

Appendix C. Historical & Archaeological Site Plan

This appendix summarizes information concerning archaeological sites and historic properties within the Mauna Kea Science Reserve (MKSr). The information presented here was reported by McCoy and Nees (2010)²² as part of an Archaeological Inventory Survey of the MKSR conducted on behalf of the University of Hawai'i between 2005 and 2009.

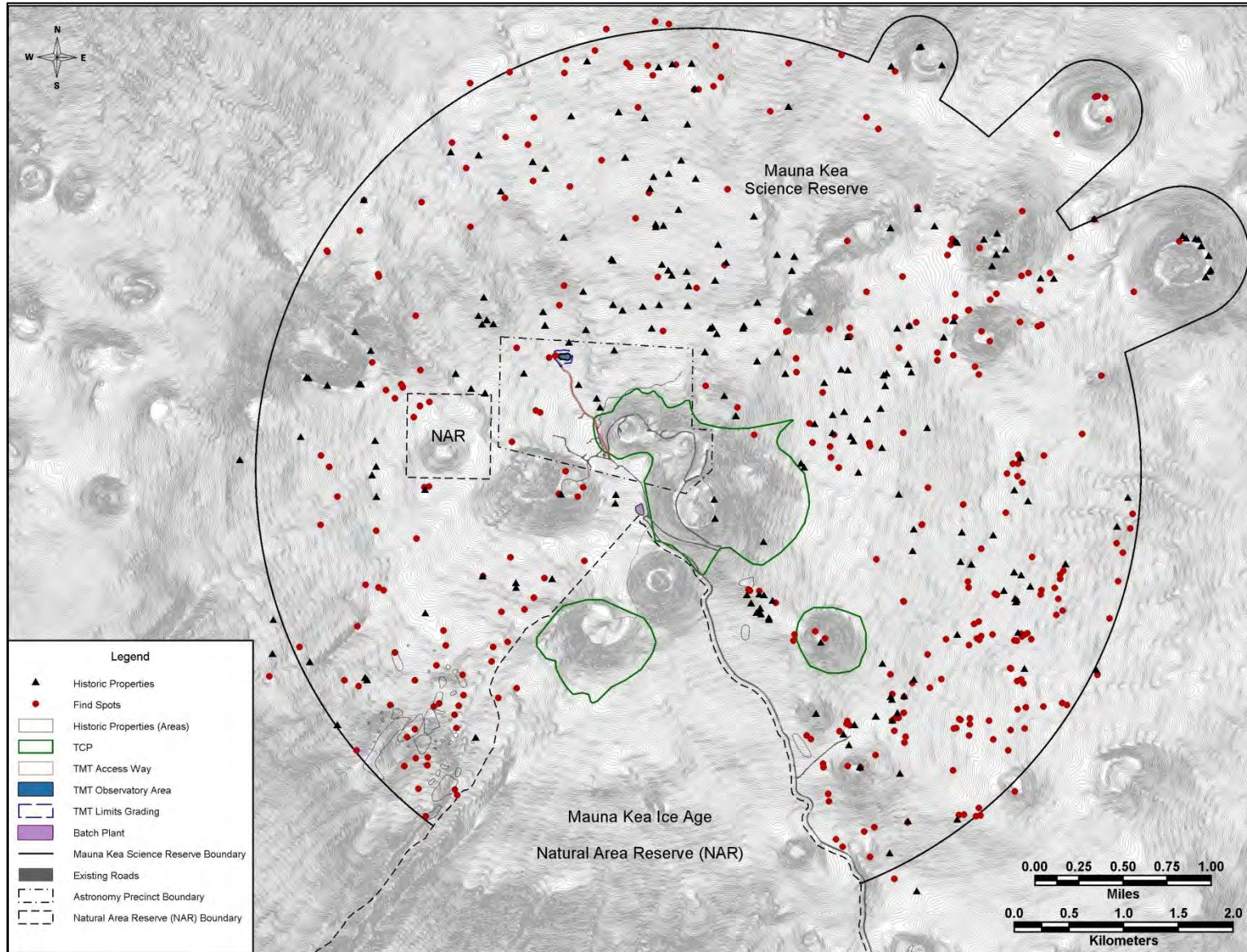
The inventory survey recorded a total of 263 sites. This number includes 95 previously identified sites and 168 new sites. Figure C.1 shows the general distribution of historic properties. Table C.1 summarizes the number and variety of historic property types found in the MKSR. The historic properties include two previously identified traditional cultural properties, and 261 examples of what are commonly called archaeological sites. Shrines are the most common functional site type. The next most common category are sites located in the Mauna Kea Adze Quarry Complex which consists of: (1) the quarry proper, which is defined as the source areas of tool-quality basalt, and (2) diverse activity remains located outside of the quarry proper as just defined, but which are directly linked to the quarry because of the presence of adze manufacturing by-products (e.g., cores, flakes), hammerstones and unfinished adzes in various stages of completion. Approximately 11 percent of the sites (29) were classified as burials or possible burials. Two possible burial sites have associated lithic scatters comprised of adze manufacturing by-products that suggest the possibility of adze maker interments. They are included in the list of sites that make up the Mauna Kea Adze Quarry Complex. The remainder of the historic property inventory is represented by small numbers of diverse site types.

Table C-1: Historic Property Types in the Mauna Kea Science Reserve

Functional Site Type	Number	Percent Total (%)
Traditional Cultural Properties	2	0.76
Shrines	141	53.61
Mauna Kea Adze Quarry Complex Sites	67	25.47
Burials and Possible Burials	29	11.03
Stone Markers/Memorials	15	5.70
Temporary Shelters	3	1.14
Historic Campsites	2	0.76
Historic Transportation Route	1	0.38
Unknown Function	3	1.14
TOTAL	263	99.99

²² McCoy, Patrick, Nees, Richard, Final Report, Archaeological Inventory Survey of the Mauna Kea Science Reserve, August 2010.

Figure C-1: Historic Properties and Find Spots within the Mauna Kea Science Reserve



Source: McCoy & Nees (2010)

Traditional Cultural Properties

In 1999, SHPD identified three areas on Mauna Kea as traditional cultural properties (TCPs). Two of the three, Kūkahau_ula and Pu_u Līlīnoe are located in the Science Reserve, the third, Pu_u Waiau, is located in the Natural Area Reserve (NAR). The boundaries of the three TCPs on Mauna Kea were drawn based on geological boundaries of the cinder cones and, in the case of the summit, a series of overlapping, contiguous cinder cones which include Pu_u Wēkiu, Pu_u Kea, Pu_u Hau_oki and at least one other unnamed cone. In the case of Kūkahau_ula, the boundaries are also based in part on the near total absence of archaeological sites on the summit. The summit thus stands out from the rest of the cultural landscape which is dotted with shrines and other cultural remains.

Shrines and Possible Shrines

Shrines are by far the most common site type in the UH Management Areas. A total of 141, or 54 percent, of the 263 historic properties are shrines that, based on present evidence, are non-occupational religious structures unrelated to the adze quarry. This number includes possible shrines, where some doubt exists about the presence of uprights because none were found in a standing position. It is possible that the construction of some shrines was never completed or the uprights were removed at a later date.

The quintessential characteristic of all of the sites on Mauna Kea that have been interpreted as shrines is the presence of one or more upright stones that the Hawaiians called *‘eho* or *pohaku ‘eho*, which translates as “god-stone”. The conventional view of these and other kinds of Polynesian “god-stones” is that they were “places for the gods to inhabit,” or “abodes of the gods,” as opposed to icons or actual representations of the gods.

Mauna Kea Adze Quarry Complex

The Mauna Kea Adze Quarry Complex consists of two physically discrete but functionally interrelated parts: (1) the quarry proper, which is defined as the source areas of tool-quality basalt, and (2) diverse activity remains located outside of the quarry proper. Sites located outside of the quarry proper include isolated adze manufacturing by-products (e.g., cores, flakes), hammerstones and unfinished adzes in various stages of completion found by themselves and also found with shrines and possible burials. One of the most important sites is a ritual complex that consists of multiple shrines, enclosures and a lithic scatter.

Burials and Possible Burials

The survey identified 29 sites with a total of 48 features in the MKSR that have been interpreted as burials or possible burials. Of the 48 features, five are confirmed burials and 43 are possible burials. For the sites classified as possible burials there are compelling reasons, such as the topographic location and morphological characteristics of the structures, to believe that these sites are indeed burials, but because human remains were not seen at the time they were recorded they are classified as possible burials.

Stone Markers/Memorials

One of the more ambiguous classes of sites are piles or stacks of rocks believed to be markers of some kind or memorials to a person or event. In all but a couple of cases the actual function is unclear. There are 15 sites that may have been survey markers, piles of stones left by unknown visitors as memorials of their visit to the top of a cinder cone or way-markers along an unmarked trail.

Temporary Shelters

The evidence for “habitation” in the most general sense of the word in the MKSR is sparse. Crude stone walls were found at various localities in the MKSR, usually in association with other features, such as lithic scatters. Three sites consist of walls without associated artifacts. Two to a maximum of four walls were found at three sites. Some are linear, while others are roughly C-shape in plan-view. A walled overhang shelter was found directly below a ridge-top shrine at one site. All of these remains are interpreted as temporary shelters based on their morphology and environmental setting.

With the possible exception of one walled rockshelter, there is no evidence that any of the shelters were occupied overnight. At least there is no evidence of a fire pit, although the evidence could be buried beneath the surface. With the possible exception of the walled overhang shelter there is no means of dating any of these sites, which are probably either late prehistoric or historic in age.

Historic Camp Sites

One and possibly two of the camps occupied by the United States Geological Survey (USGS) survey team in 1925 were found on the northern and northeastern slope of the mountain near Puu Māhoe and Puu Mākanaka.

Historic Transportation Routes

The survey identified direct evidence of the Umi Koa Trail in close proximity to the route shown on the USGS Mauna Kea Quadrangle maps. How long the trail was used to transport visitors from the Hāmākua coast is unknown.

Unknown Function

There are three sites with a total six features whose function could not be determined. A large number of these features are stone mounds and rock piles, which is one of the most common formal feature types found in the project area.

Other Cultural Resources

Cultural resources in the MKSR include a large number of remains that at present cannot be classified as historic properties or sites, as normally defined in State and Federal laws, but which nevertheless need to be considered in developing appropriate management strategies. These sites, referred to as “ifid spots,” are cultural resources that are either obviously modern features (e.g.,

camp sites with tin cans, pieces of glass and other modern material culture items), or features that cannot be classified with any level of confidence as historic sites because of their uncertain age and function (e.g., a pile of stones on a boulder). A total of 339 find spots were found in the 2005-2009 survey. Figure H.1 includes the location of find spots within the Science Reserve.

Mauna Kea Summit Region Historic District

The Science Reserve is situated within the Mauna Kea Summit Region Historic District -- Statewide Inventory of Historic Places (SIHP) No. 50-10-23-26869) -- as defined in the *Mauna Kea Historic Preservation Plan Management Components* (DLNR Historic Preservation Division, 2000). The District includes a concentration of significant historic properties that are linked through their setting, historic use, traditional associations, and ongoing cultural practices. The properties include the site types described above. All of these types of historic sites are contributing properties to the Historic District (McCoy & Nees 2010). The Historic District has been determined by the State Historic Preservation Division (SHPD) to be significant under all five criteria (A, B, C, D and E), as defined in Hawaii Administrative Rules §13-275 -6. The exact boundaries of the Historic District have not been formally established.