## Elizabeth Anderson

## The Cultural Landscape at Ke`anae and Wailuanui

Taro plant.Photo by the author.

e`anae, the subject of an extensive cultural resource study sponsored by the Maui County Planning Department, is a noted landmark on the island of Maui. The rugged peninsula juts into the sea, jagged black rocks smashing the waves to white spray, while the rest of the coast is high verdant cliffs where the highway perches, curving in and out of steep gulches. But the interior of Ke'anae peninsula resembles a quilt in shades of green, created by small irrigated taro patches, along with clumps of bananas, noni, and ti. In fact, it is a man-made garden, since much of the soil was brought onto the rugged  $a^{a^*}$  lava by hand. Water is diverted from Palauhulu stream shortly before it reaches the ocean and is brought down to Ke'anae by means of a flume where it nourishes each of the taro ponds in turn, before it is released to the sea. A similar quilt or mosaic of taro fields is found in the neighboring valley of Wailuanui. These two areas contain some of the oldest land-use patterns in Hawai'i, which have persisted to the present day, surviving technological advances and changes in cultural and governmental systems. The taro plant (Colocasia esculenta) is a

social, nutritional, and spiritual foundation of the

Hawaiian culture. Nowhere else in the world was

Hawai'i. It was the staple for hundreds of thou-

a taro cultivation more developed than in

Taro fields— Ke`anae. Photo by the author.



sands of Hawaiians before European contact. Planning, development, and maintenance of well-



engineered irrigation for taro pond fields required a stable political system and community cooperation. All parts of the taro plant are used for food. Not only is poi made from the corms, but the stem is used in soups and stews, and the leaves are used for laulau and lu'au dishes mixed with fish, squid, or meat. Taro is also connected to the origin stories of the Hawaiians. The child Haloa, stillborn and buried, became a taro plant. His younger brother, also named Haloa, became the ancestor of the people. In the Hawaiian language, parts of the taro plant and its growth patterns bear the same names as the human body and the Hawaiian family. The plant has a piko (navel) and the stem is called the ha, which is also a word for breath, the basis of life. The main plant center is the makua (parent); the smaller plants budding out of the makua are the öha (children or offspring).

Taro is the source of many Hawaiian proverbs such as: I maika'i ke kalo ka 'ohä—"the goodness of the taro is judged by the young plant

it produces,"-a metaphor for the parents being judged from the behavior of their children. The title of the study of the cultural landscape of Ke'anae and Wailuanui (produced for the county of Maui in 1995 by Group 70 International, Inc., Davianna McGregor, Ph.D., and Cultural Surveys Hawai'i, Inc.) is drawn from another Hawaiian saying: Kalo kanu o ka äina, "taro planted on the land" interpreted to mean "Natives from the land from generations back." (Pukui 1983)

The Maui County General Plan calls for preservation of the unique qualities of Maui's communities, but it does not define those unique qualities. The 1994 Häna Community Plan more specifically calls for "preservation and enhancement of the current land-use patterns which establish and enrich the region's unique and diverse qualities." The taro landscape at Ke'anae and Wailuanui manifests a viable traditional economy which has maintained historic and cultural integrity, traditional lifestyle, and social continuity to an equal or greater extent than any of the other taro growing landscapes in Hawai'i. Physical isolation, economic constraints, the characteristics of the environment itself, and the traditional attitude of the community have all contributed to this integrity. Therefore, the Maui Planning Department decided to use a cultural landscape approach to define the patterns and practices that add up to a unique community. Ke`anae and Wailuanui were chosen for the study with the purpose of guiding land-use decisions which will affect traditional farming and cultural practices, as

well as the physical appearance, of many of Maui's rural communities.

Using federal monies through the Certified Local Government Program, the recommendations of the Hawai'i State Task Force on Cultural Landscapes (1994), and National Register Bulletin 30 *Guidelines for Evaluating and Documenting Rural Historic Landscapes*, county planning staff recruited a research team. The skills of archeologists, ethnographers, architects, and planners were used to conduct the study. (The CLG funding was supplemented by *pro bono* services from members of the consultant team who made a professional commitment to the quality of the project.) The researchers worked closely with members of the community; interviews, visits, and field trips were an integral part of the study. The Ke'anae region has a long history of relative isolation from the rest of Maui. The local topography is rugged: deep valleys and high cliffs cut into the sides of the great shield volcano, Haleakalä; sea cliffs and boulder beaches stretch along the coast. Abundant rainfall creates perennial streams and encourages vigorous forest growth. Until the Häna Belt Road was completed in 1926, the area was largely inaccessible except by foot, horseback, or boat. This physical isolation has insulated the community of Ke'anae and Wailuanui, allowing it to retain many characteristics of local indigenous culture which have been lost in more readily accessible areas of Hawai'i.

The cultural landscape of today developed in an historical context of changing land tenure systems, influences of Chinese and other immigrants to Maui, and advancing technology. Records of the Hawai'i Land Commission document land-use during the 1850s. Testimonies given by applicants for land awards reveal locations, boundaries, land usage, place names, and a family's investment of time and custom in an area. Some 490 taro patches of various sizes were claimed at Ke'anae and Wailuanui. Other crops listed on the claims include dryland taro and sweet potatoes, *olana* (renowned as the best material for cordage), and *hala* (Pandanus—used for weaving). Several claims include pools and fishponds.

The Ke`anae peninsula is a recent lava flow. The story goes that a chief of the Ke`anae region was involved in rivalry with neighboring Wailua. Determined to increase taro productivity, he set all his people to work carrying soil in baskets from the valley down to the lava point, which had been used only for fishing. The soil and the banks enclosing the patches were transported and packed into place in the course of many years. The legend implies that intensive planning and labor required to redesign a barren a'a peninsula into an irrigated, productive landscape. This is a well-engineered cultural adaptation of a specific environment. Taro farming today is a hand-reared crop, better defined as horticulture, in contrast to modern mechanized large field agriculture.

Vegetation in the region today is primarily of Polynesian or foreign introduction. Taro, coconut, and *ti* were all brought by the Polynesians as essential cultigens for settling new islands. Forests of eucalyptus and ironwood were planted by Civilian Conservation Corps in 1933. Ginger, African tulip trees, and other garden plants have become established in the forests along the highway and in the study area. Most endemic vegetation has retreated to the uplands.

Changing technology, economics, and lifestyles have affected systems of circulation and settlement. Convex earthen banks around the taro



Irrigated taro

author.

fields. Photo by the

pondfields serve as dividers between the fields and still provide trails for foot traffic within the community. Fences are scarce and people walk through each others' land and fields. Road circulation is limited to the periphery of Ke`anae and Wailuanui Homestead Road. Ninety percent of all residences and public buildings in the region are located along these roadways. Increased dependence on jobs "outside" is causing a change in settlement pattern with residences and stores locating up along the main road. The Ke'anae Landing (Hawai'i Inventory of Historic Places 1992) was the area's link to the sea and commercial transportation until the 1920s. The Pi`ilani Highway, an improved trail created by the pre-contact Hawaiians for overland travel, is still found in many areas along the coast, though erosion and aggressive vegetation have affected it.



Taro patches, Ke`anae peninsula c. 1934.Courtesy Bishop Museum.

Archeological sites are present and some have retained their structural integrity. The taro fields at Ke'anae were listed on the Hawai'i State Register of Historic Places as a result of this study. A comparison of the 1994 map of the fields with a map made in 1903 of Land Commission Awards shows that the layout of the fields and the configuration of water flow through them has not changed. Given the complex layout and the constraints of the topography, it is likely that the configuration of the Ke'anae taro field system has remained the same since its initial layout long before European contact. A thorough study of archeological sites in the area has a high potential to yield information on the origins, chronology, and development of Hawaiian taro cultivation and the development of the associated Hawaiian community (Hammatt, 1995).

The architecture of the community is consistent with a plantation vernacular residential style: hipped roofs made of corrugated metal, wide overhangs, porches, double-hung windows with broad trim, single wall construction, and uncomplicated interior plans, with a modest size of 500 to 1000 square feet. Two churches dating to the 1860s and the 1912 Ke`anae School have each been listed on the National Register of Historic Places. Several bridges in the region have also been determined eligible for listing on the register, some for their design and construction, but generally for their role in overcoming the challenge of providing reliable surface transportation through the rugged Ko`olau district to connect central Maui with Häna.

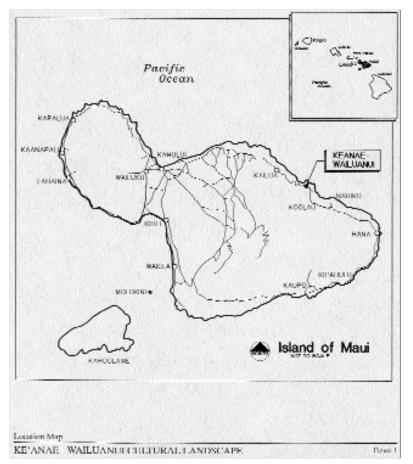
The landscape was also studied in terms of traditional cultural practices, such as fishing and gathering. This became an entire section of the study which documents the Hawaiian perspective on the use of land, reaching beyond subsistence practices to traditions and values. It is clear that the Ke'anae-Wailuanui cultural landscape, from the perspective of the people whose families have lived in the region for generations, is also a traditional cultural property (National Register Bulletin 38).

The Ko'olau Ditch, which taps the East Maui watershed for plantation crops and domestic water on the other side of Haleakalä, is also important in the traditional cultural practices region. It provides access to the mountain for hunting and collecting (while diminishing the surface flow) and the stream wildlife which have been used by the Hawaiian people since their settlement of the island of Maui.

The inventory of components includes types of structures, clusters, boundaries, open areas, and viewing points. Landscape use patterns are considered in terms of spatial organization and the natural determinants of settlement and construction. Taro cultivation has affected land tenure in this region, giving it a scale and variety that completely differs from the huge plantations and ranches which dominate most privately held land in Hawai'i.

The Ke'anae-Wailuanui cultural landscape was found to be significant under all four criteria of the National Register and an additional criteria used in the state of Hawai'i because it also represents an important resource in the perpetuation of traditional Hawaiian cultural practices. The area manifests integrity in terms of spatial organization, physical setting, and historic associations. Other cultural influences have been assimilated, and the region is a modern community in many ways. However, there remains an unbroken relationship to the foundations of Hawaiian culture through the traditional cultivation of taro, the major component of the landscape.

Planning issues are approached in terms of threats to the integrity of the region. The recom-



mendations are intended to enhance vitality as well as to maintain community character.

Hundreds of tourists daily travel the scenic Häna Highway, burdening the narrow road and bridges as well as state parks along the road. Tourists need better guidelines to structures and areas which are accessible to them. Residents should have greater opportunities to profit directly from the tourists, with greater commercial opportunities than regulations for the agricultural district currently allow. Public facilities, particularly the Ke`anae Arboretum and scenic overlooks, must be improved to accommodate greater numbers of parked cars to give tourists the opportunity to observe the scenic and cultural area without interfering with the residents' use of their own community.

Invasive plants need controls, which government agencies manage. Also, the yellow apple snail has been a problem to taro farmers for more than six years, and control of the snails, which were imported as a food crop themselves, is essential for the health of taro crops.

Protective measures such as covenants and easements for exceptional open space resources and viewsheds should be implemented. State and county engineers will need to consider the character-defining elements of the historic bridges in making decisions to repair and improve the highway. Design should be approached in terms of a rural community; roads, bridges, and subdivisions should not be required to meet urban standards.

The county government has provided property tax relief to owners of lands in active taro production; however, assistance in maintaining the local irrigation system, further incentives to community development, and an awareness of the significance of the cultural landscape will help maintain the identity of the region.

## Note

A'a is a rough, jagged lava rock formation that contrasts with the smooth, unbroken *pahoehoe* type of lava formation.

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Elizabeth Anderson works as a planner for the County of Maui Planning Department. She uses experience in anthropology and archeology to apply cultural resources management to community planning. She is a graduate student in the University of Hawai`i Historic Preservation Program. The study of Ke`anae and Wailuanui was named the outstanding project of the year by the Hawai`i Chapter of the American Planning Association in 1995.