

Chapter 5

Nā Heiau o Kahikinui: The Temples of Kahikinui

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Introduction

The Hawaiian *heiau* or temple is a marvel of stone architecture. Each rock face or wall is built from unhewn and amorphous pieces of basalt rock, yet they are interlocked in a such a complex way that gravity rather than mortar holds them together. Every *heiau* temple is also unique in stylistic detail and arrangement of internal features. The desire of the temple architect, or *kāhuna kuikuhipu'uone*, was to create a totally new architectural layout using the local topography and combinations of older temple styles in order to design for his chief something unique and unlike any previously built structure. This stylistic variation makes the *heiau* different from all other types of ceremonial architecture found in Polynesia. The temples of Maui are also unique, since the Maui chiefs reached a pinnacle of monumental construction. The massive Pi'ilanihale Heiau in Hāna, the impressive temple complex at Haleki'i Pi'ihana in Wailuku, the rock-lined king's trail that circumscribed the island; all exhibit a certain dedication and commitment to monumental buildings unrivaled elsewhere in the Hawaiian archipelago.

This chapter sets out to accomplish a number of objectives. On the most pragmatic level, we want to document and describe each *heiau* found to date in Kahikinui. These temples, described both in early ethnohistoric records and by modern archaeologists, are well preserved given the relatively arid and isolated nature of Kahikinui. Although they may appear collapsed and forlorn in their currently abandoned state, their stones still whisper sublime tales about the past for those who pause to listen. We hope that by documenting each temple location and design, we might at least begin to tell the story of their use and function.

Another important objective is to examine these temples as an integrated whole. Few opportunities exist to examine the temples of an entire district because in

most other areas of Hawai'i there has been complete or piecemeal development, obliterating sites. The temples of Kahikinui have been preserved relatively intact, and represent an ideal corpus of sites for understanding how and why temples were placed where they are. It is with these ideas in mind that we seek to understand the role of temples in the ancient Kahikinui community. Kahikinui is an extremely large and diverse tract of land, and by beginning to understand district-scale settlement patterns of religious architecture, we can start to understand the broader scope of temple use in Hawai'i.

A third objective is to discuss temple function by describing the preliminary excavations of ten *heiau* undertaken during the summer of 1996. Archaeological excavations can help us to understand how these temples functioned in the context of their Hawaiian communities, and the role they played in the rise of Hawaiian civilization. We do this by making a series of preliminary observations on the placement of Kahikinui's *heiau* sites and some of the associated activities and construction styles associated with them.

We hope that this chapter will provide a useful tool for further archaeological and historical research, not only for Ka 'Ohana O Kahikinui, but for any who are interested in Kahikinui. We would certainly wish to encourage any individuals from outside of our discipline, or whose interest lies outside Kahikinui, to seek what utility from this chapter that they may.

Scope of Work

Survey

Archaeological survey represents the first step of research and is meant to identify all existing medium- and large-scale *heiau* within Kahikinui District. Survey data were compiled from previous archaeological research, starting with archaeological and ethnohistoric inventories from the beginning of this century by Thomas G. Thrum (1907, 1909, 1917, and 1918) and Winslow Walker (1931). Additional sources included Kolb's Nā Heiau o Maui research program, the Department of Hawaiian Home Lands aerial survey undertaken by Hal Hammatt (Hammatt and Folk 1994), and concurrent research projects directed by Boyd Dixon and Patrick Kirch (Dixon et al., 1996; Kirch and Van Gilder 1995; see Chapters 2 and 3, this volume).

A current tally of Kahikinui temples now numbers 26 individual sites. The majority of these temples have been visited in 1989, January 1994, or the summer of 1996. Detailed tape and compass maps were made of those temples that were visited, while a number of more detailed plane table maps were made in 1996 after many of the sites were cleared of over-

grown vegetation. The goal of mapping was to get an approximate idea as to the labor involved in temple construction, and to map unique stylistic components.

Excavations

The majority of excavations were undertaken during the summer of 1996, under the aegis of the Northern Illinois University field school. The excavation crew consisted of six field school students and three graduate assistants. A total of ten temples were excavated over the course of the six-week field school. They were located in the three different *ahupua'a* (Nakaaha, Luala'ilua, and Kīpapa), and consisted of large and small temples, mountain and coastal locations, and a variety of architectural designs. Four of these structures (Nakaaha Heiau, Sites 3847, 4247, and 4366) are located in either the road corridor or in the proposed area of homestead lots under development at the time of this writing. Site 4279 is located close to the homestead lot boundary. Site 175 (Kahikinui House Heiau) is located near St. Ynez Church on Highway 31, Koholuapapa Heiau and the Kahu's House are near Luala'ilua Hills, and Sites 183 and 184 are located in the coastal section of Luala'ilua.

A total of 40 test units, usually 1 x 1 m squares, were laid out and excavated. For each excavation test unit, the rocks were slowly removed to reveal the underlying dirt and stones. Any midden (shell or bone debris), coral pieces, or artifacts (e.g., adz pieces) found were removed and documented. At the end of excavation, the rocks and coral taken from each of these units were counted, weighed, and reburied in their original positions. All the stone artifacts have been classified, counted, and are being curated by the State Historic Preservation Division, Maui branch office. Once each test unit was completed, we proceeded to replace all the dirt and rocks to minimize the appearance of disturbance. The numbers in parentheses after each feature correspond to the test unit in which they were discovered.

Our specific excavation goals were to:

- Examine the relationships between differing styles of architecture or visible architectural components (e.g., wall foundations, pavements, and platforms, by focusing on areas where these different components join).
- Identify earlier structural components in order to gain some insight into the growth and methods of construction of each *heiau* temple.
- Identify the material used in construction for all building episodes.
- Locate and catalog artifacts, debris, and other material culture.

- Determine the function of different activity areas by examining existing features and material culture.
- Recover suitable datable materials such as charcoal, or volcanic glass.
- Determine the approximate volume of stone used in construction.
- Replace all removed rock to its exact location.

The Kahikinui Temples

Twenty-six temples have been identified (Table 5.1). Each temple is located in a specific community or *ahupua'a*, and has been assigned a specific site number by either the State of Hawai'i, or by archaeologists working in Kahikinui (Figure 5.1). Site numbers given here are those of the State Inventory of Historic Places. Other numbers are derived from Chapman and Kirch's 1966 survey (which used the Bishop Museum system), the 1994 aerial survey by Cultural Surveys, and the 1995-96 University of California Berkeley survey undertaken by Kirch and Van Gilder (which continues the Chapman-Kirch numbering series). Some temples also possess names, usually

ascribed by "old-timers" whom Thrum or Walker came in contact with. We also provide for each temple an approximate size, architectural form, and an age estimate based on absolute radiocarbon dates, or on general architectural style.

These 26 *heiau* are distributed within the nine *ahupua'a* of Kahikinui. Each community contains at least one *heiau*, while Kīpapa contains at least seven. *Heiau* sizes range from 25 m to 1593 m in internal ritual area, and from 54 m to 1,854 m in total area. Several different *heiau* forms are represented in Kahikinui: enclosures, notched enclosures, platforms, notched platforms, enclosure and pavements, multiple terraces, and notched walled terraces. Notching is a particular Maui architectural style, with about 40 percent of all Maui *heiau* being notched. A "notched" shape is a six-sided polygon; that is, a rectangle with a corner removed so that it resembles a thick L-shape. Each *heiau* may also possess a specific age range, based upon radiocarbon dating or upon architectural design; for example, excavations from other *heiau* around Maui indicate that the notched design begin to appear after about A.D. 1650 (Kolb 1992).

During our first field season in 1996 we were able to

Table 5.1 The surveyed temples of Kahikinui.

Site ¹	Name	Kīpapa Community	Internal Area	Form	Age Estimate ²
4279	Unknown	Nakaaha	1258	double notched enclosure	A.D. 1500-1820
1387	Kahu's House	Luala'ilua	653	notched enclosure	A.D. 1850-1920
1386	Koholuapapa	Luala'ilua	601	notched wall terrace	A.D. 1300-1820
172	Kamoamo	Mahamenui	461	notched platform	ca. 1650?
4361	Unknown	Nakaohu	456	notched enclosure	ca. 1650?
3858	Unknown	Kīpapa	400	notched enclosure	ca. 1650?
4365	Unknown	Nakaohu	400	multiple terrace	unknown
1157	Luala'ilua 2	Luala'ilua	389	notched enclosure	ca. 1650?
4247	Unknown	Nakaohu	299	notched enclosure	ca. 1650?
178	Wailapa	Alena	288	notched enclosure	ca. 1650?
4360	Unknown	Nakaohu	287	notched enclosure	ca. 1650?
181	Kahikinui 3	Kīpapa	266	multiple enclosure	multiple building episodes
175	Kahikinui 1	Kīpapa	242	multiple terrace	A.D. 1665-1820
183	Kaluakakalioa	Luala'ilua	189	enclosure	unknown
4366	Unknown	Kīpapa	161	notched enclosure	ca. 1650?
187	Makee	Auwahi	160	platform	unknown
1156	Nakaaha	Nakaaha	144	notched enclosure	ca. 1650?
4364	Unknown	Kīpapa	154	notched enclosure	ca. 1650?
177	Kahikinui 2	Kīpapa	135	enclosure with terrace	multiple building episodes
4362	Unknown	Kīpapa	132	enclosure	unknown?
170	Mahamenui	Mahamenui	115	enclosure	unknown?
180	Kepalaloa	Luala'ilua	78	enclosure	unknown?
3847	Unknown	Nakaohu	60	enclosure and pavement	multiple building episodes
182	Luala'ilua 1	Luala'ilua	33	notched enclosure	ca. 1650?
184	Unknown	Luala'ilua	25	notched enclosure	ca. 1650?

¹ Site Number is the State Inventory of Historic Places number (#50-50-15).

² Site age was determined by radiocarbon dating, the presence/absence of post-contact artifacts, and architectural design.

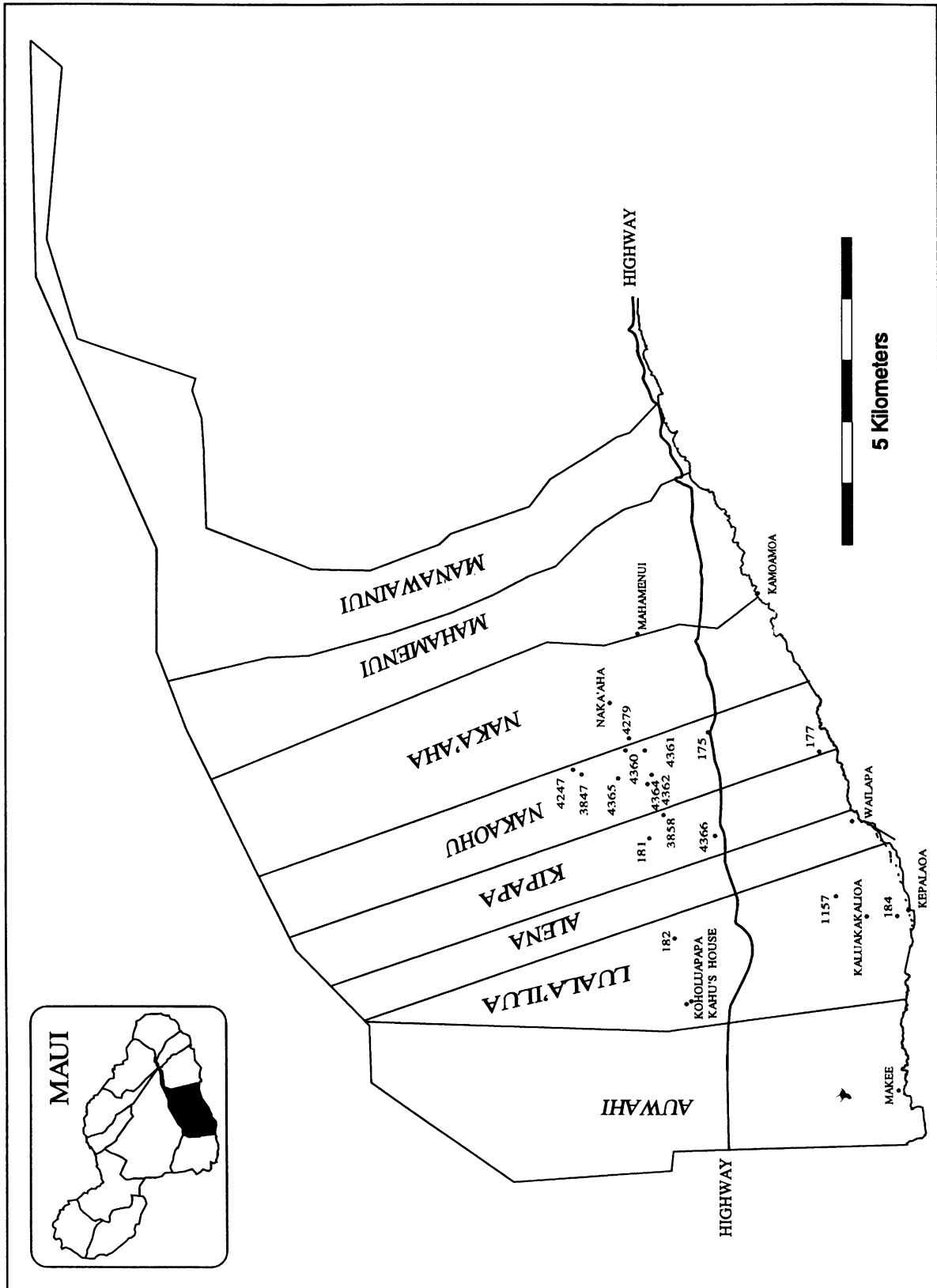


Figure 5.1 Heiau locations in Kahikinui.

place test excavations in ten of the 26 *heiau* temples (Table 5.1). Sites excavated are located in Luala'ilua, Nakaaha, Nakaohu, and Kīpapa *ahupua'a*. The survey and excavated sites are now discussed in geographic order from west ('Ulupalakua side) to east (Kaupō side).

Auwahi Ahupua'a

Site: 50-50-15-187 (Makee Heiau)

Location: Auwahi, coast
 Other site numbers: Walker Site 187
 Architectural style: platform with attached enclosure
 Approximate internal area: 160 m²
 Age: unknown, but appears to be of multiple building episodes
 Excavations: none

Makee Heiau is a small platform with an attached enclosing wall to the upland side. It was first noted by Walker during his 1931 survey. It is located within the coastal village of Makee, and is about 160 m² in size. Walker noted a large niche or tunnel extending underneath the platform; this tunnel has since collapsed.

Luala'ilua Ahupua'a

Site: 50-50-15-1164-180 (Kepala'oa Heiau)

Location: Luala'ilua, coast
 Other site numbers: Walker Site 180
 Architectural style: enclosure
 Approximate internal area: 78 m²
 Age: unknown
 Excavations: none

Kepala'oa Heiau is a small enclosure type *heiau*, first noted by Walker during his 1931 survey. It is located along the coast in Luala'ilua, near a little gully at a place called Kepala'oa. The enclosure is about 78 m² in size. Walker noted the remains of two wooden towers in the two upland corners of the enclosure. Each was 2 m in height and had a tiny platform on top. He also noted some coral on the floor.

The proximity to the coast suggests Kepala'oa may have served as a fishing shrine (*ko'a*). If the wooden structures were towers, however, Kepala'oa Heiau would have served as an agricultural *heiau* since *Hale o Lono* temples usually had two separate towers. Their short height, however, may suggest they served as altars (*lele*) instead.

Site: 50-50-15-182 (Luala'ilua 1 Heiau)

Location: Luala'ilua Hills
 Other site numbers : Walker Site 182
 Architectural style: notched enclosure

Approximate internal area: 33 m²
 Age: ca. A.D. 1650 because of its notching
 Excavations: none

Luala'ilua 1 Heiau was named by Walker in 1931. It is a small enclosure of the notched variety, located along the upland side of Luala'ilua Hills, along the old trail that ran between Kaupō and 'Ulupalakua. The north half of the structure is paved with waterworn and clinker ('*ili'ili* and aa) pebbles.

Site: 50-50-15-183 (Kaluakakalioa Heiau)

Location: Luala'ilua, coast
 Other site numbers: Walker Site 183
 Architectural style: square enclosure
 Approximate internal area: 189 m²
 Age: radiocarbon date is modern, but no post-contact material culture found
 Excavations: test units 31-32, 37, approximately 4 m²

Site 183 is a large square enclosure located along the jeep trail in the south side of Luala'ilua (Figure 5.2). It has large thick walls with large interior paving stones. Site 183 is one of only two coastal sites to be excavated in the time available.

A total of 4 m² was excavated in a two-day period of coastal investigation during the summer of 1996. Only one feature, a burn episode (32), was located within the site. Material culture recovered includes shellfish fragments, coral, bone, an adz fragment, a drilled coral piece, and '*ili'ili* gravel. The burn episode contained sizable amounts of bone, shell, and coral. None of the materials appeared to be charred. Radiocarbon dating samples for the site were taken from the single burn episode.

Site: 50-50-15-1164-184 (Unknown)

Location: Luala'ilua, coast
 Other site numbers: Walker Site 184
 Architectural style: notched enclosure
 Approximate internal area: 25 m²
 Age: not dated; ca. A.D. 1650 due to its notched shape
 Excavations: test unit 38, 1 m²

Site 184 is located approximately 45 m from the shore. Walker describes this site as a small notched fishing (*kū'ula*) shrine built of basalt slab walls. There is a coral step-terrace in the north end of the structure. A total of 1 m² was excavated in the shrine's interior. Because Site 184 was built upon a *pahoehoe* lava flow, subsurface deposits were minimal.



Figure 5.2 Photograph of Site 183 facing upslope.

Bits of coral, bone, shell, and charcoal were recovered. Walker (1931) noted small bits of sea urchin and shell.

Approximate internal area: 601 m²
 Age: A.D. 1260 and later
 Excavations: test units 19-30, approximately 13.5 m²

Site: 50-50-15-1157 (Name: Luala'ilua 2 Heiau)

- Location: Luala'ilua, "barren zone"
- Other site numbers: none
- Architectural style: notched enclosure
- Approximate internal area: 389 m²
- Age: not dated; ca. A.D. 1650 based on its notched shape
- Excavations: none

Luala'ilua 2 Heiau was first identified during the statewide archaeological inventory of 1973. It is located in the rugged "barren" zone between the coast and the highway, upon a lava flow. It is a three-walled enclosure style *heiau* placed against a linear rock outcrop. It has a small notch in its west ('Ulupalakua side) wall. It also contains interior terraces. The *heiau* is 389 m² in size.

Site: 50-50-15-186-1386 (Koholuapapa Heiau)

- Location: Luala'ilua Hills
- Other site numbers: Walker Site 186
- Architectural style: terrace with attached enclosure

Koholuapapa was first mentioned by Winslow Walker in 1931, who notes the site's complexity and size. Walker described not only Koholuapapa, but also a nearby "kahu's house" (Figure 5.3). Architecturally, this site is complex with four building episodes. The first episode is a small, raised platform constructed on a bedrock outcrop which includes a collapsed lava tube. The second episode of the temple's construction consists of a terrace facing on the south side. The third construction episode is a notched enclosure addition north of the original platform. Finally, a post-contact animal enclosure, similar in style to the post-contact walls of Site 1387, was placed off the north wall of the notched enclosure.

A total of 13.5 m² was excavated at Koholuapapa during the summer of 1996 (Figure 5.4). Three large features were located: two burn episodes (19, 29), and one faced bedrock altar. Material culture recovered includes fish bone, volcanic glass, pig bone, bird bone, land snails, basalt flakes, shellfish, and many waterworn ('ili'ili) stones. An area of intensive burning (19) is located behind the faced bedrock altar.

This may have been the location of the oven house of the *heiau*. The second burn episode (29) is a small area that may signify an earlier use of the *heiau* area. The large quantity of pig bone recovered from the site, and the architectural similarities to two other Maui *luakini heiau* previously excavated by Kolb (1991), suggest that Koholuapapa was eventually converted to a *luakini* war temple.

Radiocarbon dating samples were taken from each of the building episodes, excluding the post-contact portion. The earliest radiocarbon date, from the altar area, dated to A.D. 1260-1425. The three dates correspond with the architectural chronology.

Site: 50-50-15-186-1387 (Kahu's House)

Location: Luala'ilua Hills

Other site numbers: none

Architectural style: notched *pa hale* style residence

Approximate internal area: 653 m²

Age: no need for radiocarbon dating; ca.

A.D. 1850-1920

Excavations: none; but surface collected

The Kahu's House was first identified by Walker in 1931, but was not mapped or given a site number until the 1973 State Inventory of Historic Places. Walker notes that it may have served as a place of residence for a temple caretaker (*kahu*) because of its proximity to the sacrificial temple Koholuapapa Heiau (Site 1386) and because of the variety of post-contact midden strewn over the site. The Kahu's House consists of a raised slab-lined living platform with an attached structure and a wall facing to the east.

No excavations were undertaken at this site because of its ample surface finds (Figure 5.5). Only one major feature was located: a refuse pit filled with glass, ceramics, limpet shells, and bone. Pieces of diagnostic glass and ceramics were collected for dating during preliminary survey. Most of the material culture is associated with post-contact occupation dating between A.D. 1850 and 1920. It appears the site had already been abandoned by the time of Walker's visit in 1931.

Alena Ahupua'a

Site: 50-50-15-178 (Wailapa Heiau)

Location: Alena, coast

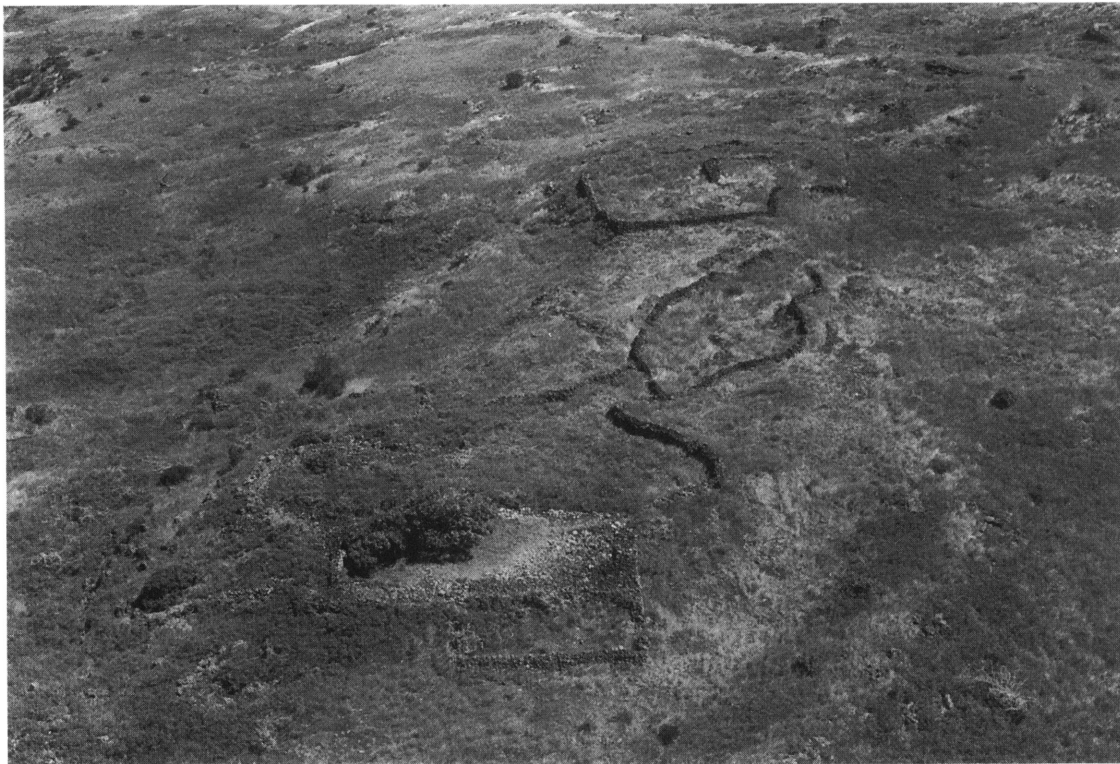


Figure 5.3 Aerial photograph of Koholuapapa Heiau (Site 1386) and Kahu's House (Site 1387).

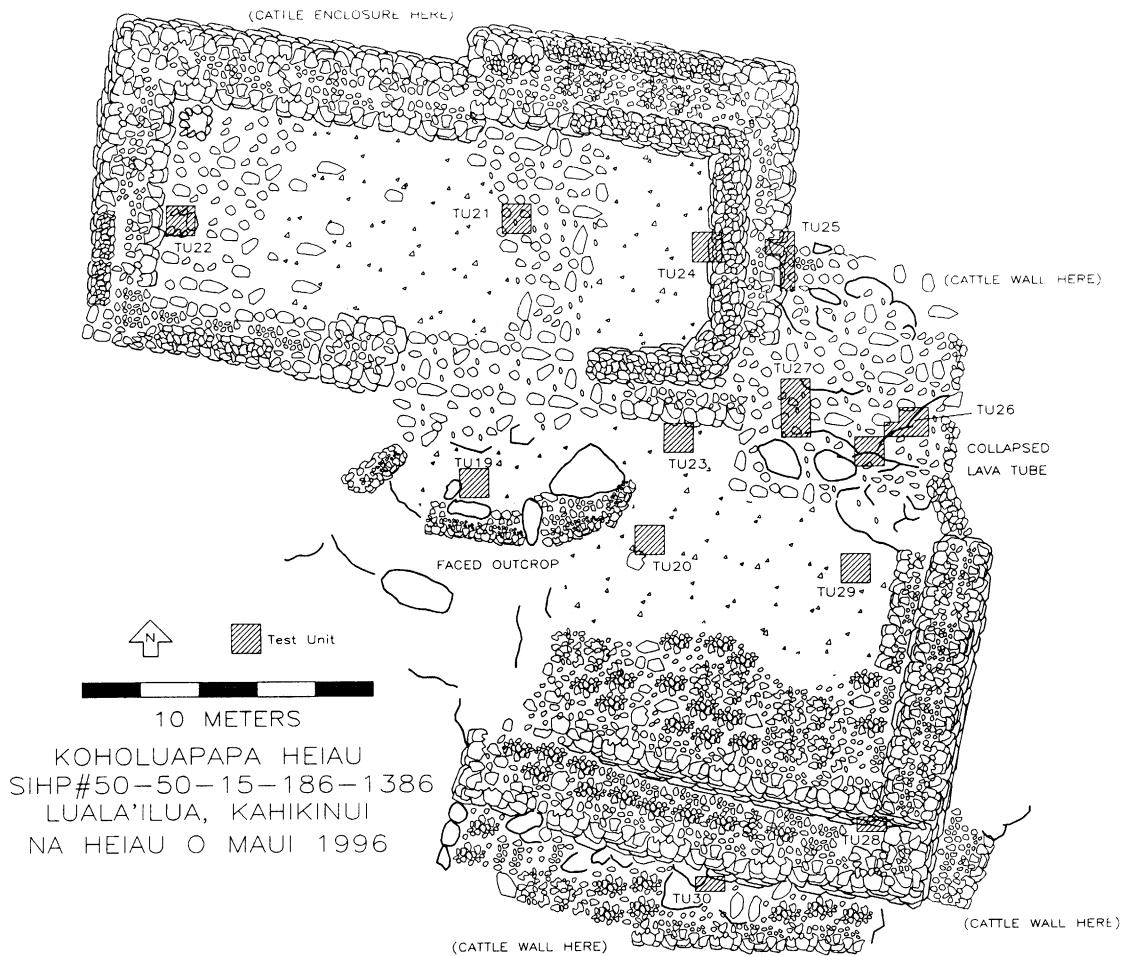


Figure 5.4 Plan-view map of Koholuapapa Heiau (Site 1386).

Other site numbers: none
 Architectural style: notched enclosure
 Approximate internal area: 288 m²
 Age: not radiocarbon dated; ca. A.D. 1650 due to the notching
 Excavations: none

Wailapa Heiau is a small enclosure of the notched variety. It was first noted by Walker in 1931, and is located along the coast of Alena, in the village of Wailapa. The enclosure is about 288 m² in size. Walker noted that it possesses two interior paved areas and a small raised platform.

Kīpapa Ahupua'a

Site: 50-50-15-177 (Kahikinui 2 Heiau)

Location: Kīpapa, coast
 Other site numbers: Chapman-Kirch Site 273
 Architectural style: enclosure with adjoining terrace

Approximate internal area: 135 m²
 Age: unknown; multiple building episodes
 Excavations: none

Site 177 is an enclosure style *heiau* with an adjoining terrace. It was first noted by Walker in 1931. It is located along the King's Trail in Kīpapa, above the area called Wai'apea. The entire site is 135 m² in size. The enclosure's end walls are tapered like the eaves of a roof. The enclosure also has a small platform located within. The terrace is set into a nearby outcrop and has a 3 m stone face. A small paved area separates the enclosure and the terrace.

Site: 50-50-15-181 (Kahikinui 3 Heiau)

Location: Kīpapa, upland
 Other site numbers: Walker Site 181, Chapman-Kirch Site 1
 Architectural style: multiple enclosure

Approximate internal area: 266 m²
 Age: unknown; multiple building episodes
 Excavations: none

Age: unknown; ca. A.D. 1650 as suggested by its notching
 Excavations: none

Site 181 possesses two adjoining enclosures. The site was first mapped by Walker in 1931. It is located along the old pipeline trail, and is one of the larger *heiau* in Kahikinui.

Site 3858 is an enclosure of the notched variety. It was discovered and first mapped with plane table by Kirch during the Chapman-Kirch 1996 survey. The enclosure is about 400 m² in size.

Site: 50-50-15-4364 (Unknown)

Location: Kīpapa
 Other site numbers: Kirch-Van Gilder Site 405
 Architectural style: notched enclosure
 Approximate internal area: 154 m²
 Age: not radiocarbon dated; ca. A.D. 1650
 Excavations: none

Site: 50-50-15-4362 (Unknown)

Location: Kīpapa
 Other site numbers: Chapman-Kirch Site 75
 Architectural style: enclosure
 Approximate internal area: 132 m²
 Age: unknown
 Excavations: none

Site 4364 is a notched enclosure style *heiau*. It was discovered and first mapped by Kirch and Van Gilder in 1995. The enclosure is about 154 m² in size.

Site 4362 is a small enclosure style *heiau*. It was first mapped by Chapman and Kirch in 1966. The enclosure is about 132 m² in size.

Site: 50-50-15-3858 (Unknown)

Location: Kīpapa
 Other site numbers: Chapman-Kirch Site 188
 Architectural style: notched enclosure
 Approximate internal area: 400 m²

Site: 50-50-15-4366 (Unknown)

Location: Kīpapa
 Other site numbers: Kirch-Van Gilder Site 424
 Architectural style: notched enclosure

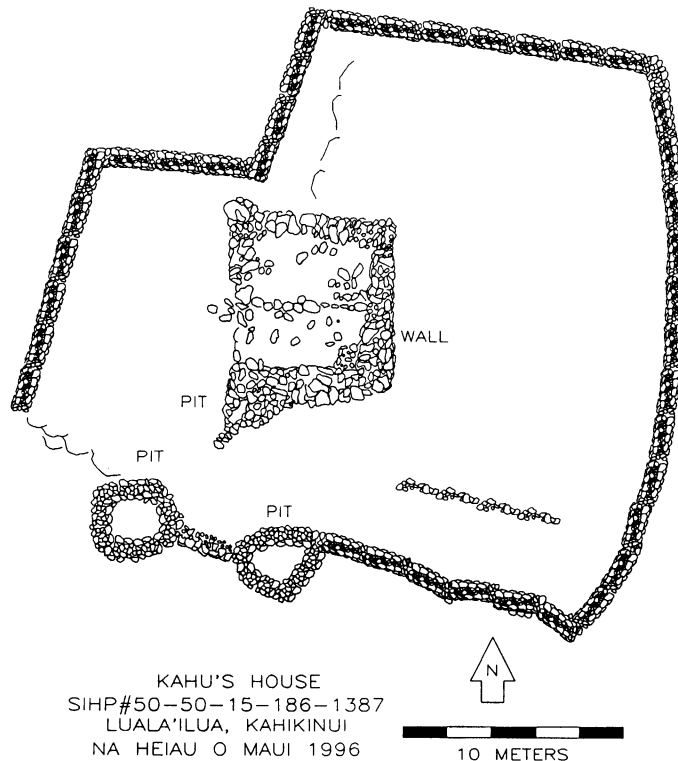


Figure 5.5 Plan-view map of Kahu's House (Site 1387).

Approximate internal area: 161 m²
 Age: not yet dated; probably ca. A.D. 1650
 Excavations: test unit 33, approximately 1 m²

Site 4366 is a small *hale mua* style *heiau* located near the upland road corridor, discovered by the U.C. Berkeley team in 1995. It is a single building episode consisting of a notched enclosure.

A total of 1 m² was excavated during the summer of 1996. One feature was located, a burn episode. Material culture recovered includes shell, coral, volcanic glass, an adz fragment, 'ili'ili, land snails, bone, basalt flakes, and charcoal. This site has not yet been radiocarbon dated.

Site: 50-50-15-175 (Kahikinui 1)

Location: Kipapa, below Kahikinui House
 Other site numbers : Walker 175; Chapman-Kirch
 Site 394
 Architectural style: terraced platform
 Approximate internal area: 242 m²
 Age: 90 ± 70 B.P.; ca. A.D. 1800
 Excavations: test units 17-18, approximately 3 m²

This *heiau* is located along the upland side of the highway and is visible from Highway 31. Walker recorded it in 1931, and Kirch and Chapman also mapped the site in 1966. The *heiau* is built upon a large rock outcrop, with two nicely faced terraces on the coastal side of the structure (Figure 5.6). A total of 3 m² were excavated at this site during the summer of 1996; no features were uncovered during the course of excavation. Small traces of midden were found associated with charcoal, as were coral, land snails, shellfish, fish bone, and nut shell. Radiocarbon dating samples were taken from the charcoal found in test unit 17.

Nakaohu Ahupua'a

Site: 50-50-15-4361 (Unknown)

Location: Nakaohu, above Kahikinui House
 Other site numbers: CS-1013
 Architectural style: notched enclosure
 Approximate internal area: 456 m²
 Age: unknown; assumed to be ca. A.D. 1650
 because of notched style
 Excavations: none

Site 4361 is an enclosure of the notched variety located by the Cultural Surveys aerial reconnaissance (Hammat and Folk 1994). It is located above Kahikinui House and is about 456 m² in size.

Site: 50-50-15-4365 (Unknown)

Location: Nakaohu
 Other site numbers: Chapman-Kirch Site 410
 Architectural style: multiple terrace
 Approximate internal area: 400 m²
 Age: unknown
 Excavations: none

Site 4365 is a *heiau* constructed with multiple terraces. It was located by Chapman and Kirch in 1966, and mapped by Kirch with plane table and alidade. It is 400 m² in size.

Site: 50-50-15-4360 (Unknown)

Location: Nakaohu, upland of Kahikinui House
 Other site numbers: CS-1011
 Architectural style: notched enclosure
 Approximate internal area: 287 m²
 Age: unknown; assumed to be ca. A.D. 1650
 because of notched style
 Excavations: none

Site 4360 is an enclosure of the notched variety located during the Cultural Surveys aerial reconnaissance of 1994. It is located upslope of CS-1013 and is 287 m² in area.

Site: 50-50-15-3847 (Unknown)

Location: Nakaohu
 Other site numbers : Chapman-Kirch Site 80
 Architectural style: terraced platform
 Approximate internal area: 60 m²
 Age: not yet dated
 Excavations: test unit 35, approximately 2 m²

Site 3847 is a medium-sized double terraced platform enclosure with pavement that has an area of 60 m². It was discovered during the 1966 Chapman-Kirch survey, and mapped by them. A total of 2 m² was excavated during the summer of 1996. No features were located during excavation. Minimal traces of material culture were found including burnt organic material and bone. One interesting note is that this site has a *kī* plant (*Cordyline fruticosa*) growing among the facing stones. This site has not been radiocarbon dated.

Site: 50-50-15-4247 (Unknown)

Location: Nakaohu
 Other site numbers: Chapman-Kirch Site 414
 Architectural style: notched enclosure
 Approximate internal area: 299 m²

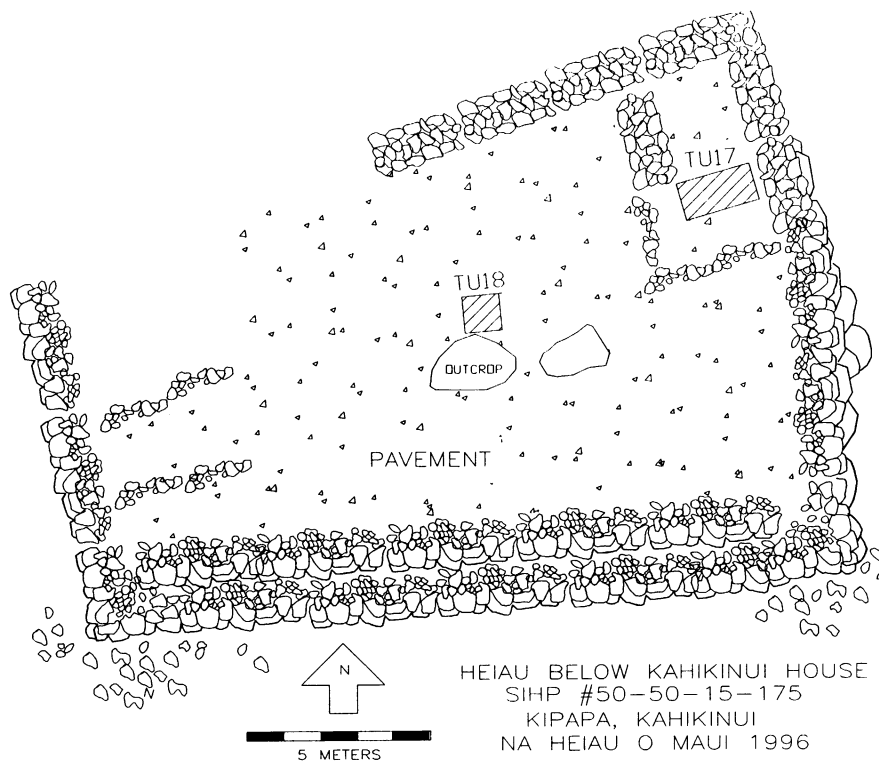


Figure 5.6 Plan-view map of Kahikinui 1 (Site 175).

Age: not yet dated; probably ca. A.D. 1650
Excavations: test unit 34, approximately 1 m²

Site 4247 is a small *hale mua* style *heiau* located near Site 3847. Architecturally, the site is similar to Nakaaha Heiau, as it is a notched enclosure that is relatively small. No features were found during excavation. Material culture recovered includes coral, pig bone, charcoal, and volcanic glass. Site 4247 has not yet been dated, but has been estimated to ca. A.D. 1650 based on stylistic criteria.

Nakaaha Ahupua'a

Site: 50-50-15-1156 (Nakaaha Heiau)

Location: Nakaaha, upland
Other site numbers: none
Architectural style: notched enclosure
Approximate internal area: 144 m²
Age: not yet dated
Excavations: test units 39-40, approximately 2 m²

Site 1156 is located to the east (Kaupō side) of Site 4279. It was first identified during the 1973 State Inventory of Historic Places. This site is a small *hale mua* style *heiau* consisting of a notched enclosure (Figure 5.7).

A total of 2 m² were excavated during the summer of 1996. No features were excavated and no material culture, other than charcoal was recovered during excavation. Nakaaha Heiau has not yet been dated, but its date is estimated at ca. A.D. 1800.

Site: 50-50-15-4279 (Unknown)

Location: Nakaaha
Other site numbers : CS-1010
Architectural style: two notched enclosures
Approximate internal area: 1,258 m²
Age: East enclosure constructed A.D. 1445-1665;
west enclosure A.D. 1650 or later
Excavations: test units 1-16, approximately 21.75 m²

Site 4279 is the largest *heiau* known in Kahikinui district (Figure 5.8). It was first described during the aerial survey of 1994 (Hammat and Folk 1994). Walker does not mention this site; Chapman (ms.) observed the large structure and photographed it, but it lay outside the boundaries of the 1966 survey area. We think it is a *Hale o Lono* temple from the discovery of pig bone and charcoal areas, and from the lack of general domestic implements inside the structure.

A total of 21.75 m² were excavated at Site 4279

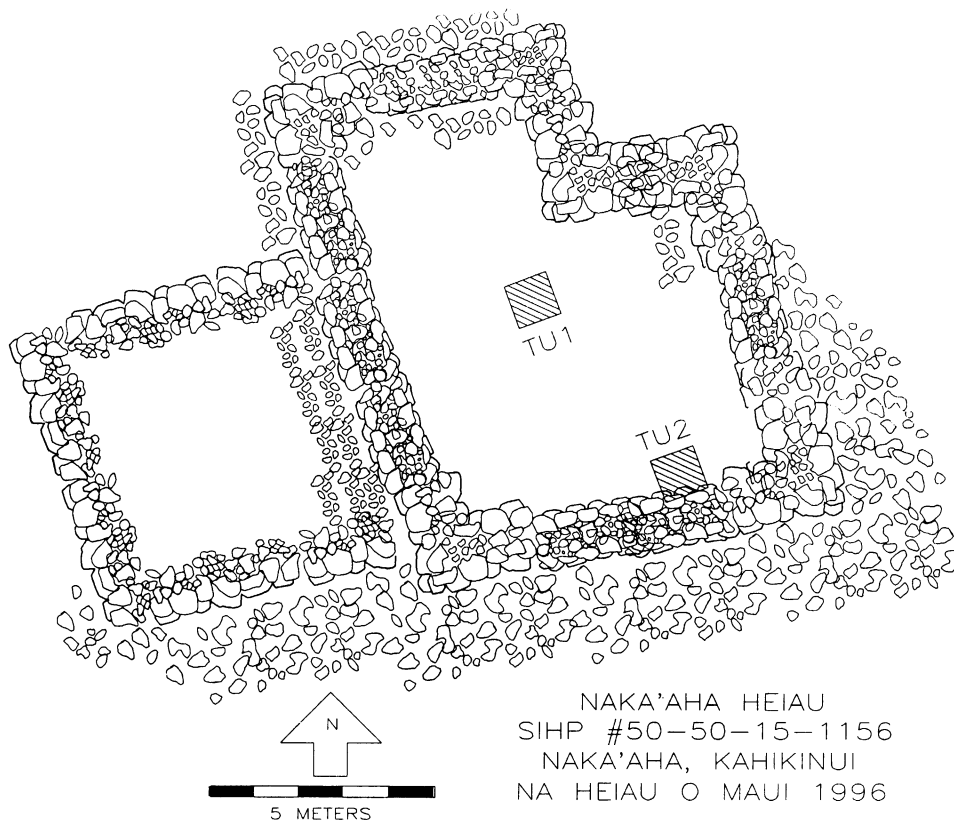


Figure 5.7 Plan view map of Nakaaha Heiau (Site 1156).

during the summer of 1996 (Figure 5.9). A total of three large features were located; two burn episodes (3, 5) and an *imu* (11). Material culture recovered consists of pig bone, coral, *kukui* nut, shellfish, adz fragments, basalt flakes, bird bone, sea urchin, land snails, *'ili'ili*, a bone awl, a worked shell piece, and a stone abrader.

An *imu* feature was uncovered in the smaller enclosure (to the west of the larger one) under a stone-paved floor. The *imu* contained large amounts of shellfish including limpet shell, and sea urchin, as well as some pig and bird bone. The upland enclosure contained only charcoal which may mean it was used to burn offerings.

Radiocarbon dating samples were taken from both enclosures. According to these dates, the larger enclosure was built between A.D. 1445-1665 while the smaller enclosure to the east was added sometime after A.D. 1660.

Mahamenui Ahupua'a

Site: 50-50-15-170 (Mahamenui Heiau)

Location: Mahamenui, near Kepuni Gulch
Other site numbers: Walker 170

Architectural style: enclosure
Approximate internal area: 115 m²
Age: unknown
Excavations: none

Mahamenui Heiau is a small enclosure style *heiau*. It was first noted by Walker during his 1931 survey, and is located east (Kaupō side) of Kepuni Gulch above the highway. The enclosure is about 115 m² in size. Walker noted that the south wall is built in three step-terraces. He also suggests a function of a rain temple used for crop fertility, presumably due to its location and small size.

Site: 50-50-15-172 (Kamoamoā Heiau)

Location: Mahamenui, at Polo'ae
Other site numbers : Walker 172
Architectural style: notched platform
Approximate internal area: 461 m²
Age: not radiocarbon dated; ca. A.D. 1650 based upon notching
Excavations: none

Kamoamoā Heiau is a small platform of the notched variety. It was first noted by Walker in 1931, and is located east off the highway. The enclosure is about 115 m² in area. Walker notes that the structure was converted to a goat pen because it possesses caves at the back end of the structure.

Other Heiau

There are numerous other references to *heiau* in Kahikinui. Most of them come from ethnohistoric sources with no locational records available. None of these have been visited by an archaeologist. They may currently exist, but are as yet undocumented.

Kahuahakamoā Heiau

This temple was first mentioned by Thrum (1918). An informant told him it was a *heiau* of Kahikinui, although Thrum himself did not visit it. Inez Ashdown, in her unpublished notes on *heiau*, indicates that Kahuahakamoā was used for ceremonies of marriage and that it “. . . is on the ‘Ulupalakua side of the Luala‘ilua hills in ‘‘Kahikinui’’ area, and was a paved arena where sportsman gathered to watch

wrestling (*lua*) or see the warriors training for war in more recent times’’ (Ashdown, n.d.).

Moomoku and Makapaiki Heiau

These site names are noted in the Hawaiian Ethnographic Notes (turn-of-the-century Hawaiian newspaper accounts translated by Mary K. Pukui, in the Bishop Museum Library). Moomoku and Makapaiki Heiau were also located in Luala‘ilua: ‘‘Luala‘ilua is the ahupua‘a. Moomoku the heiau. It belonged to the menehune. Makapaiki was the heiau. It belonged to the gods of this race of human beings. It is finished.’’

Keahuaiea, Pu‘u Kao, and Hoku-kano Heiau

These three *heiau* names are mentioned by Inez Ashdown (n.d.), and were also said to be located in Luala‘ilua. No other ethnohistoric information exists for these *heiau*. Ashdown notes: ‘‘Ke-ahu-a-i-ea Heiau is north-west, and closer [than Kahuahakamoā], to Luala‘ilua. North of Ke Ahu Aiea is the heiau Pu‘u Kao; south of there is Hoku-kano, and this is also the name of the hill upon which this heiau is standing’’ (Ashdown, n.d.).



Figure 5.8 Aerial photograph of Site 4279, view to the south.

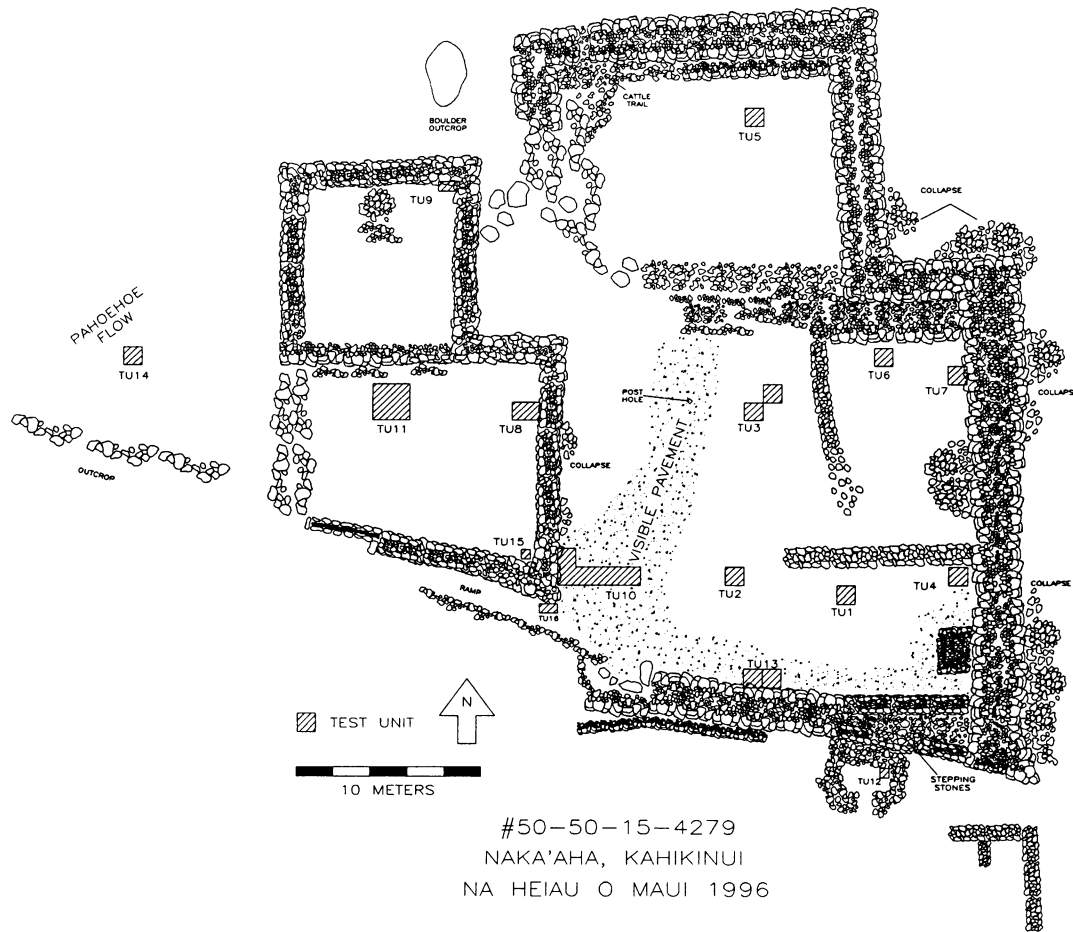


Figure 5.9 Plan-view map of Site 4279.

St. Ynez Church

Inez Ashdown (n.d.) also notes that the St. Ynez Church, with its incredible view, was built upon an old star-gazing *heiau*. No other information is available on whether or not this is true.

Discussion

Several preliminary observations can now be made regarding the location, distribution, age, and function of the *heiau* of Kahikinui. As a whole, these 26 temples represent the largest number of preserved temples for any of the twelve Maui districts (Table 5.2). The reason for this is the arid climate and sparse modern population of Kahikinui. The lack of development in the area is a key factor in the preservation of sites in general. Tourist areas such as Lahaina, or areas under intensive agricultural production such as Hāmākuapoko, are less likely to have as many preserved sites due to intensive commercial expansion and development. Windward areas, like Kipahulu

with its dense vegetation and a rugged coastline, may have fewer sites due to their inaccessibility. Yet despite an excellent rate of preservation, Kahikinui also has the smallest average temple size compared to most other districts. Ethnohistorically, Kahikinui was not known as a major political center and because of its relatively arid and harsh leeward environment, it may have been less populated relative to other districts such as Wailuku and Hāna. This may account for its relatively smaller-sized temples.

Within Kahikinui itself, the majority of *heiau* are located in the uplands. A total of eighteen *heiau* occur above the highway as opposed to eight temples in the coastal area. Local topography of these upland sites consists of a rid plains tapering from mountain to sea, punctuated with lava outcrops and finger ridges of hawaiite, alkalic olivine basalt, and ankaramite. Moderately sloping to steep soils consisting of developed volcanic ash and clinker (aa) lava are well-drained. Kahikinui is frequently buffeted by strong winds that shear around Haleakalā from the windward side of the island, and is

regularly engulfed with humid cumulus clouds that lay low against the mountain side and supplement an annual rainfall of 400 mm a year. Since it appears that the majority of archaeological sites are located in the uplands, it only makes sense that the majority of temples would be found there. Most of these sites probably served as agricultural *heiau*, rain *heiau*, or family shrines located about the houses and agricultural sites of the upland peoples. Many, of course, were probably built upon sacred areas such as outcrops, lava tubes, and hilltops.

Only four of the twenty-six *heiau* are located directly on the shoreline. These probably served as fishing shrines, since fishing played an important role in subsistence. Each of these coastal *heiau* are located in a cluster of habitation sites that represent coastal village areas. The largest clusters of *heiau* occur in the communities of Nakaohu and Luala'ilua. The biggest contrast between these two communities is that the cluster of Nakaohu *heiau* are located within a vast settlement of habitation sites and agricultural features. In contrast, most of the Luala'ilua temples are located upon rugged lava flows and nowhere near community settlements.

Nakaohu appears to possess better soil than Luala'ilua, since it consists of a ridge and swale topography that is ideal for soil collection and sweet potato production. Nakaohu has eight *heiau*, one of which is found on the coast. The remaining sites are concentrated north of the highway. Only three of the *heiau* have been excavated and the results indicate that many of the smaller *heiau* served as *hale mua* or men's eating houses. Site 4279, the largest *heiau* temple within Kahikinui, is located on the edge of the Nakaohu *heiau* cluster and is surrounded by a variety of habitation and community features. This large cluster of *heiau* in Nakaohu indicates the

importance of this region, most likely the district political and population center. This was probably the reason why Pico and his wife established Kahikinui House where they did; it is located at the probable district center.

Luala'ilua, in contrast, is covered with newer *pahoehoe* lava flows and is considerably more rocky and barren than Nakaohu. Thus, it is a little more surprising that a cluster of seven *heiau* appear here. Three *heiau* are located in the "barren" lava flows about the coastline, one is found directly upon the coast, and three temples are located around Luala'ilua Hills. The coastal *heiau* are mostly associated with fishing and *hale mua* functions. The three temples found upslope are more difficult to explain, given the fact that few other archaeological sites are present in this region. Most prominent is Koholuapapa Heiau, a possible *luakini* war temple. The location of Koholuapapa near Luala'ilua, and the presence of an arena and other temples mentioned by Inez Ashdown and others in an area without regular domestic sites, suggests this area around the Hills had a sacred and spiritual importance.

Architecture

Based upon the site maps, the majority of Kahikinui *heiau* appear to have been built in single building episodes. Another five *heiau* temples appear to have been constructed in multiple stages. The most complex temples are Site 4279 and Koholuapapa Heiau. Both are large temples, and both were constructed in more than a single building episode.

There are nine distinctive architectural styles represented in Kahikinui:

- 2 multiple-terraces (Nakaohu and Kīpapa)

Table 5.2 Distribution of surveyed temples by district (areas given in square meters).

District	Number	Average Site Area	Median Site Area	Total Area
Kahikinui	25	286	216	7,441
Kaupō	19	1,223	517	24,458
Hanā	16	1,184	307	18,942
Kula	15	448	342	6,720
Honua'ula	14	523	392	7,327
Wailuku	8	1,514	590	12,109
Ko'olau	6	407	351	2,440
Hāmākualoa	5	916	1,163	4,579
Ka'anapali	4	1,613	1,819	6,451
Lahaina	3	1,214	844	3,641
Kipahulu	2	4,283	4,283	8,565
Hāmākuapoko	0	0	0	0
All Temples	118	924 m²	416 m²	97,414 m²

- 1 platform (coastal Auwahi)
- 4 enclosures (upland Luala'ilua [2], Mahamenui, and Kīpapa)
- 2 multiple enclosures (upland Kīpapa)
- 1 enclosure with pavement (upland Nakaohu)
- 1 notched platform (coastal Mahamenui)
- 12 notched enclosures (coastal and upland Luala'ilua [4], upland Nakaohu [3], upland Kīpapa [3], upland Alena, and upland Nakaaha)
- 1 double notched enclosure (upland Nakaaha)
- 1 notched walled-terrace (upland Luala'ilua)

The most common architectural trait among the Kahikinui temples is the notched shape. A total of fifteen temples are notched in shape, which is 60 percent of all the Kahikinui temples, higher than the island-wide average. The majority of these notched sites are enclosures, with one double notched enclosure, and one walled-terrace, which is a terrace located on its downslope side and a wall on its upslope side.

Excavation

The midden materials recovered during our 1996 excavations are currently undergoing laboratory analysis. The material culture can be separated into five major categories: bone, stone, shell, coral, and charcoal. Preliminary bone analysis indicates the presence of fish, terrestrial mammal, and bird bone on most of the sites. Considerable amounts of shell at each of the excavated sites supports exploitation of the coastal resources. Coral can be classified in two groups: branch and chunk. Branch coral is usually correlated with religious offerings and chunk coral serves many domestic purposes such as abraders and even pavement for coastal sites. Preliminary stone identification suggests the use or construction of basalt

tools on sites and the presence of *'ili'ili* indicates a possible pavement or use in religious activities. Charcoal is usually considered an indication of human activity, unless a natural disaster can be associated with a burn feature. Charcoal deposits can be separated into two categories: domestic or religious. The presence of charred midden such as coral or bone indicates a possible sacrifice, whereas, burn episodes containing unburned midden is considered to have served a domestic function such as the *imu* feature found at Site 4279. The discovery of charcoal is important for determining the absolute dates of sites.

Chronology

Radiocarbon dates have been obtained for five of the excavated sites from the 1996 season. Radiocarbon and artifactual dates indicate eight separate building phases (Figure 5.10, Table 5.3). Koholuapapa has three distinct periods of occupation and is currently the oldest site of those dated. Three separate radiocarbon dates have been submitted for this site. The oldest section of Koholuapapa is also the highest portion of the site, a natural outcrop with a faced outcrop altar. A radiocarbon sample was analyzed from Test Unit 19, near the face of the rock altar. The radiocarbon date for this portion of the site is A.D. 1260-1425. Koholuapapa was later expanded with the addition of stonework around the collapsed lava tube on the east (Kaupō side) end of the site. A radiocarbon date from Test Unit 26 located near the lava tube indicates that the expansion of Koholuapapa took place as early as A.D. 1440. The next addition at Koholuapapa was the large enclosure added to the upslope side of the site. According to radiocarbon dates, this enclosure dates to approximately A.D. 1675. The last building addition added to Koholuapapa was a post-contact

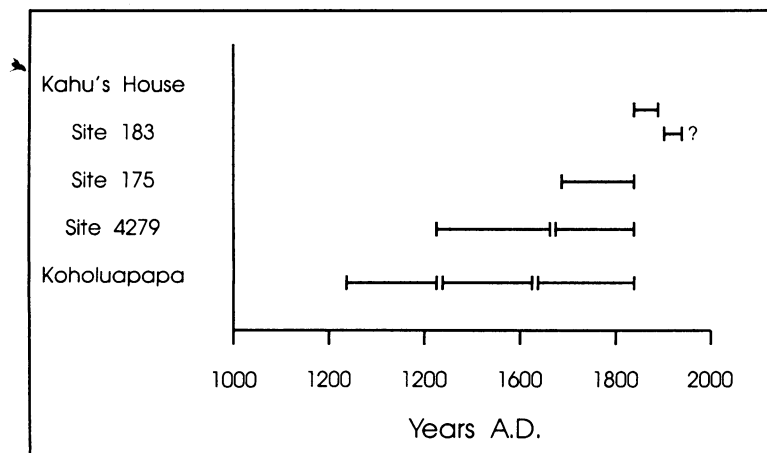


Figure 5.10 Approximate ages of the nine building episodes dated by radiocarbon dating or by diagnostic post-contact artifacts (Kahu's House).

Table 5.3 Kahikinui temple radiocarbon dates.

Site	Test Unit	Depth (cmbs) ¹	Beta Number	Adjusted Age	Interpreted Age (2 Sigma)
4279	4	90-101	97500	350 ± 60 B.P.	A.D. 1435-1665
4279	11	22-28	95906	200 ± 70 B.P.	A.D. 1520-1570
1386	19	19.5-29.5	95909	650 ± 70 B.P.	A.D. 1630-1950
1386	21	60-70	95910	50 ± 70 B.P.	A.D. 1260-1425
1386	26	0-110	95908	300 ± 80 B.P.	A.D. 1675-1775
175	17	0-62	95905	170 ± 60 B.P.	A.D. 1800-1945
183	32	23-31	95904	100.2 ± 0.9 B.P.	A.D. 1440-1690
					A.D. 1735-1815
					A.D. 1925-1950
					A.D. 1645-1950
					A.D. modern dates

¹ cmbs = centimeters below surface

cattle wall enclosure attached along the north or upslope side, probably sometime after A.D. 1850.

Other sites that date to ca. A.D. 1650 include Site 175, as well as the notched *heiau* which have been dated using architectural design traits. Interestingly, Site 4279 consists of two notched enclosures, one of which one dates as early as 200 years prior to the when the majority of notched structures were built. More radiocarbon dating is required to clarify the nature of construction at Site 4279.

Site 183 dates to modern times, yet no post-contact midden was recovered during excavation. This suggests that the charcoal recovered from the site may have been contaminated by modern charcoal.

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