
Cetacean Hunting in Oregon: Perspectives from Tillamook and Clatsop Ethnographic and Ethnohistorical Records

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Project Summary

The Tribal Historic Preservation Office in the Land and Culture Department of the Confederated Tribes of Grand Ronde Indian Community of Oregon (CTGR) is creating an ethnographic and ethnohistorical database to quantify ethnographic data related to the Northern Oregon Coast. Specifically, the area of interest is the historic land and sea base of two distinct tribes, the Salish speaking Tillamook and the Chinookan speaking Clatsop, who lived near the mouth of the Columbia River. As an intern in the Tribal Historic Preservation Office of the CTGR, I helped analyze and organize the previously created ethnographic database. The purposes of the database are to provide quantitative figures in the interpretation of oral histories and pursue the validation or negation of the ethnographic data through archaeological investigations. These ethnographic data were recorded using Geographic Information Systems (GIS) software to provide a geographic representation of the material.

Because of the high prevalence of ethnographic information related to cetaceans (whales, porpoises, and dolphins) and the long-held anthropological perspectives asserting that the hunting of whales was not carried out by Oregon's coastal tribes, I sought to investigate the ethnographic data to further understand the use of cetaceans in the region. The current project is important owing to the limited understanding of cetacean use within Oregon and the potential that such species were hunted in antiquity. The summary is directed toward anthropologists working along the Pacific Northwest Coast and is grounded in the theory of maritime adaptations of coastal hunter, gatherer, and fisher peoples exhibiting maritime adaptations along the Pacific Rim of North America.

Introduction

In this paper I explore the importance of whales and other cetaceans to prehistoric people who inhabited the northern Oregon Coast from the mouth of the Salmon River northward to the mouth of the Columbia River. This area is thought to be associated with the Tillamook and Clatsop tribes, both exhibiting maritime adaptations. Maritime cultures are considered to have acquired a large portion of their caloric or protein intake from marine resources. Historically, anthropologists have recognized as whaling cultures in the Pacific Northwest only communities located farther north in Washington (Makah, Quinault, and Chehalis) and on Vancouver Island, British Columbia, (Nuu-chah-nulth and Ditidaht) (Losey and Yang 2007; Underhill 1978). However, ethnographic and ethno-historical data document the practice of whale hunting and scavenging occurring along the Oregon Coast. For example, a historical reference of whale hunting by the Siuslaw (located south of the project area) states:

It took about a year to make one of those graceful, powerful war canoes, a craft in which they journeyed 75 to 100 miles into the ocean on whaling expeditions, catching whales weighing 60 to 80

tons. In towing these heavy loads they formed the canoes into a long chain for added power (Knowles 1965:9).

Such historical accounts provide anthropologists the opportunity to speculate that whaling could have occurred along the Oregon Coast during pre-historic times.

Recently, Robert Losey and Dongya Yang (2007) demonstrated that opportunistic whale hunting was conducted by the inhabitants of the Par-Tee site, located in Seaside, Oregon. Losey and Yang found a broken elk bone harpoon tip imbedded within a humpback whale (*Megaptera novae-angliae*) bone. A DNA analysis of the harpoon tip demonstrated that the elk DNA matched the unmodified elk bone within the larger site collection, suggesting that the tool was made and used locally (Losey and Yang 2007:669). However, Losey and Yang did not address ethnographic and ethno-historical data relevant to whale hunting among the Tillamook and Clatsop tribes, data that suggest whaling may have occurred historically in the region.

This paper expands on the research initiated by Losey and Yang (2007) by analyzing ethnographic and ethno-historical data pertaining to whales, whale hunting, and whale scavenging among the Tillamook and Clatsop Tribes.

Maritime Adaptations on the Northwest Coast

The Oregon Coast comprises a portion of the kelp forests that run discontinuously from Japan to South America. Research has demonstrated that the peopling of the Americas likely occurred along this rich resource belt often termed the Kelp Highway or the Pacific Rim Highway (Erlandson et al. 2007; Erlandson and Braje 2011:29). This research suggests that maritime cultures within Oregon may have significant time depth. However, current understanding of ancient coastal sites beyond 5000 years is

limited in Oregon because of sea level rise, tectonic forces, tsunamis, and erosion (Erlandson et al. 1998), all of which appear to have destroyed or altered the older portions of the archaeological record.

The Oregon Coast is part of the Pacific Northwest Coast Culture Area that encompasses the area from Cape Mendocino in Northern California to Yakutat Bay in Alaska (Aikens, Connolly, and Jenkins 2011:211; Lightfoot 1993:167). Differences exist between the Northern and Southern Northwest Coastal regions. In Alaska and segments of British Columbia the bordering mountains are steep and high. Although generally lacking coastal plains, those coastal areas include numerous offshore islands and protected marine waters. This results in coastal areas that are more accessible to coastal peoples than inland terrestrial areas. In contrast, California, Oregon, and Washington contain much larger areas of unprotected, high energy coastlines with less imposing coastal mountains and coastal plains, making terrestrial species more available (Aikens, Connolly, and Jenkins 2011:212–213; Drucker 1955:5; Moss and Erlandson 1995:6–8). Thus, in studying subsistence practices within different coastal areas, anthropologists expect to find a higher emphasis on marine species where terrestrial species are more limited.

Anthropologists differ in their interpretations of maritime culture or maritime adaptations and the prerequisites for defining these cultural patterns. One implication is that maritime groups lived near and attained a significant portion of their subsistence from the sea, possessed seaworthy watercraft, potentially hunted large sea mammals, and obtained some foods from resources beyond the littoral zone (Workman and McCartney 1998:361–362). Often, extensive sea mammal hunting, deep sea fishing, semi-sedentary villages (containing semi-subterranean houses), and the accumulation of large shell middens have been considered hallmarks of maritime cultures (Lightfoot 1993:175; Workman and McCartney

1998:364). These cultures, often termed “complex hunters, gatherers, and fishers,” live relatively sedentary lives based on large-scale food processing and storage, the presence of large houses, complex technologies, higher populations, the ability to affect their surrounding environment, the accumulation of large shell middens, and developed social complexity characterized by occupation specialization and social stratification (Ames 1999:25–28; Aikens, Connolly, and Jenkins 2011:212–217; Butler and Campbell 2004:328; Lightfoot 1993:178; Erlandson et al. 1998:9). The features outlined above are evident in the Northwest Coast and the project area.

Shellfish use, suggested by the well-developed middens, becomes apparent in the Northwest Coast around 5000 BP (Lightfoot 1993:173; Workman and McCartney 1998:364). The oldest known fish trap associated with mass storage of fish on the southern Northwest Coast is dated to ca. 2400 BP (Erlandson et al. 1998:15; Tveskov and Erlandson 2003). The specialized sea mammal hunting technology (i.e., the composite “toggling” harpoon) is present on the central Northwest Coast by 3000 BP, with barbed bone dart points present between 6000 BP and 5000 BP (Workman and McCartney 1998:365). The oldest large rectangular structure on the Northern Oregon Coast (Palmrose site 35CLT47) has been dated to 2600 BP and 1700 BP (Phebus and Drucker 1979:9; Connolly 1992; Aikens, Connolly, and Jenkins 2011:247). It was not until the Late Holocene (~3500 years ago) that a vast majority of archaeological sites along the southern Northwest Coast exhibited the prerequisites for complex hunters, gatherers, and fishers with maritime adaptations (Erlandson et al. 1998:9–10; Moss and Erlandson 1995:14). The dearth of old sites along the Oregon Coast makes it difficult to understand the deeper history of the evolution of maritime cultures in the area.

Ethnographic Background

The Tillamook and Clatsop peoples inhabited a large geographic area that extended from near the mouth of the Columbia River (Clatsop) and continuing south to the Siletz River (Tillamook) (Verne 1975:123; Jacobs and Seaburg 2003:2; Aikens, Connolly, and Jenkins 2011:216). During the historical era, the interface of these two tribes was located near the present location of Seaside, Oregon (Lewis et al. 1904:vol. 3; Jacobs and Seaburg 2003:2). It is unknown if this boundary extends back to pre-contact times, or if this was a recent phenomenon caused by population loss and displacement. However, the Clatsop and Tillamook people shared a close cultural connection, and members of both groups often intermarried (Jacobs and Seaburg 2003:4; Arbolino et al. 2005:6). During the historical period Clatsop tribal members also adopted the Tillamook language (Boas 1894; Jacobs and Seaburg 2003:4; Arbolino et al. 2005:6). Today members of the Tillamook and Clatsop are represented at the CTGR, the Confederated Tribes of Siletz Indians of Oregon, within the federally unrecognized Clatsop-Nehalem Confederated Tribes, the federally unrecognized Chinook Nation, and other tribal communities.

Given the evidence that the Tillamook and Clatsop have shared a common territory, a certain amount of cultural overlap has occurred. Because ethnographic research suggests that cetacean hunting may have occurred within both groups, the ethnographic information of these populations may be addressed together.

Tillamook

The word Tillamook is a Chinook word meaning “Those of Nehalem” (Boas 1965:3; Crawford 1983:4; Edel 1939:2). The Tillamook represent the southern extent of the coastal Salish (Boas 1898:23) and were divided into two main groups: the Nehalem of the north and the Siletz in the south

(Edel 1939:2). The Tillamook language was spoken along the northern Oregon Coast and along all coastal rivers south to Siletz (Edel 1939:2; Jacobs and Seaburg 2003:2).

Dialect variations existed within the Tillamook language, including Nehalem, Tillamook, Nestucca, Salmon River, and Siletz (Crawford 1983:4). However, concerning the Tillamooks, Melville Jacobs stated: "All one has a right to say is that river villages, speaking a number of Tillamook-Siletz provincialisms, occupied or possessed this territory. They were neither one tribe, nor two tribes, nor many tribes" (Jacobs and Seaburg 2003:2). In 1805, Lewis and Clark noted the similarities of the Tillamook (Kil-a-mox) and Clatsop, "The Kil-a-mox in their habits and customs, manner, dress and language differ but little from the Clatsops, Chinooks and others in the neighborhood" (Lewis et al. 1904:vol. 3:326).

Linguistic data suggest that the Tillamook migrated southward from the Strait of Georgia or Puget Sound region. Although anthropologists have provided no specific dates for when that potential migration occurred, the northern region exhibits Salishan-Marpole phase sites similar to the Palmrose site in the Seaside area, suggesting a migration 2400 RYBP and 1500-1000 RYBP (Moss 2011:98). Tribes from the northern region near the Strait of Georgia and Puget Sound conducted whale hunting to some extent; thus an ancient link to whaling witnessed in Oregon could be tied to a migration from the northern region. However, further research is needed to confirm the connection. In addition, linguists have concluded that Tillamook and Chinook languages had converged grammatically, demonstrating the close relationship of these two distinct people (Arbolino et al. 2005:8-9).

Clatsop

The Clatsop are Penutian speakers of the Chinookan tribe living from the south bank of the Columbia River along the Clatsop Plains and

inland (Verne 1975). The Chinook and Clatsop were renowned traders and fishermen who demonstrated superb canoe handling and navigation skills (Lewis et al. 1904:vol. 3 part. 2; Verne 1975). The Chinook facilitated trade north and south along the coast and into the interior (Drucker 1955:12; Braun 1999:30). Items traded included whale meat, blubber, and oil obtained through trade with the Makah, Nuu-chah-nulth and Quinault (Braun 1999: 32). However, according to ethnographic and ethno-historical sources, these resources were also acquired locally (Lewis et al. 1904:vol. 3: 324-325; Ray 1938:114; Deur 2005: 117). During the historical era the Clatsop adopted a variety of languages such as Tillamook and Chehalis (Boas 1894).

The Clatsop have inhabited the Clatsop Plains for many generations. This is supported by tribal oral traditions including a creation story related to the formation of the Clatsop Plains which began around 3,500 years ago (Evans and Hatch 1999: 13). The indigenous knowledge of the geomorphology of the region (see Connolly 1992; Connolly 1995) could provide a time marker for habitation as many native oral histories are based on aboriginal knowledge.

Archaeological Investigations Based on Ethnographic Information

Anthropologists differ on the validity of oral traditions and histories and their use in archaeological research. The issue of validity is compounded when ethnographic information is applied to ancient sites. Oral histories are accounts told by individuals of events that happened during their lifetimes whereas oral traditions are accounts transmitted orally from one generation to another (Lightfoot 2005:16). Prior research investigating ethnographic and ethno-historical data has had varied results. For example, intensive salmon fishing is often linked to the growth of social complexity and sedentism within the region (Workman and McCartney

1998:367). Some researchers, however, have noted that estimates of salmon consumption within Northwest sites have been inflated and other fish often underrepresented (Tveskov and Erlandson 2003; Butler and Campbell 2004:330).

Tveskov and Erlandson (2003) have demonstrated that the archaeology of tidal fish weirs support native oral histories related to the technology, with weirs dating to 2000-3000 years ago. Tidal fish weirs were used during salmon runs but were also part of the day to day life of indigenous peoples catching a variety of fish species.

Research, based on indigenous knowledge and western science, has shed light on geologic forces and the effects that earthquakes and other natural disasters have had on native populations. The Cascadia Subduction Zone is familiar to geologists and anthropologists within the region. McMillan and Hutchinson (2002) demonstrated that Northwest indigenous knowledge related to earthquakes, landslides, and tsunamis had validity when viewed alongside current geologic data. Indigenous knowledge related to geologic events often involved mythological figures that created earthquakes and tsunamis. Although not all events within oral traditions were datable, recent accounts of a Cascadia subduction earthquake and tsunami in AD 1700 were recounted by many indigenous communities demonstrating the accuracy of traditional oral histories during the last hundred years.

Therefore research based on oral traditions previously conducted within the region has demonstrated that native oral histories and traditions can provide valuable insights into geologic and archaeological investigations.

Quantifying Ethnographic Data

An ethnographic and ethno-historical data set was established by the CTGR Tribal Historic Preservation Office, Land and Culture Department. This data set provides the foundation for the ethnographic section of this

project supplemented by ethnographic research conducted by the primary author. Entries in the database documented the reference's description of faunal resources with data recorded for the variable type, common name, Latin names, date, season, month, use, source, and page number. (See Appendix for an extract of the database.)

Analyzing the quantified ethnographic data of fauna that totaled 1,260 entries, I found that 600 entries, 47.6% of all accounts, represented mammals. The two additional fauna with significant percentages were fish (20.6%) and shellfish (11.6%). Accounts of mammals were dominated by elk (18.5%), whale and porpoise (10.3%), deer (9.5%), beaver (7.5%) and bear (6.8%). Additional marine resources such as sea otter (2.6 percent), sea lion (3%), and seal (4.3%) also account for significant percentages of the data. Based on the high frequency of whale and porpoise, seals, sea lions, and sea otters within the ethnographic data, I focused on marine mammals for my research. I was particularly interested in the gap between the ethno-historic significance of cetaceans and archaeological evidence for the hunting of such animals on the Northern Oregon Coast.

Note on Ethnographic Information: Population Loss and Site Antiquity

Three archaeological sites within the Seaside area are well recognized today. In order of antiquity they include the Palmrose site (35CLT47) (800 BC to AD 400), the Par-Tee site (35CLT20) (AD 300 to 1150), and the Avenue Q site (35CLT13) (AD 400 to 1000) (Arbolino et al. 2005:12–16). Because of the antiquity of the sites, the application of ethnographic data in interpreting their archaeological materials may be viewed as speculative. However, I seek to demonstrate that the concepts and practices represented within the ethnographic data could provide a lens into prehistoric customs.

There are pros and cons related to the use of ethnographic data in interpreting ancient sites. Researchers have suggested that archaeologists

should use archaeological evidence to test whether ethnographic models may be seen in antiquity (Moss and Erlandson 1995:29). However, Moss and Erlandson (1995) also cautioned that the combination of disease and land displacement following European contact had major effects on indigenous communities (Underhill 1978:32–33).

On the Northern Oregon Coast Lewis and Clark noted the effects of European diseases on the Clatsop: “This nation (Clatsop) is the remains of a large nation destroyed by the Small pox [sic] or Some other [diseases] which those people were not acquainted with” (Lewis et al. 1904:vol.3: 245). In addition, researchers have noted other illnesses such as sexually transmitted diseases, which were introduced by sailors and traders within the Columbia River region as early as the 1780s (Thornton 1987:83). Lewis and Clark also noted the potential that procreation between natives and Europeans had occurred; the expedition met a member of the Clatsop of whom they stated:

With the party of the Clatsops who visited us last was a man of much lighter Coloured than the natives are generally, he was freckled with long duskey red hair, about 25 years of age, and must certainly be half white at least, this man appeared to understand more of the English language than the others of his party, but did not Speak a word of English, he possessed all the habits of the Indians (Lewis et al. 1904:vol. 3:301).

For more information of early European contact, see *Log of the Columbia 1790-1792* (Massachusetts Historical Society 1920).

Mortality estimates associated with Old World disease epidemics in the Columbia River region vary from 80 to 95 percent population loss dependent upon area and population density (Ramenofsky 1987:7–8; Aikens, Connolly, and Jenkins 2011:411–412). Smallpox outbreaks began as early as 1775 and continued into 1853, right before the reservation era.

Campbell (1990) suggested smallpox may have spread from Meso-america to the Pacific Northwest during the 1520s. However, Boyd (1999: 16) states that the hypothesis of a smallpox related population decline must be tested in comparable archaeological regions before the hypothesis of a sixteenth century smallpox epidemic can be accepted. Other diseases affected natives within the region such as venereal disease, measles, malaria, influenza, and dysentery (Aikens, Connolly, and Jenkins 2011:410–415). The combined effects of disease and removal from aboriginal lands must be understood in order to make sense of the ethnographic record. Yet, the ethnographic information may be viewed as a means of deeper interpretation of the archaeological record.

Lewis and Clark provided insight into the lifeways of Northwest tribes half a century before the reservation era began in the late 1850s. During the late nineteenth century, when researchers such as Franz Boas were recording oral histories in Oregon, attempts to assimilate native peoples were already underway. As many native people became wary of Europeans, researchers were limited to a small number of consultants willing to speak with anthropologists. Often, researchers conducted redundant questioning (confirming the accuracy of previous work) with a limited number of subjects. Beginning with Gatschet in 1877 through Crawford in 1977–78, fourteen anthropologists over a century spent a total of fifteen months with the Tillamook (Jacobs and Seaburg 2003:9-29).

Edel (1944) has demonstrated that Tillamook oral histories and narrations exhibit stability through time. Edel collected tales from Clara Pearson and many in Tillamook in 1931. Bess Langdon, three years later, collected talks from Clara Pearson in English. Although the two works were collected under different conditions with a time span between each recital, the texts are nearly identical. Lewis and Clark also noted that natives demonstrated great memory reciting the names of sailors, the months that trade occurred, and the items traded within the region.

Ethnographic Data: Lewis and Clark and the Ethnographic Era

Ethnographic data demonstrate that the Tillamook and Clatsop were knowledgeable in whale processing. It is important to clarify whether that knowledge arose from active whale hunting, opportunistic whaling, whale scavenging, or a combination of the three.

The journals of Lewis and Clark provide the insight into the lives of Clatsop and Tillamook people nearly a century before ethnographers began research within Oregon. Beginning in November 1805 and continuing into 1806, Lewis and Clark had constant contact with the Tillamook and Clatsop in the form of trade, conversations, and observations while living at Fort Clatsop (Lewis et al. 1904:vol 3 part 2; Verne 1975). During that period, the tribes inhabiting the Columbia River were already familiar with Europeans. Lewis and Clark noted that, "The Clatsops, Chinooks, Killamucks [Tillamooks] &c. are very loquacious and inquisitive; they possess good memories and have repeated to us the names capacities of the vessels &c. of many traders and others who have visited the mouth of this river" (Lewis et al. 1904: vol. 3:305-307). A list of 13 traders and vessels who visited the natives for the purpose of trade and hunting were furnished to Lewis and Clark by the natives of the area (Lewis et al. 1904:vol. 3:306).

The contact between the natives and outsiders was noted by explorers who witnessed the natives scavenging sturgeon that were left by the tide and recorded an Indian stating in English, "Sturgeon was very good" (Lewis et al. 1904:vol. 3:276). However, what is most relevant to this project is that Lewis and Clark recorded an instance of whale processing.

On Friday, December 27, 1805, Lewis and Clark sent out two men to make salt. As the men camped near Seaside, Oregon, on December 29, 1805 (Lewis et al. 1904:vol. 3:291), there was a report from the natives that a "whale has floundered" on the coast. The expedition wanted to ac-

quire some “whale oyle” from the natives, but the weather and the party’s inability to navigate the waters delayed the expedition from reaching the whale (Lewis et al. 1904:vol. 3:293-296).

On January 3, 1806, the Clatsops arrived to trade with Lewis and Clark, bringing berries, roots, dogs, and fresh blubber that had been obtained from the Tillamooks. Lewis and Clark stated that the “blubber the Indians eat and esteeme it excellent food” (Lewis et al. 1904:vol. 3). Further reports of the whale continue on January 5 when two members of the expedition returned from salt making 15 miles southwest of Fort Clatsop (Seaside) near the houses of certain Clatsop and Tillamook families. The tribes had been very friendly with the explorers and had provided them with whale blubber. After this report, Clark became determined to acquire more whale blubber and oil. While heading toward the village, Clark viewed a Tillamook canoe burial ground and proceeded to the whale. Clark noted while approaching the whale:

[we] crossed a creek 80 yards near 5 cabins, and proceeded to the place the whale had perished, [we] found only the Skelleton of this monster on the sand between (2 of) the villages of the Kilamox nation; the whale was already pillaged of every valuable part by the Kilamox indians...this skeleton measured 105 feet. I returned to the village of 5 cabins on the creek which I shall call E-co-la or Whale creek, [I] found the nativ[e]s busily engaged boiling the blubber, which they performed in a large squar[e] wooden trough [trough] by means of hot stones; the oil when extracted was secured in bladders and the Guts of the whale; the blubber from which the oil was only partially extracted by this process, was laid by in their cabins in large flickes [fliches] for use; those flickes they usually expose to the fire on a wooden Spit until it is prutty wormed through and then eate it either alone or with roots of the rush or Diped in the oil (Lewis et al. 1904:vol. 3:324-325).

A later report of whale use came from Warren Vaughan who in 1853

witnessed natives near Cannon Beach, Oregon, butchering and processing a “captured” whale (Deur 2005:118). The natives were in the process of extracting the blubber in canoes (as described above). Further evidence of whale processing via this method is given by Tillamook native Louie Fuller in the 1940s to anthropologist John P. Harrington:

My father told me what I never got to see, that the [Indians would] put water in a small canoe and then would put whale meat & hot rocks in just a little while the whale meat would be boiled & ready to eat. Or they boiled a whole quarter of an elk in this same way & when done would take it out & cut it up & eat it as they would (Deur 2005:118).

These passages demonstrate the knowledge of whale processing and the value this species represented to the indigenous populations of the northern Oregon Coast. However, the passage does not provide direct evidence of whaling. Nevertheless, it is known that whale was highly valued and prescribed regulations were observed during the processing of scavenged animals. Oral histories of the Clatsop people recorded by Boas (1894:263) state that when the Clatsop found a whale (beached) they placed holes in the skin and tied straps to it, or kelp if straps were not at hand, for themselves and their relatives (thus delineating their portion of the whale). When the people arrive to cut the whale, they did so in their respective portion. Those who arrived last took the lower portion of the whale. These observations demonstrate that beached whales were scavenged and utilized. But, it is unknown whether whales were actively hunted. However, Clark noted the potential of whale hunting within the project area:

The whale is sometimes pursued, harpooned, and taken by the Indians of this coast; though I believe it is much more frequently killed by running on the rocks of the coast S.S.W. in violent

storms, and thrown on different parts of the coast by the winds and the tide. In either case the Indians preserve and eat the blubber and oil (Ray 1938:114).

The above passage provides insight into the possibility that whaling occurred within the region. Further ethnographic information also supports the possibility of whale hunting. For example, the hunting of whale by Tillamook and Clatsop people is mentioned by Louis Fuller in a 1940s interview with anthropologist John P. Harrington:

when I ask about the California Redwood [kikfLLfx], says that sometimes the ocean brings floating redwoods way up to the Tillamook coast & such a tree is worth a lot to the indian, that is, if he finds one that is not hollow inside, some of them are hollow... The inds. Make a canoe of it for going out to kill whale & seals (Deur 2005: 117).

This supports the possibility that some whale hunting occurred among the Tillamook people and demonstrates that the Tillamook culture was based on both maritime and terrestrial subsistence. Additional evidence of the importance of whale has been found in ethnographic interviews from the Lower Chinook:

This fish (salmon) was of primary importance to the natives, but sturgeon, trout, smelt, herring, and flatfish played each an important economic role. In addition, sea mammals including the seal, porpoise, and whale were extensively utilized (Ray 1938:46).

Hence, ethnographic data supports whale being an important subsistence resource but does not clearly clarify the procurement process. However, large portions of ethnographic data from the region remain in collections unpublished or under investigated. Future research with such collections may reveal further accounts of sea mammal use within the region.

Franz Boas Whale Tales and other Ethnographic Whale Taboos

Franz Boas collected the following Tillamook materials during a field season in 1890 at the Siletz Indian Reservation. The texts are oral histories that demonstrate the extent of whaling and whale scavenging by Tillamook and Clatsop peoples. I have summarized the oral histories discussed below.

In one oral history a man goes to the sea and finds a beached whale. The people of the village came together to butcher the whale. The man who had found the whale cut open the whale stomach and went inside. However, the people who were butchering the whale became angry because the man had cut right into the body of the whale. Someone then wished that the whale would go back out to sea, which it did. After a year at sea the man was finally returned to his people when encountering a canoe (Boas 1965:12–13).

The oral history reveals that whales were to be respected by the people and that particular taboos were followed when processing whale showing that the Tillamook were familiar with whale processing.

Another oral history collected by Boas and later Elizabeth Jacobs (1959) illustrates the cultural and mythological importance of whale and Thunderbird, a prominent figure in Tillamook and Clatsop mythology. The oral history links whales to Thunderbird, believed to be the creator of the Clatsop and Tillamook people, and mentions whaling, the beaching of whales, and the economic importance of whales to the people.

In the narrative a man went out to catch salmon. On his journey he encountered Thunderbird who carried the man to his country (on the other side of the ocean). They entered Thunderbird's home, which was made of whale skin and whose entrance was the mouth of a whale. One evening the man went out and saw people fishing with "torches." Thunderbird advised the man that the people were catching salmon meaning, however, that they were catching

whales. In the morning the man seen that the canoes had many caught whales. After a year Thunderbird returned the man to his people at Nestucka and carried with him two large whales. The people found the man and he sang. The next day he instructed the people to go to the location where they had found him. The people found that two whales had beached at that location. The man instructed them to not carve the whales and instead he went and carved the whales. People from all around came to buy whale oil from the Nestucka people and brought dentalia and other valuable shells (Boas 1965:14–15).

In another account that Boas collected (Boas 1898:23–27), similar events took place at Slab creek. Although there is some variation in that text and the one above, they contain the same basic framework. Various oral histories describe a whale hunter who has the power to sing, thereby bringing whales to the people.

In a further account a man goes into the wilderness to attain “power.” He was gone for a year and when he returned he climbed a rock on the Nestucka River. Later he was found singing with his face painted and with his head covered in feathers. He was brought back to his people and dances were held. One morning he instructed three boys to go to the mountains and to take only their knives and butcher the elk the man had previously killed. The boys did as instructed and found four elks in the mountains slaughtered. Afterwards the man instructed the boys to go the sea and bring back whale meat. In the same manner the boys brought back whale meat. Therefore, whenever the people needed meat the man would sing and he would get elk and whales for the people, and he was paid (Boas 1965:15–16).

The ability to bring whales to the people has also been noted to have existed within the Chinookan worldview.

A Chinook with the proper spirit power would set up a pole on the beach and in that location a whale would drift ashore. Then the

man would sing for five days. On the sixth day a whale would be within that location (Underhill 1978:32–33).

The oral history related to the creation of the Tillamook and Clatsop people also suggests the importance of Thunderbird and whale to the people of the region.

The cultural significance of whale to the Clatsop and Tillamook can also be understood by an oral history connecting a sacred site and the location of a creation myth with whale consumption.

Harrington's consultants recalled stories of Thunderbird dwelling atop Saddle Mountain and eating whales there. The importance of Saddle Mountain to the indigenous peoples of the area can be understood as oral tradition states, "Clatsop oral tradition, and probably those of other area tribes, indicate that the first Clatsops, Chinooks, Nehalem, Tillamooks, and others were created at the top of Saddle Mountain" (Deur 2005:85).

The oral histories and ethno-historical data cited above demonstrate the potential that Tillamook and Clatsop populations may have hunted and utilized whales as long as they have lived along the Oregon Coast. However, for the ethnographic data to be accepted by anthropologists, the data will need to be confirmed archaeologically. The potential for that confirmation exists because archaeological sites on the Oregon Coast (Par-Tee, Palmrose, and Avenue Q) can be attributed to Tillamook and Clatsop communities. Therefore, the ability to test maritime adaptations within the region is a potential research project, which to some extent has been initiated by the primary author (harpoon artifact analysis, radiocarbon dating, and blood residue analysis), but further research is needed to confirm whale use in the region.

Discussion and Conclusion

The ethnographic and ethno-historical data outlined above provides anthropologists the opportunity to further research the potential that cetaceans were extensively utilized on the Oregon Coast prior to the contact period. It is with this potential that I hope future archaeologists will integrate sea mammal studies within their research. Anthropologists have long believed cetacean hunting was confined to regions farther north than Oregon. However, the combined data demonstrate the potential that sea mammal hunting and maritime adaptations were found within areas that constitute modern day Oregon.

Ethnographic research suggests a cultural tradition of the importance of whales for the Tillamook and Clatsop people. However, the ethnographic data lacked information on the methods utilized in potential whale hunting other than the use of canoes and harpoons. Further, ethnographic research of unpublished works (i.e., The Jacobs Collection, University of Washington) could provide further insight into whale use and whaling activities (Deur Pers. Comm. 2013). However, the size of the collection and the limited time to complete this research project made such ethnographic work unfeasible. Future research should utilize such collections and extend the unpublished work available within the Southwest Oregon Research Project (SWORP) Collection at the University of Oregon. Both collections have the potential to contribute ethnographic data related to the use of sea mammals in the region.

Also, future research examining the three Seaside sites (Palmrose, Par-Tee, and Avenue Q) for evidence of whale use (i.e., strike marks, evidence of butchering, tool extraction, and an analysis of cetacean bones in the sites) may identify the extent of large sea mammal use in the Seaside region during the Late Holocene. However, such research will be difficult because of the fragmented nature of the collections housed at the Smith-

sonian Institution, Washington, D.C., the University of Oregon Museum of Natural and Cultural History, and private collections within Oregon, as well as the continued disturbance of the three sites owing to modern day activities.

In summary, anthropological research of cetacean hunting within Oregon has been understudied. The reason may be a long-term belief in the region that such large sea mammals were not utilized while other species (sea otters, seals, etc.) were. In general, Oregon Coast archaeology has been under investigated when compared to states such as California and Washington. Future research in the region should not only identify the extent of sea mammal use within individual archaeological sites but also compare that extent with other early and late sites. Thus, anthropologists may be able to understand long-term species presence and use to provide better interpretations of archaeological materials.

Appendix

Example of Ethnographic Database. Courtesy of The Confederated Tribes of Grand Ronde, Land and Culture Department.

Record	Type	Name_Common	Name_Latin	Date	Season	Month	Myth_times	Historic_times	Modern_times	Hunting_Fishing	Gathering
FAU-0996	Mammals	Whale					y			y	
FAU-1104	Mammals	Whale						y		y	
FAU-1085	Mammals	Whale						y		y	
FAU-1114	Mammals	Whale						y		y	
FAU-1275	Mammals	Whale							y	y	
FAU-1282	Mammals	Whale							y	y	
FAU-1081	Mammals	Whale					y				
FAU-0951	Mammals	Whale					y	y			
FAU-0956	Mammals	Whale					y			y	
FAU-0876	Mammals	Whale					y			y	
FAU-0878	Mammals	Whale					y				
FAU-0880	Mammals	Whale					y				
FAU-0881	Mammals	Whale					y			y	
FAU-0883	Mammals	Whale					y			y	
FAU-0894	Mammals	Whale					y			y	
FAU-0981	Mammals	Whale					y				
FAU-1040	Mammals	Whale					y			y	
FAU-1021	Mammals	Whale					y				
FAU-0310	Mammals	Whale						y		y	
FAU-0346	Mammals	Whale						y		y	
FAU-0440	Mammals	Whale					y				
Record	Type	Name_Common	Name_Latin	Date	Season	Month	Myth_times	Historic_times	Modern_times	Hunting_Fishing	Gathering
FAU-0546	Mammals	Whale						y		y	
FAU-0552	Mammals	Whale					y			y	
FAU-0553	Mammals	Whale					y				
FAU-0584	Mammals	Whale					y				
FAU-0606	Mammals	Whale					y				
FAU-0627	Mammals	Whale					y			y	
FAU-0629	Mammals	Whale					y			y	
FAU-0632	Mammals	Whale					y				
FAU-0768	Mammals	Whale					y			y	
FAU-0770	Mammals	Whale					y			y	
FAU-0772	Mammals	Whale					y			y	
FAU-0815	Mammals	Whale					y			y	
FAU-0832	Mammals	Whale					y			y	
FAU-0837	Mammals	Whale					y			y	
FAU-0838	Mammals	Whale					y			y	
FAU-0865	Mammals	Whale						y		y	
FAU-0871	Mammals	Whale					y			y	
FAU-0874	Mammals	Whale					y			y	
FAU-0798	Mammals	Whale					y			y	
FAU-0580	Mammals	Whale					y				
FAU-0525	Mammals	Whale						y		y	

The University of Oregon McNair Research Journal [119]

Use 1

South Wind finds a whale on the beach near Bay City, but since he had no knife he didn't know what to do about it.

At Cannon Beach in 1853 Warren Vaughan saw a "captured" whale being cut up. Pieces of blubber and meat were cooked in full-sized canoes by adding water and fire-heated rocks--the fat was skimmed off with bones, used for the burial ritual bows, secured in the tops of young trees by the two men in the early 1930s who unearthed then reburied canoe burials at Dicks Point after the Hobsonville Mill incident Smith claims that earlier generations living north of Grays Harbor used to hunt whale, using it as a "portion of their ordinary subsistence".

bones removed from shell midden during 1953 excavation at Rube Wilkens' farm at Idaville

bones removed from shell midden during 1951 (?) excavation by University of Oregon at Netarts Spit

eaten by Thunderbird on the summit of Saddle Mountain

As'ai'yahal convinced two men sitting by the fire together in a house, Nctāl'E'qsen (flint nose) and TaLE'qtEn (copper for making arrow-points), to fight so that he could have a knife to cut up some of the stranded meat, the present given to the Tillamook by Txāxa' after they lost the ball game challenge and their stake of roots and berries caught by Thunderbird like fish

When Thunderbird brought home his catch, the whale would jump and shake the whole mountain. The man staying with Thunderbird was hurt twice trying to watch.

thought by people to be at sea with birds sitting on it, but it was a whale skin covered canoe with people from across the ocean

The men on the other side of the ocean had gone whaling, including the chief, when the last living brother returned to find his wife and son.

meat, in the house of two blind women living on the other side of the lightning door

meat, given in thanks to the canoe men for giving mouths to the mouthless people

pets of Ocean, as were other "ugly animals"

South Wind cut up a whale on the occasion when the old gnarled man visited him, to celebrate and to feed the old man.

The man with the snake belt told a whale that when South Wind packs him, he should pull South Wind out into the ocean. He did, and South Wind was stuck with the whale in the ocean for months, getting cold a

fat, for brighter indoor lighting

grease, drunk in hot soups

beached by Thunderbird, property of man with Thunder power, owner cuts off dorsal fin then sells pieces to others

Use 1

food, measured by number of joints of the backbone

eaten by Ice and his party, sliced by a character called Sharp Nose

two whales breathed into whalers' sweat for ice and his party, filling the house with steam

A woman's invisible husband and his people brought a whole whale to her.

Crow was eating pitch from a log on the beach, and calling it whale.

hunted by the men living in Thunderbird's place

Thunderbird loved to eat the tail of a whale

hunted by Crow's niece's nephew, traded for plants

Crawling One wished for a big fresh whale and one appeared. He cut it up into pieces.

meat, that Split-His-Own-Head's sister asked her brother to go buy with dentalia she gave him

Split-His-Own-Head's sister told him to go along on a trip to buy whale meat, and he sat beneath the people paddling

meat, served to the man with a crooked leg by South Wind, from a whale South Wind brought home with him from Bay City, that had meat taken from it but never died

like fish to Thunderbird. He would catch them for food, and cut them up on a big board

back fin is the best part, the big fat part. It was taken home to burn in the fire of the man who owned the whale.

Human flesh (meat from face and body, stomach, liver, kidneys) from captured people was used by Those People as whale bait.

the most precious food to the Tillamook

bought by Split-His-Own-Head

bought by Split-His-Own-Head

The man with the snake belt told a whale that when South Wind packs him, he should pull South Wind out into the ocean. He did, and South Wind was stuck with the whale in the ocean for months, getting cold ;

Clam Eater stood on a whale until Ice and the people went home, leaving him standing in the rising tide.

eaten by the Tillamook

[illegible][illegible]

Acknowledgements

This project would not have been possible without the support and advice of my mentors, Dr. Jon Erlandson and Eirik Thorsgard. Funding and support was provided by Dr. Gail Unruh and the McNair Scholars Program, University of Oregon; Dr. Kimberly A. Espy, Vice President for Research and Dean of the Graduate School, University of Oregon; Dr. Yvette M. Alex-Assensoh, Vice President for Equity and Inclusion, University of Oregon; Dr. Karen U. Sprague, (former) Vice Provost for Undergraduate Studies, University of Oregon; and Dr. Ian F. McNeely, Associate Dean for Undergraduate Education, University of Oregon College of Arts and Sciences. The Confederated Tribes of Grand Ronde, Land and Culture Department, provided assistance and encouragement throughout the project, especially Briece Edwards and David Harrelson. Also, I would like to thank Dr. Torben Rick, Curator, Smithsonian National Museum of Natural History (NMNH), and Dr. James Krakker, Archaeological Collections Specialist, NMNH for guidance during my visit to the archives. Lastly, thanks to the Oregon Parks and Recreation Department's Historic Preservation Office for supporting the project with grant funds.

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