā i nā liu), and the man at the inner outrigger boom (kua 'iako) was Hopu.

When Mākālei and his companions reached the canoe fleet, all of the fishermen were waiting for the aku to begin moving. To that time the aku had not yet appeared, and the sun was already drawing to mid day. Mākālei then called to Pali, Malama, Pālāwai, and Hopu, "Paddle for the Mākālei, fisherman of the long day." Mākālei then called to his ancestress –

E Hina-i-ka-malama-o-Kā'elo Ku'u kupunawahine o ka lā o lalo	Hail Hina of the season of Kā'elo My ancestress of the sun which is below (to the south)
E pāpale i ke aloha hōmai I makana na'u na Mākālei Ho'āla ia mai ke kahuli Ke ka'awili, ka ho'olili, ka holopapa	Your love overshadows, reaches down As a gift for me, for Mākālei Arise o fish which upsets the canoe The fish which twists, which causes ripples on the water's surface, and travels at the lower stratum
Ke aku i ka hale o ke ko'a o Kaunolū i ke ala i Kahiki I ke hālukuluku i ka māpuna I ka piko o Wākea Ka i'a alaka'i noho i ke ko'a i ka hale o ka i'a	The aku which is at the house, the ko'a of Kaunolū at the path to Kahiki Striking at the spring, at the umbilical of Wākea The lead fish dwells at the ko'a Which is the house of the fishes

When Mākālei ended his chant the aku began to strike at all sides around them. Mākālei then held securely to the lure line and pulled the quivering aku to the canoe. He then called to Pali, telling him to take up the aku and place it at the bow of the canoe. Mākālei then took up the other aku without any errors; and the aku were like snarling, raging dogs. When the canoe was filled, he called to Pālāwai to bail their canoe, and he called to Hopu, Pali, and Malama telling them, "Our canoe is filled, paddle towards the shore, to the land ko'a which is by the house where the canoe carriers await." When Mākālei and his companions finished fishing, the aku also stopped rising to the surface and remained in the depths without rising again.

When they landed their canoe upon the shore, Mākālei took up the aku that had been caught first, that was placed next to Pali at the bow of the canoe. He then told his kāohi, "Divide all the fish as you desire, giving some to those people who had carried the canoes, and to the people who dwell in the houses without fish. If there are any fish left, give them to the dogs and pigs, and do not worry about me. This one fish is all that I need." This was something new to the people of this area, that Mākālei should give them all the fish, and keep only one for himself. The people were greatly surprised for there were no other

fishermen at this place who had ever given so much. The people thought, “This person is no fisherman, but instead he is an ‘aumakua for us” (in Ka Hōkū o Hawai‘i, May 29, 1928].

The fame of Mākālei's deeds went around the island of Lāna‘i-a-Ka‘ululā‘au (Lāna‘i of Ka‘ululā‘au); that is the [area of the] ‘okina (land divisions) of Ka‘ā, Kaunolū, and Ka‘ōhai on the island of Lāna‘i. Because of these deeds of our alert one [Mākālei], a beautiful young girl of Lāna‘i went to Mākālei with her mother to ask him if he would become the young girl's husband. The name of this girl was Mauna-lei, and her mother was Lāna‘i-hale, and Pālāwai, who was one of Mākālei's paddlers was the father of this beauty of the land of the god Pahulu; the one for whom it is said “Eia kāu wahi e Pahulu – Here is your portion Pahulu!<sup>2</sup>”

Mākālei asked the maiden to excuse him, “There have been many people which have sought to arrange a marriage, and not one of them have I agreed to.” Mākālei then told Maunalei mā, “ I will have no thoughts of marriage until I see the island of Kaua‘i. Until this thought has been fulfilled, I cannot consider marriage.” Lāna‘ihale then said, “If that is so, perhaps the two of you could dwell under a palau (betrothal agreement), until the time for marriage is right.” But Mākālei explained that he could not grant their request, saying “I would not bind any woman to an agreement, for if some fine man came along, then she would be unhappy. Therefore, I ask you to forgive me, and do not let these thoughts become unjust.” Because of his just words, the people felt certain that Mākālei was indeed a chief.

Now one day while the canoe fleet was out ‘aku fishing, Mākālei went with his kāohi Pālāwai, who was the father of the maiden named Maunalei. When they reached the ko‘a, the aku were seen swimming, Mākālei turned and tossed out his lure and quickly secured ten fish. When Mākālei mā rested, they saw that it had been a great a‘u (sword fish) which drove the aku to their canoe. Mākālei then took his line and tied one of the aku to his lure, he then threw the baited lure behind the canoe and as it fell, the a‘u took the aku. The a‘u ran along the water's surface thrusting it's beak (sword) all about. The canoe fleet scattered as those people on the canoes were fearful that they would be pierced by the a‘u.

Mākālei held tight to the line, and A‘ulele traveled out to the dark blue-green sea, to where the islands were seen to sit low upon the water,

---

<sup>2</sup> The saying commemorates the practice that Lāna‘i natives had of discarding the heads of the *weke pahulu* fish, and calling out “Pahulu, here is your portion.” This was done because when Pahulu, who was also a ghost of dreams, was killed, he entered the *weke pahulu*, and to eat the head of the *weke pahulu* almost always bring on nightmares.

and Wai'ale'ale barely rose above the horizon. As the sun began to descend, Mākālei called to his ancestress –

E Hina-i-ka-malama-o-Kā'elo      Hail Hina of the season of Kā'elo  
Pa'a 'ia a pa'a ka i'a a kāua. . .      Secure and hold tight this fish of ours. . .  
(in Ka Hökū o Hawai'i, June 5, 1928)

Thus, Mākālei departed from Lāna'i and continued his journey to Kaua'i.

### **Ka'ā: Native Traditions of the Land**

Of all the legendary narratives for Lāna'i that were reviewed as a part of this study, two were found that have direct bearing on the Ka'ā study area. One legend, documenting the migration of Pele and her family from Kahiki (the ancestral home land of the Hawaiian people) to Hawai'i, is part of an epic account of broad cultural significance to the Hawaiian people throughout the island chain. The other, is an account of the Lāna'i priest, Kawelo and a priest of Moloka'i—identified in various accounts as either Lani-kāula or Waha—and is of regional importance to the people of those islands. In the legend, we learn that at Ka'ā, Lāna'i, Kawelo kept an altar on which a fire was burned to protect the well-being of the people of his island.

#### **Ka Huaka'i Pele (The Journey of Pele)**

In the narratives which record “ka huaka'i Pele,” we learn that Pele and beloved members of her family, all of whom possessed various nature powers or forms, departed from Kahiki (the ancestral home land) in the canoe steered by Pele's eldest brother, Kamohoali'i. Pele called out in a mele (chant) to her traveling companions:

Kū mākou e hele me ku'u mau pōki'i aloha  
Ka 'āina a mākou i 'ike 'ole ai malalo aku nei  
A'e mākou me ku'u pōki'i kau i ka wa'a  
No'eau ka hoe a Ka-moho-ali'i a'ea'e kau i ka nalu  
He nalu haki kākala, he nalu e imi ana  
I ka 'āina e hiki aku ai. . .

We rose to travel with my beloved siblings  
To the land below, which we have not yet known  
My siblings and I enter the canoe  
Kamohoali'i is skilled with the paddle as we rise over the waves  
Waves which are broken and choppy, waves which seek  
The land that is our destination. . . (pers. comm., Ho'ohila Kawelo; June 1975)

Upon reaching the northwestern islands of the Hawaiian chain, Pele, her family, and traveling companions began seeking out a home in which Pele could keep her fires dry. At Lehua, Ka'ula, Ni'ihau, Kaua'i, and on down the island chain, no place was suitable. Continuing the journey, Pele visited O'ahu and then traveled to Moloka'i. At none of those islands, was she able to find a satisfactory home. Pele and her family then traveled to Lāna'i, where the goddess rested on the shores of Ka'ā, at Polihua. A mele tells us that Pele found particular pleasure in eating the turtles that frequented Poli-hua (literally translated as “Cove-of-eggs,” commemorating the nesting practices of the turtles on Lāna'i):

. . .A Nāna'i Kaulahea      It was on Nāna'i of Kaulahea



A Mauna-lei kui ka lei	At Mauna-lei that the wreath was made
Lei Pele i ka 'ie'ie la	Pele wore the 'ie'ie as her adornment
Wai hinu po'o o Hi'iaka	And Hi'iaka's head glistened with water
Hölapu 'ili o Haumea	Haumea's skin was burned
'Ua 'ono o Pele i kāna i'a	And now Pele desires to eat her fish
O ka honu o Polihua	The turtle of Polihua
Honu iki 'ā'i no'uno'u	A small turtle with a thick neck
Kua pāpa'i o ka moana	Crab backed turtle of the deep sea
Ke 'ea nui kua wakawaka back	The great hawkbill turtle with its razor like back
Ho'olike i ka 'ai na Pele	Made into food for Pele
I nā 'oaoaka 'oaka i ka lani la	As lightening flashes sky ward
Elieli kau mai. . .	Awe possesses me. . . (cf. Emerson 1915)

In "Hawaiian Mythology," Martha Beckwith (1970) recorded that the sisters, "Pele, Hi'iaka, Malulani, and Kaohelo" were "born in Nu'umealani," but migrated to Hawai'i. The sister Malulani, settled on Lāna'i, while the other three moved on to Hawai'i (Beckwith 1970:187). Noting that Malulani remained on Lāna'i, is an important observation for this study, as a place which bears the name Malulani is situated between proposed landing zones (LZ) 4 and 3 (LZ sites identified as of 29 October 1996) (Emory {1924}, Site 14). Traditional knowledge of the significance of this area is also recorded in this study, in the interview with Mr. Solomon Kaöpüiki (December 12, 1996).

#### **Ke-ahi-a-Kawelo (The-fire-of-Kawelo)**

Kawelo was a famous priest of Lāna'i, who is remembered in several written accounts, dating back to at least 1868. Information collected by Kenneth Emory from Lāna'i natives and residents in 1921-1922, and accounts relayed to the author by native residents, while he was growing up on Lāna'i, place prominent sites associated with this legend in the ahupua'a of Ka'ā (see also the interview notes with Solomon Kaöpüiki in this study). There are several narratives that have been recorded, with varying circumstances and different characters, but each of the narratives focus on the central theme of the priest Kawelo, burning a fire on an altar in order to protect the well-being of the residents of Lāna'i. In 1868, a native writer to the Hawaiian newspaper "Ku 'Oko'a" wrote:

#### **Pane ia Lanikaula (Answer to Lanikaula); July 18, 1868**

. . . Lanikaula was a prophet of Molokai. He died and was buried at Puu-o-Hoku. The spot was named Lanikaula for him. It was said that he was a clever prophet in his day. While he was a prophet he could foresee the death of any chief or commoner through his wisdom as prophet, but when his own death drew near, he did not know.

This was the reason it is said that he did not know. One morning, one of the overseers of Keahi-a-Kawelo, of Lanai [and who had feigned friendship with Lanikāula], passed by. He had a raw sweet potato in his hand and inside of the sweet potato he had placed the excrement of Lanikaula. He passed right in front of Lanikaula, and the priest did not say, "That is my excrement you are carrying away," he didn't say a word.

The messenger got back to Keahi-a-Kawelo on Lanai. It was perhaps on the night of Kane (po Kane) when the fire was lighted by Keahi-a-Kawelo, and then Lanikaula knew from the smoke, that it was his excrement that was being burned. It was in this way, that he knew that he was going to die. He asked the men of Molokai to make stone knives under which to bury him when he died. He was afraid to be buried with just plain earth lest he be dug up and his bones used for fish hooks. . . (Bernice Pauahi Bishop Museum, Hawaiian Ethnological Notes:l:2690)

In 1873, Walter Murray Gibson published “A Legend of Lanai” in the newspaper “Nu Hou.” Titled “Keahiakawelo” (The fire of Kawelo), in the account we find further details on events of the legend, a reference to the upland region of Ka‘ā:

In the district of Kaa, on the western side of Lanai, there are several tumuli of large stones, and some rude contrivance of sacrificial altar, surrounded by a low round enclosure. Here three generations anterior to the reign of Kahekili, who was King of Maui and Lanai, lived the prophet Kawelo, who kept up a constant fire burning day and night upon this altar; and a similar fire responsive to it, was maintained by another prophet Waha, on the opposite side of Molokai. Now Kawelo had a daughter to assist in keeping watch and to feed the sacred fire, and Waha had a son; and it was declared to the people by these prophets, that so long as the fire burned, hogs and dogs would never cease from the land; but should it become extinguished these animals would pass away, and the kanakas would only have fish and sea-weed to eat with their poi. . . (Gibson in Ka Nu Hou, May 31, 1873:4)

Gibson described how the boy Nui, of Moloka‘i, and the girl Pepe, of Lāna‘i, came to fall in love, and how on one fateful night, they failed to keep the fires on their respective islands lit—the fire on the “altar of Keahiakawelo” had died. Upon discovering their error, Nui and Pepe fled to Maui, and Kawelo:

. . .threw himself headlong from a precipice of the barranca [bluff] of Maunalei. And many natives of Lanai believe to this day, that their native hogs and dogs have passed away, in consequence of the prophecy of Kawelo. (ibid.)

In 1912, another native writer submitted an account of the wahi pana (famed and storied places) of Lāna‘i, to the paper Ku ‘Okō‘a. One of the places referenced by the narrator was Kaweloahi (also written “Ke-ahi-a-Kawelo”).

#### **Na Wahi Pana o Lanai. . .**

O Kaweloahi, he wahi ahua keia nona ka palahalaha o hapawalu eka, aneane e pili me kekahi oawa kahawai o Maunalei. Aia ma keia wahi ahua i ku ai ka hale o kekahi kahuna o Lanai nei, oia kela inoa ae la Kaweloahi. Na ia nei i puhi i ka lepo o ko Molokai kahuna kaulana oia au, Lanikaula, a i kaulana ai hoi o Molokai pule o-o.

Aia nohoi ma keia oawa i ulu ai kekahi mau kumu ohia ku makua kupanaha, ulaula, keokeo, a eleele ko lakou pua, a wahi a kamaaina, eia wale iho nei no i nalowale ai, mamuli o ka pau o ka ili i ka ai ia e ke kao ahiu.

A ina e nana oe mai keia wahi aku, e ike no oe i ka waiho molale o ka aina o kela huli o Lanai, kahi hoi a na luna nui o ka hui e noho nei me ko lakou mau kanaka, a e huli papu aku ana ia Kaunakakai a e ike no oe ia Kalaeokalaau e oni ana i ke kai. . . (Ku 'Okō'a June 21, 1912)

Kaweloahi is a mound with an area of an eighth of an acre, very close to one of the stream gulches that enters Maunalei. It is there on that mound, that the house of one of the priests of Lanai stood, it was he who was named Kaweloahi. He is the one that burned the excrement of the famous priest of Molokai, Laniakaula, the famous priest who made Molokai known for its strong prayers.

There in this gulch (below the house of Kaweloahi), grew several mysterious ohia trees, they bore red, white and black blossoms, and natives say that the trees have only recently been lost as a result of the wild goats eating their bark.

If you look from this place, you will see the lands of that side of Lanai stretched out before you; reaching from the place where the ranch manager and his people live, over to Kaunakakai; it can be seen clearly before you, all the way to Kalaeokalaau, which juts out into the sea. . . (cf., Bernice Pauahi Bishop Museum, Hawaiian Ethnological Notes; Nwsp.Kuokoa:6-7)

In his work with native informants in 1921-1922, Emory (1924) collected site specific documentation of sites in Ka'ā, that were associated with the legendary events cited above. Emory's Site 16, Ke-ahi-a-Kawelo, is situated between the proposed landing zones (LZ) 4 and 3, while Site 15, Ke-ahi-'ā-loa, is situated south and west of landing zone 1 (LZ numbers based on reference map dated 29 Oct. 1996) (Figure 4.). Emory's site descriptions report:

Mr. W. J. D. Walker of the Hawaiian Pineapple Company reports a group of two small, circular, raised platforms, two house platforms, and three stone shelters half a mile up the parched slopes back of Kalaeahole, in the district of Kaa. The two circular platforms are places on a raised ledge about 15 feet apart and in a line approximately east and west. The eastern platform, a little the larger, measures about 6 feet high and 6 feet in diameter. On the south side of the platforms and between them is a shelter formed by a low wall of stones against the ledge. West of the platforms are two small, terraced house sites and north, two more shelters; one under a low bluff, the other directly above it. It is not beyond possibility that these ruins represent a heiau

and are the setting for the traditions of the Fire of Kawelo, which burned at Keahialoa. . . (Emory 1924:69)

Emory continues his narrative, citing the portion of Gibson's texts that identify the location of Keahiakawelo, and he then reports:

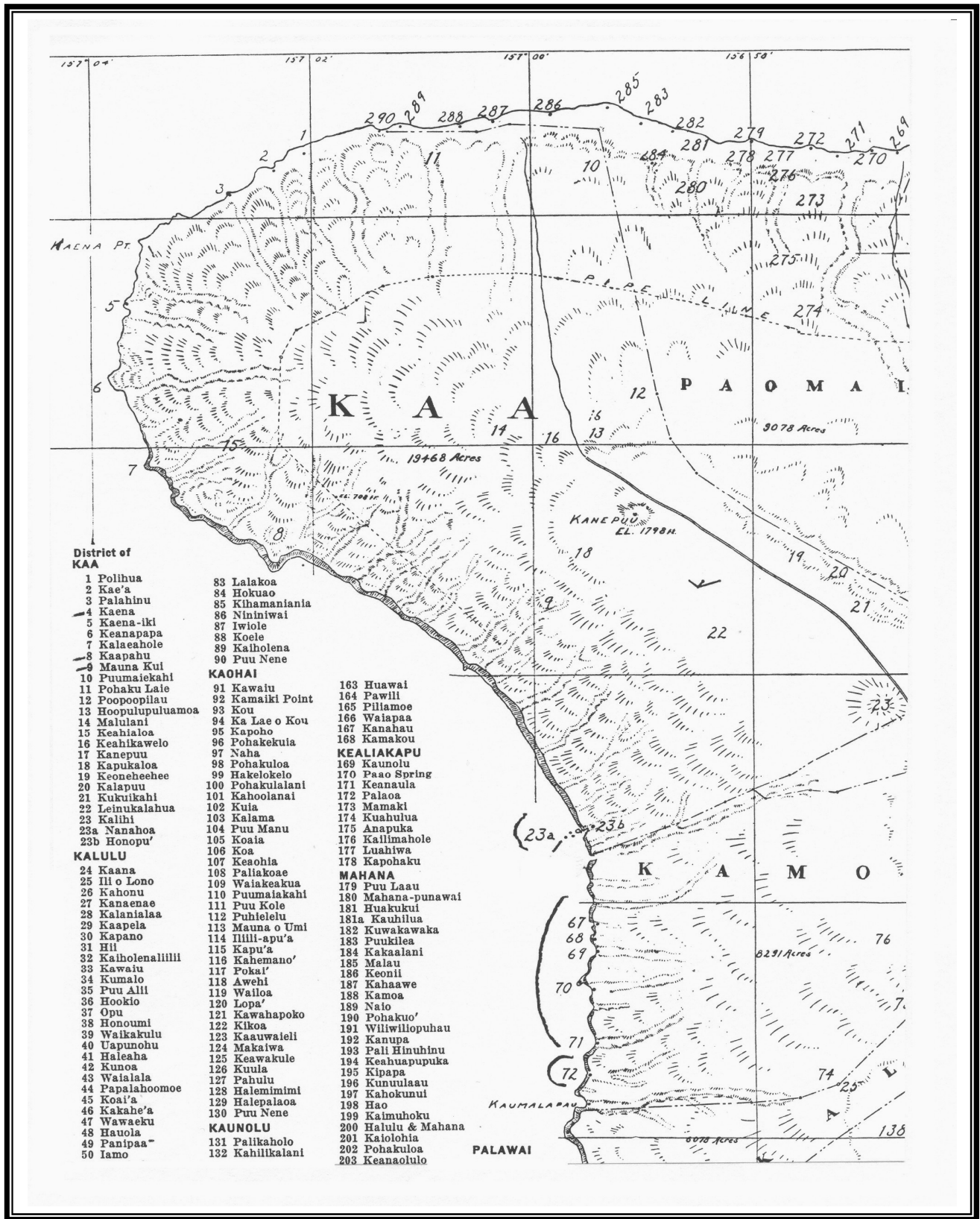
A native Kauila [the father of Tütü Ape Kauila cited above], informed me that Keahialoa, indefinitely located in Kaa, is the name of the high point to one looking upland from Kaena point. . . (ibid.)

In another section of his 1924 report, under the heading "Stones Marking Places of Religious or Magical Observances," Emory elaborates:

On the great boulders [sic] along the Keahiakawelo ridge may be many small monuments of three or four stones, one on top of the other, have been erected by natives travelling up and down [the trail], to insure good fortune on their way. . .the ahu at Keahiakawelo represent the kukae offerings of Kawelo. (ibid.:72)

In an account relayed to the author in 1972, by Tütü papa Daniel and Tütü mama Hattie Kaöpüiki Sr. (both of whom were born in the early 1890s), additional documentation of Keahi-a-Kawelo was recorded. In their recounting of the story, as learned from their elders, Tütü papa and Tütü mama recalled hearing that:

The priests Kawelo and Lani-kāula kept their fires burning at prominent locations on their islands to protect their people from one another's prayers.



When Kawelo learned that Lani-kāula had his sons secretly dispose of his kūkae (excrement) on the islet of Moku-ho'oniki, he made plans to fetch some to use in praying the Moloka'i priest to death. Lani-kāula had his kūkae hidden so that no one could take it and use it as 'maunu,' or bait in sorcery to kill him. Under the cover of darkness, Kawelo paddled to Moku-ho'oniki and fetched some of the kūkae, which he then hid in a hollowed out 'uala (sweet potato). Upon returning to Lāna'i, Kawelo placed the kūkae on his fire altar, and began his prayers. The smoke burned a dark purple-black, crossed the slopes of Ka'ā, and could be seen on Moloka'i. It was in this way, that Lani-kāula knew that his kūkae had been taken and burned by Kawelo. Lani-kāula died, and on Lāna'i the lehua trees [Metrosideros polymorpha] that had been covered by the smoke from the fire, all produced dark purple lehua blossoms. (pers. comm., summer 1972)

In their telling of the story of the fire of Kawelo, Tütü papa and Tütü mama also observed that another form of the name Poli-hua was "Pö-lehua" (dark {purple} lehua), and that the name commemorated the presence of the dark flowered lehua in the region. They also observed that goats had decimated the purple-blossomed lehua groves, and that only in their youth had they seen any remnants of the trees (ibid.)<sup>3</sup>. Additional documentation regarding this legendary account and the land of Ka'ā may be found in "True Stories of Lanai" by Lawrence K. Gay (1965).

### **Lāna'i: In the Path of Warring Chiefs**

As noted earlier in this study, the people of Lāna'i generally found themselves under the dominion of the ali'i (rulers) of Maui. Fornander (1973) reports that in its political relationship to the mö'i (king) of Maui, Lāna'i was, "independent at times, acknowledging his suzerainty at others" (Fornander 1973:94-95). This section of the study provides readers with a brief overview of events in which Lāna'i is mentioned in the period of conflicts between the warring chiefs of Maui and Hawai'i. One specific reference from c. 1778, tells of a battle fought in the forests of Paoma'i (near the study area).

We find that by the 1730s, Kekaulike, the King of the Maui island group and his brother-in-law Alapa'i-nui, king of Hawai'i, began challenging one another, with battles fought on Hawai'i and Maui. When Kekaulike died from an illness in 1736, his son Kamehameha-nui (older brother of Kahekili), took the rule of the Maui kingdom. Because Kamehameha-nui was the nephew of Alapa'i-nui, peace was called between the kingdoms (Kamakau 1961:69-70). It is around this time that the islands of Lāna'i and Moloka'i are found in the historic records.

Kamakau reports that Alapa'i-nui joined the chiefs of Maui, Moloka'i, and Lāna'i in a conflict with the chiefs of O'ahu, which Alapa'i-nui settled by a truce with Peleioholani of O'ahu (Kamakau 1961:70-72). Upon returning to Moloka'i, Alapa'i-nui set "matters between the chiefs and the country people" right, and they were able to "live at peace with the chiefs of Maui and Lanai" (ibid.:72). In 1754, Kalani'ōpu'u became the ruler of Hawai'i, and in

---

<sup>3</sup> Over the years of traveling through the uplands of the Ka'ā-Paoma'i region, I looked for any signs of the famed "*pö lehua*," but never located any.

1759, he sailed with his fleets to make war on Maui, against Kamehameha-nui (ibid.:79). In retaliation, the chiefs of Maui, Moloka'i and Lāna'i joined together against Kalani'ōpu'u. Kamakau notes that the chiefs of Lāna'i included "Na-makeha, Kalai-manuia, [and] Ke-alii-'a'a," and in this way, Maui regained its lands (ibid.:80, 82).

In 1766, Kamehameha-nui died and Kahekili became the king of the Maui-Moloka'i-Lāna'i island group (ibid.). In 1775, Kalani'ōpu'u returned to Maui in his efforts to usurp the rule of the island's hereditary chief. The Hawai'i forces were routed, and forced to return to Hawai'i. In the period between c. 1776 through 1779, Kalani'ōpu'u returned to Maui on several occasions to make war, it was in these battles on Maui that a young chief of Hawai'i, Kamehameha, earned his fame as a fierce fighter (ibid.:85-89, 91). Kamakau reports, that finding his forces once again routed from Maui:

Kalani'ōpu'u carried the war into Lanai and attacked the chiefs and soldiers in their stronghold called Ho'oki'o, mauka of Maunalei, which was their place of refuge. The trouble with the place was that when the chiefs and soldiers fled thither, their water supply was cut off and they were all slaughtered. The whole island of Lanai was ravaged by the forces of Ka-lani-'opu'u. At Paomai, at Kaea close to the forest, and at Ka'ohai was the place called Kamokupeu scarred by war markings of old. . . . During Ka-lani-'opu'u's occupancy of Lanai, the food ran out, and the men had to eat the root of a wild plant called kupala. This had a loosening effect upon the bowels when eaten in quantity. The war is therefore called The-land-of-loose-bowels (Ka-moku-hi) and it is a war still talked of among the descendants on Lanai. (ibid.:90-91)

Around 1790, while the aging Kahekili was residing on O'ahu, Kamehameha invaded Maui, securing Maui, Moloka'i, Lāna'i, and Kaho'olawe under his rule (ibid.:149). Because of civil war, on Hawai'i, Kamehameha was forced to return to Hawai'i, and in 1793, Kahekili regained control of the islands Kamehameha had taken (ibid.:159). In c. 1794, Kahekili died on O'ahu, and by early 1795, Kamehameha had retaken Maui, Kaho'olawe, Lāna'i, and Moloka'i (ibid.:171). One little known reference to the death of Kahekili, that also mentions Lāna'i, is found in Beckwith's "Hawaiian Mythology" (1970). She reports that when Kahekili died, "his brother-in-law sought his body inside the heiau and carried away the head to Lanai and worshipped it as a god" (Beckwith 1970:49).

Adding local documentation to the above accounts, George C. Munro, who had moved to Lāna'i in 1911, and managed the ranching operations there until 1935, prepared a manuscript (nd.) on the history of Lāna'i. Munro's work is based on information he received from native residents, field researchers (e.g., K. Emory, 1921-22; and C. Wentworth, 1924), and through his personal observations while traveling around the island (Munro, ms.:4, 43). In his reporting on the events following the Kalani'ōpu'u and Kamehameha encampments on Lāna'i, Munro offers the following observations and account of former residence in the Ka'ā-Paoma'i area:

. . . The invaders killed the defenders and slaughtered the civilian population who had taken refuge in the forest of Kaohai on the south side and in that of Paomai on the northwest end. ...[T]he houses were

left standing on the

northwestern slopes. They needed them while eating up crops of the natives on Kaa and Kamoku... Captain King [1779] reported that the island was well inhabited except on the south side. The houses and clearings on the northwestern seaward slopes gave a populous appearance to the land but in reality the inhabitants had been wiped out by Kalaniopuu's men and few or none were living at the time. This upper land had probably been under cultivation for 200 to 300 years and today there is still much evidence of this. [Munro, ms.:13]

When Captain Geo. Vancouver passed by Lanai on May 6, 1792, some canoes came out to the ships but they had nothing in the way of food stuffs to barter. Menzies, Vancouver's surgeon, noted the absence of "hamlets or plantations" and judged the island to be "very thinly inhabited." The effect of Kalaniopuu's devastation was by that time plainly evident on Lanai, as the houses seen by Captain King thirteen years before no doubt had fallen into ruin and disappeared. These houses may have been temporary dwellings used for shelter when working on the uplands by people living on the coast. . . [ms.:14]

In 1792, Menzies (1920) made an observation about the sparse population of western Moloka'i which is also applicable to Lāna'i, and helps explain how previously inhabited and cultivated areas like Ka'ā-Paoma'i came to be deserted:

We were visited by no natives or canoes of this end of Molokai. The people we had on board told us that Kamehameha's descent upon it had desolated the country, and that it had not yet recovered its former state of population (Menzies 1920:118)

## **Ka'ā-Paoma'i, Lāna'i:**

### **A Brief Overview of Historic Documentation**

While describing the lands of the Ka'ā region, near Kānepu'u Munro provides a brief chronology of transitions in land use and the environment of the area:

Kanepuu is a hill 1799 feet in elevation, near the extreme end of the Lanai uplands. On the windward side of the foot of this hill, which is nearly a hundred feet above the surrounding country, there are patches of original forest which covered the last six miles of the northwestern upland. This xerophytic or dry land forest is worthy of particular mention. It comprised an interesting variety of trees from those verging on the rain forest and extending to those flourishing on the dry lands near the sea. . . [ibid.:59] The most interesting of the several patches of this original forest now remaining extends for about a mile at 1729 feet elevation. Undoubtedly it was left for a windbreak by the original Hawaiian settlers and it still answers this purpose for that narrow end of the upland [ibid.:60].



The Kanepuu forest consists principally of pua and lama trees about twelve feet high making a close even top. Protruding above this canopy were straggling tops of aiea, a tree of the potato family. . . Other species represented are naio or aaka, mamani, ohelukulu-aeo (from which the Hawaiians made their stilts), nau <sup>[4]</sup> (a species of gardenia), and iliahi or sandalwood... Halapepe were also represented and hoawa and papala grew in the vicinity. Even maile and ulei and other creeping plants were present. Two elderly Hawaiian women, Awili Shaw and Naimu, told me of dark-colored flowers on ohia trees growing [ibid.:61] near Keahikawelo (Kawelo's fire). Awili Shaw declared the flowers were "elele" [sic] (black); Naimu said they were "hauili" (brown). She said there were lots of ohia trees there with red, yellow and brown flowers and that the red flowers were exceptionally large. In 1911, there were no ohia trees on the upper plateau in that locality but there were a few just over the edge of the upland [ibid.:62].

...The first land cultivated by the Hawaiians on the uplands was probably the now extremely denuded area under the shelter of Kanepuu hill and the dry forest to the windward. . . When I first saw this land [1911], there was ample evidence that it had been inhabited for a long period. Small stones, obviously broken imu (cooking) stones, were so thick on the hard surface that we raked them up and carted them to the homestead [at Koele] for use in concrete. Imus (cooking ovens) intact with charcoal still mixed with the stones stood on the surface with all the soil blown from around them. My collection of artifacts of the ancient Lanai natives...was made mostly on those bare wind-blown areas... [ibid.: 46]

...Primitive man, probably using fire, cleared land for cultivation. His digging stick further loosened and exposed the soil. This allowed the wind to have an effect that it could not have had when the surface was covered with primeval vegetation. Several thousand acres of the west-end upland and much of the sloping land was bared in this way. Some of this on the west side of Kanepuu hill, probably the first of the upland settled by Hawaiians, was brought down to hardpan. South of Kanepuu, while the more solid subsoil was not affected, the topsoil was denuded. [ibid.:11]

. . . [E]arly agriculturalists probably took what precautions they could to hold the soil but a good deal of it would be gone in the first 100 years before they learned the technique of cultivating their sweet potatoes, yams, and taro and still holding the soil. But Kalaniopuu and

---

<sup>4</sup> While discussing the Kānepu'u area with Tütü mama and Tütü papa Daniel Kaöpüiki Sr., they shared a recollection that the *pua nā'ū* (endemic gardenia), also called *nānū*, were gathered to make *lei* (garlands), and that *lei* of the *nā'ū* blossoms were the true *lei* of Lāna'i (pers. comm., c. 1973).

Kamehameha spoiled that. They killed off these skilled agriculturalists, raided the crops, and left the loose soil exposed. This land was probably never cultivated again by the Hawaiians and was at the mercy of the winds for 97 years. [ibid.: 44]

While discussing the decomposition of the lava rock on the northwestern slopes of Ka'ā (Figure 3), Munro reported:

The different stages of decomposition of the lava rock showing in different colors in the faces of the banks...especially on the Northeast side of the Kanepuu dry forest, are quite spectacular. Here there is a strange sight where disintegration and erosion have left numbers of pillars of stratified lava in their original positions while the surrounding rock has disintegrated and worn away. [ibid.:10]



**Figure 3. Land of Ka'ā, Lāna'i, looking across Kalohi Chanel to Moloka'i  
(C. Wentworth Collection, May 1924) Bishop Museum (Negative No. CP 13184)**

**Lāna'i: An Archaeological Survey (1921-1922)**

As noted in various sections of this study, Kenneth Emory, of the Bishop Museum, conducted an archaeological and cultural survey on the island of Lāna'i in 1921-1922

(Emory 1924)<sup>5</sup>. While conducting his survey, he had the benefit of meeting many of the elderly native resident of the island, and the extensive plantation work had not yet been undertaken. His field and interview records remain an important source of documentation for anyone interested in learning about Lānaʻi's native history. At several places in his study, Emory references sites in the vicinity of the study area, primarily by association with the Kānepuʻu landmark. The following excerpts are those which are believed to be relevant to this study, and may help create an awareness of the nature of cultural resources possibly present within the proposed LZ sites:

### **Dwelling Sites**

. . .I have seen a fireplace on level ground south of Kanepuu hill, which, it may be supposed, warmed a house of the high plateau. (Emory 1924:39)

### **Features Associated with Dwelling and Village Sites**

. . .Many oven pits containing charcoal and ashes have been exposed by wind erosion on the top lands. The most interesting one lies about a mile east of Kanepuu hill, in the district of Paomaʻi. As described by George C. Munro, this pit is 3 feet 6 inches in diameter at the top, 3.5 to 4 feet deep with sides nearly straight. The rim had evidently been moistened and smoothed with the hand or an instrument, marks of which still remain, for about 12 inches into the pit. The plaster and hardened burnt soil this made projected like the lips of a clay bowl about two inches above the natural surface of the wind swept ground. . . (ibid.:45)

. . .It is at first puzzling to note that most of the village sites and isolated house sites are far from springs or wells. The present natives say that in the days before sheep, goats, cattle and horses were grazing on the plateau lands, dew could be collected from the thick shrubbery by whipping the moisture into large bowls or squeezing the dripping bush tops into the vessels. Oiled tapa was also spread on the ground to collect the dew. Water accumulating in natural depressions in rock or in cup marks was husbanded carefully. . . (ibid.:46)

### **Village Sites**

. . .On the flats about Kanepuu hill are quantities of household implements and a few fire places, which are signs of dwellings. But I found no platforms or enclosures. . . (ibid.:50)

---

<sup>5</sup> Having grown up for several years on Lānaʻi, and having some knowledge of sites on the island, Kenneth "Keneti" Emory, invited the author to return to Lānaʻi with him in July-August 1975. Keneti's return marked 50 years since the publishing of his Lānaʻi study. Between July 27<sup>th</sup> to August 5<sup>th</sup>, we walked around the island of Lānaʻi, and also visited the remnants of the *maika* field at Kapukaloa, near Kānepuʻu.

### **Grindstones, Whetstones and Rubbing Stones**

Over the stretches of plateau about Kanepuu hill numerous artifacts have been dropped, most of them distinguished as such, not because of any artificial shaping, but because the stone is foreign to the region. Among these are flat and oval water-worn stones of vesicular basalt of a size fitting the hand and with both sides smooth and soft to the touch, also thin, flat fragments of lava which probably served for rubbing wooden objects. Fragments of vesicular basalt or more commonly of coral are found which have been brought to the discoidal form by the crumbling process. They resemble bowling stones, but their irregular outline and signs of wear indicate use in rubbing. . . On the plateau are numerous stream and beach pebbles of close, smooth-grained basalt having one or more sides highly polished by use, probably as burnishers. . . (ibid.:79-80)

### **Bowling Stones, Ulumaika**

. . . On the great flat, south of Kanepuu hill near Kapukaloa, is a level hard-packed strip of earth which seems originally to have been about 5 feet wide and more than 100 feet long. On this track the game of maika was played, judging from the several score of ulumaika stones gathered there by Mr. Munro and myself. There were also many broken ulumaika lying on or near the track. . . (ibid.:85)

Since the time of Emory's survey, erosion has further altered the landscape in the study area. While the natural winds and seasonal rains have taken the top soil from exposed areas, the introduced ungulates have laid to waste vast areas which were once protected by native vegetation. In the process, most of the evidence of native occupation and cultural features has been erased.

## **LĀNA'I: TRANSITIONS IN POPULATION AND LAND TENURE**

This section of the study takes a closer look at the transitions which occurred in residency, land use, and survey documentation on Lāna'i. As reported above, the entire population of Lāna'i suffered as a result of the wars between the chiefs of Maui and Hawai'i. By the time written documentation began to be recorded, only limited information pertaining to the study area and larger western region of the island was preserved. Yet, this section of the study provides readers with enough information to formulate a general overview of native- to historic-period land use.

Munro (nd.) provides readers with a chronology of 19<sup>th</sup> and early 20<sup>th</sup> century history and land ownership on Lāna'i—he records the following events and dates of occurrence:

1. A.D. 1400-1848 under Hawaiian Chiefs, when Hawaiians first settled on the island to the time of the Great Mahele in 1848 (after which the first award to commoners was made in 1852).
2. 1848-1864 under crown, government, and kuleana owners, and five-year time of the Mormons.
3. 1864-1888 under Walter Murray Gibson by purchase and lease.
4. 1888-1902 under the Frederick Hayselden family.
5. 1902-1910 under Charles Gay.
6. 1910- 1917 under the Lanai Company, Ltd.
7. 1917 - 1922 under H.A. and F.F. Baldwin.
8. 1922 -1954 under the Hawaiian Pineapple Company, Ltd. [Munro, ms.:2]

In 1902, Charles Gay and Louisa Kalā (a woman of ali'i descent from Kaua'i), purchased most of the land on Lāna'i and moved their family there. One of their sons, Lawrence Kainoahou Gay (1965), published an account of the "True Stories of the Island of Lanai," as he had learned them from natives of the island while growing up, and later, through his interest in researching the archival records. L. Gay reports that in 1823, the field missionaries estimated the population of Lāna'i to be 2,500. Nine years later, in 1832, the estimate had dropped to 1,600. Four year later, in 1836, that population was estimated at 1,200; in 1853, one of the earliest official surveys put the population at 600; with 394 resident in 1866, and 348 residents in 1872. When the Gay family moved to Lāna'i in 1902, there were fewer than 100 native Hawaiians remaining on the island (Gay 1965:83; also see Schmitt 1973).

In his discussion on Ke-ahi-'ā-loa, in the land of Ka'ā, L. Gay reports that he had learned the account from an elderly native, by the name of Hua'i (Gay 1965:59). While retelling the legendary event as he heard it, Gay describes native life and land use in the vicinity of the Ka'ā study area:

Many, many years ago, this part of Lanai was well populated. The people at this elevation (about 1,000 ft.) were engaged in growing sweet potatoes, yams, and other food crops, pigs, and chickens. The people in the lowlands were fishermen who grew whatever they could, but depended a great deal on

potatoes and yams raised on the higher elevation, so the barter system was in operation. Sea foods from the ocean and staple foods from the uplands. (Gay 1965:61)

As recorded in the preceding section, depopulation of Lānaʻi was initially the result of wars between the high aliʻi of Maui and Hawaiʻi. Following the arrival of Captain James Cook in the Hawaiian Islands in 1778, foreign diseases to which the native population had no immunity, began taking their toll as well. After 1800 introduced diseases killed tens-of-thousands of natives in short periods of time and introduced ungulates further impacted traditional residency and land use patterns.

In 1820, Christian missionaries arrived in Hawaiʻi, and within a few years, their influence in Hawaiian religious, political, and social affairs was on the rise. One of the historic distinctions of this period that is also of interest to the present study area, is that an old heiau (temple) along the shore of Kaʻā, at the point of Kaʻena-iki, was turned into a penal colony for women. Kamakau (1961) reports that in 1839, the chiefess Kekāuluohi became the premier of the kingdom. One of her early acts was that:

She made Kahoolawe and Lanai penal settlements for law breakers to punish them for such crimes as rebellion, theft, divorce, breaking of marriage vows, murder, and prostitution. Kahoolawe was the prison for the men. . . [the women were] landed at Kaʻena where was a large tract of land called Kaʻa. . . [Kamakau 1961:356-357]

Emory reported that use of the penal colony may have lasted through c. 1848 (Emory 1924:9).

Emory also reported that by 1835, the Protestant missionaries were working on Lānaʻi, and by 1837, “there were three schools for children on Lanai” (ibid.:8). By 1858, churches had been built at Maunalei and Kihamaniania, the primary areas of native residence and business operations (ibid.:9). In 1855, a Mormon settlement was established in the Pālāwai Basin. In 1861 Walter Murray Gibson assumed leadership of the Mormon colony, and by 1864, most all of the island came under the lease or private ownership of Gibson, who refused to turn the holdings over to the church (ibid.). Under Gibson’s ownership, ranching operations were formalized, and ranch shipping operations were managed from the shore of Awalua (Munro ms.:28). A review of both historic and current maps show the Gibson period trail is basically the alignment of the present-day Awalua jeep trail (situated in close proximity to proposed LZs 4 & 3). Presumably, the contemporary trail follows the general alignment of the ancient native trail through Kaʻā.

## **Historic Land Records of the Māhele (1848), and Survey and Boundary Commission Records (1859-1891)**

### **The Māhele (Land Division) of 1848**

The private ownership of land on Lānaʻi (and throughout the Hawaiian Kingdom), was facilitated by radical changes in the Kamehameha kingdom in the 19<sup>th</sup> century. As the numbers of foreign residents in Hawaiʻi grew, so too did their quest for land and economic opportunity. By 1848, Kamehameha III instituted a western-style land ownership system. Called the “Māhele,” it was a division of land between the crown,

government, lesser chiefs or konohiki, and native tenants of the land. The Māhele represented a radical restructuring of the Hawaiian land management system. It defined the land interests of the Mō‘ī (sovereign), the high-ranking chiefs, and the konohiki (overseers), who were originally those in charge of tracts of land on behalf of the king or a chief (Chinen 1958:vii and Chinen 1961:13).

Preceding this “division,” all land and natural resources in the Hawaiian Islands were held in trust by the high chiefs, and their use was given at the prerogative of the high chiefs (ali‘i ‘ai ahupua‘a or ali‘i ‘ai moku) and their representatives or land agents (konohiki), who were generally lesser chiefs as well. The maka‘āinana, or commoners resided upon the lands with basic tenants rights, including access to resources from the mountains to the sea, and the right to plots of land which they cultivated and dwelt upon. In return they provided services, foods, and material resources to the ali‘i.

The Māhele did not convey title to any land, instead, the chiefs and konohiki were required to present their claims to the Land Commission to receive awards for lands quit-claimed to them by Kamehameha III. They were also required to pay commutations to the government in order to receive royal patents on their awards. Until an award was issued, title remained with the government. The lands awarded to the lesser chiefs and konohiki became known as Konohiki Lands. Because there were few surveyors in Hawai‘i at the time of the Māhele, the lands were identified by name only, with the understanding that the ancient boundaries would prevail until the land could be surveyed. This expedited the work of the Land Commission and speeded the transfers (Chinen 1961:13).

During the Māhele, all land was placed in one of three categories: Crown Lands (for the occupant of the throne), Government Lands, and Konohiki Lands. The right to ownership within these categories were all “subject to the rights of the native tenants” (Laws of Hawaii 1848:22). The hoa‘āina or native tenants were the common Hawaiian people who lived on the land and worked it for their subsistence and the welfare of the chiefs. Before receiving their awards from the Land Commission, the native tenants were required to prove that they cultivated the land for a living. They were not permitted to acquire wastelands or lands which they cultivated “with the seeming intention of enlarging their lots.” Once a claim was confirmed, a survey was required before the Land Commission was authorized to issue any award. The lands of the native tenants became known as “Kuleana Lands.” For the commoners, this “requirement of proof” produced a series of volumes of registry and testimony—the “Buke Māhele.”

On Lāna‘i, the ahupua‘a of Ka‘ā (19,468 acres) was awarded to Princess Victoria Kamāmalu in Land Commission Award (LCA) 7713:29. The ahupua‘a of Paoma‘i, totaling 9,078 acres, was commuted to the Government. A review of the Māhele records shows that no native claims were recorded for land in the immediate study area. Indeed, even though there are numerous house sites and features along the shore of both of the ahupua‘a, as well as inland features, only five individuals claimed residence and agricultural parcels in the ahupua‘a of Ka‘ā, and only three were awarded. No claims appear to have been recorded for Paoma‘i.

In Ka‘ā, a total of five names are identified in various Māhele records, as being native tenants in the ahupua‘a of Ka‘ā, yet only three kuleana—situated in the eastern mauka corner of the land division—appear on the Government land and survey records. The

awards were made to Kauhihape (LCA 8627), Kahalekai (LCA 4288-B), and Ho'omu (LCA 3417-B). Summaries of land uses and supporting testimonies are included here, as they identify families in c. 1850, who lived in Ka'ā. It should be noted here, that in the traditional Hawaiian system of residency and land use (rights which were protected in the Māhele; cf. cf. Kingdom of Hawaii, 1850), families living in the uplands of Ka'ā would also have had access rights to the fisheries of Ka'ā. Thus, it is possible that sites such as trails, resting spots, temporary shelters, burials, and coastal residences etc., may have also been used by the individuals identified in the Māhele claims.

### **Claimants of Land in Ka'ā During the Māhele of 1848**

#### **Kauhihape, 8627** (Native Register Vol. 6:473)

We tell you the claims of land that we have on Lanai:

<u>Name</u>	<u>Land Parcel</u>
Kauhihape	Kalihi and Piiloa
Kahalekai	Mokuha
Hoopapalani	Kukuikahi
Hoomu	Kaluaakea
Hoa	Halapu

We five, are the people to who these lands belong at Kaa, Lanai.

#### **Kauhihape, 8627** (Native Testimony Vol. 13:261-262)

Kaa, Lanai: 4 parcels

Parcel 1 - 1 cultivated patch (mala) of sugar cane (ko), one mala of sweet potatoes (uala), one mala of pulu [possibly describing the growth of tree ferns which were the source of pulu fibers that were marketed in that time period], and one house (kahuahale) in the land parcel (ili) of Kalihi.

Parcel 2 - 1 mala of ko in the ili of Kalihi.

Parcel 3 - 1 mala of uala in the ili of Piiloa.

Parcel 4 - 1 mala of mahakea (a variety of taro) in the ili of Limakahua.

The land was given to Kauhihape by Umiumi in the time of Kamehameha I

#### **Kahalekai, 4288-B** (Native Testimony Vol. 13:262)

At Kaa Lanai, two parcels of land.

Parcel 1 - a section of land in the ili of Mokuha.

Parcel 2 - a kahuahale in the ili of Mokuha.

The land was given to Kahalekai by his parents in the time of Kamehameha I.

#### **Hoopapalani, 4289-B** (Native Testimony Vol. 13:262)



In the ili of Kukuikahi, Kaa, Lanai, one parcel of land.  
Parcel 1 - A section cultivated in uala.

The land was obtained before the year 1839, it was a vacant parcel,  
and  
he cultivated it and built the houses in which he dwells.

**Hoomu, LCA 3417-B** (Native Testimony Vol. 13:263)  
A section of land at Kaluakea, Kaa, Lanai.

Parcel 1 - 1 section of land and a house.

He got this land in the time of Kamehameha I, the place was vacant,  
and he is  
the one who cultivated it and built the houses.

**Hoa, LCA 3418-B** (Native Testimony Vol. 13:263)

Hoa came and stated he was relinquishing his land claim at Halapuu at  
Kaa,  
Lanai, because he had not cultivated any portion of the land since  
1839, thus  
he was returning it to the Konohiki (Overseer).

The lack of further native claims for kuleana (land rights) in the region may be explained by several factors. Besides the impacts of the Maui-Hawai'i wars described above, by the beginning of the 19<sup>th</sup> century, entire communities were conscripted to supply labor for the collection of 'ili-ahi or lā'au 'a'ala (sandalwood), and to work fields of trade crops for foreign ships. Additionally, introduced ungulates (i.e., goats, sheep, and cattle) had a devastating effect on both cultivated lands and forests (cf. Maxwell In Thrum 1900:73; Handy and Handy 1972:18, 526; and Emory 1924:46). These activities had multiple effects, the already weakened native population was further displaced, the local mahina 'ai (agricultural fields) lay fallow, and as vast tracts of land were cleared for sandalwood harvesting or commercial agriculture, the native forests were decimated (cf. Kamakau 1961:204).

#### **Government Survey Records (1859-1876)**

Following the Māhele, the need for recording land divisions and holdings in a western surveying system became critical, particularly for the King, Government, Konohiki, and foreigners who acquired large parcels of land. The Office of Hawaiian Government Survey was established under the Interior Department in 1870. W.D. Alexander was appointed the first Surveyor-General, and served between 1871 to 1901 (Survey Division, ms.:1). As a part of this study, the author reviewed the original Field Note Books of the Lāna'i surveyors, to determine if any sites or historical notes had been recorded, that were not reflected on existing maps. While records for the immediate study area were not located, documentation on several old place names and cultural features in the larger ahupua'a were located. Alexander's records of the Lāna'i survey in 1875-1876 (Register No. 153) provide us with information on Hawaiian sites and areas of cultural sensitivity in the lands of Ka'ā and Paoma'i, and offer present-day land users information on the kinds of sites that might be encountered in the field (place and informant names are underlined):

**LANAI (Memo.)**

**W.D. Alexander, 1875-76 Reg. No. 153**

[diacritical marks used as written in original texts]

(page 17) . . . Kapuniai states that at a place called Ka Lae o Kawahie, the boundary between Mahana & Paomai begins at a row of large rocks & runs directly inland. He also state that Ioba Kahema once surveyed the land of Mahana.

Names of hamlets in Paomai

Panau, two wooden houses 2 miles E of Awalua

Honowai ½ mile E of Awalua

Kanaele 1 ½ mile E of Awalua

Honuaula 3 miles E of Awalua

Kahue 3 miles E of Awalua

Ka Lae o Kawahie 4 miles E of Awalua

(page 18)

Bearings with Prismatic Compass

From Awalua Village

Leahi not visible today

Mauna Loa on Molokai            320°

Round Hill on Molokai           296 ½°

Kalae on Molokai                 348 ½°

March 31st

Old Kamai states that the boundary between Paomai & Kaa begins at a heiau called Hale o Lono about a mile West of Awalua. He confirms the statement that Ioba surveyed Paomai for Kanaina in the reign of K. IV. His father Lauaole was Ioba's guide. They assert that Paomai takes the strip of sand beach about 200 ft. wide from Hale o Lono to Pohaku Loa, & the adjacent fishery. Pohaku Loa is about a mile East of Awalua, a large rock & row of rocks. From Ka Lae o Kawahie, the boundary between Mahana & Paomai, runs tolerably straight inland a little east of the Paomai gulch, (page 19) coinciding with a road most of the way. It turns a little to the west around the head of the Paomai gulch & along a narrow ridge between the head of Paomai gulch & that branch of Maunalei which belongs to Mahana.

At a point where the latter gulch divides into two branches called "Ka Pohaku Ahi," the boundary crosses and runs up to the top of the mountain, till it meets Kalulu.

The other side of Mahana is bounded by the sea and by the Maunalei line which was surveyed by Mayor & settled by Judge Robertson.

The boundary between Paomai and Kaa, after following the top of the sand beach from Hale o Lono eastward to Pohaku Loa turns inland and runs straight for a small gulch near Kapuniai's house.

(page 20)

From Kapuniai's house, the line follows the foot of a line of bluffs, sending off a branch to the sea on the west between Kaa and Kamoku. It grows narrower towards the south and forms a narrow strip between Kamoku and Mahana as mentioned before. One of its landmarks is an ahupuaa [meaning a stone cairn marking the land division] near Koele, at foot of the encircling ridge near the mouth of a small ravine.

April 1. . . Kealakaa states that the boundary line between Kaa and Paomai after leaving Kapuniai's house, strikes the edge of the encircling line of bluffs about 500 ft. N.W. of Keoni's house on the (page 21) crest of the water shed, at a place called Kakāalani. Thence the line descends a transverse ridge to S.W., marked by two or three large rocks, to the central plain. Thence it runs straight Southwesterly to the head of a ravine which separates Kaā from Kamoku. According to ancient tradition the bottom of this ravine to the sea belonged to Paomai.

A stone was pointed out on a low ridge at about the middle of this line, as one of loba's marks.

A commanding hill N.W. of the central plain, which was selected for a primary trig. station, is called Kanepū.

The boundary between Paomai & Kamoku begins at the west, at the head of the ravine (page 22)

Paomai Boundary which separates Kaā from Kamoku. In Makalena's survey, he commenced here at a house site. The line then runs S.E. nearly straight to the ahupuaa before mentioned near Koele. One of Makalena's stations was a house site on a rising ground about half way, where there is a group, or clump of rocks.

The name of the square red bluff in the encircling ridge, a little S. of Kakāalani, is Pohōula. At its foot was the general burying ground for this part of Lanai in ancient times.

From the above mentioned ahupuaa, the boundary between Paomai & Kamoku runs up a small ravine to the top of the dividing ridge. It then follows the (page 23 [Note: handwritten page numbering out of order]) edge of the pali round to the main branch of the Mahana gulch &

thence returns to the northward along the west side of that gulch to Pohaku ahi mentioned above.

Of the place names cited above, only one, “Hale-o-Lono” is clearly identified as being a heiau (a temple). Though not situated in the immediate study area, reference to the site, which also marks the boundary between Ka‘ā and Paoma‘i is of cultural significance. The name “Hale-o-Lono” may be literally translated as the “House [temple] of Lono.” This place name is shared with many localities throughout the Hawaiian Islands, and Hawaiian historian David Malo tells us that Hale-o-Lono temples were:

119. ...of the kind known as hoouluulu (hoouluulu ai, to make food grow) and were to bring rain from heaven and make the crops abundant, bringing wealth to the people, blessing to the government, prosperity to the land (Malo 1951:176).

I‘i (1959) adds:

Houses of this kind were all thatched with ti leaves, and all the posts and beams were of lama wood. The Hale o Lono was like a heiau (I‘i 1959:58).

The presence of a Hale-o-Lono in this region supports narratives (as those cited earlier in this study) which describe native settlements and development of agricultural field systems in the Ka‘ā-Paoma‘i region. It is generally accepted that the lands which bear this name were associated with a heiau, or dedicated planting fields where the god Lono was called upon to ensure crop success and adequate rains. It is also of interest to note that across the Kalohi Channel, within sight of Hale-o-Lono, Lāna‘i, lies Hale-o-Lono in the district of Kaluako‘i, Moloka‘i.

### **Boundary Commission Records (1891)**

In the same period that the Government Survey office was established, the Boundary Commission was established to certify the boundaries of various Government and Crown lands. Usually, primary informants to the Boundary Commission were old native residents of the lands in question, many of whom had also been claimants for kuleana during the Māhele. While testimonies for Ka‘ā and Paoma‘i were given in February 1891, they only provide limited details on sites or native features. Selected excerpts of the two Boundary Commission files are included here as a part of the land records (place and informant names are underlined):

#### **Land of Paomai, Lanai**

Commencing at a cross cut in a rock at a rocky point called Lae Wahie. . . South along Mahana. . .to a stone at a place called Halala. . .to a place called Puu Kauila. . .to a redwood post at head of Paomai gulch and on edge of a branch of Maunalei gulch. . .to a red wood post on the north edge of valley that contains the water hole of Kaiholena. . .Thence to Kamoku. . .passing to the north of a couple of Hala clumps to two triangular pits at an old house site. . .Thence along Kaa. . .to Kakalani, from which point Pu‘u Manu bears S 36° 57 E. . .N along Kaa. . .To a sandy hill near place called Pohakuloa. . .along Kaa to

corner of enclosure at Kamai's house...to place called Hale o Lono. .  
.then along shore. . .(pp.:35-36)

### **Land of Kaa, Lanai**

Commencing at a red wood post at a place called Kakaalani. . .along Paomai. . .to a red wood post set in sandy hill near place called Pohakuloa. . .along Paomai to corner of enclosure at Kamai's house. . .to a place called Hale o Lono. . .then along sea shore. . .to Kamoku. . .thence along boundary to place of commencement. . . (pp.:40-41)

### **Lanai Ranch and Lanai Company, Ltd.**

Munro reports that Lanai Ranch was started by Walter M. Gibson in 1865 (Munro, ms.:26). Sheep wool was the primary product, and the harbor at Awalua in the land of Paoma'i served as the shipping point to and from Gibson's operations (ibid.:28). While there is a colorful history associated with the transfer of lands and ranching operations for the island of Lāna'i, there is little recordation of sites and uses within the present study area. In 1929, The University of Hawaii published a "Survey of Livestock in Hawaii," by L.A. Henke. Henke provides readers with a general overview of grazing and ranching operations on the island:

The Hawaiians formerly herded goats, probably for their skins, on the uplands of Lanai, and some agricultural work was done by Walter Murray Gibson, who arrived in 1861, in connection with the Mormon church. Gibson acquired considerable land and when he died in 1888 his daughter Talula Lucy Hayselden, became the owner. Gibson and the Hayseldens developed a sheep ranch on the Island, much of which was then owned by the Government and by W.G. Irwin. Irwin later acquired the Government lands and the Hayseldens about 1902 sold out to Charles Gay and nearly the whole Island of 89,000 acres was combined under the ownership of Charles Gay, which passed to Irwin in 1910 and from him to John D. McCrosson and associates in the same year, when the Lanai Company, Ltd., was formed. Their interests were sold in 1917 to H.A. and F.F. Baldwin, who in turn sold the property to the Hawaiian Pineapple Co., Ltd., in December 1922. . .

Mr. Gay continued the sheep ranch started by Gibson and Hayselden, probably carrying as high as 50,000 at times, but when the Lanai Company, Ltd., was started in 1910 they changed to cattle and put in extensive provisions for water and fences. . . At the end of 1920 there were only 860 sheep [remaining]. . . (Henke 1929:51-52).

Returning to Munro's narratives of ranching operations with specific references to the extensive erosion in the Ka'ā study area, we read an interesting observation:

Lanai has suffered much erosion of its soil and it has become habitual to blame this on stock raising. The rough system of stock raising, such as formerly practiced on these islands, has certainly done its share. But the agriculture of the ancient Hawaiians, supplemented by the

merciless killing off of these skilled dryland agriculturalists by raiders under Kalaniopuu and Kamehameha, has done much more. A great deal of soil has also been eroded by natural causes which prevailed for probably thousands of years before human beings ever inhabited the island. (Munro, ms.:3)

In his book on the history of Lānaʻi, Gay (1965) observes that one of the difficulties his family and other subsequent owners had on Lānaʻi, was the unreliable rainfall. As he noted even in ranching operations “no rainfall, no grass” (Gay 1965:37). Munro (nd.), who resided

on Lānaʻi for 20 years, began management of operations on the island in 1911. He notes that while sheep ranching had become unprofitable by that time, cattle did become a profitable business under Lanai Company, Ltd., and the Baldwin brothers (Munro, ms.:4). Ranching operations were continued on Lānaʻi through 1954, but as early as 1921, Charles Gay had begun experimenting with pineapple (Gay 1965:39). Henke (1929) reports that by 1924 arable land on Lānaʻi was primarily given over to the cultivation of pineapple. Cultivation of pineapple on Lānaʻi, under the Hawaiian Pineapple Company, Dole Pineapple Company, and Castle & Cooke, Inc., continued through 1993. At its peak, nearly 10,000 acres were under cultivation on Lānaʻi.

As noted earlier, goats and sheep had been introduced to the islands in the 1800s. Munro reports that axis deer were brought to Lanai from Molokai by the Baldwins in 1920 (Munro, ms.:80), and in c. 1954, antelope were brought in and released in the Kaʻā-Paomaʻi region. By the 1950s, hunting had become an important recreation activity for many of the plantation employees. Over the years, the primary hunting opportunities have been managed in an agreement with the State Department of Land and Natural Resources-Division of Forestry and Wildlife. Today, the state managed, public hunting program is run in the ahupuaʻa (land divisions) of Paomaʻi, Kaʻā, and Kamoku. The proposed LZ-CAL (Confined Area Landing) sites are all situated within the most active Game Management Area—hunting locality in the State of Hawaiʻi (see interviews conducted for this study in the following section).

# RESIDENT DOCUMENTATION: AN OVERVIEW OF INFORMATION GATHERED AS A RESULT OF INFORMAL INTERVIEWS AND DISCUSSIONS (DECEMBER 1996-FEBRUARY 1997)

---

## Interview Methodology

The informal “talk story” interview component of this study was conducted in an effort to gather information from Lāna‘i residents regarding traditional Hawaiian lore and practices, cultural sites, traditional use of the land and natural resources, and current subsistence practices and access to the study area; and to solicit community feedback on social and environmental concerns regarding proposed use of the study area for military training. As various potential interviewees were contacted, they were told about the nature of the study, and asked if they had knowledge of traditional sites or practices associated with the study area, and if they would be willing to share some of their knowledge.

While the findings recorded as a result of conducting the informal interviews provide us with otherwise unavailable information, it is noted here that this study does not meet the standards of a formal recorded oral history program (cf. National Register Bulletin 38 and DLNR Title 13, Section 13, Hawaii Revised Statutes; draft Dec. 13, 1996). Never-the-less, sufficient details were collected to help identify areas of sensitivity. The informal “talk story” interviews—for which hand-written notes were taken—were conducted between December 11-13, 1996, during which time, fourteen people were interviewed. Two additional interview contacts were made before and after the sites visit, thus, a total of sixteen individuals participated in the Lāna‘i interviews. Prior to visiting Lāna‘i, a list of questions was formulated (Appendix A.), to focus discussions on residents’ knowledge and concerns, and to solicit their recommendations regarding the proposed training activities.

The list of interviewees was formed on the basis of several qualifications, including, but not limited to:

- a. The potential interviewee’s genealogical ties to lands of the study area (i.e., descent from families awarded land in the Māhele of 1848, or descended from recipients of Land Grants from the Kingdom or Territory of Hawai‘i);
- b. Age—the older the informant, the more likely the individual is to have had personal communications or first-hand experiences with even older, now deceased Hawaiians; and
- c. An individual’s credibility in the community as being someone possessing specific knowledge of lore or historical wisdom pertaining to the lands, families, practices, and land use activities in the study area.

## Lāna‘i Interviews

The sixteen individuals who participated in the “talk story” interviews for which hand-written notes were taken, were given the paraphrased summary transcripts and asked to review the notes and comment on their accuracy and content. During the interviews, as specific sites were discussed, one or several maps as appropriate, were referred to. When possible, site locations were indicated on the interview map(s). A compilation of those locations is

presented on Figure 4. (in the following section documenting “Interviewee Comments and Recommendations”). Following their review of the draft transcripts, the interviewees participated in follow up telephone discussions during which necessary corrections, additions, or modifications were made. At that time, the individuals also gave their verbal permission for use of the informal interview summaries in this study. As a part of the process of participating in this study, each participant has been provided with a copy of this report. The following list, identifies individuals who participated in the Lānaʻi interviews:

<u>Interviewee</u>	<u>Affiliation</u>
· Pearl Ah Ho & Matthew Mano	Native Hawaiian residents, crafters, and hunters
· Willy Alboro  & Ron Mcomber	Life-long resident and Lanai Hunter’s Association Lanai Hunter’s Association
· Edean Desha	Hawaiian resident, historian and ethnobotanist
· Loretta Hera	Hawaiian resident, Maui-Lānaʻi Islands Burial Council member, native crafts-person, and Lānaʻi Museum co-founder
· Robert “Bobby” Hera	Life-long island resident and Lanai Company Facilities Manager
· Gaylien Kahoʻohalahala  & Barrie Morgan	Native Hawaiian resident and Lānaʻi Preserve Manager, the Nature Conservancy The Nature Conservancy
· Kolomona Kahoʻohalahala	Native Hawaiian resident, County Councilman, Maui County
· Sam Kaöpūiki & Elaine Kauwēnaʻole-Kaöpūiki	Native Hawaiian residents and resource stewards
· Solomon Kaʻöpūiki	Native Hawaiian resident, Nā Ala Hele Advisory Council, OHA Cultural Council member
· Derwin Kwon  & Albert Halapē Morita	Native Hawaiian resident, DLNR-Division of Forestry and Wildlife, Wildlife Management Assistant Native Hawaiian resident, DLNR-Division of Conservation Enforcement Officer
· Meyer Ueoka	Wildlife Manager, DLNR-Division of Forestry and Wildlife (Maui County)

This study demonstrates that traditions associated with the study area are documented in historic records, and that some form of the legends are still retained in the memories of resident families. Both literature and informants record that the shoreward regions of the ahupuaʻa contain a variety of traditional Hawaiian sites (e.g., residences, ceremonial sites,



trails, and burials etc.), and that natural resources of the area, particularly access to marine fisheries have traditional and contemporary significance to the Hawaiian people and the community at large.

In the upper region of the study area ahupua'a, in and around the proposed CAL zones, the region is known to have once been inhabited, with areas modified and developed into important agricultural field systems. But, the evidence of those early native activities has generally been eroded away. Today, the area being considered for the USMC helicopter training operations is perhaps most significant because it neighbors an important remnant of native Hawaiian dryland forest. Protection of the area, generally identified as the Kānepu'u Preserve, is of high importance to both the local and state-wide community.

## **Lāna'i Interviewee Comments and Recommendations**

Members of the Lāna'i community share common concerns about the long-term effects of military training activities on the natural and cultural landscapes of the Ka'ā-Paoma'i region. However, the interviewees suggest that a balance could be achieved that would permit military training provided that the military (Marines) work to maintain site (natural and cultural) integrity, and maintain customary and traditional access to the area for subsistence practices. It is noted here, that the DLNR-Division of Forestry and Wildlife feels that "the proposed helicopter use on Lanai should be denied" (see comments in the interview with Meyer Ueoka).

Table 1., on the following pages, provides readers with an overview of key recommendations made during the interviews. The paraphrased interview summaries record in greater detail, the context of the comments and recommendations, and Figure 4., identifies sites and location discussed in the interviews. The full interview summaries that record points of interest and concerns that shared by the individuals contacted, follow Table 1. The names of the interviewees, a brief background sketch, the date of contacts, and date of the release of the information are included in an introduction of each interview as well.

**Table 1. Summary of Recommendations and Comments Gathered in Lānaʻi Interviews**

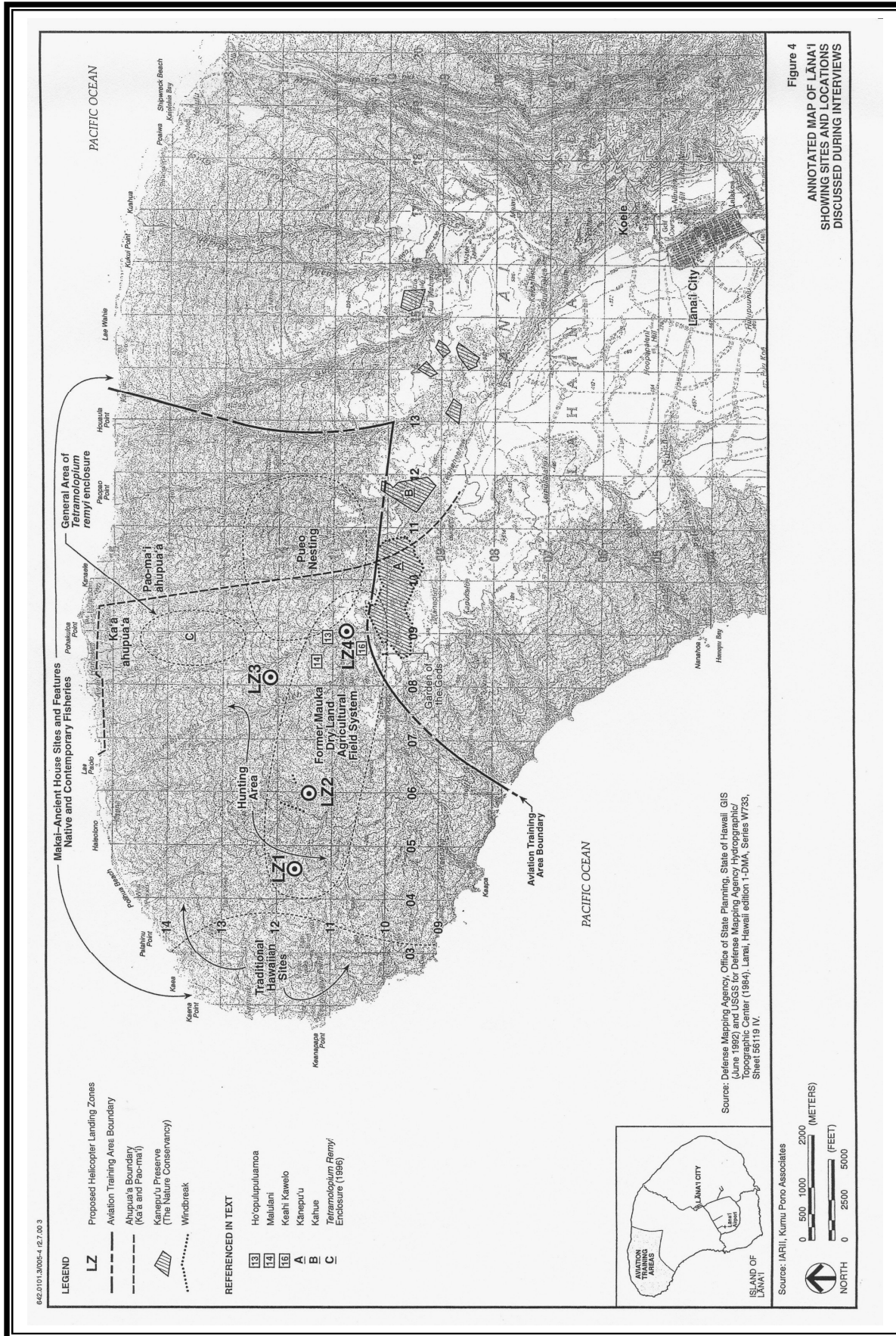
<b>Recommendations</b>	<b>Interviewee(s)</b>
<p><b>Communication:</b></p> <ul style="list-style-type: none"> <li>• USMC representatives should come to Lānaʻi and participate in community meetings and site orientations prior to entering into a lease agreement.</li> </ul>	KPK, AM, DK, RM, WA, PAH, MM, LH, GK
<ul style="list-style-type: none"> <li>• Communicate training schedules to the community, DLNR, and management agencies in a timely manner to help facilitate good relations.</li> </ul>	RM, WA
<ul style="list-style-type: none"> <li>• Keep Lānaʻi's Maui County Councilman informed of developments in this action.</li> </ul>	KPK
<p><b>Protection of Public Access:</b></p> <ul style="list-style-type: none"> <li>• To coastal fisheries and camping areas.</li> </ul>	KPK, AM, DK, SoK, LH, GK
<ul style="list-style-type: none"> <li>• In hunting zones.</li> </ul>	BH, AM, DK, RM, WA, GK
<ul style="list-style-type: none"> <li>• For cultural practices.</li> </ul>	KPK, SoK, LH
<ul style="list-style-type: none"> <li>• Various forms of public access are practiced year-round, 24-hours a day. USMC training activities need be worked around existing public access activities.</li> </ul>	BH, KPK, AM, DK, RM, WA, GK
<ul style="list-style-type: none"> <li>• Work with DLNR-DF&amp;W in managing site access.</li> </ul>	AM, DK, RM, WA
<ul style="list-style-type: none"> <li>• Relocate LZ-1 away from existing jeep trail to protect public access.</li> </ul>	AM, DK, LH, RM, WA
<p><b>Resource Management Issues:</b></p> <ul style="list-style-type: none"> <li>• The threat of fire in association with training operations is a significant concern. The USMC needs to develop a fire management plan in case of an emergency; preferably with community-agency participants in the existing plan.</li> </ul>	MU, KPK, SoK, GK, BM
<ul style="list-style-type: none"> <li>• In case of fire, <u>salt water drops can not be made</u> in the vicinity of the dry forest preserves.</li> </ul>	GK, BM
<ul style="list-style-type: none"> <li>• DLNR-DF&amp;W and community members are seriously concerned about the impacts of helicopter noise on wildlife (training disturbances prior to scheduled hunts will scatter animals)</li> </ul>	MU, AM, DK, RM, WA, GK, BM

Key to Interviewee Initials

PAH=Pearl Ah Ho; WA=Willy Alboro; BM=Barrie Morgan; ED=Edean Desha; BH=Bobby Hera; LH=Loretta Hera; KPK=Kolomona Pili Kahoʻohalahala; EK=Elaine Kaöpüiki; SmK=Samuel Kaöpüiki; GK=Gaylien Kahoʻohalahala; SoK=Solomon Kaöpüiki; DK=Derwin Kwon; MM=Matthew Mano; RM=Ron Mcomber; AM=Albert Morita; MU=Meyer Ueoka;

**Table 1. Summary of Recommendations and Comments  
Gathered in Lānaʻi Interviews (continued)**

<b>Recommendations</b>	<b>Interviewee(s)</b>
Resource Management Issues (continued):	
· Relocate LZ-4 away from the Kānepuʻu Preserve.	AM, DK, EK, LH, GK, BM
· Protect Kānepuʻu Forest preserves and other natural resources not protected within existing preserves.	BH, MU, EK, SoK, ED, LH, GK, BM
· Night hunting activities associated with management of the dry forest preserves are an important part of the long-term management plan of the preserves. Access rights for this activity need to be protected.	GK, BM
· Monitor erosion to ensure that training operations do not further impact the area.	MU, AM, DK, RM, WA, SoK, GK, BM
· Work with the community and land owner in establishing an erosion control and road maintenance program.	RM, WA, GK
Training Requirements:	
· Keep helicopters away from populated areas.	EK, AM
· USMC activities should be kept away from any cultural and native plant resources.	EK, SmK, SoK
· Leave the land as it is, do not dig holes or build any facilities in the approved training areas.	EK, SmK
· If any cultural resources are identified during training activities, leave them as they are, and notify Lānaʻi elders so they can be cared for.	SoK
· The USMC lessees must comply with all requirements of the training agreement.	RM, WA



**Robert “Bobby” Hera  
December 5, 8, 9, & 11, 1996, with Kepā Maly  
(telephone conversations and meeting on Lāna‘i)**

Robert “Bobby” Hera is a life-long resident of Lāna‘i, and is presently the facilities manager of Lanai Company. As a youth, he traveled around the island, hunting, fishing, and camping, learning about the island’s unique resources from his Hawaiian companions and neighbors, and from personal observations. For years, Bobby has been an active community participant in working to strike a balance between development and protecting Lāna‘i’s unique sense of place. Bobby has been an active member of the Lanai Hunters Association, the Nature Conservancy, and Nā Ala Hele Board member.

During the various conversations with Bobby regarding the proposed formalization of a lease between Lanai Company and the U.S. Marine Corps for the Confined Area Landings (CAL) sites for helicopter training, he made the following comments:

1. The land is presently under a ten-year management lease to the Department of Land and Natural Resources-Division of Forestry and Wildlife (DLNR-DFW) as a Game Management Area (GMA). The area of the GMA extends from the Keōmoku Road to Kaumālapa‘u Road.
2. As a GMA, the area being proposed for CAL helicopter training is a critical hunting resource for both Lāna‘i residents and the state-wide hunting community. Hunting occurs in the region nearly every month of the year. Thus, hunters will be very critical of any impacts to the resources.

Bobby suggested that Meyer Ueoka of the DLNR-DFW be contacted to provide input in consideration of creating a new lease (see notes from discussion with Meyer Ueoka on December 10, 1996). He suggested that it will be necessary for the Marine Corps to coordinate lease arrangements and access periods with the State lessee (information regarding the State GMA lease and Meyer Ueoka’s office contact number was provided to David Stefansson of BCH on December 9, 1996).

3. It is likely that any training activities will spook game.
4. Preserving rights of ways and regional access is very important to the community
5. Several jeep trails are also known to have been traditional access-foot trails as well.
6. Additionally, Bobby noted that the Kānepu‘u dry forest and Nature Conservancy preserves are a significant natural resource, that must be protected from any training impacts.
7. Though the native plant preserves are not within CAL sites, there are still native plants—e.g., ‘a‘ali‘i, ‘ili-ahi, naio, wiliwili, lama, and ohe makai—in the region, and these plants along with others are highly susceptible to impacts.

Bobby recalls that he often went to speak with Tütü Daniel Kaöpūiki regarding various Hawaiian sites that he would come across along the edges of the plantation fields, near where the plateau ends and the valleys begin on the western side of the island. Tütü’s

advice was that such sites always be left alone (Interview Notes Released December 20, 1996).

**Meyer Ueoka  
December 10, and 23, 1996  
(telephone conversations with Kepā Maly),  
and Letter Communication of January 21, 1997,**

Meyer Ueoka is the Wildlife Manager for Maui County, with the Department of Land and Natural Resources-Division of Forestry and Wildlife (DLNR-DFW). At the suggestion of Bobby Hera, I spoke with Meyer and sent him a facsimile describing the CAL helicopter training action (with map) being proposed by the U.S. Marine Corps. My communication with Meyer, was the first that he had heard regarding such an action. During the conversation, Meyer made the following observations and recommendations:

1. DLNR-DFW has a lease agreement with Lanai Company, for which an annual lease rental fee is paid.
2. He will need to speak with both the Division head, and his staff on Lānaʻi to identify State concerns about the proposed action.
3. Following the identification of DLNR-DFW concerns, a representative of the Division will need to speak with management of Lanai Company to address those concerns.
4. While hunting activities are primarily weekend based, it is likely that hunters will have serious questions about the kinds of activities and potential impacts on hunting and access.
5. Speak with Lānaʻi DLNR-DFW staff, Albert Morita and Derwin Kwon.
6. Speak with Ron Mcomber or other representatives of the Lanai Hunter's Association.

As a result of the conversation with Meyer Ueoka, his name and contact number was provided to David Stefansson of BCH.

**December 23, 1996 (follow-up conversation)**

Having faxed a draft copy of the informal interview notes (also forwarded notes from Albert Morita and Derwin Kwon) to Meyer, he added that he would need to review the proposed Marine Corps action with a number of agency representatives on Maui, Lānaʻi, and Oʻahu. Meyer observed that one of the key concerns was that the area is also a Conservation District, and he needed to explore the CDUA compliance requirements of the Marine Corps—has a CDUA process been started/completed. Meyer also observed that one of the Department's initial concerns is "What are the implications of a multiple lease on DLNR's lease payments, lease agreement, and management programs?"

**January 21, 1997**

Having further reviewed the proposed Marine Corps action (including having a conversation with David Stefansson of BCH), Meyer Ueoka forwarded the following letter (Figure 5-a & 5-b) to be included as a part of his released statement and recommendations.

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF FORESTRY AND WILDLIFE  
54 SOUTH HIGH ST., ROOM 101  
WAILUKU, HAWAII 96793-2198

January 21, 1997

MICHAEL D. WILSON  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR  
GILBERT S. COLOMA-AGARAN

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND  
ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

Mr. Kepa Maly, Consultant  
Kumu Pono Associates  
554 Keonaona Street  
Hilo, HI 96720

Dear Mr. Maly:

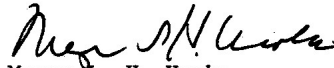
The following are comments and additions to the telephone communication I had with you regarding helicopter training on Lanai proposed by the U.S. Marine Corps:

1. DLNR-DOFAW has a long-term Cooperative Game Development and Management Agreement with Lanai Company that includes an annual lease rental fee of \$30,000.00.
2. It is our understanding that in 1995 a request for helicopter training on Lanai was denied.
3. Our past experiences with military training in other Game Management Areas have been less than satisfactory.
4. We, particularly our personnel on Lanai, feel strongly that the helicopters and noise would disturb and scatter the wildlife species. Although hunting is permitted on weekends and State holidays, hunting occurs almost year round, and any disturbances prior to scheduled hunts would impact the recreational hunting opportunities. We have constructed a protective enclosure around a colony of Tetramolopium remyi and Hibiscus brackenridgii which are endangered and could be impacted by the helicopter operation. Helicopter downward rotor wash could cause plant damage, create dust clouds and erosion to exposed areas.
5. It is our understanding that all of the helicopter training sites are within the Conservation District Zone, subzoning (L.).
6. A serious concern that needs to be addressed is the possible ignition of a brush fire that could sweep through the entire area. Is there a fire contingency plan?
7. We feel that the proposed helicopter use on Lanai should be denied.

Kepa Maly  
January 21, 1997  
Page 2

We appreciate the opportunity to comment on the proposed helicopter operations and further appreciate the opportunity to review and comment on the upcoming draft EA.

Sincerely,

  
Meyer L. H. Ueoka  
Wildlife Manager

cc: Wesley H. C. Wong, Jr.  
David Stefansson

F



**Kolomona Pili Kaho'ohalahala  
December 11, 1996 & January 19, 1997, with Kepā Maly  
(meeting on Lāna'i and telephone conversations)**

Kolomona Kaho'ohalahala (Kolomona), is a native Hawaiian resident of Lāna'i, with residency ties to the island, predating the Māhele of 1848. Over the last twenty years, he has been an active member of his island community, with a strong focus on Hawaiian issues and stewardship of both cultural and natural resources of Lāna'i. At the time of this writing, Kolomona is a representative of Lāna'i on the Maui County Council, and has served as the chairman of the Hawaiian Sovereignty Election Commission.

On December 10<sup>th</sup>, I forwarded a description (via facsimile) of the proposed use of sites in the lands of Ka'ā-Paoma'i, Lāna'i, by the U.S. Marine Corps for confined area landings (CAL) helicopter training (the project area map was also forwarded with the background information). During a brief meeting on December 11<sup>th</sup>, and in subsequent telephone conversations, Kolomona offered the following comments and recommendations:

The project area appears to include a large portion of Lāna'i. The lands of Ka'ā-Paoma'i are important to the local community and particularly important to the Hawaiian community. The proposed training area is in a region that also provides important access to shore line fisheries. Some people also gather plants and other resources in the area. Significant concerns are the preserves of rare and endangered native Hawaiian plants situated near the proposed landing zone 1 (see Interview Map, Figure 4.).

Kolomona notes that at the present time, he does not have an opinion on the proposed training action, though he does have several questions and a recommendation that should be addressed prior to the Marine Corps' making a decision on this matter; they include, but are not limited to:

1. What exactly will the proposed maneuvers entail?
2. Is the Marine Corps proposing to have flights seven days a week, once a month, twice a year, or what?
3. Will the Marine Corps' use of the region include impacting local access to the region?
4. What will be done to ensure that fire hazards will be minimized, and that a quick response plan can be implemented in case of emergency?
5. Kolomona strongly recommends that a community meeting be held on Lāna'i. During this meeting, community participants should be provided with a complete description of the proposed action, and be given an opportunity to provide input on this proposed action.

This last issue and recommendation is very important to Kolomona. He does not want the opportunity for the community to participate in a public meeting to simply slip away. He suggests that the meeting be held prior to any decision making, and that the community's input taken into account. If the meeting does not occur, it is likely that the

community will react negatively once it becomes aware of the activities, particularly if there are negative impacts.

6. Kolomona asks that he be kept informed about the status of the proposed action, and that he be contacted as soon as possible to help make arrangements for a public meeting. Correspondence may be sent to:

The Honorable Kolomona Kaho'ohalahala · Maui County Council,  
Room 810 · 200 South High Street · Wailuku, HI 96793 (Interview  
Notes Released January 19, 1997).

**Albert Halapē Morita and  
Derwin Kwon  
December 11, 1996, with Kepā Maly  
(meeting on Lāna'i)**

Albert Halapē Morita and Derwin Kwon are both native Hawaiian residents of Lāna'i, with generational family ties to the island. Albert is a DLNR-Division of Conservation Enforcement Officer, and Derwin is a DLNR-Division of Forestry and Wildlife, Wildlife Management Assistant. Based on their life-long experience in the field, connection to the land, and roles in stewardship of the Game Management Area (GMA), Albert and Derwin offered the comments and recommendations presented below:

(See Interview Map, Figure 4.)

1. Hunting seasons for axis deer, mouflon, and birds are open in the GMA, proposed CAL sites ten and one-half (10½) months a year.
2. While hunting is primarily restricted to weekends, the public makes access through the area seven days a week at all hours. The jeep trails that cross through the area provide the public (residents and visitors) with access to shoreline fishing sites, camping areas, and for other recreational activities (e.g., hiking, biking, and horse back riding).

The Marine Corps use of the CAL sites should be managed so as to work around the existing public access—to minimize impacts on the community.

3. Subsistence practices associated with hunting and fishing are important to many members of Lāna'i's community, thus maintaining public access is important.
4. LZ-1, furthest to the west, near what is now called the Morita Trail (just east of grid line 04), is very close to a high traffic area intersection. The intersection provides public with access to several coastal areas. The site should be relocated.
5. LZ-4 to the north of the Kānepu'u Nature Conservancy enclosure (grid line 09) should probably be moved north (to a lower elevation site), away from this sensitive resource.

Several of the plants within the enclosure are federally protected, endangered species. There are also significant plants outside of the

exclosures, in areas around the CAL sites. Just recently, DLNR was required to put a protective exclosure around a colony of *Tetramoloprium remyi*, situated roughly between the shore and the LZ situated near the intersection of grid lines 08 and 12.

6. Based on previous military training operations conducted from time to time (particularly those based out of the airport), helicopter operations are loud and can be heard in the city. While it appears that the proposed use area will not impact the city, Albert notes that “it will certainly be a concern for resource users in the area, such as fishermen or campers along the shorelines.”
7. Helicopter noise has been blamed for scattering game, and driving it from GMA areas.
8. The whole area within the flight training boundary has been severely impacted by droughts. Erosion and dust problems are significant, thus, there is concern about the impact of helicopters on already exposed and fragile areas.  
Over the years, as drought periods seem to have increased, there has been a steady decline in the size of the plant covered area. Larger areas are dying back and being exposed to wind and occasional rain erosion.
9. Before the lease and proposed CAL site use begins, it would be wise to have a public meeting during which the specific activities can be described, and community concerns addressed. It may also be worthwhile to have a demonstration of the activity in the field, open to public viewing.
10. Speak with members of the Lanai Hunter’s Association to gather information; suggested Ron Mcomber and Ken Sabin as possible contacts.

Albert noted that he understands the need for training operations like the one proposed here, but also observed that the community’s needs must also be addressed and protected. Also, in response to question regarding the presence of any traditional sites within the identified CAL sites, neither gentlemen knew of any sites.

Upon reviewing the draft transcript notes, Albert also commented:

My comments and suggestions are only for purposes of discussion regarding the potential impact that the proposal may have on the area. It does not represent an approval or endorsement of the proposal (fax-comm. Dec. 23, 1996). (Interview Notes Released December 20 & 23, 1996)

**Ron Mcomber and  
Willy Alboro  
December 11, 1996, with Kepā Maly  
(meeting on Lāna’i)**

Ron Mcomber first began hunting and fishing on Lāna’i in 1972, and has been an active resident on the island for more than twenty years. Willy Alboro is a life-long resident of Lāna’i, and like many of the island residents, has been hunting and fishing on the island

since his early youth. During conversations with Meyer Ueoka, Albert Morita, and Derwin Kwon (see above), of the State DLNR-Forestry and Wildlife Division, Ron was suggested as a possible contact with the Lanai Hunter's Association. Upon contacting Ron, he agreed to meet and discuss the proposed Marine Corps CAL site use, and also contacted other members of the organization to ask them for input. As a result, a meeting with Ron Mcomber and Willy Alboro was arranged.

Both Ron and Willy are active members of the Lanai Hunter's Association (LHA). The LHA is primarily made up of island resident-hunters, who work in cooperation with Lanai Company and agencies to monitor and control game populations. One of the important concerns of their organization is protecting the Lāna'i-hale rain shed from over grazing. Though most of the LHA hunting activities occur outside of the DLNR leased Game Management Area (GMA), LHA membership does hunt the GMA, and shares concerns regarding protection of access to hunting and coastal zone fisheries. Both Ron and Willy observe that the GMA is like an "ice box" for Lāna'i hunters. Additionally, the game not only provides an important subsistence resource for families, but, it is also an important recreational activity for residents who find—once stable—life on Lāna'i being impacted by rapid change.

Both gentlemen commented that they had no specific, personal objections to the proposed training activities. But, they note that since the State already has a ten year lease on the GMA, it is likely that the State and many hunters will have concerns, and possibly objections. The following comments and recommendations were made during our conversation regarding the proposed use of the Ka'ā-Paoma'i CAL sites for Marine Corps training operations:

1. The GMA in which the four CAL sites are located, is one of the most active hunting areas in the state; many, many hunters use the GMA.
  - Why was this important public access area selected rather than another portion of Lanai Company land?
  - Public access to hunting and coastal zones need to be protected.
  - Polihua and Awalua Roads are important thoroughfares, being accessed through all hours of the day. Will the proposed activities impact, or will limitations be placed on public access?
  - The three LZs (No.s 1, 2, & 3) in the vicinity of grid lines 04, 06, and 08, are right in one of the "hottest" hunting zones of the GMA (see Figure 4., Interview Map).
2. It is very likely that helicopter noise will impact hunting.
  - If maneuvers occur a night or two before hunting days, it is likely that helicopter noise will spook the animals, possibly driving them from the traditional hunting localities (perhaps driving game out of the GMA into other Lanai Company fee-hunting zones).
  - If the training maneuvers are frequent enough, the "dropping" (birthing) cycles of the does and ewes could be impacted, and lead to a diminished game population.
3. Erosion is a significant problem in the area, winds whipped up by helicopter blades will probably add to the problem. What will be done to monitor erosion and helicopter impacts?

4. The Marines must comply with all requirements, agreements, and restrictions of the lease agreement (i.e., no flights over populated areas; no troop disembarking; no taking of animals etc.)
  - Prior to entering into a lease with Lanai Company, the Marines should come to Lānaʻi and hold meeting for the community, informing them about the nature of the training activities, and to elicit further information on community needs and concerns. It would also be nice to have an annual open house day for Lānaʻi school children, where they could go see a helicopter and learn about their operation.
 

Ron volunteered to help distribute information about a public orientation meeting to members of the Lānaʻi hunting community. He may be contacted at, P.O. Box 2160 • Lanai City, HI 96763.
  - The Marines need to communicate training schedules in advance to residents, hunters, and law enforcement officers, in order to minimize confusion and risk of accidents. Such a policy of communication and working with Lānaʻi residents will be the basis of a “good neighbor” policy.
5. Because of the potential impact of such training activities on the community, several questions were raised, among them were:
  - What does Lanai Company get paid for this lease?
  - What will the community benefits be?
  - If a fee is being paid to Lanai Company for use of the landing zones, a portion of that fee should go into restoration/stabilization of areas impacted by erosion, and also into stabilization and maintenance of the GMA roadways. If the Company is going to gain, the Company should do the maintenance; some wording on this matter should be included in the Military-Lanai Company lease agreement.

[Ron observed that the recent rains have ruined many roads in region, making the need to discuss and plan for community benefits in return for area use, an even more significant factor {pers. comm. January 8, 1997}.] (Interview Notes Released January, 8 1997)

**Elaine Kauwēnaʻole-Kaöpūiki (December 12, 1996) and Samuel Kaöpūiki (December 13, 1996) (meetings on Lānaʻi with Kepā Maly)**

**Elaine Kauwēnaʻole-Kaöpūiki**

Elaine Kauwēnaʻole-Kaöpūiki is a native Hawaiian, life-long resident of Lānaʻi, with residency ties on the island dating back to the period prior to the Māhele of 1848. Aunty Elaine, as she is affectionately known, is a Kumu Hula (master instructor of hula) and native practitioner. For years, Aunty Elaine has been working to further the knowledge and protection of Lānaʻi’s unique history and cultural resources, and had be active in stewardship activities, caring for traditional sites, burials, and natural resources.

Aunty Elaine noted that based on the interview map (Figure 4.), she did not know of any traditional sites that might be impacted by the proposed activities. She did state that the area a short distance west of the most western landing zone (LZ), extending down to the

shore, including the heiau of Ka'ena-iki and the former women's penal colony, were very significant in the history of Lāna'i. Aunty Elaine shared the following specific comments and recommendations during our conversation:

1. If the Marines are going to come to Lāna'i, keep the helicopters away from populated area. Fly in and out on the ocean side of the landing zones, not over the city or residences.
2. LZ-4 is too close to the Kānepu'u native plant enclosure, and should be moved further makai. If there was an accident, the plants that we have worked so hard to protect could be destroyed.
3. Marine Corps activities should be kept away from all cultural historic and native plant (natural) resources.
4. The proposed activities should be okay, as long as no modifications are made to the ground, or structures made.

In closing Aunty Elaine noted that she "had no qualms" with the Marine Corps' lease, as long as they respected the land and the community. She realizes that change occurs, and commented that "We cannot stop progress, but, we can work together to enhance it."

### **Samuel Kaöpūiki**

Uncle Sam Kaöpūiki, like his wife (Aunty Elaine), is descended from a family with generations of residency on Lāna'i. His family has a history of stewardship of the island's cultural and natural resources, and his aloha for the land is deeper than words can describe. Uncle concurs with the general observations of Aunty Elaine above, and adds:

1. If they don't come in too often with the helicopters, it should be okay. But they need to know that there is a serious erosion problem there, and the helicopters will make even more of the dirt fly away.
2. They need to leave the land as is. Do not dig holes or make anything out there.
3. The land is generally very dry, and there is a significant problem with fires. What's left of the native forests is very important to us here, and the Marines must make sure that they do not start fires either accidentally by flying sparks, or through some other use.
4. Access to the land in the Ka'ā area is very important to the Hawaiian families. The coastal fisheries have been used for generations by native families, and more recently by other residents.
5. That traditional uses occurred in the area around the proposed LZ training sites is clear, because the entire coastline is rich in traditional sites. Mauka lands were always used a part of the ancient residency patterns.

When asked about his recollection of the use of the name "Garden of the Gods," Uncle felt that it was not until sometime in the late 1950s, early 1960s that the name came into use; given by some haole. Throughout his life time, the area was always one that was considered to be beautiful. (Interview Notes Released February 11, 1997)

**Pearl Ah Ho and  
Matthew Mano  
December 12, 1996, with Kepā Maly  
(meeting on Lānaʻi)**

Both Pearl Ah Ho and Matthew Mano are native Hawaiian residents of Lānaʻi. Pearl works as Kolomona Kahoʻohalahala’s County Council office assistant, and is very active in Hawaiian issues. Matthew is descended from a family with generations of residency on Lānaʻi, and he presently works at Lanai High and Elementary School; he is also a native craftsman. I met with Pearl and Matthew briefly at Kolomona’s Council office, and both expressed an interest in the proposed training action. Matthew commented that he had occasionally seen helicopter activities out in the Kaʻā area. When the basic restrictions of the proposed lease agreement were described, Matthew raised his eyebrows, and indicated that troops had disembarked in the past, and that game had been taken.

Both Pearl and Matthew suggested that the Marine Corps should participate in a public community meeting. Such a meeting would provide the Marines and Lānaʻi community members with an opportunity to discuss the proposed training operations, and how to make sure that things work properly. (Interview Notes Released January 30, 1997)

**Solomon Kaöpūiki  
December 12 & 13, 1996, with Kepā Maly  
(meetings on Lānaʻi)**

Solomon Kaöpūiki (Uncle Sol) is a native Hawaiian resident of Lānaʻi. His family’s relationship with the island extends back many generations, with residency formally recorded in the records of the Māhele of 1848. Like other members of his immediate, and extended family, who also participated in this informal interview series, Uncle Sol’s aloha for his island home—the resting place of his ancestor’s iwi—is too deep to be adequately recorded with written words. From a very early age, perhaps more than his other peers, Uncle was always interested in the history, resources, and families of Lānaʻi. Throughout his life, he was always asking his parents and kūpuna about various sites, stories, practices, and natural resources of Lānaʻi. Today, Uncle is highly regarded as being perhaps the most knowledgeable native resident—familiar with the sites and histories of Lānaʻi—he is a kūpuna, native practitioner of land stewardship.

Because of his humble manner and knowledge, Uncle is a member of several Hawaiian councils and serves as an advisor to other organizations. Among his affiliations are the Office of Hawaiian Affairs Cultural Advisory Council; Nā Ala Hele Advisory Council; the Nature Conservancy; and Kūpuna consultant (advisor and steward trying to ensure culturally sensitive treatment of Lānaʻi’s resources) as development projects are undertaken.

Uncle Sol recalls that as a youth in the 1930s, he would sometimes ride out to the Kānepuʻu region to watch the military’s practice bombing that was occurring then (the round ring of stones, that was the target can still be seen). He has spent a great deal of time in the remaining native forests, and walked countless times in the area that has come to be called “Garden of the Gods.” In those early days, Uncle had the benefit of being able to speak with his own kūpuna about sites and features that he occasionally came across.

In our discussion, Uncle observed that since the 1930s-1940s, erosion has nearly obliterated all evidence of the traditional sites that he had seen in the vicinity of the proposed Confined Area Landing (CAL) zones. He believes that nearly all of the remnant sites in the vicinity of the proposed landing zones (LZ) have since been washed away. Thus, Uncle notes that the helicopter access should be okay. Uncle does ask that if any artifacts or cultural resource are found out in the field while USMC training operations are occurring, that the military leave them alone, and that they go to a Lānaʻi kupuna so that the site or cultural materials may be properly cared for.

The notes below, record some of what Uncle Sol shared about the area of the proposed training, and also records his concerns and recommendations (for site locations, refer to the Interview Map, Figure 4.; and Emory's Site Map, 1924, Figure 2.):

1. Traditions and formerly observed site remnants tell us that the area extending from Kānepuʻu, towards the north and west was used in ancient times.

As a youth, Uncle saw loose stone alignments in the area extending out from the area near the Kānepuʻu LZ (#4), towards, and possibly beyond the LZ on grid line 06. Upon inquiring of his father (Daniel Kaöpūiki Sr., born in 1890) about these sites, and asking about the high number of residences on the coastal flats between Kahue and Polihua, Uncle learned:

The people that lived on the shore line were primarily fishermen, but they also kept extensive dryland gardens (māla) in the uplands, near the edges of the ancient forest. ʻUala, or sweet potatoes were the main crop grown in the area, and the fragmented stone alignments that could still be seen in the 1940s-1940s had been a part of that field system.

Uncle notes that even today, there is an area on the north and west side of Kānepuʻu that clouds settle on. For years, Uncle has watched this phenomena. The winds blowing inland, off of the Kalohi Channel between Molokaʻi and Lānaʻi bring with them moisture that condenses and forms clouds. Those clouds could have provided enough moisture to supply Hawaiian mulched planting mounds and pits with enough water to support the ʻuala growth that his father spoke of. Among the traditional place names recorded for the area of the dryland field system are Malulani (Site 14) and Kahoʻopulupuluamoā (Site 13).

Uncle also notes that “Malu-lani” is literally translated as sheltered or shaded by the heavens, a poetic description of cloud cover. “Ka-hoʻopulupulu-a-moa” may describe an area being moistened (cf. hoʻopulu) by a mist rain, or describes the native practice of mulching dryland agricultural fields. The place name may also record the name of one of the types of plants grown in this field system, a native maiʻa (banana) called moa (or hua moa). In dryland field systems, plants like the ʻuala and moa were typically grown in mulched, cloud moistened planting pits, alignments, and mounds (see also references to land use in this area, recorded by George Munro {ms.} in the archival documentary research section of this study).



2. The Kānepu‘u LZ, situated on grid line 09, is also in close proximity to the ancient site called Ke-ahi-Kawelo (Site 16). Ke-ahi-Kawelo is a wahi pana (famed legendary site, important to the history and people of Lāna‘i. Stories around the naming of Ke-ahi-Kawelo (Literally translated as “The fire of Kawelo”) are recorded in the archival documentary research section of this study.
3. The trails and public access are important to the families of Lāna‘i. Do not block them.
4. Stay away from our native forests, they are fragile remnants of a once thriving ecosystem.
5. Erosion is a steadily increasing problem, and helicopter landings will add to the problem. Establish a system for monitoring and addressing erosion problems that will be exasperated by the training operations.

One of the important cultural observations shared by Uncle during our conversation, was his explanation, that “Though the area may appear to be desolate and barely able to support life, our kūpuna gave place names to localities out there. Wherever place names exist, we are being told that there was something significant in our history there. Places are named because they are important to our history.” (Interview Notes Released January 8, 1997)

**Edean Desha**

**December 12, 1996, with Kepā Maly  
(meeting on Lāna‘i)**

Edean Desha has lived on Lāna‘i since 1946, coming to island with her late husband, Swede Desha, who held a management position with Lanai Company-Dole Pineapple. Being of Hawaiian ancestry in a predominately haole (Caucasian) managed firm, they were afforded a unique opportunity on the then isolated island, of bridging two worlds. The Deshas naturally had a deep interest in their own Hawaiian identity, and as a result, they were afforded the opportunity to develop close ties with the island’s Hawaiian community. Indeed, over the last 50 years, Edean has traveled all around Lāna‘i with a variety of people, including native residents; members of the Gay and Munro families (who lived on the island in the early part of the century); and with many archaeologists, botanists, and geologists, who have worked on compiling aspects of Lāna‘i’s natural and cultural history.

Upon hearing about the helicopter training action being proposed by the U.S. Marines, Edean shared the following comments and observations:

1. Having grown up in the period around World War II, Edean understands and supports the need for training and troop preparedness.
2. The only site of concern that Edean recalled during the interview was Keahikawelo, an important legendary site, near landing zone 4 on grid line 09.
3. The Kānepu‘u forest preserve is an important botanical resource, and every precaution must be taken to protect that area.
4. As long as the military respects the land, it’s traditional resources, and the remnants of the native ecosystem, there should not be any

problem with the helicopter training operations. (Interview Notes  
Released January 9, 1997)

**Loretta Hera**  
**December 12, 1996, with Kepā Maly**  
**(meeting on Lānaʻi)**

Loretta Hera is a native Hawaiian resident of Lānaʻi, and has lived on the island for more than twenty-five years. She is a master lau hala weaver, having learned, in part, from Lānaʻi kūpuna, and she is active in a number of Hawaiian and social issues in the community. Loretta represents the island of Lānaʻi as a member of the Maui-Lānaʻi Islands Burial Council, and is also working on the development of a Lānaʻi museum and cultural center.

Upon reviewing the proposed helicopter training action with Loretta, she made the following comments and recommendations:

1. The area to the west of LZ-1 near grid line 04, extending along the slope and down to the shore, is a culturally sensitive region. According to some accounts, the legend of Keahikawelo is also associated with a site known as Kapuahi-o-Kawelo, a little ways below (west) of LZ-1.
2. The above referenced LZ is also very close to an important roadway access, used by local families and some visitors. Training actions should be moved away from the roads and trails, to minimize impacts on public access and native practices.
3. LZ-4, on grid line 09, is north of the Kānepuʻu forest preserve, an area presently managed by the Nature Conservancy. The LZ is too close to the preservation area, another location, probably at a lower elevation, should be identified.
4. Before any decisions are made, Marine Corps command should come to Lānaʻi to hold a public meeting. It would be helpful for them to bring aerial photographs of the proposed landing areas, and provide the community with a clear overview of the proposed action. — i.e., how often are the landings being proposed; and are they planning on impacting public access etc.?

It may even be beneficial to have a field site visit with knowledgeable residents to ensure that the LZ sites do not contain sensitive resources.

In closing, Loretta observed that she did not feel comfortable to make a blanket statement that the training would be okay, until clear reference points on landing sites was available. (Interview Notes Released January 19, 1997)

**Gaylien Kahoʻohalahala**  
**December 12, 1996, with Kepā Maly**  
**(meeting on Lānaʻi) with review comments from Barrie Morgan,**  
**of the Nature Conservancy (January 13, 1997)**

Gaylien Kahoʻohalahala (a younger brother of Kolomona) is a native Hawaiian resident of Lānaʻi, descended from families with generations of residency on the island. Gaylien is the Lānaʻi preserve manager of the Nature Conservancy, and is intimately familiar with the lands being considered for lease by the U.S. Marine Corps from Lanai Company. In reviewing the map of the proposed landing zones (LZ) and the general statement of training conditions,

Gaylien offered the following comments and recommendations (see Interview Map, Figure 4.):

1. LZ-4 on grid line 09, is too close to the Kānepu‘u forest preserve. The LZ should be moved away from the preserve.
2. The preserves are very fragile, and are extremely susceptible to fire. Because of the high significance of the preserves, the Nature Conservancy has a fire response and control plan, which also involves Lanai Company, the Maui County Fire Department, and DLNR. If the Marine Corps is going to enter into a lease with Lanai Company, they should also participate in this fire management plan. The more frequent the helicopter maneuvers, the higher the likelihood of wildfire (resulting from a crash—it has happened—or equipment malfunctions). The Marines need to come to Lāna‘i with a fire management plan.  
It is also critical that if a fire does occur, that NO SALTWATER may be used in or near the preserve to fight the fire. Only fresh water may be used, the salt water could be as deadly to the native dry forest plants, as the fire itself.
3. Populations of other native and endangered plants exist outside of the fenced preserves, a careful ground survey should be conducted to minimize training impacts on these plants.  
One example of an endangered species growing outside of the Nature Conservancy preserves, is the recently identified Tetramoloprium remyi, situated not far from the Awalua Road (in the vicinity of grid line 08, between grid lines 13-14).
4. Pueo, the native Hawaiian owl nests in the lands between the Kānepu‘u area and half way to the shore. Helicopter noise will impact the pueo population.
5. Erosion is a serious problem in the area of the proposed training. Any given day, the winds range from 15 to 25 miles an hour. Helicopter landings will increase the erosion problem, what steps can be taken to minimize their impact?
6. Helicopter noise will spook the game animals in the DLNR Game Management Area (GMA). The forest preserves continue to have a problem with the alien game, and it is very likely that the game, being spooked in the dark will run into the preserve fence lines, killing or injuring themselves, and possibly impacting the fence line itself.
7. As a part of the NC Kānepu‘u preserve management program, Gaylien manages a hunting program within the Kānepu‘u enclosure. This hunting program is a DLNR permitted night hunting program which occurs ten (10) to fifteen (15) nights a month, year round. Night hunting primarily occurs on dark (no, or small moon nights), and is integral to the management of the preserve. While the hunting occurs within the preserve itself, rounds may fall outside the enclosure.
8. In response to questions about traditional sites in or around the LZ sites, Gaylien commented that he “Thinks sites did exist, but extreme erosion has already impacted surface features.”

9. Suggests moving the eastern boundary away from the Kahue line to the western side of the Awalua Road.

Speaking as a native resident and hunter, Gaylien also inquired and commented:

1. It would be very good for the Marine Corps to have a community meeting to clarify any questions and concerns.
2. What would the frequency, schedule, and time of flights be? The frequency and time of year will have a direct impact on game in the GMA. The stress will cause the game to move, and possibly leave the GMA all together.
3. The helicopter noise will also impact the people who use the area.
4. The maneuvers should not impact public access?
5. Is it possible to consider moving the training out of the GMA?  
(Interview Notes Released January 30, 1997)

As a part of the review and release of discussion notes, Gaylien asked his supervisor, Ms. Barrie Morgan of the Nature Conservancy (TNC) to also review the summarized notes. Barrie noted that Gaylien had done a good job representing TNC concerns, and added two other recommendations:

1. The United State Fish and Wildlife Service has done several plant surveys in the region, and has plant lists and growing locations plotted on maps. Barrie notes that Winona Char, who is conducting the plant survey for the proposal-associated Environmental Assessment, should be familiar with the documentation.
2. In the area of biological surveys and field observations, Barrie noted that TNC could be contracted to conduct a data-base reference check of all records and collections of data for the Ka'ā-Paoma'i region of Lāna'i.
3. DLNR-SHPD, Maui staff archaeologist, has conducted some field survey work in the vicinity of the Kānepu'u preserve, and may be able to offer further information to the work being done by David Tuggle of International Archaeological Research Institute, Inc. (pers. comm. January 13, 1997.)

## ACKNOWLEDGMENTS

There is a Hawaiian saying “**I ka lökahi ko kākou ola ai**” (In unity is found our well-being), the kūpuna (elders) knew that when many minds, skills, hands, and even prayers joined together to work on any task, that a common good would result. Many people participated in the preparation of this study, sharing their aloha, knowledge and recommendations, and to all of you —

Pearl Ah Ho, Willy Alboro, J. Noelani Cleghorn, Edean Desha, Diane Drigot, Keneti Emory mā (i ka huaka’i o ka M.H. 1975), Bobby Hera, Mr. and Mrs. Florentine Hera, Loretta Hera, Gaylien Kaho’ohalahala, Kolomona Kaho’ohalahala, Kūpuna Daniel a me Hattie Kaöpüiki Sr. (ke ho’omaha nei i ka poli ‘olu’olu o ka Makua-lani), Elaine and Sam Kaöpüiki, Solomon Kaöpüiki, Kupuna Lei Kaöpüiki-Kanipae (aloha ke Akua pū me ‘oe a me kāu po’e kaikamāhine), Makuahine Iwalani Kaöpüiki-Kwon, Kupuna Apelahama Kauila (i ho’opakele ‘ia i kēia ola honua ana), Derwin Kwon, Kamakaonaona Pomroy-Maly (no ke aloha kau palena ‘ole a me ke kōkua i nā papa hana), Matthew Mano, Ron Mcomber, Barrie Morgan, Albert Halapē Morita, M. “Suki” Richardson-Nākoa, David Stefansson, David Tuggle and Myra Tomonari-Tuggle, Meyer Ueoka, Bruce Wilcox, Ron Yamada, and archivists of the Bernice Pauahi Bishop Museum, State of Hawai’i, Survey Division, and Real Property Tax Office —

Mahalo nui nō, a ke aloha o ke Akua pū me kākou a pau.

In closing, I would like to share with you, a saying that I was taught in my youth by Tütü Papa and Tütü Mama (Daniel and Hattie Kaöpüiki Sr.) of Lāna’i — “O ka mea maika’i mālama, o ka mea maika’i ‘ole, kāpae ‘ia” (Keep that which is good and set that which is not good aside). With this saying, I wish to share with readers that I can only speak from the door of my own house, from that of which I have experienced. I do not profess to have recorded all that could be said about the land and traditions of the Ka’ā-Paoma’i region of Lāna’i or the study matter. But, an effort has been made to present readers with an overview of the rich and varied history of the area, and to accurately relay the thoughts and recommendations of the people who contributed to this study.

‘o wau nō me ka ha’aha’a — Kepā Maly

## REFERENCES CITED

---

**Beckwith, M.**

1970 Hawaiian Mythology. Honolulu: University of Hawaii Press.

**Board of Commissioners**

1929 Indices of Awards Made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands. Star Bulletin Press, Honolulu.

**Boundary Commission Testimony**

1891 Microfilm Collection of the University of Hawai'i at Hilo, Mo'okini Library.

**Chinen, J.J.**

1958 The Great Mahele; Hawaii's Land Division of 1848. Honolulu: University of Hawai'i Press.

1961 Original Land Titles in Hawaii. Privately published.

**Coulter, J.W.**

1935 A Gazetteer of the Territory of Hawaii. Honolulu.

**DLNR (Department of Land and Natural Resources)**

1996 Hawaii Administrative Rules, Title 13, Department of Land and Natural Resources, Subtitle 13, State Historic Preservation Division Rules, Chapter 276:7, Consultation with individuals knowledgeable about the project area's history (Draft, December 13, 1996).

**Emory, K.P.**

1924 The Island of Lanai. B.P. Bishop Museum, Bulletin 12. Honolulu.

**Fornander, A.**

1917–1919 Fornander Collection of Hawaiian Antiquities and Folk-Lore. Memoirs of the Bernice Pauahi Bishop Museum. Bishop Museum Press, Honolulu. (Kraus Reprint, 1986)

1973 An Account of the Polynesian Race, Its Origin and Migrations. Rutland, Vermont and Tokyo: Charles E. Tuttle Company..

**Handy, E.S.C., E.G. Handy, with M.K. Pukui**

1972 Native Planters in Old Hawaii, Their Life, Lore, and Environment. B.P. Bishop Museum Bulletin 233. B.P. Bishop Museum Press.

**Henke, L.A.**

1929 A Survey of Livestock in Hawaii. University of Hawaii. Research Publication, No. 5

**Gay, L.K.**

1965 True Stories of the Island of Lanai. Advertiser Publishing Co., Honolulu.

**I'i, J.P.**

1959 Fragments of Hawaiian History. Honolulu: Bishop Museum Press.

**Kamakau, S.M.**

1961 Ruling Chiefs of Hawaii. Honolulu: Kamehameha Schools Press.

1991 Tales and Traditions of the People of Old, Nā Mo'olelo a ka Po'e Kahiko. Bishop Museum Press, Honolulu.

**Kingdom of Hawaii**

1850 "Kanawai Hoopai Karaima no ko Hawaii Pae Aina" [Penal Code].

**Malo, D.**

1951 Hawaiian Antiquities. Honolulu: B.P. Bishop Museum.

**Maly, K. (translator)**

Ms. He Mo'olelo no Mākālei (A history of Mākālei). Published in the Hawaiian Newspaper Ka Hökū o Hawai'i; January 31 through August 21, 1928.

**Maxwell, W.**

1900 "The Hawaiian Island Ranches." IN The Hawaiian Almanac and Annual for the Year 1900:75-79.

**Munro, G. C.**

Ms. The Story of Lanai. Ms. Bernice Pauahi Bishop Museum, (Lanai Comm. Library, RH GC 996.923 M).

**National Register Bulletin (NPS)**

1990 Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin 38. U.S. Department of the Interior, National Park Service, Washington, D.C.

**Pukui, M.K., S.H. Elbert, and E.T. Mookini**

1974 Place Names of Hawaii. Honolulu: University Press of Hawaii.

**Schmitt, R.C.**

1973 The Missionary Censuses of Hawai'i. Pacific Anthropological Records No. 20. Department of Anthropology, Bishop Museum.

**Tuggle, H.D.**

1997 (Preliminary Draft) The Northwestern Uplands of the Island of Lāna'i: Archaeological Inventory Survey of Five locations Proposed for U.S. Marine Helicopter Landing Zones. International Archaeological Research Institute, Inc. Honolulu, Hawai'i. (February 1997)

**Wilkes, C.**

1845 Narrative of the United States Exploring Expedition During the Years 1838-1842, Under the Command of C. Wilkes, U.S.N. Vol. 4. Philadelphia: Loa and Blanchard.



## **APPENDIX A: LĀNA'I—OVERVIEW/QUESTIONNAIRE**

---

### **General Information:**

Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Address: \_\_\_\_\_

Interview Date: \_\_\_\_\_ Time: \_\_\_\_\_ to \_\_\_\_\_ Location: \_\_\_\_\_ Interviewer: \_\_\_\_\_

The Lāna'i study area is situated on the north-northwestern side of the ahupua'a of Ka'a-Paoma'i (see attached map). The United States Marine Corps (USMC) has proposed entering into a formal lease, using three-to-four sites for Confined Area Landings (CAL) in helicopter training maneuvers. David Stefansson of BCH notes that the proposed use is within an area where such activities have occurred for six years, under a limited agreement with Lanai Company. The average CAL site would range from 1100-3300 square meters, in clear, relatively flat areas (pers. comm., D. Stefansson, Dec. 9, 1996). Use of the CAL sites will be limited to:

- (a) Night Vision Goggle (NVG) low-level (not to exceed 1000 ft elevation) helicopter flight operations over specified routes, and tandem (1-3 helicopters) day and NVG landings; and
- (b) No improvements will be placed on the site by the Government;
- (c) No use of live ammunition, flares, explosives, incendiary devices or weapons, except under emergency medical situations, when a maximum of two smoke grenades may be used to mark locations of injured personnel; and
- (d) No troops will disembark from helicopters except in emergency situations or with prior consent of the landowner.

Information is being sought regarding the proposed use of lands in the ahupua'a of Ka'a-Paoma'i. Pertinent information that is discussed (information and comments the interviewee wants to share), will be typed in a paraphrased format and sent back to the interviewee(s) for review and clarification. After the paraphrased statement is approved, it will be included with a historical/archival report being prepared as a part of the Environmental Assessment for the proposed training activities. Topics and issues of consideration include:

- A - Traditional Hawaiian lore and practices,  
The presence of traditional sites, cultural and natural resources (areas to be avoided),  
Traditional and Customary Land Use & Practices (collection and use of resources,  
source/basis of use) (site specific references, refer to Figure 1., or Land Court Map 862);



**Lānaʻi — Overview/Questionnaire**

B - Current Public Use Requirements

Hunting Seasons and Access points (activities and protocol—how access managed);

C - Recommendations regarding social and/or environmental concerns about the proposed use of the study area for limited military training operations; and

D - Other comments or considerations.

Written comments may be sent to:  
Pacific Division Naval Facilities Engineering Command  
Attn: John Bigay (Code 231JB)  
Pearl Harbor, HI 96860-7300  
Ref.: Lānaʻi Training

Kepā Maly —Kumu Pono Associates

(cf. ML03qa.doc – Dec. 9, 1996-DS)