

SOURCE:

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Chapter 3 Historic Context

Introduction

To the extent that it is relevant to archaeological and historical investigations at PMRF, the cultural and historical setting is reviewed as six topics: (1) traditional cultural geography; (2) traditional land use; (3) early historic land use; (4) commercial agriculture era; (5) early twentieth century prior to World War II, and (6) World War II and Cold War to 1990s.

WHAT FOLLOWS IS THE ORIGINAL "TRADITIONAL LAND USE" SUBSECTION:

Traditional Land Use

The Mānā Plain is a large geological landform covering much of the coastal terrain of west Kaua'i. Traditions pertaining to Mānā-Kekaha refer to this region as being important for habitation, agriculture, and ceremonial activities, including use of the dunes as burial grounds. The Mānā area was especially known historically for its offshore fishing grounds, wet taro cultivation in the marshes inland of the dunes, and the *'iliahi* (*Santalum* spp.) or sandalwood forests in the uplands (Handy and Handy 1991:411; Maly and Wulzen 1997:23). The coastal dune and back beach areas were the setting for temporary fishing camps that were linked to permanent communities at the foothills. In late pre-Contact times (1700s), the seaward beach ridge in the northern Mānā Plain was likely a typical lowland grassland and shrubland in a dry leeward zone (Carson 2004:7). From the inland edge of the plain, the people of Mānā had ready access to wetland and upland forest resources (Tomonari-Tuggle and Yoklavich 2005:80-83).

Mānā was equally famed as one of the *leina a ka 'uhane*, leaping or departing places of souls, based on the extensive burials in the coastal sand dunes (Flores and Kaohi 1992; Maly and Wulzen 1997:23; O'Hare and Rosendahl 1993:4; Wulzen and Jensen 1995:4). Gonzalez and Peyton (1999:20) state that archaeologists and elders have indicated that a *leina a ka'uhane* is located on the cliffs above the Kamokala Caves section of PMRF. Kahelu *heiau* was erected one ridge north of Kamakala Ridge at a point where ancestral deities and entities would come through openings in the heavens from the

ʻaumakua (family or personal god or deity) realm (Flores and Kaohi 1992:106, 217; Gonzalez and Peyton 1999:11; Pukui and Elbert 1986:32).

Permanent settlements likely stretched along the inland edge of the Mānā Plain. Small seasonal fishing communities were scattered along the coast, concentrating near optimum localities such as breaks in the reef where canoes could be launched or where reefs provided rich habitat for nearshore marine resources. Some of these temporary camps occurred on the protected, lee sides of the high dunes from Nohili Point to Polihale. The dunes provided them protection from storm waves, floodwaters, and strong onshore winds while giving them easy access to ocean resources. Taro was cultivated in portions of Kolo Swamp adjacent and *mauka* (toward the mountains) of these house sites. Freshwater was obtained from springs, intermittent streams, and percolating water near the ocean. Houses and religious structures (e.g., *heiau*) were built on the ridges, along the cliffs, and in the valleys and foothills overlooking Mānā Plain and its wetlands, with the exception of ʻElekuna *heiau* (Bennett 1931:102-103; Flores and Kaohi 1992:33, 44; Tomonari-Tuggle and Yoklavich 2005:80-83); Elekuna [ʻElekuna] is shown on an 1891 map near Puuheihei [Puʻuheihei] (see **Figure 3.2**). During his 1928–1929 island survey, Bennett (1931:102) observed house sites marked “by single rows of stones . . . or by low walls” along the inland side of the dunes at the northern edge of the marshlands in the northern portion of Barking Sands.

Two primary land routes extended from the east onto the Mānā Plain. One stretched along the base of the cliffs and ridges and the other along the shoreline. Other trails ran inland from the coastal plain to the mountains (see **Figure 3.4**). People also traveled by launching canoes from beaches with unobstructed reefs and passageways such as at Palaiholani, Keanapuka, Poʻoahonu, Keawanaiʻa, and Polihale (Tuggle and Tomonari-Tuggle 2004:149-150). After heavy flooding from Kona storms, it was possible to traverse the swamps and marshlands of the Mānā Plain by canoe from Mānā to as far south as Waimea (Bennett 1931:6) or from Waimea as far inland as Kolo or Kaunalewa (Faye 1981; Flores and Kaohi 1992:33, 77, 125; Knudsen 1991:99; McGerty and Spear 1997c:9-10; Tuggle and Tomonari-Tuggle 2004:150). Kennedy (1991a:10) reports that “Hawaiians bringing taro by canoe from the Na Pali Coast area would come ashore at Polihale, transport both canoes and cargo across the sand spit, and continue their journey to Kekaha and Waimea on the lagoon.”

The people of Mānā were noted primarily as fishermen. They took advantage of the rich ocean channel between Kauaʻi and Niʻihau known as Kaulakahi (Flores and Kaohi 1992:13, 114; Tuggle and Tomonari-Tuggle 2004:149). Fishing also occurred in the swamps and ponds on the coastal plain between Polihale and Waimea. The swamp areas of Limaloa, Kawaiele, Nohili, and Kolo were used as brackish-water *loko puʻuone* fishponds (Flores and Kaohi 1992:26, 31; Kikuchi 1987:5, 9; Kilauano 1991). They were fed by freshwater runoff from mountain streams, artesian springs, and water that percolated from adjacent aquifers (Flores and Kaohi 1992:31). Some of these natural ponds were altered by digging ditches through the dunes that allowed seawater to flow into the ponds during high tide (Gonzalez et al. 1990a:27; Kikuchi 1987:9; Tuggle and Tomonari-Tuggle 2004:149). Among the fish raised in these ponds were *ʻanae* (mullet), *awa* (milkfish), *āholehole/āhole* (flagtail), *pāpio/ulua* (jackfish), *ʻōʻio* (bonefish), *nehu* (anchovy), *awa ʻaua* (tarpon), *ʻoʻopu* (goby), *kākū* (barracuda), *moi* (threadfish), *weke* (surmullet), and others (Flores and Kaohi 1992:31). The Mānā wetlands also provided an important habitat and nesting area for Hawaiian water birds, including *koloa maoli* (duck), *ʻaukuʻu* (night heron), *āeʻo* (stilt), *ʻalae ʻula* (gallinule), and *ʻalae kea* (coot) (Tuggle and Tomonari-Tuggle 2004:147).

The plain’s aridity limited the amount of farming that could be done, particularly irrigated agriculture (Tuggle and Tomonari-Tuggle 2004:149). Pukui (1983:271) states that in ancient days, the people of

Mānā did little *poi* making except at places like Kolo, where taro was grown. In addition, because taro cooking and *poi* making was done elsewhere, the people of Mānā were said to live on “smokeless food.” Handy (1940:61) indicates they grew wet taro at the northern end of the Mānā swamp, near Barking Sands. The wet taro was grown in soil piled on rafts that were floated on the marshes, were partially submerged, or possibly rested on the soft bottoms (Flores and Kaohi 1992; Handy and Handy 1991:411, 419; Pukui 1983:232). The people of Mānā also traded with the people on the nearby island of Ni‘ihau (Tuggle and Tomonari-Tuggle 2004:149) and exchanged fish and dryland products (such as gourds) with taro producers living in the uplands (Flores and Kaohi 1992:77).

The mountain regions provided places of refuge, caves for burials, and materials for house construction, including timber, *pili* (*Heteropogon contortus*) grass, and volcanic stones (Bennett 1931; Flores and Kaohi 1992:33). The upper slope trails extended to the Nā Pali coast. *Koa* (*Acacia koa*), *‘iliahi* (*Santalum* spp.), and *kauiha* (*Alphitonia ponderosa*) were harvested (McGerty and Spear 1997:12). Some were felled for canoes, others for household items, implements, medicines, and religious purposes. Bird catchers and canoe and paddle makers were among those who dwelled and worked for long periods in mountain areas (Flores and Kaohi 1992:33, 44). Melons, taro, sweet potatoes, bananas, and other food crops were grown in wet areas on the plain and at the mouths of narrow gulches and valleys that fed onto the plain (Flores and Kaohi 1992:33, 114; Gonzalez and Peyton 1999:10; Sweeney 1994:33). Resources gathered from the coastal plain included seaweed, salt, *‘a‘ali‘i* (*Dodonaea* spp.) shrubs for firewood, *hi‘aloo* (var. of *‘uhaloo*, a weed; *Waltheria indica* var. *Americana*) and other plants for medicine, and *makaloo* (*Cyperus laevigatus*, a perennial sedge) and *neki* (bulrush) for weaving. The *neki* and *makaloo* were used in plaiting mats and other articles (Pukui and Elbert 1986: 227, 363; Tuggle and Tomonari-Tuggle 2004:150).

Beginning in pre-Contact times, the coastal dunes also were used as burial grounds. Human remains have been found in the sands of PMRF Barking Sands, from the north end of the installation to Waiokapua Bay (Tomonari-Tuggle and Yoklavich 2005:80-83). Waiokapua Bay is depicted on **Figure 3.8** below. Dye and Dye (2009a:4) suggest that the concentration of burials and *heiau* in the northern dunes probably reflects a large settlement inland and north of PMRF, rather than dense settlement along the coast. Drolet and Powell (1998:16) say that the coastal dunes served both as a cemetery area and as a seasonal procurement zone for harvesting marine resources. References to burials in the Nohili area appear in oral traditions and literature (e.g., Fornander 1917). Reportedly, Pō (abode of the dead) “lies under the ocean just outside Polihale” (e.g., Knudsen 1991; see McGerty and Spear 1997c:11).