PATTERNS ON THE LAND: LANDSCAPE ARCHAEOLOGY

AT ANNADEL STATE PARK

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ABSTRACT

Presented are preliminary results of a cultural resources study, highlighting the utility of the research strategy used. By approaching the study area as a rural cultural landscape, we were able to more fully understand the cultural, geographical, and historical associations of the park’s historical-archaeological resources. Resource types include stone quarries, access/haul roads, cabin remains, trash deposits, stone fences, an 1888 railroad grade, and remains of a tram system. Identifying the historical processes that have shaped the land and documenting the material culture remains and structures there made it possible to view this diverse landscape as a unified whole.

INTRODUCTION

In this paper I present preliminary results of a cultural resources study, emphasizing the utility of the research strategy/methodology used. Approaching the study area as a rural cultural landscape provided a broader and richer understanding of the historical, cultural, and geographic associations of the archaeological resources. Identifying the historical processes that have shaped the land and documenting the material culture remains and structures there made it possible to view this diverse landscape as a unified whole.

Rather than viewing the sites and features as a collection of separate, isolated features and archaeological sites distinct from one another, a cultural landscape perspective facilitates viewing the study area as a whole. It is a synthetic approach which situates the sites and features within their historical contexts. This perspective includes all the cultural and natural features and leads to a broader understanding of the whole as more than simply the sum of the individual components.

The cultural landscape perspective is a multidisciplinary approach using the perspectives of archaeology, history, geography, geology, landscape studies, historical archaeology, and material culture studies. Essentially, the human use of the natural resources within what is now Annadel State Park has left a pattern on the land, creating a rural cultural landscape. This 5,000-acre State Park is located in the North Coast Ranges, on the eastern edge of the City of Santa Rosa, Sonoma County, California.

Of the five types of cultural landscapes defined by landscape studies, Annadel State Park is an historic vernacular landscape, a geographical area that has been used, shaped, and modified over time by human activity and occupancy. Thus it
possesses recognizable concentrations, linkages, and continuity of landscape features, including areas of land use, vegetation, buildings, roads, and natural features (Feierabend 1990:24). As a vernacular landscape, much of the activity and use of the land was by ordinary working people and thus affords the potential of gaining insight into ordinary workplaces of the time and into the day-to-day lives of blue-collar workers.

To read this cultural landscape and to understand the natural and cultural forces that have shaped it, I used the classification system developed and elaborated in National Register Bulletin No. 30 (McClelland et al. n.d.). A summary of this system is presented in Table 1.

<table>
<thead>
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<th>Table 1</th>
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<tr>
<td><strong>Summary of Cultural Landscape Characteristics</strong></td>
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<td><strong>A cultural landscape (also referred to as a rural historic landscape)</strong> is, according to McClelland et al. (n.d.:3): “a geographic area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features.**</td>
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<td><strong>The evidence of human use or activity is examined through eleven landscape characteristics:</strong></td>
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<tr>
<td>• land uses and activities</td>
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<td>• patterns of spatial organization</td>
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<td>• response to the natural environment</td>
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<td>• cultural traditions</td>
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<td>• circulation networks</td>
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<td>• boundary demarcations</td>
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<td>• vegetation related to land use</td>
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<td>• buildings, structures, and objects</td>
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<tr>
<td>• clusters</td>
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<td>• archaeological sites</td>
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<td>• small-scale elements**</td>
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**CHARACTERISTICS OF CULTURAL LANDSCAPES**

Of the 11 characteristics enunciated in Bulletin 30, three are cultural processes that have shaped the landscape, while the other eight characteristics are components observable within the cultural landscape. I will use eight of these characteristics to illustrate my discussion of the historic vernacular landscape of Annadel State Park.

**PROCESSES**

**Land Uses and Activities**

The primary human activity that shaped the landscape of Annadel has been the procurement of stone materials. While most of the more than 50 Native American archaeological sites in the park are associated with procurement and processing of obsidian raw material, native people procured chalcedony, hematite, and probably andesite from the land as well (Parkman 1981: 17). Other aboriginal uses of the area include gathering of both floral and faunal resources on a seasonal basis. Recent archaeological and natural resources surveys (Porter and Wilbur 1987; Whatford 1993) suggest intensive use of the Annadel area for gathering acorns, seeds, game animals, and plant materials. Aboriginal use of fire as a vegetation management tool in northern California, particularly in association with the gathering of food and other vegetal materials, has been documented by several researchers (Lewis 1993; Barnhart et al. 1987; Reid and Sugihara 1987; Sugihara and Reid 1987; Keter 1987; Veirs 1987). During a vegetation survey of Annadel State Park, resource ecologist David Amme observed that large areas of the park which used to be open oak woodland, and other areas formerly chaparral had recently been overtaken by Douglas fir (Pseudotsuga menziesii). Based on his observations, Amme proposed that Native Americans had:

...maintained the oak woodland and to a certain extent larger chaparral areas by the use of frequent
fires that scorch and kill Douglas fir seedlings and saplings. Such fires do little damage to the mature oaks while oak seedlings resprout after fire. [Amme 1987:31]

After non-native peoples arrived on the scene, the land was used for grazing during the Los Guilicos Rancho land grant era, and also for homesteading in areas of the western part of the park which had been public domain.

Between 1888 and 1913, the extensive deposits of basalt and andesite were intensively quarried for paving stones and building blocks for use in San Francisco and other northern California cities (Bradley 1916). These quarry complexes cover hundreds of acres of land, and include primary and secondary quarry stations, open pits, waste rock piles, blacksmith sites, and networks of paths and access/haul roads between the quarries and their respective shipping points at stations along the Santa Rosa and Carquinez Branch of the Southern Pacific Railroad.

A charcoal industry was active in the local area during the late nineteenth and early twentieth centuries, and much of the oak woodland was harvested for this use and for sale as firewood in nearby Santa Rosa (Futini 1976:82; Catelani, personal communication, 1987). Between 1909 and 1913, 100,000 eucalyptus trees were planted with the expectation that not only would the trees grow rapidly, but the wood would be saleable for lumber and fuel (Bradley 1916:357). In 1930 one of the landowners built an earth dam and created a 20-acre marsh. By 1940, most of the land had come into the ownership of J.J. Coney, an engineer and entrepreneur. In the 1940s and 1950s, he extended the old quarry roads and built new roads and trails all over the property, raised goats and cattle on the land, constructed a small lake, and operated several rhyolite and perlite quarries (Futini 1976:90).

Patterns of Spatial Organization
Predominantly an upland area with diverse vegetation, Annadel State Park is characterized by flat and rolling topography in the central portion, with steep sides descending to adjacent valleys. The lands of the park are predominantly underlain by rocks of Mio-Pliocene Sonoma Volcanics, primarily andesitic and rhyolitic volcanic rocks (Higgins 1983:235). The area now in the park is drained by two principal watersheds. Most of the transportation networks of roads and trails follow these drainages down to main routes along the floor of the Los Guilicos Valley and connect the interior area with the main travel routes between the cities of Santa Rosa and Sonoma.

COMPONENTS
Circulation Networks and Cluster Arrangements
Travel within the Annadel area was facilitated by a system of paths and roads connecting various portions of the interior with each other and with the main transportation routes along the northern edge of what is now the park. These routes were the Santa Rosa and Carquinez Branch of the Southern Pacific Railroad and the main road between Santa Rosa and Sonoma (now State Highway 12). Local to regional circulation patterns also included a tramway from one of the major quarry complexes to the rail shipping point at Melitta Station on the railroad line.

Four principal paving stone quarries operated within the area now in the park. These complexes were connected to their rail shipping points by a network of access and haul roads. This cluster arrangement of quarry complexes and their respective rail shipping points is one of the characteristics which unifies these scattered features into an historic vernacular landscape. Finished basaltic-andesite paving stones were shipped from the Lawndale Quarry (SON-2014/H) through the Lawndale Station; the Annadel Quarries (SON-1578/H) used the Annadel Station as a shipping point; stones from the Hutchinson Ranch Quarries (SON-1232/H; -1235/H; -1577/H; and -1579/H) were shipped via the Oleson Station; and those produced from the Melitta Stone Quarries (SON-1576/H) were shipped through the station at Melitta.
Boundary Demarcations
These features delineate ownership and land use areas and include 12 stone fences as well as composite fences of stone, split redwood posts, and rails with barbed wire. One stone fence extends for over a mile along the southwestern boundary of the former Rancho Los Guilicos land grant and was probably constructed before 1877 (Futini 1976:50; McGuire 1981:40).

Vegetation Related to Land Use
Land-use patterns have a direct relationship with various types of vegetation, including indigenous and introduced species. Vegetative features resulting from both human activities and intentional planting within the cultural landscape of Annadel include over 100 acres of eucalyptus (Eucalyptus globulus) planted early in this century (Bradley 1916:357). As cited above, recent research has documented ways oak woodland areas were kept open by regular use of fire by Native Americans. In addition, the results of suppression of fires since Euroamerican settlement can be seen in areas recently occupied by chaparral which are now Douglas fir forest, and in former oak woodlands now dominated by Douglas fir, identified by the large dead oaks and manzanitas beneath the forest canopy, indicating a more open environment until recently. Other vegetative features comprising the cultural landscape include the remnants of an apricot orchard planted before 1930.

Thus historic land use of the area now in Annadel State Park has resulted in great changes in the natural environmental aspects of the landscape. These land uses have included intensive grazing by livestock, invasion of exotic plant species, and alteration of native wildlife patterns and densities, as well as exploitation of hardwood and redwood timber resources (Amme 1987:32-33). Intensive hardwood harvesting for firewood and charcoal production has impacted the native oaks while quarrying activities resulted in removal of top soil and clearing of vegetation, resulting in both an increase in the extent of bare ground and vegetation replacement (Amme 1987:32-33).

Structural Types
A number of built features documented in this landscape reflect the historic activities which went on here. While no buildings remain standing, there are several types of structural remains. One example is the previously-mentioned tramway over which cut stones were transported from the quarry to the railroad shipping point. Another is the railroad right of way (SON-1696H). Even though this section was paved over in 1982 and is the main park entrance road, earthworks including cuts and berms are still visible along the 1.5 miles of right of way which crosses the park's northern sector. This branch of the Southern Pacific Railroad operated between 1888 and 1936 (Parmelee 1963:10).

Archaeological Sites
Physical remains from past human activities and occupation all over the area now in the state park include aboriginal trails; obsidian, chalcedony, andesite, and basalt quarries; bedrock milling stations; building foundations; ruins; old roadbeds; blacksmith shops; charcoal sites; and other types of surface remains.

Small-Scale Elements
Features within the study area that collectively add to the landscape's setting but are not necessarily archaeological sites include split redwood post and barbed wire fences, as well as abandoned equipment and deposits of discarded metal cans and glass bottles.

CONCLUSIONS
By identifying the historical processes that have shaped the land and in documenting the material remains, structures, and features within the vernacular landscape thus created, it is possible to more clearly see this diverse landscape for what it really is: a unified whole. Traditional archaeological survey practice might involve seeing these physical remains on the land as merely features and sites distinct and isolated from one another due to their geographical distance apart. Following this methodology at
Annadel would have resulted in the loss of much valuable information. Approaching the study area from a cultural landscape perspective helped to situate the more than 100 archaeological sites and features within their historical contexts. As I have described, this comprehensive perspective provided a coherent framework for understanding the integral relationships between the area's natural and cultural resources. Use of this framework resulted in a broader understanding of the whole as much more than simply the sum of the individual components.

In addition, using this cultural landscape perspective has helped open other avenues of investigation to this particular study area. Specifically, approaching the study area as an historic vernacular landscape can facilitate an appreciation for ordinary workplaces and focus research attention on and pose new questions about the archaeology and history of ordinary working people.

NOTES

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