Formative Oregon Coast

ABSOLUTE TIME PERIOD: 2000–150 B.P.

RELATIVE TIME PERIOD: Follows the Archaic Oregon Coast tradition, continues into early historic period.

LOCATION: Oregon coast and adjacent Lower Columbia Valley.

DIAGNOSTIC MATERIAL ATTRIBUTES: Shell middens; rectangular plank houses; small narrow-necked and side-notched projectile points; local ceramic complex; portable stone art objects.

REGIONAL SUBTRADITIONS: Lower Columbia, Northwest California.

IMPORTANT SITES: Chetlessenten, Lone Ranch Creek, Meier, Palmrose, Ti-1.

CULTURAL SUMMARY

Environment

Climate. The time span of the Formative tradition coincides with the Late Postglacial climatic interval, which saw the onset of today’s humid marine climate, characterized by moderate temperatures, wet mild winters and cool relatively dry summers, and high annual rainfall.

Topography. The coastal margin is dominated by beaches, bordered in some areas by active and stabilized sand dunes and in other areas by sea cliffs or headlands. The low-lying north and central Oregon coast contains estuaries and bays created when river mouths were “drowned” by the postglacial sea level rise, but south of the Coquille River estuarine areas are not extensive. Lying slightly higher are Pleistocene marine terraces, which are more extensive on the south coast (south of Coos Bay) where they are underlain by resistant rock than on the central and north coast where the bedrock is weaker and more subject to erosion. No sizable islands are present off the Oregon coast, but islets and seastacks occur offshore.

Geology. The Oregon coast is generally divided into two subregions. The south coast, from the Coquille River to the California border, includes the Siskiyou Mountains, which contain the oldest rocks (metamorphic and granitic or serpentinitized ultrabasic rocks of pre-Tertiary age) in western Oregon. The central and north coast, from the Coquille River north to the Columbia River, is characterized by few rock types, mostly marine sandstones and siltstones and volcanic basalts, and all are of Tertiary age. The Oregon coast is
tectonically active. Release of strain along the Cascadia subduction zone offshore has generated at least four major earthquakes over the last 2,000 years, the last of which occurred c. 300 B.P. Each of these major earthquakes was accompanied by abrupt subsidence of the coastline by up to 1–2 m. Evidence of these subsidence episodes has been found at some Formative Tradition sites, and there is little doubt that earthquake-induced subsidence has seriously affected the preservation of archaeological sites along the Oregon coast.

Biota. Dense forests of Sitka spruce, western hemlock, and western red cedar occur along the north and central Oregon coast. Vegetation along the drier south coast (south of the Coquille river) was more Californian in nature, with herb and shrub communities along the coastal margin, oak stands in interior valleys, and coniferous forests farther inland. Terrestrial mammals like deer and elk were relatively more abundant in the more open grasslands and oak woodlands of the south coast than in the closed canopy forests along the central and north coast. Abundant marine resources including sea mammals, seabirds and waterfowl, fish, and shellfish were available in the offshore, nearshore, and intertidal environments. All five species of salmon found along the Pacific coast spawn in the Columbia River, and all other coastal streams also supported runs of anadromous fish.

Settlements

Settlement System. The Formative tradition encompasses prehistoric archaeological manifestations indicative of the emergence of ethnographic culture patterns along the Oregon coast and in the adjacent Lower Columbia Valley, which are situated in the southern portion of the ethnographic Northwest Coast culture area. Ethnographic cultures in this region were characterized by large sedentary villages, ranked societies, and artistic elaboration. Elsewhere in North America, Formative Stage cultures were based on agriculture. The Northwest Coast culture area is recognized as an exception to this pattern, as the hunting-gathering-fish subsistence practices in this region were effectively equivalent to economies based on agriculture.

The emergence of Formative lifeways can be correlated with the widespread appearance of rectangular plank houses. Archaeological sites with house remains, usually interpreted to represent winter villages, are commonly found along the shores of estuaries, although in some areas of the Oregon coast (e.g., the south coast) they also occur along the outer coast. Beyond the existence of a central winter village, there appears to have been considerable diversity in settlement patterns. In most areas, the bulk of the population apparently dispersed from the winter village to task-specific settlements, such as shellfish-gathering sites, fishing sites, and acorn-gathering sites, during the warmer months of the year. Ethnographic accounts indicate that in some cases people moved from winter villages to summer villages (a dual-village settlement pattern). It has also been suggested, based on both archaeological data and ethnographic accounts, that some winter villages situated in especially favorable settings were occupied throughout the year.

Community Organization. Communities varied in terms of numbers of houses present. Along most of the Oregon coast, the community generally consisted of houses arranged in a linear village pattern adapted to the local landscape. Along the Lower Columbia, villages consisting of two rows of houses are known. Several other variations on community organization are known from the Lower Columbia River (especially the Portland Basin). At the Meier site near present-day Portland, the community was centered around a single very large house. The occurrence of “row houses,” consisting of several houses aligned in a row under a single roof, is also known from the Lower Columbia.

Housing. The typical house form is the rectangular plank house of post-and-beam construction made by the ethnographic peoples of the region. These houses consisted of a frame of posts sheathed with planks split from logs or trees, with shed or gable roofs. Floors were usually earthen, but sometimes were covered by planks.

Population, Health, and Disease. The Lower Columbia Valley supported one of the largest populations, and one of the highest population densities, in all of native North America. Populations on the adjacent Oregon coast were somewhat lower, but they were generally comparable in size and density to those of peoples elsewhere in the Northwest Coast cultural area. The introduction of infectious diseases during the early historic period led to rapid decline in the native population. Infectious diseases occurring as epidemics between the 1770s and 1850s are estimated to have resulted in the death of 90 percent or more of the Chinookan population in the Lower Columbia Valley. Although estimates are not available, the introduction of infectious diseases probably had comparable effects on native peoples living along the Oregon coast.