SINCE KWATYAT LIVED ON EARTH:
AN EXAMINATION OF NUU-CHAH-NULTH CULTURE HISTORY

by

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Since Kwatyat Lived on Earth: An Examination of Nuu-chah-nulth Culture History

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ABSTRACT

This study examines the culture history of the related Nuu-chah-nulth, Ditidaht, and Makah peoples, whose historic territory encompasses western Vancouver Island and the northwestern Olympic Peninsula. Although archaeological research began relatively late in this area, the greatly expanded pace of recent fieldwork now allows an integrated assessment of their cultural heritage. The West Coast culture type, previously proposed for this area on limited archaeological data, is assessed against more recent evidence for diachronic trends and regional differences.

An historical and multi-faceted approach is employed, integrating data from archaeology, historical linguistics, and aboriginal oral traditions, along with ethnography and ethnohistory for later time periods, in a cultural historical synthesis. Recent research with the Toquaht, a small Nuu-chah-nulth group in western Barkley Sound, provides much of the archaeological data for this study.

Archaeological and linguistic evidence suggest a southward movement of Nuu-chah-nulth peoples from an original homeland on northern or north-western Vancouver Island. The ancestors of the Ditidaht and Makah split off from the parent stock and settled in their historic territories in relatively recent times. Over the last two millennia the ethnographic cultures gradually developed in their present territories. The destructive events of the early contact period resulted in significant cultural restructuring, particularly involving changes in political organization and settlement pattern. The West Coast culture type masks significant temporal change in Nuu-chah-nulth culture history, which is best seen in the framework of an evolving tradition.
"Kwatyat, the one of many tricks..."
(Sapir and Swadesh 1939:51)

"Quawteaht [Kwatyat]..., while on earth, lived at the Toquaht river"
(Sproat 1868:19)

Kwatyat was the culture hero and transformer figure of the Barkley
Sound Nuu-chah-nulth. His exploits are reflected at many locations on the Nuu-
chah-nulth cultural landscape.
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CHAPTER 1:
SETTING THE STAGE

Introduction

Goals and Outline

The record of the human presence on western Vancouver Island spans at least the last 4200 years, as known from archaeological research. From an indigenous perspective, human history extends back to the time when transformers such as Kwatyat put the landscape and the animals in their present forms. This dissertation examines the long culture history of the three related groups known today as the Nuu-chah-nulth, Ditidaht, and Makah, whose historic territories comprise western Vancouver Island and the northwestern portion of the Olympic Peninsula.

Long a "frontier area" to archaeologists, the precontact culture history of this region was essentially unknown until 1966, when large-scale excavations began at Yuquot in Nootka Sound and Ozette on the Olympic Peninsula. In subsequent decades several major excavation projects and intensive regional surveys, in addition to a number of smaller scale archaeological investigations, have taken place at various locations within the general region (see Chapter 3 for a review and assessment of relevant archaeological research). Sufficient data now exist to outline general diachronic trends and to perceive regional differences within the larger picture. For later time periods, this large body of information allows insight into a relatively wide range of past cultural practices. Linguistic and ethnographic data, as well as native oral traditions, also provide
substantial contributions to our understanding of aboriginal culture history in this area.

Although this dissertation examines and integrates such data from throughout the study region, the emphasis is on the Nuu-chah-nulth, with particular attention paid to the Toquaht of western Barkley Sound. This little-known Nuu-chah-nulth group is the focus of study for the on-going Toquaht Archaeological Project, which was initiated in 1991 (McMillan and St. Claire 1991, 1992, 1994). Throughout the following chapters, data from the Toquaht Project investigations are used as specific examples of more general issues. Ethnographic and archaeological information from Toquaht territory contributes to an emerging understanding of the broad patterns of Nuu-chah-nulth culture history, while at the same time being illuminated by and interpreted within this growing body of knowledge from the wider region.

As part of the general study, this dissertation examines and assesses the West Coast culture type, the present model of cultural continuity proposed for western Vancouver Island by Donald Mitchell (1990). This construct was proposed as part of a general review of the prehistory of southwestern British Columbia, and was based almost entirely on the excavated results from Yuquot and Hesquiat Harbour. Cultural continuity evident in the Yuquot sequence led Mitchell to place the entire known precontact history of western Vancouver Island, covering at least 4200 years, into a single culture type. He claims that the artifacts recovered, even from the earliest levels at Yuquot, are recognizable in the ethnographic material culture of the Nuu-chah-nulth, and concludes that "the post-3000 B.C. period can be characterized as one of relatively little change in subsistence and other aspects of technology" (Mitchell 1990:357). This model of cultural conservatism and continuity, however, masks significant changes
that occur through time. More recent archaeological data are used here to assess issues of temporal change and regional variation in the culture type.

The West Coast culture type, as generally applied, tends to project ethnographic Nuu-chah-nulth culture back in time to interpret the archaeological evidence. Certainly sites such as Yuquot demonstrate a remarkable cultural continuity. It is argued here, however, that significant changes did occur over time and that the cultural restructuring required by the traumatic events of the early contact period preclude any simplistic projections of the ethnographic culture into precontact times. Ethnographic data must be assessed with knowledge gleaned from archaeology to determine which traits have a lengthy continuity among the Nuu-chah-nulth, as well as the nature and extent of culture change that has taken place.

Following a brief discussion of the theoretical perspectives which guide the approach followed in this dissertation, this chapter then turns to linguistic and ethnographic overviews of the Nuu-chah-nulth, Ditidaht and Makah peoples, whose ancient heritage is investigated in this study. Linguistic analysis shows evidence of past relationships, of vital concern in investigating culture history. Ethnographic data allow us to understand the functioning interrelationships of living societies and provide a cultural framework against which remains recovered through archaeology can be compared. Attention then shifts more specifically to western Barkley Sound, with an account of the Toquaht and their neighbours, who provide many of the specific examples used in the following chapters. A brief description of Toquaht territory and its resources is provided, as well as a discussion of what is known of Toquaht culture history through native oral accounts and ethnographic research.
Chapter 2 examines various non-archaeological perspectives in interpreting the Nuu-chah-nulth past, including anthropological and linguistic models and aboriginal oral traditions. In the holistic perspective described in the following section, all make substantial contributions to our understanding of past culture histories.

Archaeological data and interpretations are covered in Chapters 3 to 5. Chapter 3 reviews archaeological research carried out throughout Nuu-chah-nulth, Ditidaht and Makah territory, and summarizes the amount and quality of information presently available. Based on this, a broad reconstruction of Nuu-chah-nulth prehistory, divided into the period prior to 2000 B.P. and the period from 2000 B.P. to historic contact, is presented in Chapters 4 and 5. Possible antecedent cultures and the geological factors which have inhibited study of the initial occupants are included with the early period. The more complete information available for the later period allows a fuller reconstruction of various aspects of past lifeways.

The early historic impact on Nuu-chah-nulth cultures is examined in Chapter 6. Changes in political organization and patterns of resource use are documented, particularly using examples from Nootka Sound and Barkley Sound, and the limitations of ethnographic analogy in the interpretation of archaeological materials from this area are assessed. Chapter 7 offers a summary and concluding remarks.

All aboriginal terms used in this study are written in the orthographic system devised for the B.C. Indian Language Project by Randy Bouchard (1971). Published accounts of this system can be found in Ellis and Swan (1981) and McMillan and St. Claire (1982). All radiocarbon dates are given as
radiocarbon years before present (shown simply as B.P.), with no correction or calibration factor, providing consistency for comparison between sites.

Theoretical Perspective

The approach followed in this dissertation is guided by the concept of an "holistic archaeology," as advocated by Bruce Trigger (1989a, 1989b, 1991). Central to the search for an "holistic understanding of human behavior" (Trigger 1991:562) is an historical perspective, integrating data from a number of distinct fields. As Trigger (1989a:377) states:

This humanistic outlook also reinforces the view that it is reasonable to employ a direct historical approach and to use non-archaeological sources of data, such as oral traditions, historical linguistics, and comparative ethnography, in order to produce a more rounded picture of prehistoric cultures.

Such a perspective has a lengthy history in North American anthropology, extending back to Sapir's (1916) important early paper, but it is put into its fullest and most recent form by Trigger. Unlike processualism, this integrative and humanistic approach validates an interest in the cosmologies, religious beliefs, artforms, and other symbolic aspects of individual cultures. Trigger (1991:562) states that the search for culturally specific meaning in the archaeological record "requires additional information, which can only be acquired from non-archeological sources by means of the direct historical approach." The rigorous development of this approach, Trigger (1991:562) maintains, is "perhaps the most challenging and potentially important task confronting archeologists today."

Holistic archaeology can be perceived as one of the many strands embedded in contemporary post-processual archaeology. Trigger (1989a:377) considers it an extension of contextualism, as advocated by Hodder (1986). This
approach stresses the need to consider all possible aspects of the archaeological record in order to understand the significance of individual elements. It also calls for recognition of the dynamic and symbolic nature of material culture.

Trigger (1989b:22) notes that traditional culture history, which tended to attribute culture change to such external factors as migration and diffusion, had little in common with true history except for a concern with chronology. Processualists came to view historical concerns as the opposite of science, as descriptive rather than explanatory, as particularistic rather than as capable of evolutionary generalizations. Trigger (1980:673; 1989a:373) rejects this "false dichotomy" between history and science. Through an holistic approach, he maintains (1991:562), where cultural traditions are examined as closely as ecological and systemic constraints, archaeologists can gain a more rounded and humanistic understanding of the past.

Similarly, Sahlins (1983, 1985) has sought to bridge anthropology and history. Rejecting the ahistoricism of structural anthropology, Sahlins calls for "a structural, historical anthropology." The problem now, as Sahlins (1985:72) sees it, "is to explode the concept of history by the anthropological experience of culture." In archaeology, Green (1994) adopts the term "historical anthropology," but maintains that a more appropriate label for this approach would be "the anthropology of long-term history." Green also makes the point that this is not the much-criticized traditional culture history, but a higher-level synthesis.

Such approaches, sometimes called "the new cultural history" (see Hunt 1989), have been applied in fields as diverse as social anthropology and literary theory. The common threads include roles as "historians of culture" (Hunt 1989:10) and the use of an integrative methodology which blurs disciplinary
boundaries. Biersack (1989, 1991), in advocating such an historical perspective in anthropology, uses the term "postdisciplinary" to describe the modern multi-faceted approach. In typical postmodernist phrasing, she refers to "the play of texts across topically diverse terrains" (1991:2). She also sees an emerging "historical anthropology" as providing an integrative focus for all anthropological subfields, including archaeology.

Trigger has questioned the colonialism inherent in academic fields which have not treated indigenous peoples as suitable subjects for historical study. People of European descent were perceived as the "prime movers" of historical analysis, while indigenous populations became "people without history" and were relegated to the subject matter of anthropology (Wolf 1982; Trigger 1980, 1984, 1985, 1989b). A misleading image of the "unchanging native" was further enhanced by such anthropological concepts as the "ethnographic present." Trigger (1985:34) describes the differentiation of history and anthropology as "a product of colonialism and ethnocentrism."

As a subfield of anthropology, prehistoric archaeology in North America traditionally has had weak ties with history. More recently, the processualist use of native heritage to formulate and test general hypotheses on human behaviour was resented by aboriginal communities as failing to address their own distinct identities and histories (Trigger 1980; 1985:29-32; 1989a:376; 1989b:24-25). Archaeology, if it is to meet the needs of the people it studies, must provide specific information on their unique culture histories. This is particularly vital in the modern political climate, as collaboration for mutual benefit is a prerequisite for many archaeologists working with aboriginal communities. Potential contributions archaeologists can make to aboriginal groups include investigating ancient ties to the land and demolishing the myth of
"the unchanging native." In addition, the new emphasis on studying cognitive and symbolic aspects of the past has the potential to enrich our understanding of aboriginal accomplishments. Recognition of "the native voice" through oral traditions and collaboration with existing populations may also enhance our understanding through new lines of knowledge. This is consistent with Hodder's (1991) call for respecting "multiple voices" on the past as a key element of his "interpretive archaeology."

A similar approach to that pursued in this dissertation was taken by Marshall (1993), who integrated data from a number of fields to assess changing Nuu-chah-nulth political organization. Central to her perspective is the requirement of study over a broad temporal framework, beginning well before contact and extending into modern times. Such an approach documents the resiliency of aboriginal cultures and the survival of a strong core of Nuu-chah-nulth culture and identity in the modern world. An important contribution of her work was a challenge to the established view that precontact Nuu-chah-nulth culture had been conservative and largely unchanging, a view based primarily on artifacts from a few major excavations. By focusing on other types of archaeological data, such as settlement patterns, Marshall was able to document important changes in Nuu-chah-nulth political organization over time.

The basic elements of "holistic archaeology" or "historical anthropology" have been put into practice in some areas, particularly in Polynesia. Green (1986) has employed a "triangulation" method, involving a search for convergences between archaeology, historical linguistics, and comparative ethnology, to reconstruct shared ancestral forms of Polynesian cultures. In a more ambitious paper, Kirch and Green (1987) call for an evolutionary approach
to Polynesian prehistory that has as its goal the task of unraveling both specific historical pathways and general processes of cultural evolution. The methodology they employ involves the analysis of linguistic relationships to reconstruct past population movements, testing such reconstructions with data from archaeology and physical anthropology, and then using ethnohistoric and ethnographic information to analyze systemic cultural patterns. In a prediction for the future of Polynesian archaeology, Green (1994:16) envisages a situation that might characterize archaeology generally:

The archaeology of the first part of the 21st century... will have to do with the anthropology of long-term history where the constructions of the past are multi-faceted, the perspectives multi-ethnic, and the players multi-cultural and multi-disciplinary.

The West Coast People: Nuu-chah-nulth, Ditidaht and Makah

Languages

The rugged west coast of Vancouver Island, from Cape Cook in the north to around Point No Point in the south, is the traditional homeland of people known historically as the Nootka. This name was applied by the famed British explorer Captain James Cook, who mistakenly thought he was recording a term the natives of the area used to describe themselves. In fact, "Nootka" stems from a word meaning "to come around" or "to circle about" (Sapir and Swadesh 1939:276; Moser 1926:160), apparently reflecting native attempts to direct Cook and his vessel into the sheltered harbour in front of the nearby village of Yuquot (Efrat and Langlois 1978:55; Folan 1972:32; Arima et al. 1991:6-7). Although largely rejected by the people to whom it was applied, the name
"Nootka" came into widespread use by anthropologists and others to describe not just the people of Nootka Sound but all the culturally related groups along Vancouver Island's west coast. The aboriginal languages of the area lacked any such broad collective term, preferring to keep self-designations at the more local level. As a result, the English phrase "the West Coast (or Westcoast) peoples" came into widespread use to encompass all the people formerly known as Nootka. This gained official use in the title of their political organization, formerly known as the West Coast District Council of Indian Chiefs, which was first established in 1958. The name Nuu-chah-nulth is a relatively recent innovation, being formally adopted by the Tribal Council in 1978, fully two hundred years after Cook erroneously applied the term "Nootka." Loosely translated, it means "all along the mountains," referring to the mountain chain of central Vancouver Island which forms the backdrop for the west coast villages.

To the south, along the storm-lashed coast of the Olympic Peninsula, were the culturally and linguistically related Makah. Their most southerly village, Ozette, was at Cape Alava, on the outer coast. In their own language, these people referred to themselves as the Kw'idishch7aa7tx, meaning "people who live at the cape" (Swan 1870:1; Colson 1953:76; Taylor 1974:43). The Nuu-chah-nulth called them the Tl'aa7as7ath, or "people of the outside coast" (Sapir and Swadesh 1939:148, 310; Arima 1983:7; Renker and Gunther 1990:429). This term frequently appears in early historic accounts as "Classet" or "Klazzart." The name "Makah" has been in common use since the mid-19th

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1 Individual political groups generally have names ending in -7ath (Nuu-chah-nulth) or -7aa7tx (Ditidaht and Makah), meaning "people of." This led Sproat (1868) to refer to the Nuu-chah-nulth as the "Aht" Indians.
century, deriving from a term applied to them by the Clallum, their Salishan neighbours to the east.

Although linguists today identify three separate languages (Figure 1), the aboriginal peoples of this area have a strong sense of sharing a common culture. Certainly the late-18th century European observers perceived them all as a single people, with only minor regional differences. Meares (1790:165) found "the language of King George's [Nootka] Sound . . . to prevail from thence to the district of Tatootche," referring to the powerful chief of the Cape Flattery area. Haswell, among the Ditidaht in 1789, was "glad to find that they spoke a dialect of the Nootka Language" (Howay 1941:71). When the Spanish established their settlement of Nuñez Gaona at Neah Bay in 1792, they thought the surrounding Makah closely resembled the inhabitants of Nootka Sound, differing only slightly in speech (Wagner 1933:189). Jewitt (1967:75), at Nootka Sound from 1803 to 1805, said of the Makah ("Kla-iz-zart") visitors to the sound: "Their language is the same as spoken at Nootka, but their pronunciation is much more hoarse and guttural."

Although these early observers had no linguistic training, the first anthropologists to work in this area came to the same conclusions. In his pioneering work among the "Nootka," Boas (1891:583) referred to three "closely allied dialects of the same language," which were "all intelligible to each other." Sapir, in his linguistic studies of the Barkley Sound groups, also comments on the three "Nootka dialects" (Sapir and Swadesh 1939:10). Similarly, Drucker (1951:3) refers to three "dialectic divisions," noting:

These dialects seem to differ through a few fairly simple and consistent phonetic shifts, so that although at first mutually unintelligible, a person who speaks one form can soon understand the other and make himself understood. At least that is what informants say...
Fig. 1. Traditional territories of the Nuu-chah-nulth, Ditidaht and Makah in the 19th century.
During fieldwork among the Tseshaht in Port Alberni, this author had similar experiences, with several informants insisting that they were a single people from Cape Cook to the Olympic Peninsula and that they could make themselves understood despite linguistic differences. More recently, Thompson and Kinkade (1990:39-40) have noted this tension between aboriginal views and the linguistic evidence:

Nootka, Nitinaht [Ditidaht], and Makah are reported to be considered a single language by the Indians, sometimes referred to as the Westcoast language, after the native expression; however, as they are not mutually intelligible, they are considered here to be three separate languages.

The northernmost of the three languages, formerly termed Nootka, is usually referred to as Nuu-chah-nulth today. The Language Committee of the Nuu-chah-nulth Tribal Council uses the term T'aat'aaqsapa for this language (Nuu-chah-nulth Tribal Council 1991; see also Thomas and Arima 1970). T'aat'aaqsapa exists as a series of intergrading dialects, from the Kyuquot in the north to just south of Barkley Sound. Local differences in speech are clearly evident, but do not hinder communication. For example, the Tseshaht are said to "talk very fast;" if someone speaks rapidly in a conversation, the others will joke that he must be a Tseshaht (Sapir 1915:194).

The language spoken by the Vancouver Island groups south of Barkley Sound is Ditidaht (formerly Nitinaht, but this reflects Nuu-chah-nulth, not Ditidaht, pronunciation). Like the Makah language, Ditidaht has a relatively small number of speakers and little dialectal variation (Thompson and Kinkade

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2 Bouchard and Kennedy (1991) report a different experience among the Ditidaht, where informants insisted that their language was distinct from Nuu-chah-nulth.

3 This joke was also made to the author on several occasions during research with the Tseshaht in the 1970s.

4 Ditiid7aa7tx is the term used by those who speak this language, while in the language of their Nuu-chah-nulth neighbours it is pronounced Niitiinaa7ath.
1990:39). Although Ditidaht and Makah are considered to be two separate languages, they have a high degree of intelligibility (Bates 1987:54; Arima 1988:23). They are more closely related to each other than either is to Nuu-chah-nulth (Renker and Gunther 1990:422; Bouchard and Kennedy 1991:4; Nuu-chah-nulth Tribal Council 1991:3). The divergence of Ditidaht and Makah may have occurred about 1000 years ago, based on glottochronology (Jacobsen 1979:776).

Despite these linguistic differences, the three groups consider themselves a single population, distinguished from their Kwakw’akw, Salish and Quileute neighbours. Ties of intermarriage and reciprocal attendance at social and ceremonial events enhance this shared identity. Even today, the Makah are frequently honoured guests at potlatches held by the Ditidaht or Nuu-chah-nulth groups. At such occasions, speakers stress their kin ties with statements such as: "We are related up and down the coast" (Bates 1987:151).

Today there are approximately 6000 Nuu-chah-nulth and 700 Ditidaht in Canada (Canada, Indian and Northern Affairs 1995), along with 2200 Makah in the United States (Makah Tribal Council; G. Wessen, pers. comm. 1995). These are the legally enrolled populations, however, and not all speak their native languages. A Canadian government study in the early 1980s categorized the Nuu-chah-nulth language as "moderately endangered," with one to two thousand speakers, while Ditidaht was considered "extremely endangered," with only perhaps sixty speakers (Foster 1982). In the Aboriginal Peoples Survey which followed the 1991 federal census approximately one thousand people indicated that they could speak the "Nootka" (presumably including Ditidaht) language. This should be considered a minimum number of native language speakers among the Nuu-chah-nulth and Ditidaht today.
The three "Nootkan" languages comprise the southern branch of the Wakashan language family. This term also comes from the observations of Captain James Cook among the Nuu-chah-nulth of Nootka Sound in 1778. He proposed that the people should be called Wakashians, after an expression in common use:

the word *wakash* . . . was very frequently in their mouths. It seemed to express applause, approbation, and friendship. For when they appeared to be satisfied, or well pleased with any thing they saw, or any incident that happened, they would, with one voice, call out *wakash! wakash!*

(Cook 1784:337)

The northern (or "Kwakiutlan") branch of the family also contains three languages: Kwakwala (the people speaking the Kwakwala language, formerly known as the Southern Kwakiutl, are today referred to as the Kwakwaka'wakw or Kwagiulth), Heiltsuk (at Bella Bella) and Haisla (at Kitamaat).

The recognition that these two sets of languages are related was an early discovery in the pioneering work of Franz Boas (1891:678-679). Sapir (1911:15), however, noted that the differences between the two branches are "very great." Swadesh (1953, 1954), in an attempt to establish the time depth separating northern and southern Wakashan based on "percentages of agreement in noncultural vocabulary, according to the method known as glottochronology or lexical statistics" (1954:361), arrived at an estimate of 29 centuries. Although numerous problems exist with glottochronology as a dating technique, Jacobsen (1979:769), in a review of the Wakashan family, considers this estimate "plausible."

Some linguists have sought more distant relationships. In his pioneering linguistic work, Edward Sapir (1929) suggested that all the aboriginal languages of North America could be encompassed within six broad super-stocks. He
linked the Wakashan languages to Kutenai and the widespread Algonkian family, creating the Algonkian-Wakashan super-stock. One of the three divisions within this super-stock he termed "Mosan," consisting of the Wakashan, Chimakuan and Salishan families. The Mosan grouping was further studied by Sapir's former student Morris Swadesh (1953). He considered the Wakashan languages to be most closely related to Chimakuan (consisting of only two languages, Quileute and Chemakum, widely separated on the Olympic Peninsula), and calculated that the time depth separating them was about 6500 years. Differences with the Salish languages were seen as even greater, requiring a time depth of about 9000 years for Mosan as a whole (Swadesh 1953:27, 42). If such distant relationships could be substantiated this would have obvious implications for the early occupation of a vast area of what is now central and southern British Columbia and northern Washington. This scheme, however, receives very little support from modern linguists. The Algonkian-Wakashan link has been completely abandoned and the Mosan grouping largely dismantled. Although Powell (1976) has attempted to demonstrate a relationship between Wakashan and Chimakuan, most modern linguists consider the former members of Sapir's Mosan to be three separate language family isolates (Kinkade 1990:104).5

Ethnographic Background

A rich body of ethnohistoric information describes Nuu-chah-nulth, Ditidaht and Makah life during the initial contact and maritime fur trade period. Of the many late-18th century observations by European visitors, both

5This ignores the controversial claims of Joseph Greenberg. The ultimate linguistic "lumper", Greenberg (1987) goes far beyond Sapir's suggestions of distant relationships, proposing that all the aboriginal languages of North and South America, with the exception of the NaDene and Eskimo-Aleut languages, are distantly related in a huge stock he calls Amerind.
published and unpublished, the journals of Captain James Cook (1784; Beaglehole 1967) offer the most important insights into Nuu-chah-nulth life during the early years of contact. Other valuable late-18th century accounts include those of John Meares (1790), George Vancouver (1984), Archibald Menzies (Newcombe 1923), Alexander Walker (1982) and José Mariano Moziño (1970). At the beginning of the 19th century, John R. Jewitt, who was held as a slave among the Nuu-chah-nulth of Nootka Sound for several years, left brief but valuable observations in his journal (1988), as well as a fuller but perhaps less reliable narrative of his adventures (Jewitt 1967; Stewart 1987).

The first detailed ethnographic studies, based on years of close contact with the people being described, appear in the second half of the 19th century with the works of Gilbert Malcolm Sproat (1868) among the Nuu-chah-nulth of Barkley Sound and James G. Swan (1870) among the Makah. Edward Sapir (1910-1914; Sapir and Swadesh 1939, 1945) collected extensive anthropological accounts of the Barkley Sound groups early in the 20th century. Other early 20th century ethnographers include Edward Curtis (1916) and Vincent Koppert (1930), the latter writing exclusively on the Tla-o-qui-aht (formerly Clayoquot). Philip Drucker's monograph on the northern and central Nootkans (1951), based on fieldwork carried out in the 1930s, is an ethnographic classic and the most widely cited source on traditional Nuu-chah-nulth culture. Much more recently, Eugene Arima (1983) has prepared a more general account, providing an ethnographic overview of all three West Coast peoples. More specific ethnographies, dealing with more recent issues of acculturation and adaptation, include Colson's (1953) study of the Makah, Kenyon's (1980) work with the Kyuquot, Golla's (1987) research on the Tseshaht of the Alberni area, and the study of Ditidaht and Makah interaction by Bates (1987).
Throughout their entire territory, from Cape Cook to Cape Alava, the Nuu-chah-nulth, Ditidaht and Makah occupied a landscape of majestic grandeur. Frequently shrouded in clouds, the rainy coast bears a lush green mantle of cedar, fir, hemlock and spruce. Along the outer coast huge waves break against long sweeping sandy beaches, broken by rocky headlands. Rugged mountains descend precipitously to the sea along the fjord-like inlets which stretch far inland. Large sounds and numerous smaller bays and inlets, studded with island clusters, result in a convoluted coastline offering a diversity of local environments and a great variety of resources. From the outer coast these people took whales, sea lions, seals, halibut and shellfish; the protected waterways of the sounds and inlets offered salmon, herring and other fish; and the forests provided deer, elk, bear and various plant foods.

Large dugout cedar canoes once traversed these waterways, allowing people to exploit resources throughout their territories and to travel to distant villages for feasts, ceremonies, or raids. Permanent villages of large cedar plank-clad houses faced the sheltered waterways at important locations, although temporary housing was also used at short-term resource camps. The beaches in front of the houses bustled with activity, as the canoes of fishermen, sea mammal hunters and traders arrived and departed. Here people gathered to clean and dry fish, make and mend tools, and visit. The basic activities of everyday life, such as sleeping, cooking, and caring for children, as well as major ceremonial activities, took place primarily within the houses, the cluster of people occupying a house forming one of the basic levels of Nuu-chah-nulth social organization (Marshall 1989a; Golla 1987:98-102; Wike 1958:219).

Throughout much of the historic period the numerous politically independent local groups along the west coast of Vancouver Island were
coalescing into larger and more complex political units. By the 19th century rapidly declining populations, brought about by introduced European diseases and intense internecine warfare, resulted in amalgamations to form the historically known Nuu-chah-nulth and Ditidaht groups (Figure 2). Sproat (1868:308) lists 20 "tribes" for western Vancouver Island in 1860; similarly Boas (1891:583) lists 22 "tribes," including the Makah, in the late 19th century. Several of these ceased to exist, their surviving members being incorporated into other bands, in a process continuing well into the 20th century. Today there are 15 legally recognized bands of Nuu-chah-nulth and Ditidaht, of which all but the most southerly, the Pacheenaht, are represented politically by the Nuu-chah-nulth Tribal Council.  

The basic social and economic unit in the Nuu-chah-nulth political system was the local group. As Drucker (1951:220) describes it:

The fundamental Nootkan political unit was a local group centering in a family of chiefs who owned territorial rights, houses, and various other privileges. Such a group bore a name, usually that of their "place" (a site at their fishing ground where they "belonged"), or sometimes that of a chief; and had a tradition, firmly believed, of descent from a common ancestor.

Kenyon (1980:84) adds further details:

... the Nootka local group was conceived of as an idealized family, expanded over time, which owned a distinct territory and shared common ceremonial and ritual property. Members

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6 The Pacheenaht, along with their Salishan neighbours the Sooke and Songhees, are members of the First Nations of South Island Tribal Council.
Fig. 2. Location of Nuu-chah-nulth and Ditidaht political units by the early 20th century.
of this family were ranked on the basis of primogeniture and it was the highest ranking member who was regarded as the owner of most of the group's property.

Such social units had clearly defined territorial boundaries. Access to economic resources within that territory was strictly controlled. As a result, each local group would have exploited a slightly different pattern of available resources, making individual local groups potentially detectable in the archaeological record (Calvert 1980; Haggarty 1982; Huelsbeck 1989).

Although the local group was the basic political entity in Nuu-chah-nulth society, it was composed of varying numbers of subgroups, called *ushtakimilh*. These subgroups have been designated "lineages," "houses," or "family groups" by anthropologists. Members of a local group considered themselves to be the descendants of a common ancestor and the various *ushtakimilh* represented different lines of descent from that ancestor. Primogeniture prevailed; the senior member of the line of descent stemming from the eldest son would be the head chief of the entire local group (St. Claire 1991:22; Wike 1958:220). This person would bear the name of the ancestor-founder and act as custodian of all group property (Wike 1958:219). Within the local group, each *ushtakimilh* was likely to have its own house, that of the head chief being the largest and grandest (Golla 1987:111).

Marriage, particularly among high-status individuals, served to promote alliances between social groups. Membership in several different local groups was possible through ambilateral descent (Arima and Dewhirst 1990:399). Broad networks of kin ties meant that individuals could shift local group affiliation through changing residence and participating in the new social unit. Considerable movement of people between local groups was common. Although
patrilocal residence was the preferred form, in practice there was no set rule (Drucker 1951:278; Arima and Dewhirst 1980:399).

In many regions, such as along Muchalat Arm and in Hesquiat Harbour, autonomous local groups survived into quite recent times. In other regions, however, more complex social structures emerged through political alliances of formerly separate groups. Drucker (1951:220) uses the term "tribe" to refer to allied local groups which shared a common winter village. Each local group owned and occupied at least one of the large permanent house structures at the winter village, where important ceremonial activities involving the entire tribe took place. The people of such a tribal union shared a name, frequently taken from one of the component groups, and had a pattern of fixed ranking for their assembled chiefs. The local groups still maintained their distinct identity, however, and retained exclusive ownership over important seasonal resource locations.

Warfare also played a major role in the formation of such larger groupings. Often hostilities were driven by a desire to appropriate the territorial holdings of another group, particularly if these contained such vital economic resources as rivers with salmon runs (Swadesh 1948; Drucker 1951:333; Arima 1983:105). The conquerors killed or enslaved the area's occupants and took possession of the territory. Families which escaped the destruction of their villages sought refuge among their relatives in neighbouring groups. Some groups, reduced in population through such hostilities, sought voluntary fusion with stronger neighbours for protection. A well-documented example of such wars of conquest is the expansion of the Ahousaht, formerly restricted to a small area of the outer coast, who in the early 19th century nearly exterminated the Otsoaht and absorbed their territory with its rich salmon streams (Drucker
Similarly, the Ucluelet, who also lacked a good salmon river, destroyed the Nahmintaht, an apparently independent local group on Alberni Inlet, and took possession of the rich fishery in the Nahmint River (Sapir and Swadesh 1955:362-367). Various other traditions of territorial conquest for economic gain have been recorded (Sapir 1910-1914; Swadesh 1948). The expanded territories of the victorious groups forced a shift in settlement pattern, involving seasonal movements between widely separated locations. These changes in economic and political systems are discussed further in Chapter 6.

The northern Nuu-chah-nulth - the Mowachaht, Ehattesaht, Nuchatlaht, and Kyuquot - formed confederacies, some apparently predating European contact. The members of such political units shared a name, generally taken from one of the constituent groups; a fixed series of chiefs, whose relative ranks were reaffirmed through ritual prerogatives, such as the order of seating for ceremonies; and a common village site, occupied during the summer months (Drucker 1951:220; Arima and Dewhirst 1990:391; Morgan 1980). Constituent groups maintained their distinct identities and territories, and they acted as ceremonial units within the confederacy. At other times of the year people still occupied their tribal winter villages and the local group resource sites.

Hereditary chiefs (hawilh) derived their power through inherited privileges. These included ownership of specific economic resources, such as salmon streams, off-shore halibut banks, sea lion rocks, clam beds or salvage rights to anything that drifted onto a particular beach. House sites and important ceremonial privileges were also included. Drucker (1951:247) described such rights as the "fountainhead of chiefly power", stating:
The Nootkans carried the concept of ownership to an incredible extreme. Not only rivers and fishing places close at hand, but the waters of the sea for miles offshore, the land, houses, carvings on a house post, the right to marry in a certain way or the right to omit part of an ordinary marriage ceremony, names, songs, dances, medicines, and rituals, all were privately owned property.

(Drucker 1951:247)

Ceremonial privileges had to be publicly displayed. Sapir and Swadesh (1955) explain the Nuu-chah-nulth concept of tupaati (hereditary display privilege), which is essential to chiefly power:

The term "tupaati"... is used in a narrow sense for a ceremonial trial of strength or skill in a guessing game, which constitutes an exclusive hereditary prerogative of a given lineage; those who are successful in such trials are rewarded with prizes and the host takes the occasion to reaffirm his family prestige, of which the tupaati is a token. Tupaati is also used in a broad sense for any hereditary privilege or any token of such a privilege, including territorial rights, songs, names, painted screens, carvings, which are the exclusive possession of a lineage.

(Sapir and Swadesh 1955:3)

Commoners were individuals who lacked claims to inherited privileges. In return for access to economic resources, they provided their services to the chiefs as fishers, hunters and craftworkers, as well as providing much of the menial labour. Chiefs required the labour of their commoners to "keep up their names," that is, to live up to the expectations of their chiefly positions through lavish feasting and potlatching (Drucker 1951:273). Commoners had much greater mobility than chiefs, who were tied to specific locations by their hereditary rights and traditions. If their leaders were overbearing, or failed to provide feasts and security, commoners could leave to assert their kin ties in the villages of other chiefs (Arima and Dewhirst 1990:401). In extreme cases they might kill their chief; in 1804, for example, a period of hunger caused by poor fishing and unsuccessful whaling led the Mowachaht chief Maquinna to fear for
his life, forcing him to use his slaves for protection from his own people (Jewitt 1988:59-60).

Slaves occupied the lowest rung of the social ladder. Most slaves were captives taken in war, then sold to other groups along the coast. A slave was considered chattel, and could be sold or mistreated at the whim of the chief. Occasionally slaves were killed at the mourning ceremonies for their chief, or publicly dispatched by a chief at a potlatch to demonstrate his great wealth. In most respects, however, their lives differed little from those of commoners. They carried out numerous menial but essential tasks, and were important economic resources. They also played an important military and political role, as some chiefs used their slaves to wage war or to enforce their control over their commoners (Wike 1958:223,225; Donald 1983:113).

Nuu-chah-nulth economic life changed with the seasons, as many resources, such as salmon, herring and various waterfowl, were only available at certain times of the year, while other species, such as halibut and sea mammals, could only be taken when the seas were relatively calm and people were living on the outer coast. Drucker (1951:36-61) describes the Nuu-chah-nulth economic cycle in some detail. Although considerable local variation existed, the basic pattern involved an annual round of movement from a sheltered winter village site on the inner coast, to spring and summer fishing and sea mammal hunting locations on the outer coast, to various rivers and streams for fall salmon fishing, and back to the winter village. This seasonal movement between "inside" and "outside" locations typifies the ethnographic cultures. Much of the warfare and political maneuvering historically recorded can be understood as attempts to secure territorial rights in both of these settings (Dewhirst 1978:7; Arima and Dewhirst 1990:394). Prior to the extensive historic
amalgamations, however, many local groups appear to have relied year-round on the resources locally available, perhaps augmented through patterns of trade and ceremonial exchange with their neighbours.7

In early spring, as stores of dried salmon and other winter provisions were exhausted, Nuu-chah-nulth groups began the move toward the "outside" portions of their territories. Schools of herring, the first important resource to appear, were eagerly taken in the inlets, using herring rakes (long wooden poles studded with sharp bone points on which the fish were impaled) and dip nets. Spring salmon also appeared to feed on the herring, and were taken by trolling with a sharp-angled hook, usually baited with whole herring (Drucker 1951:40). These were cooked and eaten fresh. When the herring spawned, the Nuu-chah-nulth collected the thick egg masses on sunken hemlock boughs and dried them for later consumption. Spring was also the time when large flocks of migratory waterfowl arrived and were taken by various methods, including hunting from canoes, netting and snaring.

As the weather improved, groups which owned outside village locations dispersed there to fish for halibut and cod and to hunt sea mammals (Drucker 1951:48; Calvert 1980:83; Arima and Dewhirst 1990:394). Halibut were taken on U-shaped hooks of dense wood, usually baited with octopus tentacle, sunk to the ocean floor. The halibut banks were often considerable distances offshore, the Barkley Sound groups reporting that they would paddle their canoes all night to reach their destination by dawn (Sapir and Swadesh 1955:41). People also

7 George Clutesi, a Nuu-chah-nulth author, gives an example of food exchange in a ceremonial context. In his book Potlatch, he describes a Tseshaht ceremony at Port Alberni early in the 20th century, to which the people of the inland lakes brought fresh deer and elk meat and roasted camas bulbs, while the people of the outer coast provided seal oil and chunks of smoked fur-seal and whale blubber (Clutesi 1969).
harpooned seals, sea lions and porpoises from their canoes, and clubbed seals when they hauled up on the rocks.

This was also the time when migrating whales became available and could be hunted through the summer. Grey whales (Eschrichtius robustus) and humpback whales (Megaptera novaeangliae) were the two main species taken ethnographically (Sapir 1924; Drucker 1951:49-50; Huelsbeck 1988b), although the latter may have been the most important in earlier times (Kool 1982). Only chiefs could hunt whales, an activity which required ritual preparation and careful training for both the whaler and his crew (Sapir 1924; Gunther 1942; Curtis 1916:16; Densmore 1939:47; Drucker 1951:169-170). The whaling canoe had to be paddled alongside the whale, so that just as the whale submerged the whaler could thrust the heavy harpoon deeply in behind the left flipper. As the whale dove and the paddlers frantically tried to get the canoe out of the way, the whale took with it a long line attached to the harpoon head, to which floats of inflated seal skins were added. As the whale resurfaced, other canoes could move in to implant additional harpoon lines and floats. Finally, when the weakened whale could no longer escape by diving, it was dispatched with a long lance and towed to shore. The "saddle" from the back of the whale was reserved for ritual treatment by the chief, while the rest was distributed according to rank and participation, with the blubber going to the entire group (Drucker 1951:55; Swan 1870:21-22; Waterman 1920:45; Koppert 1930:58-60; Densmore 1939:63; Arima and Dewhirst 1990:395).

Drucker (1951:49) argues that whaling was primarily a prestige activity, and that successful hunts were relatively rare events. Certainly, Jewitt's (1967, 1988) observations among the Mowachaht in 1803 to 1805 show a low success rate for Maquinna's whaling expeditions. Nevertheless, whaling clearly played a
major role in the Nuu-chah-nulth, Ditidaht and Makah economies. Even a relatively small number of kills would provide a substantial quantity of oil in the diet (Inglis and Haggarty 1983; Cavanagh 1983; Huelsbeck 1988a, 1988b; Arima 1988). The southern groups emphasized whaling to a greater extent than the Mowachaht and other northern groups studied by Drucker. Riley (1968:72) quotes an Indian agent among the Makah in 1865 as stating: "What the buffalo is to the Indians on the plains, the whale is to the Makah."

The outside sites also provided excellent access to marine invertebrates. A variety of clams, mussels and other shellfish were collected and eaten (Clarke and Clarke 1975, 1980; Ellis and Swan 1981; Calvert 1980). Women were the primary collectors, although men also gathered such foods (Moss 1993). Digging and prying sticks of yew and openwork collecting baskets were the major implements used (Ellis and Swan 1981:75-80). In addition to shellfish, the intertidal zone held an array of edible invertebrates, including several species of chitons, sea urchins, sea cucumber, crabs and octopus (Ellis and Swan 1981).

From late spring to fall, a wide variety of plant foods was collected (Drucker 1951:56-57; Turner and Efrat 1982; Turner et al. 1983). In spring, the fresh green stalks of salmonberries, cow parsnip and several other species were eagerly eaten raw. Several types of roots and bulbs were also dug for roasting or steaming. Camas and tiger lily bulbs were dug in summer. In late summer the Nuu-chah-nulth dug and steamed clover rhizomes, their most important root food, and feasted on the numerous berries which ripened then.

Throughout the summer people continued to fish and hunt sea mammals. A variety of rockfish, lingcod, Pacific cod, greenling and other fish were taken on hooks and lines around rocky reefs and headlands. Offshore, they took halibut, cod and red snapper. During hot summers the warm ocean currents brought
such large fish as bluefin tuna. Although these are not mentioned in the ethnographic literature, there are a few early historic references and their bones are found in virtually all excavated archaeological sites in Nuu-chah-nulth territory (McMillan 1979; Crockford 1992, 1994).

By late summer the sockeye salmon run brought many people back into the bays and inlets, to the mouths of their salmon streams. As the season advanced, particularly when the important chum or dog salmon run began in the fall, most groups were back "inside" at their fall fishing stations. Wooden stake weirs enclosing traps were constructed in coves by river mouths or in the rivers (Drucker 1951:58). As the runs began to thin, harpooning became the dominant method of capture. Most salmon taken at this time were smoked and dried for winter consumption. The chum salmon had spawning runs in nearly every sizable stream and river, its relatively dry flesh made it easy to preserve, and the late timing of its runs made it an ideal resource for winter provisions (Drucker 1951:36).

The West Coast people spent the wet, stormy months of winter at their major villages, generally located on the sheltered "inside" portion of their territory. Large multifamily houses, consisting of permanent cedar log frameworks covered with removable split cedar planks, lined the beaches at such locations. House posts and ridge beams might be carved with images that were the inherited rights of important chiefs. When torrential rains and rough seas kept the people indoors, they were able to feast on such preserved foods as dried salmon and halibut, dried clams, dried salal berry cakes, and sea mammal blubber and oil. When the weather cleared, men set off to fish for cod, while women gathered shellfish, other marine invertebrates, and winter huckleberries (Drucker 1951:37-39), adding variety to the steady diet of dried foods. Hunting
for land mammals, such as deer, elk, and bear, was done opportunistically throughout the year, but winter was a favoured time for many, when inland groups such as the Muchalaht and Opetchesaht used snowshoes to run down deer and elk in deep snow and dispatched them with yew lances (Drucker 1951:38; Arima and Dewhirst 1990:397). The reduced food-gathering requirements of this season allowed people to spend more time indoors, manufacturing and repairing their tools, weapons and clothing, as well as producing objects and regalia to be used in ceremonies.

The grey rainy winter days, when large numbers of people were gathered in the villages, were enlivened by major ceremonial events. Chiefs displayed their wealth, generosity, and ceremonial privileges at major feasts and potlatches, to which guests from other villages were invited. The major winter ceremonial was the tlukwana (tlukwaali in Ditidaht and Makah), literally the "Shamans' Dance" although it is widely referred to as the Wolf Ritual. A wealthy chief would sponsor such an event, which might last for ten days or more, in order to initiate a son, daughter, or other younger relative. Nearly all the people of the village participated in some fashion, many having roles which were hereditary rights. At the beginning of the ritual, as the people were seated for a feast, whistles from the woods signaled the arrival of the wolves. Men dressed as wolves burst into the house and abducted the children to be initiated, who were kept in isolation for several days. Later, the children were recaptured, "tamed," and restored to human society. The final event was a potlatch, at which the initiates danced to display the ceremonial prerogatives they had received from the wolves. Elaborate costumes and theatrical illusions enhanced the dance performances, and the entire event was punctuated with feasting and speeches.
(Ernst 1952; Drucker 1951:386-443; Curtis 1916:68-91; Sapir 1922:320-321; Densmore 1939:102; Moogk 1980).

Like all Northwest Coast aboriginal peoples, the three "Nootkan" groups relied extensively on the western red cedar in their technology (see Stewart 1984). House beams and planks, carved figures, canoes, and boxes were all of cedar, as were most masks, whistles and other ritual objects. Yellow cedar and alder were also important in various manufactures, and the tough wood of the yew provided spears, paddles, digging sticks and other implements. Although ethnographic studies list a relatively limited range of woods, J. Friedman's (1975, 1976) analysis of the late prehistoric material culture at Ozette demonstrates that almost every available species was employed. In addition to wood, the roots, bark, and withes from cedar and other trees were important technological raw materials. Women spent much of their time collecting, preparing, and weaving cedar bark and other materials into a wide range of useful products, such as basketry, matting, blankets, and items of clothing (Drucker 1951:92-99; Sapir 1922:305). Drucker (1951:93) points out that such vital products permeated all stages of Nuu-chah-nulth life, from the shredded cedar bark pads used to clean infants to the cedar bark mats used to wrap the dead. The overwhelming importance of wood, bark, and roots in the technology is, unfortunately, reflected in the archaeological record only at the few waterlogged sites known in the area. At all other archaeological sites, factors of preservation have removed most of the material culture that once existed, leaving only such remnants as sharpened slivers of bone that were once parts of composite fishing gear.

Although ethnographic studies have provided a fairly detailed picture of traditional Nuu-chah-nulth culture, they have to be used with caution.
Numerous differences existed between the various Nuu-chah-nulth, Ditidaht and Makah groups, and even between families in the same community. Differing beliefs and behaviours attributable to rank and gender distinctions are also minimized in these normative descriptions. Furthermore, they present an idealized account of cultural practices, largely ignoring the exceptions or variations in behaviour. The late date at which this information was collected means that it refers primarily to the mid-19th century and cannot be extended uncritically to earlier periods. Practices documented ethnographically may reflect historic adaptations to declining populations and the European presence, while many earlier traits were abandoned and forgotten by the time the ethnographic data were collected. The accuracy of the ethnographic record can now be evaluated only through archaeological research, which also provides a temporal perspective to the synchronic ethnographic picture.

The Toquaht and Their Neighbours

The Nuu-chah-nulth of western Barkley Sound provide a specific focus for this study. Archaeological research in Toquaht territory features prominently in the analysis of Nuu-chah-nulth culture history presented in subsequent chapters. As Drucker's (1951) classic ethnography of the Nuu-chah-nulth deals only with the groups to the north of Barkley Sound, a review of Toquaht ethnography and oral traditions provides insight into the nature of more southerly Nuu-chah-nulth cultures. Specific details of the changes brought about by the events of the early contact period are given in Chapter 6.
The Nuu-chah-nulth of Barkley Sound

Barkley Sound may have supported one of the densest populations in Nuu-chah-nulth territory. This, at least, was the opinion of the Spanish officers of the Eliza expedition, who explored Barkley Sound in 1791 and expressed an opinion that the villages they observed "contained more Indians than Nuca [Nootka] and Clayocuat [Clayoquot]" (Wagner 1933:149). Spanish chroniclers over the next several years estimated the population of Barkley Sound to be more than 8500 people, compared to 4000 at Nootka Sound (Boyd 1990:145). By the mid-19th century five major groups - the Toquaht (T'ukw'aa7ath), Ucluelet (Yuulhuu7ilh7ath), Tseshaht (Ts'ishaa7ath), Ohiaht (Huuzii7ath), and Uchucklesaht (Huuchukwtlis7ath) - shared the sound and its resources. Unlike more northerly areas, no single polity dominated the entire sound. Each of the five groups maintained distinct and jealously guarded territories, with clearly established boundaries. The 19th century territories of these groups are shown in Figure 3.

By the latter half of the 19th century a sixth Nuu-chah-nulth group was making at least seasonal use of the sound and its resources. This was the Opetchesaht (Hup'ach'is7ath), an amalgamation of several local groups occupying the lakes and rivers of the Alberni Valley. Their ancestors were apparently Salish-speaking, prior to the late prehistoric or early historic arrival of the Tseshaht from Barkley Sound into the lower Alberni Valley (McMillan and St. Claire 1982:13-16; St. Claire 1991:76-81). By the late 19th century the Opetchesaht and Tseshaht were highly intermarried and living in nearby communities in the lower Alberni Valley. The Opetchesaht movement into the sound was motivated by the lucrative late-19th century trade for dogfish and seal oil. In 1869, Rev. J.X. Willemar lamented the disappearance of all the
Fig. 3. Barkley Sound, showing 19th century Nuu-chah-nulth group territories (following St. Claire 1991:175).
native groups from around the mission at Alberni, stating: "... even the Opee-shesh-aht tribe, who have never been known to leave except for hunting deer in the interior, have given up their usual occupation and gone down to the coast in order to catch seals and make oil" (Willemar 1870). They had no territorial claim in the sound, and the reserve commissioner (O'Reilly 1883) did not assign them any reserves in this area.

By the 19th century, all the Barkley Sound groups, with the possible exceptions of the Toquaht and the Uchucklesaht, were amalgamations of formerly autonomous local groups. The Tseshahat consolidation, for example, continued into the late 19th century, when the Ekoolthaht (Hikwuulh7ath) of the upper sound joined their more populous neighbours (Blenkinsop 1874:41; St. Claire 1991:37-38). Ethnographic accounts of these groups refer to this late post-amalgamation period. This process of amalgamation is discussed further in Chapter 6.

Boundaries between the amalgamated Barkley Sound groups shifted over time, as more powerful groups pushed aside their weaker neighbours and seized valuable resource areas. The Ucluelets embarked on wars of expansion, taking Effingham Inlet and the Nahmint River by conquest and extermination of the former occupants (Sapir and Swadesh 1955:362-367,373-377; Swadesh 1948). The important village site of Hiikwis changed hands between the Tseshahat and Ucluelet several times. The Tseshahat expanded up Alberni Inlet to seize the rich salmon fishery on the Somass River of the lower Alberni Valley (McMillan and St. Claire 1982:12-16; St Claire 1991:76-81). The Uchucklesaht once held much of eastern Barkley Sound, which they had obtained through conquest, but by the 19th century were greatly reduced in numbers and restricted to a small area near the entrance to Alberni Inlet (St. Claire 1991:75). The Toquaht may also
have held more extensive territories in earlier times (McMillan and St. Claire 1982:10).

**Toquaht Territory**

Toquaht traditional territory in the 19th century encompassed western Barkley Sound, including Toquart Bay, Mayne Bay, and Macoah Passage (Figure 4). The Toquart and Maggie Rivers were also included, with at least the former having major fishing locations a considerable distance upriver. Several smaller rivers and creeks also supported important salmon runs. The few islands, such as the Stopper group, provide some protection but much of the coastline is exposed to winter storms. The large village sites of T'ukw'aa, Ch'uumat'a, and Macoah all are sheltered by offshore islands, while the long stretch of exposed coastline has few known habitations. The area lacks the resource diversity and abundance of sheltered locations characteristic of the Broken Group Islands in central Barkley Sound, and consequently has a much lower site density.

At the western edge of Toquaht territory, a short distance into Ucluelet Inlet, a prominent white-faced bluff marks the boundary with the Ucluelet (Figure 5). Blenkinsop described this in 1874 as a "small remarkable pinnacle rock with a few trees on top". From there the boundary line ran out to the open ocean through the George Fraser Islands. These islands, ethnographically the location of a Toquaht whaling village, were recognized as Toquaht possessions but were shared in use with the Ucluelet (Blenkinsop 1874:33). On the east, Lyall Point forms the boundary with the Tseshah. Even as late as 1874, however, Blenkinsop described the "dispute and contention" over this boundary (St. Claire 1991:55,167). From there the boundary extended out to sea, cutting
Fig. 4. Toquaht traditional territory, showing the location of major ethnographic villages.
through the middle of Hankin Island, at the western edge of the Broken Group. Such precisely demarcated territorial boundaries were a characteristic feature of Nuu-chah-nulth concepts of exclusive rights to lands and resources.

The islands and shoreline of western Barkley Sound fall within the Estevan Coastal Plain (Holland 1964:32), a comparatively low-lying strip of outer coast immediately backed by the rugged topography of the Vancouver Island Range. Holland (1964:20) characterizes the geology of most of the west
coast of Vancouver Island, including all of Toquaht territory, as "folded and faulted sedimentary and volcanic rocks." Volcanic rocks such as andesites and basalts predominate, mantled along the coastal plain with Tertiary sandstones and Pleistocene glacial drift deposits (Carter 1973:442; Dolmage 1921:14). The land is thickly covered with the predominantly coniferous forests of the Coastal Western Hemlock biogeoclimatic zone (Krajina 1969), with the principal species being Western red cedar (Thuja plicata), Western hemlock (Tsuga heterophylla), Douglas fir (Pseudotsuga menziesii) and Sitka spruce (Picea sitchensis).

The lush forest cover is sustained by the rainy climate, with an average annual precipitation of over 300 cm. Winters are relatively warm and wet, with much of the annual rainfall occurring during that time. Snowfall occurs on average only about six days a year. Table 1 summarizes climatic data from the weather station at Amphitrite Point, near the end of the Ucluth Peninsula, only a short distance across Ucluelet Inlet from several major Toquaht sites.

<table>
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<td>Climatic Data From Amphitrite Point, Ucluelet</td>
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<td>(Canada, Atmospheric Environment Service, 1982)</td>
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<td>(figures refer to the averages from 1951 to 1980)</td>
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<td>mean January temperature</td>
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<td>mean annual precipitation</td>
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<td>days per year with precipitation</td>
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The intertidal zone of Toquaht territory offered numerous economic resources. Butter clams (*Saxidomus giganteus*), native little neck clams (*Protothaca staminea*), cockles (*Clinocardium nuttalli*), geoduck (*Panope generosa*), two species of horse clam (*Schizothoerus nuttalli* and *S. capax*) and several species of *Macoma* are found in the mud, sand and gravel substrata of the protected and semi-exposed locations. Exposed rocky areas are more characteristic of Toquaht territory, yielding such important intertidal resources as California mussel (*Mytilus californianus*), bay mussel (*Mytilus edulis*), purple-hinged rock scallop (*Hinnites multirugosus*), barnacle (*Balanus* spp.), goose barnacle (*Pollicipes polymerus*), black katy chiton and giant red chiton (*Katharina tunicata* and *Cryptochiton stelleri*), and the purple, green, and giant red sea urchins (*Strongylocentrotus* spp.). The rocky Food Islets off the village site of Ch'uumat'a take their name from the abundance of such resources, and both they and the George Fraser Islands are used by modern Nuu-chah-nulth food collectors.

The waters of western Barkley Sound and offshore also provided access to various sea mammals, a vital component of Toquaht economy. Stellar or northern sea lion (*Eumetopias jubata*), California sea lion (*Zalophus californianus*), northern fur seal (*Callorhinus ursinus*) and harbour seal (*Phoca vitulina*) all occur in these waters. The sea otter (*Enhydra lutris*) was also present, prior to being hunted to local extinction early in the 19th century. Cetaceans which come into the area include the humpback whale (*Megaptera novaeangliae*), grey whale (*Eschrichtius robustus*), sei whale (*Balaenoptera borealis*), minke whale (*B. acutorostrata*), blue whale (*B. musculus*), fin whale (*B. physalus*), right whale (*Balaena glacialis*), sperm whale (*Physeter catodon*), Pacific pilot whale (*Globicephala macrorhynchus*), killer whale (*Orcinus orca*) and
the Pacific harbour porpoise (*Phocoena phocoena*). It was the humpback and
grey whales which were the primary prey of the Nuu-chah-nulth hunters. When
a commercial whaling station was established on Sechart Channel in Barkley
Sound early in the 20th century, the great majority of animals killed were
humpback whales, with lesser numbers of blue and fin whales and a few sperm
whales (Webb 1988:190, 338). Today, the whale most likely to be spotted in the
sound is the grey, which comes right into the shallow water off the mouth of the
Maggie River in Toquaht territory.

The waters of Barkley Sound also provided an abundant and varied
supply of fish. Halibut (*Hippoglossus stenolepis*), cod (*Gadus macrocephalus*),
lingcod (*Ophiodon elongatus*), rockfish (*Sebastes* spp.), herring (*Clupea harengus
pallasi*) and dogfish (*Squalus acanthius*) are among the common species.
Chinook or spring salmon (*Oncorhynchus tshawytscha*) could be caught by
trolling throughout much of the year, while several other salmon species were
taken during their spawning runs at various creeks and rivers in Toquaht
territory. The Toquart River was the most important fishery, with a major run
of chum or dog salmon (*Oncorhynchus keta*), a somewhat smaller run of coho
salmon (*O. kisutch*), and much smaller numbers of chinook salmon, pink salmon
(*O. gorbuscha*) and steelhead (*Salmo gairdneri*) (Brown *et al.* 1979:165).
According to modern salmon escapement data, Maggie River, Twin Rivers, Little
Toquart Creek, Lucky Creek, Cataract Creek and Sandy Creek also support
chum and coho runs (Brown *et al.* 1979). The lower portions of Toquart River
and Little Toquart Creek, Maggie River and Two Rivers are held as Toquaht
reserves today, attesting to their historic importance.

Barkley Sound is also home to a large variety of birds, both as seasonal
visitors and permanent residents. Economically important birds include an
abundance of ducks and geese. A survey in Pacific Rim National Park listed 10 species of dabbling ducks and 15 species of diving ducks (Hatler, Campbell and Dorst 1978). The Canada goose (Branta canadensis) and brant (Branta bernicla) are numerous during their migration periods to and from their breeding grounds. Three species of grebe (Podiceps grisegena, P. auritus and Aechmophorus occidentalis), three mergansers (Lophodytes cucullatus, Mergus merganser and M serratus), cormorants (Phalacrocorax spp.), gulls (Larus spp.), bald eagles (Haliaeetus leucocephalus) and the great blue heron (Ardea herodias) are common residents of the area. In all, Hatler, Campbell and Dorst (1978) list 247 different species of birds for Pacific Rim National Park, on each side of Toquaht territory.

Land mammals are the least abundant of faunal categories in the Barkley Sound area. Only the coast deer (Odocoileus hemionus columbianus) and the black bear (Ursus americanus) played a significant role in the Nuu-chah-nulth economy. Other local species include wolf (Canis lupis), cougar (Felis concolor), beaver (Castor canadensis), weasel (Mustela erminea), mink (Mustela vison), marten (Martes americana), raccoon (Procyon lotor) and river otter (Lutra canadensis).

Toquaht Oral Traditions

Edward Sapir was the first professional anthropologist to do fieldwork of any magnitude among the Barkley Sound groups. As part of his linguistic and ethnographic research, he recorded a considerable number of native historical narratives, primarily from Tseshahaht informants, during his first visit to Alberni in 1910 and subsequent fieldwork in 1913-14. During the latter period Sapir trained two Tseshahaht assistants, Alex Thomas and Frank Williams, to continue
recording native traditions. Thomas was able to send Sapir a considerable body of additional texts and other ethnographic information, collected between 1914 and 1923 from several groups in Barkley Sound. Much of Sapir's data remains unpublished, available only in his field notebooks (Sapir 1910-1914). Two major volumes of Nuu-chah-nulth texts and traditions, however, were compiled by Sapir's former student, Morris Swadesh, and published after Sapir's death (Sapir and Swadesh 1939, 1955). Swadesh gathered additional information from Nuu-chah-nulth informants during a research visit to Port Alberni in 1949, and also published an article on Nuu-chah-nulth warfare, using the texts on that theme collected by Sapir and Thomas (Swadesh 1948).

Warfare features prominently in the texts published by Sapir and Swadesh, clearly reflecting its importance in the recent history of the Barkley Sound Nuu-chah-nulth. Particularly useful in providing information on the Toquaht are those texts collected by Alex Thomas from Kwishanishim, Sapir's main Ucluelet informant. Although Kwishanishim was the son of a Ucluelet war chief, his mother was Toquaht.

Kwishanishim's story "Ucluelets seize Effingham Inlet" (Swadesh 1948:79; Sapir and Swadesh 1955:373-377) took place sometime before the end of the 18th century, shortly after the Tla-o-qui-aht had obtained firearms but before these were available to the Barkley Sound groups. The war started through a territorial dispute between the Toquaht and the people of Effingham Inlet, the "A'uts" (A7uts'ath) and "Hachaa" (Hach'aa7ath). A jumping contest, which the Toquaht won, was held at the disputed boundary. The Effingham people attacked the Toquaht to take their land. Toquaht losses were considerable (Kwishanishim states that the Toquaht "became few" as a result of these raids). During one night raid, however, a group of Ucluelet were
mistakenly attacked and killed, and the Tla-o-qui-aht also claimed the loss of one of their people. These two tribes then attacked the Effingham groups, the Tla-o-qui-aht bringing the trade guns which they had recently obtained. The A'uts and Hachaa were nearly exterminated and the Ucluelets seized Effingham Inlet.

The most lengthy and important of Kwishanishim's war texts is "the Long War in Barkley Sound" (Swadesh 1948:79-80; Sapir and Swadesh 1955: 413-439). Kwishanishim's father, Angryface, played a role in this conflict, which can be dated to around the 1840s. This lengthy war began at the Toquaht village of Macoah, where a Ucluelet chief demanded compensation for a runaway slave. When this was refused, the Ucluelets decided to punish the Toquaht, roughing up some of the men and damaging houses and canoes, but not killing anyone. The Toquaht forged an alliance with the Tseshyaht, Ohiaht, and other Barkley Sound groups through presents of women. Many of the Ucluelet were killed in the ensuing attack by the combined forces, and the survivors retreated to a strongly fortified location. After a number of raids, they dispersed, some to live with their Tla-o-qui-aht relatives while others joined the neighboring Toquaht, despite the recent hostilities. Hearing of a plot by the Toquaht to help the Ohiaht in the war, the Ucluelet turned on their hosts. The Tla-o-qui-aht aided the Ucluelet by hiding in the woods and killing the Toquaht as they fled. Kwishanishim estimated that 60 men were killed and beheaded, and many women and children were taken as slaves. The surviving Toquaht scattered to their relatives among the other Barkley Sound groups. Mistreatment at their hands, however, led the Toquaht to return to Macoah and eventually to rejoin the Ucluelet. Their combined village was attacked by the other groups, particularly the Ohiaht, and a lengthy period of reciprocal raiding followed. The Ucluelet then moved into Toquaht territory, settling with the remaining Toquaht at a village on the Toquart River ("Deek-
yac-us" [T'iiyakis], translated by Sapir as "Dug Root Beach"). Kwishanishim noted that the Toquaht and Ucluelet "had now become one tribe. They no longer had separate villages" (Sapir and Swadesh 1955:427). Finally, after the Ucluelet gave gifts of women, the wars were stopped.

The narrative, however, continues past the end of the Long War. Desiring to own the rights to the Toquart River, a Ucluelet man decided to kill the Toquaht chief, despite being married to his sister. The other Ucluelet were opposed, but reluctantly agreed to his plan. The plot failed but several Toquaht were killed and the two tribes moved apart. According to Kwishanishim: "There were only a few Tukwaa [Toquaht] people now." Seeking revenge, the Toquaht survivors invited the Ucluelet to join them. The initiator of the plot returned to his wife's village and was killed, and another Ucluelet group was ambushed. The Toquaht then moved to their fishing village at the falls on the Toquart River. They were followed by the Ucluelet, who wanted to exterminate them, "leaving none of them alive, because they were now few" (Sapir and Swadesh 1955:433). After the Ucluelet killed one of the Toquaht chiefs, the two groups finally ceased hostilities and "war was no longer in season."

Recent oral history research has involved interviews with contemporary elders, placing particular attention on such topics as place names, site usage, territorial boundaries, and group composition. Place name research has been particularly fruitful, with nearly 700 native names now known for Barkley Sound locations (Inglis and Haggarty 1986:112). Studies of place names allow insight into how the aboriginal occupants perceived their landscape, as well as providing specific details of site and resource use. A major program of such research was initiated as part of the Pacific Rim Project in 1981-83 (Inglis and Haggarty 1986; St. Claire 1991). Although Toquaht traditional territory lies
outside Pacific Rim National Park, the primary focus of that project, considerable data were gathered on the Toquaht. For example, St. Claire (1991:155-167) collected 78 place names in Toquaht territory, and recorded Toquaht traditions on the use of these locations. This work was continued as part of the Toquaht Archaeological Project from 1991-94 (McMillan and St. Claire 1991).

Some of this research has focused on the nature of the component groups which make up the larger polity. Although the local group was the basic autonomous political entity in Nuu-chah-nulth society, it was composed of varying numbers of *ushtakimilh*, "family groups" or separate lines of descent from a common ancestor. The drastic decline in Toquaht population caused by disease and warfare resulted in massive disruption of intragroup relations and loss of entire descent lines. It is now difficult to determine if the still-remembered component groups were once autonomous local polities or *ushtakimilh*. Sayaach'apis, Sapir's main Tseshaht informant, claimed that the people of Macoah, the *Ma7akwuu7at̓a*, who were the second ranking "sept" of the Toquaht according to Boas (1891:584), were once a distinct group which amalgamated and became subordinate to the Toquaht (Sapi 1910-1914; St. Claire 1991:54). Another of Sapir's Tseshaht informants, William, credited the *Ch'uumat'a7ath*, whose main village was Ch'uumat'a, with once being a separate tribe. However, no traditions of amalgamation remain among the Toquaht, nor are there separate ranked chiefly positions or potlatch seats, as exist among the Barkley Sound groups where amalgamation is known to have occurred. The reduction of Toquaht populations to near-extinction levels may, of course, be responsible for the loss of such positions. Jim McKay, St. Claire's (1991) primary Toquaht informant, provided the names of seven *ushtakimilh*
comprising the Toquaht, while Archie Thompson later identified 10 such subgroups (McMillan and St. Claire 1991). Their lists, compared to the 11 Toquaht "septs" recorded by Boas in 1889, are shown in Table 2.

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<table>
<thead>
<tr>
<th>Boas (1891) (ranked)</th>
<th>Jim McKay (unranked)</th>
<th>Archie Thompson</th>
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<tr>
<td>1. Tok'oa'ath</td>
<td>Tukw'aa7ath (Boas No. 1)</td>
<td>Tukw'aa7ath</td>
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<td>2. Maa'koath</td>
<td>Ma7akwuu7ath (Boas No. 2)</td>
<td>Ma7akwuu7ath</td>
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<td>3. Wa'stanek</td>
<td>Kwuhats'a7ath (Boas No. 8)</td>
<td>Kwuhats'a7ath</td>
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<td>4. To'tak.amayaath</td>
<td>Ch'inaht'a7ath (Boas No. 9)</td>
<td>Ch'inaht'a7ath</td>
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<tr>
<td>5. Tsak.tsak.oath</td>
<td>Ch'uumat'a7ath (Boas No. 11)</td>
<td>7aa7aspi7ath</td>
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<tr>
<td>6. Mu'ktciath</td>
<td>K'inaht'a7ath</td>
<td>Tiikyakis7ath</td>
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<td>7. Tucklis'a'th</td>
<td>T'apaat7ath</td>
<td>Makwuu7ath</td>
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<td>8. Kohatsoath</td>
<td>Tiikyakis7ath</td>
<td>T'apaat7ath</td>
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<tr>
<td>9. Tc'e'natc'aath</td>
<td>Ch'uch'aa7ath</td>
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<td>10. Metsto'asath</td>
<td>Tsaw'in7is7ath</td>
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<td>11. Tco'maath</td>
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Toquaht informants today maintain that the Toquaht were once the dominant group in western Barkley Sound. There is a tradition that they were the original Barkley Sound group, from which all the others sprang (Sproat 1868:19; St. Claire 1991:53). Their dominant position is also suggested by the location of Tukw'aa, with its prominent fortress site controlling the entrance to Ucluelet Inlet. Bert Mack, the hereditary Toquaht chief, was told by his father that the Toquaht once protected the people of Ucluelet Inlet, prior to the
formation of the modern Ucluelet through amalgamation. In addition to dominating the Ucluelet Inlet groups, the Toquaht also held drift rights, from the surf line seaward, to the entire outer coast of the Ucluth Peninsula, all ethnographically Ucluelet territory. A Toquaht family apparently resided in one of the outer coast Ucluelet villages to watch out for Toquaht drift rights, quickly sending word when anything important was sighted, for once it reached the beach it was Ucluelet property. Such an arrangement also suggests that the Toquaht were once the major political force in western Barkley Sound, prior to their near-disappearance during the catastrophic events of the early historic period.

The Toquaht serve as a specific example at many points in this study. Chapters dealing with archaeology strongly feature the results of research conducted as part of the Toquaht Archaeological Project (see Chapter 3). Ethnographic and ethnohistoric information collected during that research greatly enhance the archaeological data. In addition, historic forces which affected the Toquaht, such as the Long War in Barkley Sound, feature prominently in the events described in Chapter 6. In their historic reduction by warfare and disease, the Toquaht illustrate processes that affected the broader Nuu-chah-nulth world.
CHAPTER 2:
DIFFERING APPROACHES TO THE NUU-CHAH-NULTH PAST

A considerable body of ethnohistoric and ethnographic data documents the recent Nuu-chah-nulth past. For earlier periods, however, the record is comparatively meagre. Archaeological research came late to the Nuu-chah-nulth area and even now provides only an incomplete picture. Many earlier studies relied on comparative analyses of ethnographic traits to place the Nuu-chah-nulth within broad models of the emergence of Northwest Coast cultures. Linguists have also played a major role in developing models of origins and migrations of Northwest Coast cultures. More recently, biological anthropology and molecular biology have contributed new insights, particularly in demonstrating genetic relationships between groups. Oral traditions of the Nuu-chah-nulth, Ditidaht and Makah peoples add their own unique flavour to the study of this region's ancient inhabitants, providing rich detail to augment the meagre remains recovered by archaeologists. In an holistic approach, all such sources of knowledge provide vital insights into the past.

Oral Histories

Sharply differing views of the past are commonly held by archaeologists and native groups. Archaeologists have been preoccupied with determining the origins of Northwest Coast peoples and the development of various traits which characterize the ethnographic cultures. Native groups, on the other hand, through their oral traditions, perceive a past where their ancestors have always
been part of the land they presently occupy. Oral histories of the remote past refer to a time when humans and animals were not separate, prior to the arrival of powerful transformers who put all living creatures and many prominent features of the landscape into their present form.

Edward Sapir noted the difference in the Nuu-chah-nulth oral traditions between myths and legends, with the former believed to extend back to the time of the transformers. He states that the Nuu-chah-nulth:

... distinguish very strictly between myths proper and legends. Both are believed to be true, but the myths go back to a misty past in which the world wore a very different aspect from its familiar appearance of today. They go back to a time when animals were human beings, to be later transformed into the creatures we know, and the tribes of men had not yet settled in their historic places nor started upon their appointed tasks. The legends, on the other hand, deal with supposedly historic characters of human kind, are definitely localized, and connect directly with the tribes of today and what is of ceremonial or social importance to them. A myth ... is no one's special property. It may be told by anyone and is generally known to a large number. A legend, however, is family property. Only those may tell it who have an inherited right to it, who trace descent ... from the hero of the legend, the ancestor who has met one or more supernatural beings, has gained "power" from them, and has bequeathed to his descendants not only this "power" but a number of privileges, such as names, songs, and dances, which derive from the ancestral experiences.

(Sapir 1959:106)

Franz Boas, working in the late 19th century with Tseshahnt and Opetchesaht informants in the Alberni area, collected a typical example of a Nuu-chah-nulth oral tradition of mythic origins, featuring the arrival of the transformers. According to this story:
In the beginning only the ky'aimi'mit, birds and other animals lived on the earth. They knew that they would one day be transformed into people and actual animals. Now when the rumour went round that two men, called kwe'kustépsép (the transformers), had descended from the sky and would transform them, they called a council to talk the matter over. A'tucmit, the Deer, said, "When they come and want to transform me, I'll kill them. I'm not afraid." He picked up a couple of seashells and sharpened them on the beach on a stone. While he was thus engaged he saw two people approach who looked just like his neighbours. They asked, "What are you doing there, A'tucmit?" He answered, "I'm making daggers for myself in order to kill them when they arrive." "Whom?" they queried. "The transformers, when they eventually come," replied Deer. "You've chosen really nice shells, let's have a look at them," they continued. When A'tucmit handed them over, they struck his forehead with them and shouted, "They shall always stay on your forehead, this one here and that one there! Now shake your head!" He had to obey. "Now once more," they called. After he had shaken his head for the second time the shells were transformed into antlers. Then they ordered him to prop his hands on the ground and smeared his rear-end with the dust which he had ground off the shells. Then they told him to run into the woods and he became a Deer. Then the transformers went to the village and changed all the inhabitants into animals and birds. The Land-otter had a long spear, the Beaver a long broad bone-knife and they fashioned them tails from these.

When the animals had thus come into being, the people came into the world, one couple in every village. The transformers created them and said, "Mankind shall speak different languages. Some tribes shall become powerful, others shall remain weak. We will give people everything they need: berries, clams and fish."

(Boas 1974:159-160)

A similar version of this story was collected by Sapir from Tseshahnt informants several decades later (Sapir and Swadesh 1939:45-51).

Stories of how the world was put into its present order varied along the west coast. Among the Barkley Sound groups, Kwatyat was the culture hero,

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1 The translation of this term is not clear in the Boas manuscript, but from its context it refers to the animal people, who occupied the world until the transformers arrived to create the animals which exist today.
who was said "to have been the creator of all things and to have had the power of transforming himself into anything" (Sapir and Swadesh 1939:217, note 107). Among groups to the north, Kwatyat played more of a buffoon's role, while Andaokot was the primary transformer and culture hero (Drucker 1951:452). Also known as mucus-made or Snot Boy (Arima 1983:50), Andaokot was formed from the droppings from his mother's nose as she sobbed over the loss of her child to a supernatural being. Growing rapidly to adulthood, Andaokot overcame the being that had taken the children from the village and restored them to life. He eventually climbed on a chain of arrows to the sky world, where he received powers and instructions to return to earth and transform all things to their present state (Arima 1983:50-54, 180-187; Boas 1916:903-913; 1974:188-192).

Such myths situate the people on their landscape and reaffirm their ancient connection with the land. Looking around their territory they can see prominent features that mark the transformer's exploits. An example is the story of Kwatyat and the wolves, told to Sapir by a Tseshaht informant (Sapir and Swadesh 1939:33-34; Thomas and Arima 1970:15-19). After killing the Wolf chief, Kwatyat was forced to flee. When the wolves were nearly upon him, Kwatyat set his comb in the ground, commanding it to become a mountain between him and his pursuers. When they again came close, Kwatyat poured some oil out of his pouch and it became a big lake, blocking his pursuers' path and allowing him to escape. When Boas was told this story at Alberni late in the 19th century it was specifically noted that the lakes and mountains formed by Kwatyat "can still be seen today between Sproat Lake and the central part of Alberni Canal" (Boas 1974:161). Similarly, in a modern retelling of this story, Hupquatchew (Ron Hamilton), an Opetchesaht artist and writer, specifically
links Kwatyat's flight with the creation of the Beaufort Range mountains and the two large lakes, Sproat and Great Central, in the Alberni Valley (Hupquatchew 1981). Far to the south, Swan (1870:64-65) was told a version of this story by the Makah, who trace the origins of the Flattery Rocks and the Strait of Juan de Fuca to this mythic event.

Other stories were prized possessions of chiefly families. These traced their origins, often from supernatural forces, and the history of how ancestors acquired powers and associated privileges, such as names and songs, through encounters with supernatural beings (Golla 1987:85; Drucker 1951:157-161). Such stories, meant to be told essentially verbatim, recount family histories in a Nuu-chah-nulth social context; they are, in Golla's (1991:108) words, "testaments in the native voice." Group names, founding histories, and traditions of remote times all reinforced the ties between the Nuu-chah-nulth and their physical and social landscape.

Several locations in Toquaht territory feature prominently in the oral traditions. According to Sproat (1868:19), Kwatyat (which he rendered as "Quawteaht"), during his time on earth, lived at the Toquart River. Macoah, the main ethnographic Toquaht village, in mythic times was the home of the Wolves (Sapir and Swadesh 1939:24-26; Thomas and Arima 1970:9-14). This is where the Thunderbirds went to play the hoop game, in which they were defeated by Kwatyat's tricks (Sapir and Swadesh 1939:51). After a dispute with the Thunderbirds, Kwatyat took revenge. He destroyed three of the four Thunderbirds by entering a vessel in the form of a whale and luring them from their mountaintop home, dragging them underwater and drowning them in Alberni Inlet, in the land of the Uchucklesahts (Sproat 1868:177-178; Carmichael 1922:29-30). The rocks in front of the site of T'ukw'aa are said to be
the remains of this vessel, transformed by Kwatyat (Boas 1974:169-170). When the great flood covered the earth, the Toquaht sought refuge on the large mountain called Quossakt, whose peak was one of the few places above the waters (Sproat 1868:184). A large rock in the intertidal zone at Toquart Bay today is known as T'ikwuusim, "an anchor," as this is where the Toquaht tied their canoes with long ropes during the flood (St. Claire 1991:164; McMillan and St. Claire 1991:48). This association of features in the modern landscape with the beings and events of mythic traditions served as constant reinforcements of Toquaht identity and ancient ties to the land.

Many oral traditions are more straightforward historical accounts set in more recent times, describing wars, alliances and other social and political events. Specific examples for the Toquaht and their neighbours, such as the events of the Long War in Barkley Sound, were given in Chapter 1. Some traditions describe territorial changes, usually through conquest. Most involve internecine warfare among Nuu-chah-nulth groups, but some refer to Nuu-chah-nulth or Makah expansion at the expense of their neighbours. These are discussed later in this chapter.

**Anthropological Theories**

*Early Diffusionist Views*

Prior to the availability of archaeological data, speculations on Nuu-chah-nulth culture history had to be drawn from ethnographic traditions or from distribution studies of material culture items. In an early example of the latter type of analysis, Ronald Olson (1927) concluded that the "Nootka" were the probable originators of such important Northwest Coast traits as the ocean-
going "Nootka-style" canoe and the D-shaped adze. Philip Drucker, in a later study, credited the Wakashans with the development of the D-shaped adze, the curved halibut hook, end-thrown sea-hunting harpoons with finger-holes or rests, sealskin floats for sea mammal hunting, ritual use of human corpses and skeletons, development of the dancing societies and elaborate masks used in rituals (Drucker 1955a:79; 1955b:198). However, Drucker also lamented the lack of archaeological data and the subjective nature of distribution studies:

... there is a wealth of ethnographic information available plus a few linguistic and anthropometric data, and only a modicum of cold, hard, archeologic fact to refute one's interpretations... one is tempted to rely far too heavily on ethnographic distributions in which subjective evaluations must be made... and, further, arbitrary assumptions must be made as to the significance of those distributions... (Drucker 1955a:59)

Early views on the origins of coastal cultures were permeated with diffusionist and migrationist theoretical assumptions. Franz Boas, in his association with the Jesup Expedition, attempted to trace a spread of Asiatic traits around the Pacific littoral and down the Northwest Coast (Boas 1905). Although he felt that the Tsimshian and Salish were recent arrivals from the interior, he was willing to credit the Wakashans with a lengthier heritage on the coast, presumably supplying the model for Salish adaptation to their new environment (Suttles 1987a). Asiatic influences, in his view, continued to shape the development of the Northwest Coast ethnographic pattern until they were cut off by the intrusion of Eskimo-Aleut populations in the Bering Strait region (Drucker 1955a:60; Chard 1960:235; Suttles and Jonaitis 1990:81). Like so many early speculations, such ideas were rendered untenable by subsequent archaeological research, in this case demonstrating considerable antiquity for
the Eskimo-Aleut presence. Any continuing Asiatic influences had then to be transmitted by Eskimo-Aleut cultures.

An alternative view was to derive the coastal cultures from interior groups, which moved down the major rivers to the coast. This idea was expressed in fullest form by Alfred Kroeber (1939:28), who proposed that: "Northwest Coast culture was originally a river or river-mouth culture, later a beach culture, and only finally and in part a seagoing one." He pointed to the simpler societies found inland, along the Fraser and Columbia river drainages, as the logical prototypes for Northwest Coast cultures. Although crediting the northern coastal tribes with the "culture climax" in historic times, he thought that previously the Wakashans may have had the most developed cultures. He also speculated that in earliest times, as cultures emerged from the rivers to an ocean environment, the climax may have been centred around the mouth of the Fraser River (Kroeber 1939:30).

To assess these competing theories anthropologists sought the "earliest" and "purest" coastal cultures from which to reconstruct the original form. These early speculative models prominently featured the Nuu-chah-nulth. Looking at their relatively isolated location and lack of what he considered "interior cultural traits," Drucker regarded the Wakashans as "the most typical coastal peoples" (1955a:69), "the purest strain of Coast culture" and "the oldest strain of Northwest Coast civilization" (1955a:76). Borden (1951:39) referred to the Nuu-chah-nulth as "the Indians who have lived longest on the coast," while Gunther (1960:270) described them as "the base from which all coast cultures began." Such assessments of the Nuu-chah-nulth stress a perceived isolation and marginality to later developments on the coast. The emphasis was on their
conservatism, as the Nuu-chah-nulth were believed to have retained most completely the basic form of the original coastal adaptation.

It was Nuu-chah-nulth whaling that attracted particular anthropological attention. Of all Northwest Coast peoples, only the Nuu-chah-nulth, Ditidaht, Makah, Quileute and Quinault actively hunted whales, and the latter two groups clearly derived this practice from contact with the Makah. Along the coast to the north the nearest whalers were the Koniaq and Aleut peoples, of Eskimo-Aleut stock, in southern Alaska, leaving a distributional gap that cried out for explanation. In a diffusionist argument characteristic of the time, Lantis (1938) prepared a detailed list of parallels in whaling practices in the two areas and proposed a formerly continuous distribution that was later broken by the arrival of the northern Northwest Coast groups from the interior. The parallels that she noted were not simply technological traits, but involved such ritual practices as the use of human corpses to obtain supernatural power over the whale. This led Borden (1951:39) to state that the "close similarity" of whaling practices in the two areas "makes the assumption of a historic connection unescapable." He wondered whether "the Nootka found the Eskimo already on the scene upon their arrival on the coast" or if "the Nootka once lived much farther north than they do now" (Borden 1951:41). Swanson (1956) also noted a variety of shared traits between the Nuu-chah-nulth and Eskimoan groups, leading him to debate whether Nuu-chah-nulth whaling was derived from the Aleut and Koniaq of southern Alaska or from Eskimoan groups nearer Bering Strait. Duff (1965) added another aspect to the argument by noting similarities in construction and design between the Nuu-chah-nulth whaling canoe and the Eskimo-Aleut umiak, concluding that the open hide-covered boat was the parent form. Similarly, Suttles (1952) noted the use of a set formula for the division of sea mammal
carcasses among the Wakashans, Salish and Eskimo-Aleut, favouring the explanation that this reflects an ancient common origin.

Such ideas strongly influenced Borden's interpretations of his pioneering research in the Fraser Delta. Drawing on a presumed cultural continuum between the Nuu-chah-nulth and Eskimo-Aleut in earlier times, Borden (1951) described the earlier cultures of his emerging Fraser Delta sequence as "Eskimoid," suggesting a common cultural base for much of the Northwest Coast, predating the arrival of the Salish from the interior. This view was then expanded by Drucker (1955a:64), who proposed the hypothesis that "the distinctive basic patterns of the Northwest Coast culture, from Yakutat Bay to northwest California, were derived from the same subarctic fishing-and-sea-hunting base of the coasts of Bering Sea and southwest Alaska that gave rise to the various Eskimo and Aleut cultures." Chard (1960) expanded even further the distribution of this proposed fishing and sea-mammal hunting base, visualizing "an ancient arc of related culture and population around the entire rim of the North Pacific from Kamchatka to Puget Sound." Characterizing the Wakashans as "the purest and the most specialized Northwest Coast subculture," Drucker (1955a:78) concluded that "the groups of the Northern Province probably emerged on the coast after the Wakashan-speaking groups, and may actually have disrupted lines of communication of the latter with Eskimo-Aleut." The speculation of this early period is perhaps taken furthest by Duff (1965:30), who conjures up the image of "an umiak-borne migration of proto-Eskimo people down the coast."

The result of this speculative period was to marginalize the Nuu-chah-nulth, making them seem to be an isolated and conservative survival, tenaciously clinging to an earlier way of life. Modern archaeologists reject such
scenarios, viewing whaling and other features of Nuu-chah-nulth culture as indigenous and ingenious adaptations to their open ocean environment, rather than as relic traits with a once more widespread distribution. Faint echoes of these early interpretations, however, may still lie in such modern archaeological constructs as the West Coast culture type, with its emphasis on cultural conservatism and continuity throughout time, downplaying appreciation of change and innovation.

_Ecological Models_

Interpretations requiring the migration of peoples or the diffusion of cultural traits gradually fell into disfavour, partially because they failed to provide any real explanation of why such events occurred. Instead, many anthropologists shifted their attention to understanding the ecological factors behind the distribution and evolution of cultural traits.

A model for the development of Nuu-chah-nulth culture built on systems theory and ecological theory was proposed by Langdon (1976). Based primarily on ethnographic data, along with the limited archaeological information then available, this model incorporates an ecological and demographic perspective. Langdon was following the ecological functional school, popularized in the preceding decade by such writers as Suttles (1962, 1968), Vayda (1961), and Piddocke (1965), in emphasizing resource variability and occasional shortages as ecological factors shaping cultural development. The potlatch was seen primary as a mechanism for resource distribution. Similarly, warfare was viewed as a way of redistributing people to resources.

The first of the four stages of development Langdon proposed is a long period of generalized coastal adaptation, based on fishing and sea mammal
hunting. Following Fladmark (1975), he argued that sea level stabilization about 5000 years ago resulted in peak salmon productivity, leading to a period characterized by semi-sedentary winter villages, increased reliance on salmon and shellfish in the diet, modest population growth and the development of feasting to enhance the power of emerging elites and to ensure the labour necessary to acquire adequate supplies of salmon. In the "classic" stage which followed, the potlatch emerged from the feast as a mechanism for validating ownership rights to resource locations. An "ideology of extravagant giving and consumption" was generated, based on extensive resource surpluses, leading to further elaborations in ceremonial life and power of the chiefly elite. In the final stage prior to European contact, continued population growth began to tax the energy requirements of this system, leading to two very different results. In the north, the potlatch took a unifying function, resulting in an integrated system of ranking for chiefs and the emergence of confederacies. Among the central and southern groups, culturally-induced shortages resulting from ritual consumption and competition led to extensive warfare over resource territories. Langdon viewed warfare as the "systemic alternative" that allowed maintenance of a "consumptive standard of living."

Morgan (1980) also adopted an ecological approach in his study of Nuu-chah-nulth political organization. Donald and Mitchell (1975) had earlier shown that the potlatch rank of each local group among the neighbouring "Southern Kwakiutl" (Kwakwaka'wakw) was strongly correlated with their population and the median size of the salmon runs in their territory. Morgan (1980) examined whether differential access to salmon could be a key variable in understanding why some Nuu-chah-nulth groups remained independent polities while others formed larger confederacies. Although salmon played a lesser role in the
economies of many Nuu-chah-nulth groups than among the Kwakwaka'wakw, Morgan's analysis suggested that there was a significant relationship between salmon availability and the form of political organization. In general, politically independent winter village groups tended to occur in areas of productive salmon streams. Where the salmon resource was less dependable, political confederation into larger units, sharing a common summer village, was likely. Only where a group's population had dropped below levels required for defense and for participation in inter-group potlaching was this political union likely to be voluntary. Instead, Morgan emphasizes the role of warfare in the growth of larger political units. Rather than exterminating their opponents, militarily successful Nuu-chah-nulth chiefs could accept peace initiatives, usually consolidated through marriage, and absorb other groups in subordinate positions. In this way, such chiefs gained access not only to additional territory and resources but also to an enlarged pool of labour, providing a military and economic advantage. This resulted, according to Morgan, in the emergence of the hierarchically structured confederated polities known ethnographically among the northern Nuu-chah-nulth.

Both Morgan and Langdon emphasize the role of warfare in the evolution of Nuu-chah-nulth political organization. Morgan's scheme, in particular, is compatible with the broad theory of political evolution advanced by Carneiro (1970). Although primarily concerned with the evolution of the state, Carneiro viewed warfare as the basic mechanism behind the emergence of all higher levels of political organization. Where the resource base is circumscribed by geographic barriers or by neighbouring polities, population pressures would force groups with inadequate resources to wage war against their neighbours to expand their territory. Conquered groups would be politically incorporated in
subservient positions, resulting in a more complex, hierarchically stratified society. The role of warfare in Nuu-chah-nulth society is further examined in Chapter 5.

**Historical Linguistics**

*Linguistic Models of Wakashan Origins and Expansion*

Historical linguistics provides an important analytical framework for assessing prehistoric population movements. It provides insights that cannot be directly derived from archaeology, even where such data are available. On the Northwest Coast, particular attention has been given to the Salishan-speakers, with their widespread distribution on the southern coast and in the interior Plateau. Such noted anthropologists as Franz Boas (1905:96) and Alfred Kroeber (1923:17) had long maintained that the Salish were late arrivals on the coast from the interior. To counter these long-standing beliefs, Suttles and Elmendorf (1963; see also Suttles 1987a, 1987b) used linguistic data to argue that Salish origins were, in fact, coastal, with a later movement inland. They pointed to the greater variability in the coastal languages, and postulated a formerly continuous distribution of Salishan-speakers along the coast as far north as the Nuxalk (formerly known as the Bella Coola) in the Bella Coola Valley. Such analysis suggested that the Salish homeland was around the lower Fraser River (Suttles 1987a:260; Jorgensen 1969:23; Thompson and Kinkade 1990:45), possibly extending as far south as the Skagit River (Kinkade 1991:148) or the southern end of Puget Sound (Suttles and Elmendorf 1963:45; Suttles 1987b:277).
As the immediate neighbours of the Salish, the Wakashans also figured prominently in these schemes. The proto-Wakashan homeland has been interpreted as encompassing northern Vancouver Island (Thompson and Kinkade 1990:47). In their eventual expansion from that base, the northern (or Kwakiutlan) branch took much of the adjacent mainland coast, displacing or absorbing northern members of the Salishan continuum and isolating the Nuxalk from all other Salish-speakers (Thompson and Kinkade 1990:47; Swadesh 1949:166). Around the same time, in this model, the southern (or Nootkan) branch moved down the west coast of Vancouver Island, ultimately reaching the northern Olympic Peninsula.

Using a somewhat different approach, Kinkade (1991) recently offered a variant of this established model. He states that it "seems fairly clear" that the Wakashans once occupied all of Vancouver Island and the south-central British Columbia coast (1991:151). His analysis of Salishan vocabulary revealed proto-Salishan words for animal species which do not occur on Vancouver Island, thus, in his opinion, "excluding Vancouver Island from the Salishan homeland" (1991:147). Similarly, his review of Nuxalk vocabulary indicated that names for typical coastal flora and fauna were borrowings from Wakashan, suggesting that the Nuxalk were, in fact, of interior origin (1991:149). He concludes that the Wakashans, in much of their former distribution, "were supplanted by Salishans moving north and by Bella Coolas moving across from the interior" (1991:151). Although an intriguing suggestion, this viewpoint provides a poorer "fit" with the archaeological data and illustrates the equivocal nature of models drawn on linguistic data alone.

Sapir (1916), in his pioneering work in historical linguistics, proposed two principles for drawing inferences about the history of a group of related
languages from their distribution. The first principle asserts that linguistic differentiation increases with time, making the area with greatest linguistic diversity the original homeland. The second, the "centre of gravity" principle, asserts that the deepest cleavage between related languages will mark the homeland. Suttles (1987b), while challenging the inevitability of the first principle, used Sapir's methodology, with limited success, to demonstrate a coastal homeland for the Salish. Although the Wakashans lack the range of languages and the widespread territory of the Salishans, these principles could also be applied. Certainly the deepest cleavage in the Wakashan family is between the two major branches, Kwakiutlan and Nootkan, whose relationship is considered to be rather remote (Sapir 1911:15; Thompson and Kinkade 1990:39). Both branches have their greatest diversity near this split, as both the Nuu-chah-nulth and Kwakwak'wakw have languages with a series of dialects, while the other Kwakiutlan and Nootkan languages are more uniform. Both the "centre of gravity" and the "greatest diversity" criteria could then be interpreted as suggesting that the northern or northwestern portion of Vancouver Island was the original Wakashan homeland.

Some archaeologists have embraced these linguistic models to interpret their own work. Mitchell (1990), for example, has argued that two distinct cultures once occupied the southern coast of British Columbia, the ancestral Wakashans along the west coast of Vancouver Island and ancestral Salishans along the protected waterways of Puget Sound, the Strait of Georgia and Queen Charlotte Strait. The Wakashans then expanded from the northern portion of their homeland into Queen Charlotte Strait and northward, absorbing or displacing Salish-speakers and isolating the Nuxalk. He supports the linguistic model with archaeological evidence suggesting a population replacement in
Queen Charlotte Strait around 500 B.C. Similarly, Hobler (1990) adopted the Suttles and Elmendorf (1963) model of a continuous distribution of Salishan-speakers to the Bella Coola Valley, broken by an expansion of Wakashans from northern Vancouver Island. Examining his archaeological data from the Bella Coola Valley, he suggested that such population dislocations may be reflected in archaeological discontinuities around 2500 B.C. and subsequent changes to about A.D. 1 (Hobler 1990:305).

Analysis of vocabulary, as Kinkade (1991) has shown for the Salish, provides evidence of the original environment and core elements of the culture which can be used to reconstruct ancestral homelands. No equivalent study exists for the Nuu-chah-nulth. Long ago, however, Sapir (1912:228) pointed out the extensive vocabulary the Nuu-chah-nulth have for various species of marine animals, suggesting a long period of adaptation to the outer coast. Sapir (1912:238-239) also noted the common use of suffixes relating to potlatching, feasting, and gift giving at girls' puberty ceremonies, claiming that this demonstrated the fundamental importance of such institutions in Nuu-chah-nulth culture.

*Linguistic and Oral History Evidence for Territorial Shifts*

Linguistic studies and oral histories also contain evidence of territorial shifts over time. A good example is the late arrival in the Alberni Valley of the Tseshahlt from Barkley Sound. This event is well recorded in oral traditions and the ethnographic literature (Sproat 1868:179; Boas 1891:584; Carmichael 1922:51-64; Drucker 1950:157, 1951:5; McMillan and St. Claire 1982:14; St. Claire 1991:79-81). The Opetchesaht, an amalgamation of three formerly separate local groups in the Alberni Valley, were apparently Salishan speaking
prior to the arrival of the Tseshaht. Boas (1891:584; 1974:208) reported informants who maintained that their grandfathers spoke only Nanaimo, a dialect of Halkomelem. Sapir's informants also claimed that some Opetchesaht spoke a Coast Salish language until quite recent times (Sapir 1910-1914; St. Claire 1991:76), although Sapir related this language to the now-extinct Pentlatch, another Salishan language of eastern Vancouver Island. In describing a girl's puberty ceremony, he stated that her original name was "apparently one of the stock of Coast Salish names that are current among the Hopatch'asath, who, according to reliable evidence, once spoke a now extinct Salish language" (Sapir 1913:77). In a later publication, Sapir (1915:19) described a unique linguistic trait (the confounding of 's' and 'c' sounds) in Opetchesaht, attributing this to "the fact that they carried over into Nootka speech a linguistic peculiarity found in the Salish dialect which they originally spoke."

Nuu-chah-nulth territory may have once extended somewhat further to the north. Boas (1891:608) recorded a tradition from the Kwakwaka'wakw of Quatsino Sound which describes the expulsion of the Nuu-chah-nulth from the region immediately to the south. Galois (1994:347, 363) attributes this Kwakwaka'wakw expansion to the Klaskino and points to a Nuu-chah-nulth place name for the origin point of one of the Klaskino subgroups.

As a third example, at the southern end of "Nootkan" distribution, Kinkade and Powell (1976) have argued from a linguistic perspective that the Makah are relatively recent arrivals on the Olympic Peninsula. In earlier times, at least the northern portion of the Olympic Peninsula seems to have been the homeland of Chimakuan peoples, represented historically only by the Quileute, south of the Makah on the outer coast, and the now-extinct Chemakum, at the
northeastern end of the Peninsula adjoining Puget Sound (Curtis 1913; Kinkade and Powell 1976; Elmendorf 1990:438). The geographic separation of these two related languages carries obvious implications for the culture history of this region. Kinkade and Powell (1976) point out that a number of place names for significant features of the landscape, used by both the Makah and the Quileute, have Chimakuan origins. They also note the lack of strong differentiation between Quileute and Chemakum, indicating that these two languages had been separated by Makah intrusion in relatively recent times. Historic Quileute territory extends into lands once occupied by the Quinault, their Salishan-speaking neighbours to the south, suggesting a late southward movement (Curtis 1913:176; Powell 1990:431). Swadesh (1955:60) estimated a separation of 21 centuries between Quileute and Chemakum. Glottochronological dates, however, are notoriously unreliable and, in any case, this need not refer to the Makah arrival. Kinkade and Powell propose that the Makah occupation of the Olympic Peninsula occurred about A.D. 1000, although the evidence for this specific date seems inconclusive at best. Wessen (1990:421) cautions that there is no evidence for such population replacement in the archaeological record, and that whaling and fur sealing, long associated with the Makah, have much greater time depths on the Olympic Peninsula.

The Ditidaht may also have been relatively recent arrivals in their territory. According to an oral tradition told to anthropologists Mary Haas and Morris Swadesh in 1931, the Ditidaht originally stem from a group of people occupying Tatoosh Island, off Cape Flattery (Clamhouse et al. 1991:288; Inglis and Haggarty 1986:200). Ditidaht Ernie Chester also recounted this story to Ann Bates (1987:293-294), although in his version only some of the Ditidaht ancestors arrived in this fashion. After a battle with the inhabitants of Ozette,
the Tatoosh Island people moved across the Strait of Juan de Fuca and settled around the Jordan River, now in Pacheenaht territory near their boundary with the Salish-speaking Sooke. There they lived for a long time, taking their name, Diitiidd7aa7tx, from the name of the Jordan River, Diitiida (Bouchard and Kennedy 1991:3; Clamhouse et al. 1991:285). Continued hostilities with their Salish-speaking neighbours, the Sooke and Clallum, eventually led them to abandon these lands and move north along the coast. They settled in a number of villages near Nitinat Lake, including the important fortress of Whyac at the outlet of the lake. They remained a number of separate local groups, not coalescing into the modern Ditidaht band until declining populations forced them to amalgamate in the 20th century.

Oral traditions tell of continued hostilities between the Ditidaht and Makah. They maintain that at one time the Cape Flattery area was held by the Ditidaht and that it was forcibly seized by the Makah, who had been living in their more southerly villages (Irvine 1922). The Makah also defeated the Ditidaht in their own territory, taking possession of Nitinat Lake for the rich salmon fishery in the rivers. The Ditidaht were scattered, many going to live with their relatives among the Pacheenaht. The Makah held the lake for a long time, assigning their own place names throughout the area (Clamhouse et al. 1991:299-309; Inglis and Haggarty 1986:204). Finally, the Ditidaht and Pacheenaht defeated the Makah and the Ditidaht reclaimed their territory.

The Pacheenaht (Paachiidd7aa7tx in the Ditidaht language) may have had different origins. Chief Peter of the Pacheenaht told Swadesh in 1931 that in earlier times they spoke the same Salishan language as their Sooke neighbours (Clamhouse et al. 1991:289; Inglis and Haggarty 1986:215). Intermarriage with the Ditidaht led to their adoption of the Ditidaht language sometime prior to
They remained a component group of the Ditidaht for a considerable time, before becoming politically separate. They took their name from a word meaning "sea foam," after great quantities of this material once appeared in their river (Jones and Bosustow 1981:21-22; Inglis and Haggarty 1986:214).

These traditions suggest that, until a relatively late period, Vancouver Island south of Barkley Sound was held by Salish-speakers and the northern Olympic Peninsula was home to Chimakuans. This may have lasted until roughly a thousand years ago, when Kinkade and Powell (1976) estimate the Makah arrived on the Olympic Peninsula. Despite the highly speculative nature of such dates, this corresponds with a linguistic estimate of about 1000 years for the separation of Ditidaht and Makah (Jacobsen 1979:776). If the Ditidaht-Makah separation occurred when the Cape Flattery people moved to the Jordan River to become the Ditidaht, this would roughly date this event. The Ditidaht movement around the still-Salish ancestors of the Pacheenaht to settle at Nitinat Lake occurred sometime later, as did intermarriage with the Pacheenaht and their absorption into Ditidaht culture. Arima (1988:23; Arima et al. 1991:289) speculates that it was the effective open-ocean technology, particularly with the development of whaling, that enabled the Ditidaht and Makah expansion. At present, however, the archaeological research required to assess these ideas is almost totally lacking in Ditidaht and Pacheenaht territories.

In summary, oral traditions and linguistic evidence suggest that "West Coast" territory in early times extended from slightly north of present

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2This process is apparently still continuing. Bates (1987:128) noted for the recent era that so many Ditidaht women have married into the Sooke band that the Sooke people now speak Ditidaht as well as Sooke.
distribution to somewhere around Barkley Sound. Later migrations took the ancestors of the Ditidaht and Makah south on Vancouver Island and to the Olympic Peninsula. The Tseshahaht expansion from Barkley Sound into Alberni Inlet and the lower Alberni Valley took place even later, perhaps about the time of European contact. This information is in accord with linguistic suggestions of a Wakashan homeland on northern Vancouver Island, with a spread of the Nootkan branch south along Vancouver Island's west coast, leaving a string of dialects through Nuu-chah-nulth territory and a separate southern division which later split into two closely related languages.

Molecular Biology

Biological anthropology is also making major contributions to our understanding of the aboriginal past, particularly relating to the nature and timing of the initial occupation of the Americas. On linguistic grounds, Greenberg (1987; Greenberg, Turner and Zegura 1986) has argued for three waves of human arrivals into North America, corresponding to his three large clusters of aboriginal languages: Eskimo-Aleut, Na-Dene (comprising all Athapaskan groups, plus Tlingit and Haida on the Northwest Coast) and Amerind (encompassing all other aboriginal languages in the Americas). From her research as a biological anthropologist, Szathmary (1979, 1993) has argued that members of the Na-Dene stock are more closely related to Eskimo-Aleut populations than to other North American Indians, likely indicating that the Na-Dene have a separate origin on this continent. Both Szathmary (1979) and Spuhler (1979) report analyses of genetic differences among North American aboriginal peoples based on blood group gene frequencies. Both use the Nuu-
chah-nulth as one of their examples, taking their data from an earlier study of blood groups among the Ahousaht (Alfred et al. 1969). In both analyses the Nuu-chah-nulth emerge as a distinct population, not clustering closely with any other group, but differing markedly from Na-Dene or Eskimo-Aleut populations. Part of the Nuu-chah-nulth distinctiveness, however, stems from a paucity of comparable samples from neighbouring areas of the Northwest Coast.

More recently, some researchers are examining mitochondrial DNA (mtDNA) to assess relationships among past populations. One such study (Ward 1989; Ward et al. 1991) focuses on the Nuu-chah-nulth. As part of a large-scale biomedical project, serum samples were collected from a large number of Nuu-chah-nulth individuals, from all 14 bands represented by the Nuu-chah-nulth Tribal Council. Detailed genealogical information was collected, along with basic demographic data. The Nuu-chah-nulth form a distinct population, with a high level of intramarriage; analysis of selected genetic markers indicated that individuals born before 1940 had less than five percent Caucasian admixture. To determine the degree of variability in mtDNA, a sample of 63 maternally unrelated individuals was selected from 13 of the 14 modern bands. The analysis indicated a very high level of mitochondrial diversity for a small local population. In an attempt to date the development of this level of diversity, Ward and his colleagues used as their comparison the divergence between humans and chimpanzees. Using what they view as conservative figures, they still arrived at an age estimate of nearly 60,000 years, a time which is assumed to predate human arrival in the Americas (Ward et al. 1991). They conclude that such differentiation began in Asia and that the first arrivals to the Americas were already genetically diverse. Similar extensive mtDNA diversity has been demonstrated for other American aboriginal populations.
sampled. Szathmary (1993:215) summarizes the prevailing view that "the
great time depths obtained make it likely that mtDNA radiation began in Asia
and the initial colonizers brought many varieties of mtDNA into America."

In a more recent study, Ward and his colleagues (Ward et al. 1992) look at
mtDNA data to assess the "three wave" theory of arrival. They examined
mtDNA lineages from selected populations within the proposed Eskimo-Aleut,
Na-Dene and Amerind stocks. Their study indicated closer genetic similarity
between Haida (Na-Dene stock) and the distant Greenlandic Inuit (Eskimo-
Aleut stock) than that between Nuu-chah-nulth and the only other Northwest
Coast "Amerind" member in their sample, the Nuxalk at Bella Coola. They
conclude that Na-Dene and Eskimo-Aleut populations share a relatively recent
common ancestry, and that the huge "Amerind" stock, to which the Nuu-chah-
nulth belong, is characterized by greater mtDNA diversity, suggesting

To assess the issues raised in this chapter, further archaeological
fieldwork is required. In particular, speculations based on historical linguistics
regarding the nature and timing of population movements throughout Nuu-
chah-nulth, Ditidaht and Makah territories could be evaluated and refined
through additional archaeological research. Archaeology and linguistics provide
compatible information, strengthening hypotheses supported by both sets of
data. In addition, anthropological models both draw on available archaeological
data and suggest ideas which can be investigated by further archaeological
research. Increased archaeological knowledge may result in abandonment of the
model, as was the case with the early diffusionist speculations presented earlier
in this chapter. Native oral traditions also strongly complement the
archaeological data, adding the human and spiritual dimensions to the material remains recovered by archaeologists, although it is rare that archaeology can support or confirm the information provided in these traditions.

At present, archaeological research in Nuu-chah-nulth territory is limited. Only three geographic clusters of excavated sites exist: at Nootka Sound and adjacent Hesquiat Harbour, at Barkley Sound, and on the Olympic Peninsula. Only at Hesquiat Harbour has a significant sample been excavated from the total number of archaeological sites in the region. Even in these better-known areas, information is very limited, particularly for the crucial early period. We are totally lacking excavated data for the area north of Nootka Sound and for the coastline of Vancouver Island south of Barkley Sound, in Ditidaht and Pacheenaht territory. These are crucial areas for assessing ideas on past population movements, such as the linguistic model discussed above. The following chapter reviews what archaeological research has been carried out in the territories of the Nuu-chah-nulth, Ditidaht and Makah people, and the nature and limitations of the archaeological record as it now exists.
CHAPTER 3:
ARCHAEOLOGICAL RESEARCH IN NUU-CHAH-NULTH TERRITORY

Introduction

Prior to 1966, the west coast of Vancouver Island was virtually an archaeological terra incognita. In that year, the large-scale excavation at Yuquot in Nootka Sound began. At the same time, the large test trench through the Ozette village midden on the Olympic Peninsula initiated major archaeological work in Makah territory. Despite the considerable amount of archaeological fieldwork which has followed these projects, large areas of Nuu-chah-nulth, Ditidaht and Makah territory remain uninvestigated. This chapter reviews the archaeological research that has been conducted and summarizes the present state of our knowledge.

In 1982, when Haggarty and Inglis (1983a) collated the distribution of Nuu-chah-nulth archaeological sites and their broad environmental settings, a total of 270 sites had been recorded. This number was swelled greatly by the rapid increase in archaeological fieldwork in the 1980s. By mid-1995, the recorded site inventory for western Vancouver Island (Nuu-chah-nulth and Ditidaht territories) had risen to 1264. When separated by site types, the total increases to 1536, as several different categories might be included under the same site number. Table 3 shows the site totals, classified by type, for this area.\(^1\) Habitation sites, the vast majority of which are shell middens, account

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\(^1\)Site inventory data came from site records in the CHIN (Canadian Heritage Information Network) system. The results of a computer search of the relevant areas were provided by the Archaeology Branch, Victoria. This information reflects the site files as they existed in August, 1995.
for 693, or about 45.1%, of this total. At least 34 of these are located on steep-sided headlands or islets, presumably serving as refuges or "fortifications" during times of hostilities or as lookouts for migratory sea mammals. Intertidal petroforms, with most identified as rock-wall fish traps or canoe skids, form another common category. Aboriginal burial sites are most commonly in caves or rockshelters, but tree burials and canoe burials, as well as historic cemeteries, are also reported. Most of the "surface lithic scatters" were recorded in the lower Alberni Valley and may not be related directly to Nuu-chah-nulth culture history. The Euro-Canadian presence is also represented in the site inventory by such historic ruins as shipwrecks, homesteads, canneries, and mines.

A large and rapidly growing, but still under-reported, site category is culturally modified trees (CMTs). These include all standing or fallen trees showing evidence of native use of the wood or bark, as well as all stages in the manufacture of canoes. CMTs have only recently been given site numbers in the provincial system on a regular basis (and then primarily as clusters, rather than individual trees), and have been inconsistently recorded in regional surveys. Despite clearly being under-represented in the site records, this has become one of the most common site types reported for western Vancouver Island. CMTs have also played a vital role in aboriginal land use studies for modern legal purposes. On Meares Island, for example, Nuu-chah-nulth claims to aboriginal use of the entire island were strengthened by an intensive archaeological survey which focused on CMTs (Arcas Associates 1986). The survey identified almost 1800 individual CMTs, with tree-ring dates indicating continuous use since the mid-17th century, and estimated that the coastal region of this relatively small island contains a total of 20,000 CMTs (Stryd and Eldridge 1993).
Table 3
Site Inventory Totals for the West Coast of Vancouver Island (Ethnographic Nuu-chah-nulth and Ditidaht territories), 1995

<table>
<thead>
<tr>
<th>site type</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>habitation sites</td>
<td>693</td>
</tr>
<tr>
<td>fish traps, canoe skids, other petroforms</td>
<td>266</td>
</tr>
<tr>
<td>CMTs</td>
<td>245</td>
</tr>
<tr>
<td>burial sites</td>
<td>176</td>
</tr>
<tr>
<td>historic Euro-Canadian sites</td>
<td>90</td>
</tr>
<tr>
<td>surface lithic scatters</td>
<td>28</td>
</tr>
<tr>
<td>rock art</td>
<td>23</td>
</tr>
<tr>
<td>other</td>
<td>15</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>1536</strong></td>
</tr>
</tbody>
</table>

A growing interest in non-destructive archaeological fieldwork and the application of new, more intensive, survey techniques helped focus attention on regional surveys by the 1980s, with a consequent rise in recorded site totals. These surveys, designed to record and map all sites at or near the modern shoreline, involved inspection on foot of the entire shoreline area, including the intertidal zone. Soil probes were used to detect buried deposits. Rocky and inhospitable areas, unsuited to habitation uses, were examined for evidence of burials, rock art, or defensive locations. This method was first tested in the Brooks Peninsula survey (Haggarty and Inglis 1981, 1983b) and fully applied, with considerable success, in survey throughout Pacific Rim National Park (Haggarty and Inglis 1984, 1985; Inglis and Haggarty 1986). Subsequently,
these techniques were employed in the Meares Island survey (Mackie 1983),
Ohiaht Ethnoarchaeology Project (Mackie 1986), the Mowachaht/Muchalat
Archaeology Project (Marshall 1990, 1992a; Marshall and Moon 1989), and the
Such regional surveys were also stimulated by the desires of First Nations
communities to document heritage resources in their traditional territories (the
Hesquiat, Ohiaht, Mowachaht/Muchalaht, and Toquaht Projects) and to assert
land claims (the Meares Island survey). The Ditidaht band also initiated an
inventory and assessment of heritage resources, although this was restricted to
their reserve lands (Eldridge 1992). At present, some portions of Nuu-chah-
nulth and Ditidaht territory have been intensively surveyed and their heritage
resources are well-documented, while other areas have received only cursory or
unsystematic attention.

Despite the growing number of recorded archaeological sites in Nuu-chah-
nulth and Ditidaht territory, excavated data are remarkably limited. Although
30 sites have had some form of systematic excavation, most were limited to
very minor testing. The 15 sites in Hesquiat Harbour which were systematically
investigated as part of the Hesquiat Project account for half of this total, yet
only four received more than minor sub-surface examination. Major
excavations, resulting in the recovery of fairly extensive cultural materials,
consist only of those conducted at Yuquot, several of the Hesquiat Project sites,
two of the Toquaht Project sites, and Shoemaker Bay, at the end of Alberni
Inlet. The distribution of excavated sites on the west coast of Vancouver Island
is shown in Figure 6.

Eleven sites have been excavated in the ethnographic territory of the
Makah. Of these, only Ozette and the two Hoko River sites have been the
Fig. 6. Location of excavated sites in Nuu-chah-nulth, Ditidaht and Makah territories. Not all sites are labelled on the map. For clarity, only the major sites in Hesquiat Harbour are shown and only one site is indicated for each of the two at Chesterman Beach, Aguilar Point, Nitinat Lake, and Hoko River.
locations of major excavation projects. A number of sites around Neah Bay and from Cape Flattery to just south of Ozette have had limited testing (Friedman 1976; Wessen 1990). The location of these sites is also shown on Figure 6.

Major gaps are evident in the geographic distribution of archaeological research. While Nootka Sound and Hesquiat Harbour in the north and Barkley Sound in the south have seen relatively extensive fieldwork, including both inventory and excavation, little has taken place in the intervening areas. The entire northern portion of Nuu-chah-nulth distribution, from Cape Cook to Nootka Sound, has been almost entirely ignored. To the south of Barkley Sound there have been several programs of site inventory, with only limited excavation around Nitinat Lake. Several of these gaps are in areas crucial to assessing the hypothetical models of past population movements reviewed in Chapter 2.

Other problems exist with the archaeological record from the west coast. Differing sampling strategies hinder comparison of recovered materials from various sites. Only at Hesquiat Harbour has a systematic sample been taken of all site types in the study region, and a significant number of the total sites tested. Elsewhere, archaeological attention has tended to be limited to the large, ethnographically important village sites. At Yuquot, the presence of modern occupied houses put great constraints on the choice of excavation area, limiting it to a single large block in an unoccupied portion of the village. Although an impressive collection of cultural remains was recovered, the extent to which this represents activities carried out over the total site area is unknown.

Differences in season of occupation may also hinder comparisons. Abbott (1972) has cautioned that the ethnographic pattern of seasonal movement would result in a single social group leaving distinctly different archaeological remains at various locations. He argues that this pattern has considerable
antiquity, at least in the Coast Salish region. Dewhirst (1980:17-18), however, minimizes seasonal differences in Nootka Sound by noting the very similar nature of artifacts found at the ethnographic summer and winter villages. Also, archaeological and ethnographic research now indicates, as argued in Chapter 6, that the ethnographic seasonal round was a late adaptation, and that year-round occupation is more likely to characterize the major shell midden sites prior to contact with Europeans. Detailed analyses of faunal remains provide the clearest indicators of seasonality (Monks 1981), but such studies have been completed in relatively full form only for the three major Hesquiat Harbour sites (Calvert 1980) and Shoemaker Bay (Calvert and Crockford 1982).

Finally, a major problem in understanding the culture history of the area lies in the incomplete nature of the material remains recovered through archaeological excavation. Ethnographic sources on the Nuu-chah-nulth and their relatives emphasize the overwhelming importance of wood, bark, and root in the material culture, a fact fully borne out at the two sites, Ozette and Hoko River, where such materials are preserved in waterlogged contexts. These two sites provide something of a "control," where the nature and degree of loss can be understood for those sites which offer only remains in the relatively imperishable materials of bone, antler, shell and stone.

In the discussion which follows, an effort is made to present all radiocarbon age estimates available for Nuu-chah-nulth sites. These are given as radiocarbon lab dates, without any calibration or correction factor. In a number of cases, paired charcoal and shell samples were collected and submitted; only the charcoal dates are presented here.
Nootka Sound and Hesquiat Harbour

These two regions are considered together here as they are immediately adjacent and the material objects recovered are very similar. Ethnographically, however, Drucker (1951:4) considered Estevan Point, between Nootka Sound and Hesquiat Harbour, to mark a significant cultural break. The Mowachaht of Nootka Sound were placed in Drucker's "Northern Nootkans" category, which was characterized by frequent contact with the Kwakwaka'wakw and extensive cultural borrowing. Only the "Northern Nootkans" developed the confederacy level of social organization. Of these groups, only the Mowachaht have received any significant archaeological attention, including excavation. Around the point, the Hesquiaht were the northernmost of Drucker's central division, which he described as having "little direct contact with foreigners." Drucker (1951:4) considered any outside influences among the central groups to be indirect, "brought in by their northern kin, or by the Makah, who plied busily back and forth across the Strait." The Hesquiaht and Toquaht are the only "Central Nootkans" to have received significant archaeological study through excavation.

Research in Nootka Sound

Nootka Sound has had considerable archaeological attention, including intensive archaeological inventory throughout the entire region (Marshall 1992a, 1993) and excavation at two sites. The major excavation project took place at Yuquot (Yukwaat), the historic summer village for the Mowachaht confederacy, while more minor excavation was conducted at Kupti (Kwuupti), the winter village of the dominant Mowachaht tribal unit. In addition, several
small impact assessment studies have been carried out by archaeological contractors (Eldridge 1989; Arcas Consulting Archeologists 1993, 1994).

The outer coast village of Yuquot (DjSp 1) is one of the largest sites on the west coast of Vancouver Island and the best-known archaeologically. The 1966 excavation was conducted on a large scale, encompassing a trench 19.5 m long and between 3 and 4.5 m wide. The excavation reached a maximum depth of 5.5 m, without encountering sterile deposits. The total volume of matrix removed is calculated at 231.8 m$^3$ (Dewhirst 1980:29). Over 4000 artifacts of indigenous manufacture, as well as several thousand items of metal, ceramic or other introduced historic materials, were recovered. Numerous faunal remains, consisting of about 217,000 fish, mammal and bird elements, as well as about 26,000 mollusc and barnacle specimens, were collected (Dewhirst 1980:33). Only the avifauna, molluscs and barnacles, however, have been analyzed and reported in any detail (McAllister 1980; Clarke and Clarke 1980; Fournier and Dewhirst 1980).

The Yuquot strata are clustered into four zones, providing a continuous archaeological sequence that spans the period from sometime prior to 4200 B.P. to the modern era (Dewhirst 1978, 1980, 1988). Dewhirst stresses continuity throughout, maintaining that there are "no breaks and no extensive qualitative discontinuities" in the sequence, which culminates in historic Nuu-chah-nulth culture. Where changes are evident, they represent more complex forms emerging from their earlier prototypes. Dewhirst (1980:336) concludes that: "In short, the archaeological record reflects a single culture in a process of improved adaptation to the outside coastal environment." Similarly, Folan (1972) interprets the archaeological evidence from earliest occupation as representing essentially the same way of life as the historic Nuu-chah-nulth. He states that:
In general, the picture provided by the archaeology ... is that the inhabitants of Yuquot through time have been a rather conservative people, fishing and hunting and collecting the same species of fauna (and probably flora) since their earliest discovered habitation of the site, and all the while utilizing basically the same fishing and hunting equipment and tools. Further, there is no reason to believe that they lived in structures differing much from some of those drawn by John Webber in 1778 during Captain James Cook's third and last voyage of discovery.

(Folan 1972:x)

Zone I, dating from sometime prior to 4200 B.P. to about 3000 B.P., encompasses the two lower strata. Sterile deposits were not reached; a test hole in the wet sand and pebbles of the lowest stratum still revealed fish vertebrae at a depth of about 60 cm below where the excavation terminated. During this Early Period, prior to the build-up of extensive midden deposits, the site was a low-lying gravel spit. Many of the artifacts and faunal remains are waterworn, suggesting that sea levels were slightly higher than at present. Poor preservation in these wet lower deposits meant that few faunal remains and only a small number of artifacts were recovered. These artifacts, however, reflect the types of tools and the range of grinding, pecking, and splitting technologies found in later stages. The artifacts characteristic of this period include stone abraders and abrasive saws, stone celts, bone points for composite fishing gear, and bone awls, needles, and barbed points or harpoons.

The Middle Period is encompassed within Zone II deposits, estimated to date between about 3000 and 1200 B.P. These strata contain much more organic material, particularly crushed mussel (Mytilus californianus) shell, resulting in much better preservation of bone and antler. More intensive occupation of the site is also suggested by large rock-rimmed firepits, some superimposed, which may indicate that permanent house structures were in place. A wider range of artifacts may simply reflect the improved preservation
conditions. Stone artifacts include abundant abraders, abrasive saws, and celts. In addition to the bone points, awls, and needles continuing from Zone 1, these deposits contain bone fishhook shanks, small barbed points for composite fishhooks, and bone bipoints which would have served as gorges for taking fish. Paired valves and arming points are the components of composite toggling harpoon heads, of the size used for taking salmon. Larger barbed harpoons would have been suitable for hunting sea mammals. Whalebone shredders and beaters indicate that the technology for processing and weaving cedar bark was established by this time. Canine tooth pendants and other objects of personal adornment are also found.

Materials from Zone III deposits are assigned to the Late Period, dated from about 1200 to 200 B.P. According to Dewhirst (1980:342), the Late Period, which ends with the Spanish occupation of the site in 1789, "largely reflects Nootkan culture as it is known from early historical and ethnographical sources." Although there are no large firepits in Zone III, the deposits seem to have formed from activities associated directly with habitations. Artifacts remain largely unchanged from the Middle Period, with the exception of several innovations which suggest increased efficiency in exploiting open ocean resources. Stone fishhook shanks, indicating the specialized salmon trolling hooks known ethnographically, appear late in this period. Technological changes for sea mammal hunting also become evident. Barbed non-toggling harpoon heads were replaced by large composite toggling harpoon heads, with bone valves slotted for mussel shell cutting blades, of the type known ethnographically as parts of sea mammal hunting gear (Waterman 1920; Drucker 1951:26-29). Several large valves have a punctate zigzag design, identical to historic specimens used in whaling, where the design had "magical
virtue" (Drucker 1951:28). This trait led Dewhirst (1977; 1980:344) to conclude that Nuu-chah-nulth whaling emerged only in this late period.

Faunal remains were abundant in Zones II and III and, according to Dewhirst (1979), were "remarkably consistent" through time. Molluscan remains, which made up a large part of the site deposits, were overwhelmingly California mussel (Mytilus californianus) (Clarke and Clarke 1975, 1980; Dewhirst 1979). Fish bones dominate the vertebrate remains. Although analysis is incomplete, most elements were identified to species. These are roughly evenly divided between salmon (Oncorhynchus spp.); nearshore pelagic species, primarily rockfish (Sebastes spp.); and nearshore bottom dwellers, of which ling cod (Ophiodon elongatus) is the most abundant (Dewhirst 1979). Halibut (Hippoglossus stenolepis) appear to have played only a minor role in the economy, despite their ethnographic importance among the Nuu-chah-nulth. Avifauna were abundant, representing 67 species, of which 23 occurred in significant numbers. The most abundant single species, representing 27% to 40% of all avian remains, is the short-tailed albatross (Diomedea albatrus) (Dewhirst 1979; McAllister 1980). McAllister (1980:133) describes the abundance of albatross bones as "astonishing," overwhelming all other species in the sample. Identification of mammals, based on a sample of about one-third of the elements recovered, indicated that land mammals were primarily coast deer (Odocoileus hemionus), while the most abundant sea mammal species was the northern fur seal (Callorhinus ursinus), followed by the harbour seal (Phoca vitulina) (Dewhirst 1979). Whalebones were found throughout the deposit, although their fragmentary nature inhibits specific identification and quantification. The presence in the midden deposits of a distinct type of barnacle (Coronula reginae), which lives almost exclusively on the skin of the humpback
whale, provides indirect evidence for the procurement of humpback whales since at least about 2200 B.P. (Fournier and Dewhirst 1980:95-96). Based on this sample of elements, the ratio of sea mammals to land mammals appears to increase by the Late Period (Savage 1973; Dewhirst 1978:14).

Seasonality studies based on the faunal remains are incomplete and tentative. Analysis of the avifauna indicates that the site was occupied from at least February to October during the Middle and Late Periods (McAllister 1980:169). The molluscan remains also suggest a spring to fall occupation for the Middle Period, with a shift to year-round residence by the Late and Historic Periods (Clarke and Clarke 1980:52).

Zone IV encompasses the historic period, from the beginning of intensive European contact around 1789 to 1966, the year of the excavation. Although Dewhirst (1978:17) maintains that "the basic character of Nootkan technology and subsistence remained unchanged until the late 19th century," substantial cultural shifts are evident. Metal, glass and ceramic implements became abundant, replacing some categories of indigenous artifacts. Only a few classes of historic artifacts have been analyzed, however, and objects which can be shown to predate the late 19th century are relatively rare (Jones 1981:69; Lueger 1981:104). Small bone points and other tools persist, but they appear to have been whittled to shape with iron cutting tools (Dewhirst 1978:17; 1980:346). Substantial shifts also took place in the faunal species exploited. Among the avifauna, albatross remains are less numerous while the Canada goose (Branta canadensis) markedly increases in importance (Dewhirst 1979; McAllister 1980). In the molluscan remains, epifaunal species such as mussel (Mytilus californianus), which dominate the prehistoric deposits, were largely replaced by infaunal species, such as little-neck clam (Protothaca staminea),
butter clam (*Saxidomus giganteus*) and horse clam (*Schizothaerus nuttalli*) (Clarke and Clarke 1975, 1980; Dewhirst 1979). Even the most common type of barnacle found in the midden deposit changed in the historic period (Fournier and Dewhirst 1980). Most of the scattered human skeletal elements, including three possible fragmentary burials, also came from Zone IV deposits (Cybulski 1980).

The archaeological sequence at Yuquot is supported by an extensive series of radiocarbon age estimates (Dewhirst 1980:36-59). Not all are consistent and several have been rejected by the excavator. The earliest radiocarbon date is 4230±90 years, based on a sample collected from wet sand and pebbles near but not at the base of the cultural deposit. Table 4 lists all radiocarbon dates from Nootka Sound.

As part of the 1966 fieldwork, Folan and Dewhirst also excavated four small testpits at the site of Kupti (or Cooptee; DkSp 1), on the protected "inside" of Nootka Sound at the entrance to Tahsis Inlet. Few faunal remains and no artifacts were found. Two years later, McMillan (1969) conducted more extensive test excavations. A total of 15 units, each 5 foot by 5 foot (1.5 x 1.5 m), was excavated, removing approximately 35.4 m$^3$ of matrix. Most test units were located on the relatively shallow lower terrace, but two were excavated on the upper terrace along the back of the site, where a maximum depth of 2.4 m was reached. This site was revisited in 1990 by Marshall (1992), who prepared a detailed map and collected additional artifacts from the beach.

Kupti was the winter village of Chief Maquinna's tribal group in the late 18th century. A 1792 Spanish engraving (Moziño 1970:Plate 11) shows houses on several levels densely clustered together. The map prepared by Marshall (1992a:50; 1993:34) shows the numerous surface ridges and other features
suggestive of closely spaced dwellings. This site was an occupied Mowachaht village well into the 20th century.

Fewer than 200 artifacts of indigenous manufacture were recovered from the 1968 excavation, along with numerous introduced historic items and a substantial quantity of faunal remains. Bone points and abrasive stones were the most common implements; more diagnostic artifacts include a stone fishhook shank and several hand maul fragments. Although faunal analysis is incomplete, some observations can be made (Marshall 1990:109-111). The most numerous vertebrate remains are fish, which are dominated by salmon (*Oncorhynchus* spp.), along with smaller numbers of dogfish (*Squalus acanthias*) and rockfish (*Sebastes* spp.). Among the birds, the common murre (*Uria aalge*), loons (*Gavia* spp.) and cormorants (*Phalacrocorax* spp.) are the most abundant. These were all common avifauna at Yuquot, although overshadowed by the great abundance of albatross, which was very rare in the more inner coast environs of Kupti.

Based on the types of artifacts found, McMillan (1969:109) suggested that all materials recovered were relatively late, probably within the last 1000 years. Dewhirst (1978:19; 1980:16) considered all the Kupti artifacts as contemporaneous with Zones III and IV at Yuquot, suggesting an occupation spanning the last 1200 years. More recently, several radiocarbon estimates have been obtained from charcoal samples originally collected by McMillan (Marshall 1990:101-103; 1992a:49). These are listed in Table 4. The earliest date of $3090\pm90$ was initially accepted by Marshall (1990:103; 1992b:8), but aroused enough suspicion that Marshall and McMillan submitted the remaining portion of the sample to a different laboratory, obtaining an age estimate of
1210±50 years. Thus the 3000 year date is rejected and the oldest radiocarbon age corresponds closely to McMillan and Dewhirst's original estimates.

The earliest Kupti dates came from the two excavation units on the second terrace. Evidence of thick ash layers with rocks, presumably hearths, with little shell and few artifacts, suggests that these are house deposits. No radiocarbon samples were obtained from the base of this terrace, so the date of earliest occupation is unknown. The initial occupation may have been limited to the upper terrace, while the lower deposits, which contain much more shell, accumulated through refuse disposal. The site appears to have grown rapidly in late prehistoric times, with evidence of house structures spread along the relatively shallow deposits of the lower terrace. Marshall (1993:156-157) attributes this to the use of Kupti as a winter village by the larger social group which emerged through political confederacy of the Yuquot and Tahsis Inlet peoples.

In addition to the excavated data, stone artifacts have been found on the beaches in front of several sites in Nootka Sound (Marshall 1990, 1992a; Arcas Consulting Archeologists 1993). These consist primarily of small stone celts and chipped stone tools, including bifaces, flakes and cores. The rarity of chipped stone in the excavated deposits of Yuquot and Kupti makes these beach discoveries of particular interest. One possible explanation is that they belong to an early occupation period in Nootka Sound, predating the excavated deposits. This is examined in more detail in Chapter 4.
Table 4
Radiocarbon Dates from Nootka Sound

Yuquot (from Dewhirst 1980)

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The Hesquiat Project

The Hesquiat Project was initiated in 1971 through collaboration between archaeologists and Hesquiaht band members (Calvert 1980; Haggarty 1982; Haggarty and Boehm 1974). At first, the focus was on protection of burial caves and rockshelters, which had been subjected to considerable theft and vandalism. The initial field season goals were to locate and record all archaeological sites within Hesquiaht traditional territory, and remove all surface materials from the burial caves and rockshelters (Snee 1972; Haggarty 1982). In all, human remains representing at least 108 individuals were removed from 11 such sites, probably all dating to the early historic period (Cybulski 1978). Over half came from DiSo 9, the largest burial cave in the region, which also contained thousands of surface artifacts, including cedar bark mats and baskets, cordage, wooden harpoon shafts, wood and bone combs, and a wooden dance mask (Snee 1972:5; Haggarty 1982:19). About 7000 trade beads were also included with the burials in this cave.

In subsequent fieldwork, lasting until 1979, the Hesquiat Project evolved into an ambitious program of site survey and excavation, as well as research in
linguistics and ethnography. In all, test excavations were carried out at 15 habitation sites, sampling all site types from the study area. Substantial excavations, however, were limited to four sites: DiSo 1, the major ethnographic and modern village of the Hesquiaht people; DiSo 9, the large burial cave which also had extensive prehistoric habitation deposits; DiSo 16, a smaller burial and habitation cave; and DiSo 22, a site consisting of both rockshelter and open midden deposits (Haggarty 1982). DiSo 9 is the oldest of the four sites, with prehistoric deposits dating between 1200 and 1800 B.P. underlying the historic burial materials. Hesquiat Village was occupied from about 1200 years ago to modern times, while the remaining two sites are encompassed within the past millennium (Calvert 1980; Haggarty 1982). Radiocarbon age estimates are shown in Table 5.

Over 1500 artifacts of aboriginal manufacture were excavated from these four sites, with over 900 of the total coming from Hesquiat Village (DiSo 1) (Haggarty 1982:Table 18). Abrasive stones were numerous, as were a number of bone and antler artifacts, including various points and bipoints, awls and composite harpoon valves. Less numerous but more diagnostic artifacts include stone fishhook shanks and mussel shell tools, including a cutting point for a composite harpoon head. As at other Nuu-chah-nulth sites, the simplicity of the assemblage and the low numbers of artifacts compared to the abundant historic items in the burial caves suggest that most objects were made from perishable materials. In general, the artifacts closely resemble those from Kupti and from Zones III and IV at Yuquot, which are contemporary with Hesquiat Village.

A strong focus of the Hesquiat project was the systematic collection and analysis of faunal remains. Calvert (1980) provides a detailed study of the fauna from three of the major excavated sites. Fish remains dominate the vertebrate
fauna, but major differences between sites are evident. At Hesquiat Village, rockfish, lingcod, greenlings, and dogfish were the most abundant, while herring and salmon were particularly important at DiSo 9. Sea mammals, particularly northern fur seal (*Callorhinus ursinus*), harbour seal (*Phoca vitulina*) and sea otter (*Enhydra lutris*), were numerous at Hesquiat Village, near the outer coast, while DiSo 9 and 16, on the inner harbour, had a mix of sea and land mammals, the latter consisting largely of deer. Unidentified whalebone was also common at Hesquiat Village; the presence of a whale barnacle (*Coronula* sp.) suggests that at least some of this represents humpback whale. Avifauna were also numerous, representing a wide range of species. Loons, ducks, geese, cormorants and gulls were common, with albatross dominating the assemblage from Hesquiat Village. The faunal pattern from that site strongly resembles that from Yuquot, located in a similar outer coast environmental setting.

Differing interpretations of the faunal remains from Nootka Sound and Hesquiat Harbour stem from differing levels of ethnographic sociopolitical organization. Dewhirst (1978:20; 1980:15-18) interprets the prehistoric economy in Nootka Sound as representing a pattern of seasonal movement, from spring and summer outer coast locations to fall and winter "inside" villages, as was documented ethnographically for the Mowachaht. Further, he perceives an increasingly maritime adaptation over time. Calvert (1980:106), however, points out that such patterns would not emerge until a tribal or confedera
cy level of political organization had been achieved. Her work in Hesquiat Harbour, where politically independent local groups persisted into historic times, led her to interpret differences in site faunal assemblages as reflecting access to differing resources within clearly defined territorial boundaries. Such culturally restricted territories, exploited on a year-round basis, result in distinct archaeological
<table>
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(from Calvert 1980:Table 9; Haggarty 1982:Table 20)
patterns which reflect the presence of politically autonomous local groups. Haggarty (1982) also claims that such distinct patterns can be seen in artifact distributions in Hesquiat Harbour, as the technology of resource procurement would leave distinguishable assemblages in each local group territory. Calvert (1980:267-8) suggests that the earliest remains at DiSo 9, dating to about 1800 B.P., show unrestricted access to resources throughout the harbour, but by 1200 B.P. separate geographically-bounded local groups had emerged. Such simple local group political organization may have been the earliest adaptive pattern along the west coast of Vancouver Island, even in those areas characterized historically by larger tribal or confederacy groups.

Clayoquot Sound to Barkley Sound

Little archaeological research has been conducted between Hesquiat Harbour and Barkley Sound. Intensive site surveys have been carried out on Meares Island in Clayoquot Sound (Mackie 1983), including systematic searches for culturally modified trees (Arcas Associates 1984, 1986), and along the Long Beach portion of Pacific Rim National Park (Inglis and Haggarty 1986). Excavation projects, however, are limited to testing for an historic house structure on Meares Island (Arcas Associates 1988) and limited testing at two shell middens near Tofino (Wilson 1990, 1994).

Barkley Sound has received much more archaeological attention. Intensive surveys have been conducted in the Broken Group islands of the central sound (the Pacific Rim Project--Inglis and Haggarty 1986), along western Barkley Sound (the Toquaht Archaeological Project--McMillan and St. Claire 1991, 1992), and near Bamfield on the eastern side of the sound (the
Ohiaht Ethnoarchaeology Project--no report available). Less intensive surveys have taken place in the islands of the Broken Group (White 1974) and throughout Barkley Sound, Alberni Inlet and the lower Alberni Valley (McMillan 1975a, 1975b, 1981; McMillan and St. Claire 1977, 1982; St. Claire 1975). Major excavations are limited to the Shoemaker Bay site at the head of Alberni Inlet (McMillan and St. Claire 1982) and several of the ethnographic Toquaht sites along the western sound (McMillan and St. Claire 1991, 1992, 1994). Another important excavation, although modest in scale, took place at the Little Beach site in Ucluelet (Arcas Consulting Archaeologists 1991; Brolly 1992). In addition, across the sound from Little Beach and the Toquaht sites, two adjacent sites at Aguilar Point in Bamfield have received minor test excavations (Buxton 1969; Coates and Eldridge 1992). See Figure 6 for locations.

Along with the Hesquiaht, all the peoples of this region are considered "Central Nootkans" in Drucker's scheme. The Ohiaht of eastern Barkley Sound are today the southernmost Nuu-chah-nulth speakers. The ethnographic boundary with the Ditidaht is at Pachena Point, on the outer coast just south of Barkley Sound.

The Toquaht Archaeological Project

The Toquaht Project, initiated in 1991, involved test excavation at Toquaht village sites, intensive survey throughout ethnographic Toquaht territory, and oral history research with native elders (McMillan 1992; McMillan and St. Claire 1991, 1992, 1994). Four sites, including the only three large villages recorded in Toquaht territory, have been excavated as part of this project (Figure 7).
Fig. 7. Toquaht traditional territory, showing the location of the four sites excavated as part of the Toquaht Archaeological Project.
Macoah (*Ma7akwuu7a*; DfSi 5), near the upper portion of the sound, was the ethnographic winter village. It features prominently in the 19th century traditions collected by Edward Sapir (1910-1914; Sapir and Swadesh 1939, 1955). During the Long War in Barkley Sound, which broke out at Macoah through a dispute over an escaped slave, the village was apparently palisaded, as returning slaves noted "a fence all around the Tukwaa [Toquaht] village" (Sapir and Swadesh 1955:437). Peter O'Reilly (1883), the reserve commissioner, described Macoah as a winter village and fishing station in 1882, as did the Royal Commission on Indian Affairs in 1914 (British Columbia 1916). Toquaht elder Jim McKay noted that some people lived there throughout the year, as "a sort of headquarters for all the creeks around" (St. Claire 1991:163). The site name means "house on the point," referring to a rocky point the north end of the modern reserve. O'Reilly's 1882 map shows four houses near this point, while five houses appear in the 1893 reserve surveyors' map (B.C. Ministry of Crown Lands 1894). In 1914 there were nine houses, with only 18 people living there (British Columbia 1914). By the 1920s the site was abandoned, as the Toquaht moved closer to Ucluelet.

Today, Macoah is again an occupied Toquaht village (Figures 8, 9). Construction of a gravel road to Toquart Bay provided access, and new houses began to appear at Macoah in the early 1980s. House construction continues at the site and a new sawmill provides an economic base. Such activities, however, have resulted in considerable disturbance to the archaeological deposits. Objects recovered through such disturbance, now in the possession of Chief Bert Mack, include the handle of a whalebone club in the form of the thunderbird, a complete flat-topped hand maul, and a bone gambling piece which once had a central copper band (McMillan and St. Claire 1991:75-77). A reserve resident near the
Fig. 8. Aerial view of Macoah, showing modern housing. The rocky point for which the site is named is at the right.

Fig. 9. The site of Macoah from the beach, looking north to the point.
south of the village has collected seven stone celts (most of which are the small rounded-poll "pebble celts" characteristic of the West Coast culture type), three basalt bifaces and a number of shaped sandstone abraders from her property. House construction was monitored as part of the Toquaht Project and all recovered materials have been recorded.

Systematic excavation at this site was limited, partially because of the disturbed nature of some site deposits. In all, five 1 x 2 m units were excavated (Figure 10), removing a total of about 18.2 m³ of archaeological deposits. Of the 61 artifacts recorded for the site, 48 are of indigenous materials. Bone points and bipoints, along with abrasive stones, were the most common implements. A finely-made complete stone fishhook shank, similar to late types from Yuquot, was found immediately under the sod. Most artifacts and faunal remains came from the upper midden strata, but some cultural materials continued into the deeper gravel and pebble layers. Two radiocarbon dates, collected from basal deposits in widely separated areas of the site, give varying estimates of the initial occupation, with the earliest suggesting that the site was first occupied almost two millennia ago. Intensive occupation, however, would not have been until considerably later. All radiocarbon dates for Toquaht sites are listed in Table 6.

The largest and most impressive of the Toquaht archaeological sites is Tukw'aa (DfSj 23), at the entrance to Ucluelet Inlet. The importance of this site is evident in its name, for the Toquaht (T'ukw'aa7ath) are literally "the people of T'ukw'aa." It would appear, however, that its prominence had greatly declined by the mid-19th century. Little mention of this site occurs in the extensive ethnographic accounts of Edward Sapir. When O'Reilly (1883) laid out the reserve in 1882, he described it as "a fishing station used only during the sealing
Fig. 10. Map of Macoah, showing location of excavation units.
season." The Royal Commission on Indian Affairs lists this as a "village site and fishing station." Toquaht informants describe fishing for halibut and cod and hunting seals, sea lion, and whales from this location during spring and fall, moving to Macoah and other sites up the sound when the fall salmon runs began.

The impressive size of this site and the depth of archaeological deposits suggest much more extensive occupation in earlier times (Figures 11, 12). The site extends for about 250 metres along the beach, with a maximum depth of between two and three metres. Two distinct terraces are evident along the western portion of the village area, with ridges forming several house outlines clearly visible on the upper terrace. At the western end of the site, midden deposits extend out along the top of a steep-sided rocky promontory. This would be an ideal defensive location, with a drop of about 20 metres off the steep cliffs. One narrow access route from the village area would have been relatively easy to defend. Ethnographic accounts of other defensive sites in Barkley Sound suggest that the narrow access point could have been closed with logs, piled so that they could be released to roll down on attackers. The entire top of the promontory is covered with relatively shallow shell midden deposits, with numerous surface features. Several flat areas, at considerably different elevations, suggest house locations.

Excavation took place during two field seasons on both the village and defensive areas of this site (Figure 13). On the village area, a total of 38 m² was excavated, reaching a maximum depth of 2.75 m. Units scattered across the elevated defensive area accounted for another 30 m² of excavation, ranging from very shallow deposits over bedrock to a maximum depth of about 1.4 m. The total volume of archaeological deposit removed from the site is about 106
Fig. 11. Aerial view of T'ukw'aa. The rocky point with the defensive site is at the left.

Fig. 12. T'ukw'aa from the terrace at the eastern end of the site. The defensive location is at the far end of the site.
Fig. 13. Contour map of T'ukw'aa, showing location of excavation units. The 0 contour line refers to mean sea level. The rise from the upper beach to the site occurs about the 4.5 m contour line.
m$^3$. Nearly 1500 artifacts were recorded from this site, of which 1407 are of aboriginal materials. All but a few of the introduced Euro-Canadian artifacts were surface discoveries associated with the ruins of an early 20th century house. Faunal remains were abundant from all levels of the deposit (Monks 1992). A series of radiocarbon dates (Table 6) suggests that this site was first occupied about 1200 years ago, although no evidence exists for use of the refuge area until about 800 years ago.

The third major excavated village site is Ch'uumat'a (DfSi 4), a large conspicuous shell midden in a small cove east of T'ukw'aa (Figs. 14, 15). Large rocks on the beach in front of the site have been moved to create an access channel for canoes. A stream cuts through the site near the western end, exposing a cutbank with shell midden deposit to a depth of over four metres. The front, most visible, portion of the site is gently sloping and covered with salmonberry bushes. Behind this, at the back of the site, the area is covered with old forest, with large coniferous trees and little undergrowth. Soil probes revealed shell midden below a considerable overburden of forest deposit. Subsequent excavation revealed that this area of the site had been abandoned over 700 years ago, while the front portion of the site continued in use into early historic times.

Ch'uumat'a was the former major village of the Ch'uumat'a7ath, a subgroup of the Toquaht. It takes its ethnographic name from the mountain behind it. A cave near the village was said to extend up the mountain, and from this cave emerged the wolves, both natural and supernatural (St. Claire 1991: 159). The village appears to have fallen into decline and disuse even earlier than T'ukw'aa, and was apparently not being occupied at the time of the reserve commissioner's visit in the late 19th century. Consequently, it is not held today
Fig. 14. Aerial view of Ch'uumat'a.

Fig. 15. Ch'uumat'a from beach.
Fig. 16. Contour map of Ch'uumat'a, showing location of excavation units.
as a Toquaht reserve. Except for objects associated with remains of a recent cabin on the site, the excavation showed little evidence of historic occupation.

Four 2 x 2 m units were excavated to the base of cultural deposits at Ch'uumat'a (Fig. 16). Near the front of the site, the excavated deposit had a depth of about 2.9 m, dating to about 1100 years at its base. In the back forested portion of the site, deposits reached a depth of 4.3 m, with several radiocarbon dates suggesting an initial occupation about 3900 years ago. The total volume of deposit removed from the four excavated units is approximately 56.4 m$^3$. Of the 466 artifacts recovered, all but one, a piece of rolled copper, are of indigenous materials. All radiocarbon age estimates are shown in Table 6.

One additional site (DfSj 30) was excavated as part of the Toquaht Project. Shallow shell midden deposits cover the upper surface of a small saddle-shaped rocky islet on the outer portion of the George Fraser Islands, off the tip of the Ucluth Peninsula (Figs. 7, 17, 18). It is at an elevation of about 15 metres, with steep drop-offs on all sides. At low tide there is a beach around it and it is joined to surrounding islands, while at high tide the water comes up to its steep sides. Shell midden deposits are thickest in the centre of the island's saddle, tapering off to almost nothing over bedrock at both ends. An excellent view from this site extends across a wide arc, allowing observation of the open ocean from the entrance to Ucluelet Inlet on one side to the islands of the Broken Group in Barkley Sound on the other. The elevated location and commanding view would suggest that this site served as a lookout, probably to watch for whales or other sea mammals.

Ch'uch'aa is the general Nuu-chah-nulth name for the George Fraser Islands, as well as the specific name for a Toquaht summer whaling and halibut fishing village. Toquaht informants described a whaling village on these islands,
Fig. 17. DfSj 30, a lookout site in the George Fraser Islands.

Fig. 18. Aerial view of DfSj 30.
although its exact location could not be determined. The islands are associated with a great whaling chief named *Wiihswisanap*, which means "filling or blocking the pass," who attempted to fill the channel between the two main islands with the bones from the many whales he had killed (St. Claire 1991:157). Blenkinsop (1874:33) stated that although these islands were Toquaht possessions, they were shared in use with the Ucluelet. Any whale driven ashore on these islands was shared equally by both groups.

Excavation at this site took the form of a 10 x 2 m trench across the central saddle (Fig. 19). The average depth of deposit over bedrock was about 70 cm. Approximately 13.9 m$^3$ of deposit was removed. Of the 239 artifacts recovered, all but one, a rolled copper tinkler, were of indigenous materials. Despite the ethnographic association with whaling, the artifact assemblage contains no obvious whaling equipment, such as large slotted harpoon valves, nor was whalebone particularly common in the faunal remains. Several radiocarbon dates suggest that this site was occupied only in relatively recent times, perhaps within the last 400 years (Table 6).

Faunal remains were abundant from all four excavated sites. However, analysis of this great quantity of material is still in preliminary stages and only a brief report (Monks 1992) is available. Sea mammals, due to their large size, were particularly evident. Whale, sea lion and porpoise bones were noted in the field. Whale identification has not been completed, but humpback (*Megaptera novaeangliae*) appears to be the most frequently occurring species (Monks, pers. comm. 1994). Fish bones were extremely numerous, dominating the assemblage from all sites when considered by number of identified elements. These ranged in size from herring (*Clupea harengus pallasi*) and other small fish to the giant bluefin tuna (*Thunnus thynnus*), which is more frequent in these sites than
Fig. 19. Sketch map of DfSj 30, showing the location of the excavation trench.
anywhere else on the Northwest Coast yet reported (Monks, pers. comm. 1994). Land mammals and birds are also well represented. Shellfish also played a major role in the diet.

---

### Table 6
Radiocarbon Dates from Toquaht Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macoah</td>
<td>580±60</td>
<td>Beta-47310</td>
<td>sand at base of deposit</td>
</tr>
<tr>
<td></td>
<td>1840±80</td>
<td>Beta-67472</td>
<td>clay at base of site</td>
</tr>
<tr>
<td>Tukw'aa (village area)</td>
<td>640±60</td>
<td>Beta-67474</td>
<td>2 m depth</td>
</tr>
<tr>
<td></td>
<td>690±70</td>
<td>Beta-47312</td>
<td>upper terrace - 1.5 m</td>
</tr>
<tr>
<td></td>
<td>870±50</td>
<td>Beta-47314</td>
<td>upper terrace - basal clay at 2.3 m</td>
</tr>
<tr>
<td></td>
<td>1150±90</td>
<td>Beta-55803</td>
<td>from hearth in basal sand</td>
</tr>
<tr>
<td>Tukw'aa (refuge area)</td>
<td>150±50</td>
<td>Beta-47313</td>
<td>bottom of shell matrix</td>
</tr>
<tr>
<td></td>
<td>380±50</td>
<td>Beta-67473</td>
<td>lower shell matrix, near bedrock</td>
</tr>
<tr>
<td></td>
<td>560±50</td>
<td>Beta-47311</td>
<td>just above bedrock</td>
</tr>
<tr>
<td></td>
<td>780±90</td>
<td>Beta-50030</td>
<td>near bedrock</td>
</tr>
<tr>
<td>Ch'uumat'a</td>
<td>720±50</td>
<td>Beta-55798</td>
<td>top of shell at back of site</td>
</tr>
<tr>
<td></td>
<td>970±60</td>
<td>CAMS-16625</td>
<td>level 3</td>
</tr>
<tr>
<td></td>
<td>1140±50</td>
<td>Beta-75884</td>
<td>basal sands near front of site</td>
</tr>
<tr>
<td></td>
<td>2010±60</td>
<td>Beta-55799</td>
<td>level 23</td>
</tr>
<tr>
<td></td>
<td>2280±60</td>
<td>Beta-75885</td>
<td>level 22</td>
</tr>
<tr>
<td></td>
<td>2290±80</td>
<td>Beta-55802</td>
<td>level 40</td>
</tr>
<tr>
<td></td>
<td>2450±60</td>
<td>Beta-75886</td>
<td>level 38 - basal sands</td>
</tr>
<tr>
<td></td>
<td>3480±80</td>
<td>Beta-55800</td>
<td>back of site - level 33</td>
</tr>
<tr>
<td></td>
<td>3810±90</td>
<td>Beta-55801</td>
<td>back of site - level 41 (near base)</td>
</tr>
<tr>
<td></td>
<td>3900±60</td>
<td>CAMS-3967</td>
<td>back of site - level 37</td>
</tr>
<tr>
<td>DfSj30</td>
<td>260±60</td>
<td>Beta-75888</td>
<td>near bottom - eastern end of trench</td>
</tr>
<tr>
<td></td>
<td>440±70</td>
<td>Beta-75887</td>
<td>near bottom - western end</td>
</tr>
</tbody>
</table>

---

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A considerable number of artifacts, of which 2160 are of aboriginal manufacture, came from the four sites. Objects of bone and antler dominate the assemblage, comprising 90% of the total. By far the most numerous artifact categories are bone bipoints and a variety of bone points, assumed to be parts of composite fishing gear. Other categories of bone objects include harpoon valves, fishhook shanks and awls. Whalebone artifacts are not common, but include a wedge, small handle and comb preform from DfSj 30 and several rough clubs from T'ukw'aa. In addition, the practice of preparing cedar bark for weaving basketry and clothing is indicated by the discovery of a complete bark beater from T'ukw'aa and a fragmentary bark shredder from Ch'uumat'a, both of whalebone. Stone artifacts, primarily abrasive stones, account for only 8.1% of the total. Other stone artifacts include fishhook shanks and small ground stone points, with celts and chipped stone objects almost entirely limited to Ch'uumat'a. Artifacts of tooth (1% of total) consist primarily of pendants and other decorative items, although several beaver incisor tools and a large harpoon valve blank of tooth were also found. Shell implements (0.7% of total) consist largely of mussel shell tools, such as knives and small celts, along with dentalium and Olivella shell beads and two abalone shell pendants found together at DfSj 30.

With few exceptions, all artifacts of aboriginal manufacture recovered from the excavated Toquaht sites fall within the West Coast culture type as proposed by Mitchell (1990). The exceptions consist primarily of a small number of ground stone points found at several of the Toquaht sites and chipped stone flake tools and detritus, primarily from lower levels of Ch'uumat'a. The only significant absences among the Toquaht sites from the list of traits established for the West Coast culture type are deer ulna tools and hand mauls.
Shoemaker Bay and Little Beach

The Shoemaker Bay site (DhSe 2) is located at the end of the long Alberni Inlet, which cuts through the Vancouver Island mountains from Barkley Sound to a short distance from the eastern coast. Although this area is today the political centre for the Nuu-chah-nulth Tribal Council, the Nuu-chah-nulth presence in the lower Alberni Valley appears to be relatively recent. Oral histories, discussed in Chapter 2, describe the forceful seizure of the rich salmon fishery on the lower Somass River by groups which later amalgamated to form the Tseshahlt. The original occupants, who apparently spoke a Salishan language, were acculturated to Nuu-chah-nulth language and culture. Excavation at Shoemaker Bay shows close similarities throughout the prehistoric period to the Strait of Georgia to the east, confirming the late arrival of the Nuu-chah-nulth from Barkley Sound.

Excavation at Shoemaker Bay was conducted in 1973 and 1974. A total of 132 m$^3$ of deposit was removed, resulting in the recovery of 2558 in situ artifacts (an additional 583 were obtained from the disturbed surface), 5 burials and 20,210 vertebrate faunal elements (McMillan and St. Claire 1982; Calvert and Crockford 1982). The excavators distinguish three major stratigraphic zones, with a fourth zone underlying these at one end of the site, and define two major cultural components (McMillan and St. Claire 1982). A series of radiocarbon dates (Table 7) shows the site was first occupied about 4000 years ago and was abandoned sometime after about 1000 years ago. No evidence of any historic occupation is evident at this location.

The most recent component, Shoemaker Bay II, is contained in a single stratigraphic zone (Zone A). This is the only zone with a high level of crushed
shell, resulting in far better preservation of bone and antler than lower levels. Consequently, most artifacts of those materials and most faunal elements were obtained from this zone. Particularly common artifacts are the valves for composite toggling harpoons and the small wedge-based bone points which served as arming points for such harpoons. Other bone and antler implements include barbed harpoons and fixed barbed points, deer ulna tools and bone splinter awls. Abrasive stones dominate the stone artifacts, but ground stone points and rectangular celts are also relatively numerous. Chipped stone artifacts are not common, but include small chipped basalt points. Faunal remains suggest an emphasis on fishing, particularly salmon and herring, as well as hunting, primarily for coast deer (Odocoileus hemionus), although the harbour seal (Phoca vitulina) was also relatively important. All would have been available in the immediate vicinity of the site. Radiocarbon dates suggest an occupation of roughly 1500 to 1000 years ago, although the fact that the surface of the site had been leveled off by a bulldozer prior to excavation makes any terminal date uncertain. Although differences are evident, the closest parallels for this component are with the Strait of Georgia culture type defined for the east coast of Vancouver Island (Mitchell 1971, 1990).

The earliest component, Shoemaker Bay I, encompasses materials from all the lower zones. Zone B, a very dark matrix with abundant fire-cracked rock, had only traces of shell. Bone and antler artifacts from Shoemaker Bay I came predominantly from near the top of this zone. Zone C, a lighter brown matrix with abundant pebbles, and Zone D, a light brown to grey sand which occurred only in one portion of the site, had few bone or antler artifacts or faunal remains. The predominance of stone objects in the artifact assemblage is at least partially attributable to the lack of bone preservation in the lower deposits.
Numerous chipped stone artifacts include a variety of points and knives, as well abundant microblades and microflakes of quartz crystal and obsidian. Trade networks are indicated by the presence of obsidian from several distant locations, including central Oregon. Numerous abrasive stones dominate the ground stone tools, but points and celts also exist in considerable numbers. The relatively limited bone assemblage consists primarily of small points and splinter awls. Evidence of a large house structure and domestic activities from the lower levels consists of a row of three very large evenly-spaced post moulds and numerous large hearths and concentrations of fire-cracked rock. Several burials came from this component, including one cairn burial, where large rocks had been piled over a shallow pit containing a partially disarticulated individual with artificial cranial deformation. What faunal remains exist for these levels suggest an economy similar to the upper component, based on fishing salmon and hunting deer and waterfowl. No radiocarbon estimates are available for Zone B, but several from Zone C suggest a time span of between 1700 to nearly 3000 years ago (Table 7).

McMillan and St. Claire (1982:123) note that the earlier component could be further subdivided. Almost all the bone and antler artifacts are found in Zone B, although this distinction is primarily due to preservation factors. The abundant microblades and microflakes of quartz crystal and obsidian are heavily concentrated in Zones C and D. In addition, nine water-rolled non-diagnostic stone objects came from the top of Zone E, the original beach gravels, and are included in this component as a matter of convenience. They are associated with a radiocarbon date of 4000 years, presumably marking the initial occupation of the site, and may considerably predate the other materials from Shoemaker Bay I. In general, the abundance of chipped stone points and
knives, microblades, ground stone points and small rectangular celts in Shoemaker Bay I most closely resembles the temporally equivalent stages in the Strait of Georgia, the Locarno Beach and Marpole culture types. Although differences are also evident, the similarities are much greater than with materials of equivalent age at Yuquot, classified in the West Coast culture type.

Shoemaker Bay's proximity to the east coast of Vancouver Island and the ethnographic traditions of early historic Salishan occupancy of the Alberni Valley help support the conclusion based on archaeological evidence that this locality was culturally related to the Strait of Georgia until the relatively late arrival of the Nuu-chah-nulth. Certainly the artifacts recovered are markedly dissimilar from those characteristic of other Nuu-chah-nulth area sites. Much more surprising is a similar claim which has been advanced for an open ocean site near Ucluelet.

The Little Beach site (DfSj 100) is in a small open-ocean cove near the end of the Ucluth Peninsula. Development plans for the site area led to the excavation of a small test pit in 1990 (French 1990) and more extensive testing in 1991 (Arcas Consulting Archaeologists 1991; Brolly 1992). In a brief (two week) project, mechanical equipment was used to cut 180 metres of trenching across the site. Because a number of burials were encountered during trenching and left in situ, not all trenches were excavated to basal deposits. Four 1 x 1 m units were laid out adjacent to the trenches and hand excavated, removing a total of just over 10 m$^3$ of cultural deposits. The main deposit, containing all the burials encountered at the site, was a shell midden up to three metres deep. Several radiocarbon age estimates (Table 7) suggest that the midden dates from roughly 4000 to 3000 years ago. An overlying layer of black silty loam yielded a radiocarbon date of about 2500 years. No evidence of more recent occupation
was uncovered, and no ethnographic traditions of a village in this location could be obtained from Ucluelet informants (Arcas Consulting Archaeologists 1991).

Seventeen definite and six possible burial features, representing at least 27 individuals, were encountered while trenching the midden deposit. Several were in shallow pits covered with low rock cairns, sometimes also with whalebone. Only 68 artifacts were recovered, with 41 coming from the controlled excavations. Bone points and abrasive stones dominate this small collection, although more diagnostic implements also occur. These include a leaf-shaped chipped stone projectile point, a crudely chipped cobbles tool, a thick ground slate point fragment, and a fragment of what appears to be a large flanged labret. Fish elements dominate the vertebrate faunal remains recovered from controlled excavations, with the most numerous being lingcod (*Ophidon elongatus*), rockfishes (*Sebastes* spp.) and greenlings (*Hexagrammos* spp.), although a wide variety of fish species was present. The most common mammals were cetaceans, northern fur seals (*Callorhinus ursinus*) and harbour seals (*Phoca vitulina*), as well as canids (*Canis* sp.). Although only a small sample of the faunal remains has been analyzed, an economy oriented to open-ocean resources seems evident.

A number of similarities link Little Beach and the lower component at Shoemaker Bay, which are at least partially contemporaneous. Chipped stone projectile points, thick ground stone points, labrets and cairn burials are found at both sites. Further, all these traits are absent from the West Coast culture type, and most closely resemble the Locarno Beach stage in the Strait of Georgia. This led the excavators at Little Beach (Arcas Consulting Archaeologists 1991) to suggest that a "major revision" was required in our knowledge of Nuu-chah-nulth prehistory. This is further examined in Chapter 4.
Table 7
Radiocarbon Dates From Shoemaker Bay and Little Beach

Shoemaker Bay (from McMillan and St. Claire 1982)

<table>
<thead>
<tr>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Zone</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1130±85</td>
<td>GaK-5432</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>1450±80</td>
<td>GaK-5108</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>1730±80</td>
<td>GaK-5107</td>
<td>C</td>
<td>near base of deposit - possibly too recent</td>
</tr>
<tr>
<td>1730±90</td>
<td>GaK-5106</td>
<td>C</td>
<td>near base of deposit - possibly too recent</td>
</tr>
<tr>
<td>2860±90</td>
<td>GaK-5104</td>
<td>C</td>
<td>from large trench feature</td>
</tr>
<tr>
<td>4030±105</td>
<td>GaK-5105</td>
<td>E</td>
<td>top of underlying beach gravels</td>
</tr>
</tbody>
</table>

Little Beach (from Arcas Consulting Archaeologists 1991)

<table>
<thead>
<tr>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2510±60</td>
<td>Beta-47923</td>
<td>from humic black deposit which overlies the midden</td>
</tr>
<tr>
<td>3310±70</td>
<td>Beta-47925</td>
<td>bone collagen from burial</td>
</tr>
<tr>
<td>4000±90</td>
<td>Beta-47924</td>
<td>near base of deposit, overlying cobbles</td>
</tr>
<tr>
<td>4000±170</td>
<td>Beta-47655</td>
<td>from base of deposit, overlying sandy beach</td>
</tr>
</tbody>
</table>

Other Archaeological Research

In Clayoquot Sound itself, the only controlled excavation to take place was at the site of Tsacheesowus (DhSk 1), at the eastern end of Meares Island, in 1985 (Arcas Associates 1988). Narrow exploratory trenches were used in an unsuccessful search for buried features associated with an old-style house described for the site by a Tla-o-qui-aht informant. The trenches only extended to the upper levels of this deep midden, removing a total of just over 3 m³ of
A large sandstone abrader was the only artifact of aboriginal manufacture recovered from this site.

On the outer coast of the Esowista Peninsula, near Tofino, two shell midden sites on Chesterman Beach have had minor testing. Six 1 x 1 m excavation units were spread across two terraces at the disturbed site of DgSl 61, near the south end of the beach (Wilson 1990). The lower deposits contained an abundance of shellfish remains, primarily of *Mytilus californianus*, suggesting than this was a shellfish processing area. The upper level, which may have been a seasonal camp, contained a wider variety of shellfish, as well as numerous bones of fish, birds and mammals. Fish were the most common remains, while the identified mammal bones were dominated by porpoise. These remains and the environmental setting suggest a summer fishing and sea mammal hunting camp. Only 15 artifacts were found, with bone points and bipoints most common, although an antler fishhook shank, two shell tools and an abrasive stone are also included. No historic materials were recovered. Two radiocarbon dates suggest that the site was first occupied by at least 1500 years ago (Table 8).

More recently, minor test excavation was carried out at DgSl 67, near the north end of Chesterman Beach (Wilson 1994). Two 1 x 1 m test pits were excavated in the disturbed and relatively shallow prehistoric deposits. A variety of fish species dominated the vertebrate faunal remains, while mammal remains consisted primarily of fur seal and sea lion. No artifacts were found. A single radiocarbon estimate indicates that this site was first occupied nearly a millennium ago.

On the eastern side of Barkley Sound, two adjacent sites have been excavated at Bamfield, in the ethnographic territory of the Ohiaht. DfSg 3 is a
defensive earthwork at Aguilar Point, near the entrance to Bamfield Inlet. Below this rocky promontory, on the outside of the peninsula, is the ethnographic village of 7O:ts'o:7a (St. Claire 1991:99-100; Coates and Eldridge 1992:2), today represented by a shell midden designated DfSg 2. Although the two sites are slightly separated, they probably represent the same ethnographic location, consisting of a village and its associated refuge area. Also nearby, on the inside of the peninsula, is DfSg 47, the Bamfield Teacherage site, where semi-controlled excavation salvaged the disturbed burial of a native female, probably dating to the historic period (McLeod and Skinner 1986).

The defensive earthwork at DfSg 3 was formed by the construction of a ditch and embankment, stretching across the headland for about 15 metres. A small test excavation in 1968, consisting of a 1 x 8 m trench across the mound, confirmed that there had once been a ditch parallel to the mound, with a total height from the bottom of the ditch to the top of the mound of about 1.3 m (Buxton 1969). Only nine artifacts, all of bone, were found, with bone bipoints being the most common. Faunal remains consisted largely of sea mammals, particularly seals. Two radiocarbon dates (Table 8) suggest that people were living at the site about 1200 years ago, and that the ditch was cut through earlier midden deposits about 700 years ago (Buxton 1969:29).

The adjacent village site (7O:ts'o:7a; DfSg 2) has also had minor excavation. Site disturbance led to an archaeological impact assessment, consisting of a series of shovel test holes and soil probe tests, in 1990 (Simonsen 1990). This was followed in 1992 by further assessment, including several additional shovel tests and the excavation of three 1 x 1 m units (Coates and Eldridge 1992). The approximately 2.9 m³ of excavated deposit contained 50 artifacts, of which 32 are of aboriginal manufacture. These are primarily of
Table 8
Radiocarbon Dates from Other Sites in Clayoquot and Barkley Sounds

<table>
<thead>
<tr>
<th>Site</th>
<th>C14 Date</th>
<th>Lab No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesterman Beach (DgSl 61)</td>
<td>660±80</td>
<td>not given</td>
<td>lower site - 30-35 cm depth</td>
</tr>
<tr>
<td></td>
<td>1480±100</td>
<td>not given</td>
<td>upper bench - 80-85 cm depth</td>
</tr>
<tr>
<td>Chesterman Beach (DgSl 67)</td>
<td>890±80</td>
<td>AECV-1937C</td>
<td></td>
</tr>
<tr>
<td>Aguilar Point (DfSg 3)</td>
<td>705±95</td>
<td>I-4008</td>
<td>thought to date trench embankment</td>
</tr>
<tr>
<td></td>
<td>1190±95</td>
<td>I-4007</td>
<td></td>
</tr>
<tr>
<td>Aguilar Point (DfSg 2)</td>
<td>40±50</td>
<td>Beta-56669</td>
<td>top of undisturbed midden - 37 cm</td>
</tr>
<tr>
<td></td>
<td>170±50</td>
<td>Beta-56668</td>
<td>base of deposit - 120 cm depth</td>
</tr>
</tbody>
</table>

(from Wilson 1990, 1994; Buxton 1969; Coates and Eldridge 1992)

Bone, consisting largely of points and bipoints, with the only stone artifact being an abrader. Faunal remains were relatively abundant, with fur seal and sea lion comprising most of the mammal remains and salmon being the most common fish. This is consistent with the open ocean location of this site. The two radiocarbon dates (Table 8) are remarkably recent. Although both are within the historic period, the fluctuations within radiocarbon in recent times makes it possible that the dates could actually be late prehistoric (Coates and Eldridge...
Although defensive sites atop steep rocky promontories are well-known in Barkley Sound and elsewhere in Nuu-chah-nulth territory, the defensive earthwork at DfSg 3 is unique. Such trench embankments, however, are relatively common in the Strait of Georgia region. Buxton (1969) lists 58 such sites in southwestern British Columbia and adjacent Washington. Mitchell (1990:348) refers to the "widespread distribution of sites with trench embankment features" as evidence of intergroup hostilities during the late prehistoric Strait of Georgia culture type. The excavated data from the two Aguilar Point sites, however, fit comfortably within the West Coast culture type. No strong ties to the Strait of Georgia are evident in the excavated materials, although the total sample recovered is very small.

**Ditidaht Territory**

This long stretch of coastline, from southeast of Barkley Sound to Port San Juan and Point No Point, has received little archaeological attention. Intensive survey has been carried out only along the portion in Pacific Rim National Park (Haggarty and Inglis 1985; Inglis and Haggarty 1986). More recently, the Ditidaht band commissioned an inventory and assessment of heritage resources on their reserve lands, and preparation of a management plan (Eldridge 1992). Discovery of significant archaeological resources, including waterlogged intertidal deposits, led to excavation at two such sites in 1994 (Eldridge, pers. comm. 1995).
The two excavated sites are on the same Ditidaht reserve, at "The Flats" near the mouth of Nitinat Lake. The large shell midden of DeSf 9 corresponds to the former Ditidaht winter village of Wikpalh7uus (Eldridge 1992:26). Nearby, the site of DeSf 10 is so large that it has two ethnographic names, Hitats'aaSak and Hit'ilhtaasak, corresponding to two clusters of houses (Eldridge 1992:26; Arima et al. 1991:273, 277). According to Bates (1987:41), this "may have been the site of the largest population concentration in Ditidaht territory." Bouchard and Kennedy (1991:30) describe this as the home of the "original" Ditidaht, who were "said to be very numerous." Midden deposits at these sites are up to six metres in depth (Eldridge 1992; pers. comm. 1995).

The 1994 excavations took place on the flat terraces at the front of the sites, where waterlogged deposits contained artifacts of perishable materials. Two 1 x 1 m units were excavated at DeSf 9 and three at DeSf 10. In addition, shovel tests were taken from the back of the sites, where creeks had exposed deep erosion faces, to obtain organic samples for radiocarbon dating. A small sample of artifacts, not yet analyzed or reported, includes such typically West Coast culture type items as small bone points, abrasive stones and a mussel shell blade. Objects of normally perishable materials include baskets (stylistically similar to Ozette and historic Nuu-chah-nulth examples), wooden fishhooks, small wooden points (almost identical to the bone points), and several unilaterally barbed wooden points (Eldridge, pers. comm. 1995).

At DeSf 9 a series of seven radiocarbon dates was taken from the midden deposits at the back of the site (Table 9). Although the samples were taken from discrete strata spanning about two metres of deposit, the dates are essentially contemporaneous. This part of the midden appears to have built up very rapidly about 2400 years ago. A sample of basketry from the waterlogged excavation
area at the front of the site dated to about 600 years ago. Similar dates were obtained from DeSf 10 (Table 9).

<table>
<thead>
<tr>
<th>Site</th>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeSf 9</td>
<td>2390±60</td>
<td>CAMS-14450</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2410±60</td>
<td>CAMS-14451</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2430±50</td>
<td>CAMS-14445</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2440±60</td>
<td>CAMS-14449</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2450±60</td>
<td>CAMS-14446</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2500±60</td>
<td>CAMS-14448</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2530±60</td>
<td>CAMS-14447</td>
<td></td>
</tr>
<tr>
<td></td>
<td>610±80</td>
<td>CAMS-14452</td>
<td>from basketry at front of site</td>
</tr>
<tr>
<td>DeSf 10</td>
<td>2260±60</td>
<td>CAMS-14453</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2030±60</td>
<td>CAMS-14455</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1920±60</td>
<td>CAMS-14454</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1000±60</td>
<td>Beta-49003</td>
<td></td>
</tr>
<tr>
<td></td>
<td>690±60</td>
<td>CAMS-14456</td>
<td></td>
</tr>
<tr>
<td></td>
<td>600±60</td>
<td>CAMS-14457</td>
<td>from front of site</td>
</tr>
</tbody>
</table>


Olympic Peninsula

The Makah, the southernmost Wakashans, occupy the northwestern portion of the Olympic Peninsula around Cape Flattery. Their 19th century territory stretched east along the Strait of Juan de Fuca to the Hoko River, which was also claimed by the Clallum Salish, and south beyond Cape Alava,
where they bordered on the Quileute. Five semi-autonomous winter village groups, linked by ties of kinship and common traditions, made up the Makah people in the 19th century (Swan 1870; Taylor 1974; Renker and Gunther 1990). Although these major villages seem to have been occupied for much or all of the year, during the warmer months many people moved to more exposed locations, such as Tatoosh Island off Cape Flattery, to fish for halibut and hunt sea mammals (Renker and Gunther 1990; Huelsbeck and Wessen 1995).

Ozette

Ozette (*Usee7ilh*; 45CA24 in the Smithsonian site designation system), at Cape Alava on the Olympic Peninsula's open Pacific coast, was the southernmost and most isolated of the Makah villages. The huge shell midden deposits which mark the village location stretch for over a kilometre along the beach, making this the largest site on the Washington coast. While providing immediate access to the resources of the open Pacific, the site itself was protected by offshore islands and reefs. Tskawahyah (Cannonball) Island, joined to the village by a sandspit at low tides, forms part of the Ozette site complex. Shell midden deposits atop this steep-sided rocky island indicate its use as a lookout or defensive location. Ozette was occupied for at least two millennia, continuing into the early 20th century when the last inhabitants moved to the main Makah community of Neah Bay.

Research at this important site began in 1966, with the excavation of a trench through the midden deposits (Daugherty and Fryxell n.d.; McKenzie 1974; Kirk with Daugherty 1974; Samuels and Daugherty 1991). This two-metre wide trench extended for 70 metres perpendicular to the beach, cutting through several distinct terraces and reaching a maximum depth of about four metres.
In total, about 200 m$^3$ of midden was removed (Huelsbeck 1994b:278). In the following year, further excavation took place south of the main trench, in an area where remains of recent longhouses could be seen decaying in the thick vegetation. Although most of the deposit removed was shell midden, essentially identical to that of the earlier trench, waterlogged deposits were encountered at lower levels in some of the excavation units. The corner of a well-preserved wooden house was exposed in one unit, and such normally perishable materials as basketry and wooden wedges and box parts were common. These early excavations also included testing the offshore islands, including the deep midden deposits atop Tskawahyah Island. Later, additional excavation in the midden portion of the site was carried out by E. Friedman (1976), who dug two 2 x 2 m units, with an average depth of about 1.5 m, on the uppermost terrace near the top of the earlier trench.

The results of the early excavations at Ozette have never been fully reported, although McKenzie (1974) provides an analysis of artifacts from the lower portion of the 1966 trench. Throughout the midden deposits, evidence of a highly maritime subsistence orientation was evident. Gustafson (1968) estimated that nearly 80% of the numerous marine mammal bones recovered from the trench are northern fur seal (*Callorhinus ursinus*), and that this reliance remained constant throughout the occupation of the site. E. Friedman (1976:109) found even higher percentages of fur seal in his upper terrace excavation. Fur seals are pelagic mammals, requiring the hunters to venture out to sea to procure them (Friedman and Gustafson 1975). Whalebones were also common in the midden deposits. Although fish bones from this part of the site have not been analyzed, the majority of the artifacts recovered are small bone and antler portions of composite fishing gear (McKenzie 1974:138). In her
examination of the artifacts from the trench, McKenzie (1974:147) denies any "significant morphological change" throughout the period of site occupation and maintains that, "with few exceptions," all artifacts are "comparable with ethnographic forms." The "few exceptions" include some objects of chipped stone, which are concentrated in the earliest levels. These, and some "heavy ground slate knives," are the only artifact types from the Ozette trench which would be out of place in the West Coast Culture Type, as proposed for the Nuu-chah-nulth area.

The time represented by these midden deposits is uncertain. Gustafson (1968:50) maintains that the site was occupied for about 2000 years, based on stratigraphic evidence and four radiocarbon dates, and McKenzie (1974:26) follows Gustafson's interpretation. These dates were never published or reported, however. The two earliest dates from the trench excavation are 1495±300 (Daugherty and Fryxell n.d.:4) and 1835±305 (J.C. Sheppard, WSU Radiocarbon Laboratory, pers. comm., 1995). All have very large margins of error. McKenzie (1974:27) submitted an additional sample from a lower level of the trench, receiving a result of only 180±70 years. This date seems unacceptably recent for the depth at which it was recovered, although it is associated with artifact types such as stone fishhook shanks which are known to be late at excavated Nuu-chah-nulth sites. Upper terrace deposits yielded age estimates of 440 and 710 years (E. Friedman 1976:84). The oldest date yet available from this site, at just over 2000 years, comes from the base of deep midden deposits on Tskawahyah Island (Samuels and Daugherty 1991:11). It seems likely that the earliest deposits in the village area should be at least of equivalent age. All Ozette radiocarbon age results are listed in Table 10.
The most spectacular discoveries at Ozette occurred after 1970. At the beginning of that year winter storms sent huge waves crashing into the bank along the edge of the village, causing slumps that exposed portions of a preserved wooden house and its contents. The importance of this discovery and the recognition that invaluable objects and information would be lost without immediate attention led the Makah Tribal Council to request archaeological salvage work, which began that summer (Kirk with Daugherty 1974; Daugherty 1988; Samuel and Daugherty 1991). This salvage excavation soon expanded into a major year-round archaeological project, with fieldwork which continued until 1981. When the project was eventually halted, over 800 m² of site area had been cleared, completely exposing the floors of three houses and portions of several others (Samuels and Daugherty 1991:23; Samuels 1989:143; Huelsbeck and Wessen 1994:3). Hydraulic excavation techniques were developed, using high pressure hoses to remove the thick clay deposit and smaller hoses with adjustable pressure to expose delicate perishable objects (Gleeson and Grosso 1976). Over 50,000 prehistoric artifacts, between 20,000 and 40,000 preserved wooden structural elements, and over 1,000,000 identified or identifiable faunal elements were recovered from the extensive excavations in this portion of the site (Wessen 1990:416; Samuels and Daugherty 1991:24; Samuels 1991:178; Huelsbeck 1994a:20).

These spectacular discoveries at Ozette were the result of a natural disaster, in the form of a massive mudslide. Sometime shortly before contact with Europeans, a section of the hillside above the village gave way, possibly as a result of tectonic activity. A mass of liquefied clay roared down the slope, crushing and burying at least four houses that stood in its path. Many of the roof planks and beams were swept out onto the beach by the force of the slide,
but the lower portions of the houses and most of the contents were sealed beneath a layer of wet clay up to three metres thick. The deposits immediately below the clay were kept permanently saturated by subsurface water flow, resulting in excellent preservation of all items of wood or bark. Broken and scattered architectural elements and almost the entire contents of the houses at the time the slide struck were exposed as excavation proceeded. Ozette provides an unprecedented opportunity to study the nearly complete material culture of a late precontact Northwest Coast society at a single moment of time.

The exact timing of this disaster is not certain. Initially, the slide was estimated to have occurred perhaps 450 or 500 years ago, or roughly A.D. 1500 (Kirk with Daugherty 1974:90; Daugherty and Friedman 1983:183; Wessen 1990:416). More recently, dendrochronological studies on cedar planks from a house destroyed by the slide yielded dates of A.D. 1613 and 1719, although both planks are missing their outer rings and bark (Samuels 1991:186; Huelsbeck 1994a:20). The lack of European material items among the house contents indicates a precontact occupation, probably prior to Captain Cook's arrival in Nootka Sound in 1778, when the Nuu-chah-nulth first obtained a substantial quantity of European goods, and certainly before 1792, when the Spanish built a short-lived fort at Neah Bay (Swan 1870:4; Wagner 1933; Cook 1973). This slide, therefore, was an 18th century event, occurring sometime after A.D. 1719 and prior to about 1778. The house from which the planks came showed signs of use and repair, suggesting that it had been occupied for a considerable period, perhaps about a century, at the time of its destruction (Huelsbeck 1989:157; Samuels 1991:186). A radiocarbon date of over 400 years was obtained from a hearth at the lowest house levels, providing the earliest evidence for a house at
this location (Samuels 1991:186). Underlying the deposits associated with the protohistoric houses impacted by the slide are late prehistoric midden deposits, yielding two radiocarbon age estimates of around 800 years (Table 10) (Samuels 1991:180; Samuels and Daugherty 1991:21). These are the earliest cultural materials from this portion of the site. Throughout the depositional sequence at Ozette, clay layers show that the 18th century slide which covered the excavated houses was not a unique event, and that the inhabitants of this village had been forced periodically to contend with the consequences of slope instability.

Although the force of the slide snapped upright support posts and scattered the planks, the great quantity of architectural elements preserved in the waterlogged deposits allowed reconstruction of house forms (Mauger 1991). The three completely excavated examples were large, plank-covered shed-roof structures, closely resembling historic Makah dwellings. Drainage ditches, frequently lined with whalebone, ran along the house walls to take runoff from the hillside away from the house floors. One house, along the front row of the village, has a number of features such as carved wall panels that suggest occupation by a high status household (Huelsbeck 1989; Samuels 1989).

The nearly complete contents of these houses were also preserved within the waterlogged deposits. Of the great quantity of artifacts recovered, over 85% are of perishable materials (Samuels and Daugherty 1991:4). Woven or twisted plant fibre objects, such as cordage, baskets, pouches, hats, capes and mats, are numerous (Croes 1977, 1980a). The abundant wooden artifacts include fishhooks, clubs, wedges, bows and arrows, bowls and kerfed-corner boxes (Gleeson 1980; Mauger 1982; Daugherty and Friedman 1983). Numerous finely-carved wooden artworks, from decorated bowls and clubs to large incised panels,
feature such motifs as the thunderbird, wolf, and whale, all characteristic of historic Nuu-chah-nulth and Makah art (Daugherty and Friedman 1983). The exceptional circumstances of this site even led to the recovery of such ritual items as a large carved wooden whale dorsal fin effigy, inlaid with sea otter teeth in the form of the thunderbird, suggesting whaling ceremonies similar to those of the ethnographic groups. The typical bone and antler artifacts which characterize Nuu-chah-nulth and Makah shell midden sites are present, but are greatly reduced in importance. The small bone points which dominate most assemblages play only a minor role here and are often found as parts of composite tools, such as the barbs on wooden fishhooks. Small quantities of iron also appear in these protohistoric house deposits, generally as the cutting edges of woodworking tools and knives. The source of this metal is not known, but its origins must be in Europe or Asia, reaching the people of Ozette shortly before direct contact with outsiders.

The excavated house floors and intervening midden deposits also yielded a vast array of faunal remains (Huelsbeck 1981, 1988a, 1994a, 1994b; DePuydt 1994; Wessen 1982, 1988, 1994a). The late prehistoric occupants at Ozette collected 90 species of shellfish, took 18 species of fish, and hunted 42 bird species and 27 mammal species (Huelsbeck and Wessen 1994:10). However, a relatively small number of species dominate each class. This is particularly true among the mammals; when whalebones are excluded, 90% of all mammal remains come from a single species, the northern fur seal (Huelsbeck 1989:163; 1994a:28). Grey and humpback whales were also a major part of the Ozette economy, representing such a huge quantity of meat and oil that whale products were likely a significant trade commodity (Huelsbeck 1988a, 1988b, 1994b). Halibut, lingcod and salmon were the principal food fishes. California mussel,
little-neck clam and chitons were among the most important shellfish in the diet. A highly maritime way of life is evident in an economy dominated by whaling, sealing and fishing for halibut.

Swan (1870:6) describes Ozette as being occupied during the winter, the people dispersing to various fishing locations in the other seasons. Faunal analysis, however, indicates that this was a year-round settlement. Although most fishing and sea mammal hunting occurred during spring to fall (Huelsbeck 1994a, 1994b), various species of fish, birds and shellfish indicate procurement throughout much of the year (Huelsbeck 1994a; DePuydt 1994; Wessen 1988, 1994a). Population levels may have fluctuated seasonally, but it would appear that at least some people remained in residence throughout the year, as was probably true of all the ethnographic Makah "winter villages" (Huelsbeck and Wessen 1995).

The remarkably complete material record at Ozette and the extensive nature of the excavations, exposing entire house floors, have resulted in insights into the social realm, both within and between houses. Analysis of floor deposits within each house has indicated individual family spaces and various activity areas (Samuels 1989, 1994). Croes and Davis (1977) even suggest that the residence areas of individual weavers can be located within the house by the distribution of slight stylistic differences in basketry. The differential distribution of artifacts and faunal remains across the house floors provides evidence of status distinctions within the houses, particularly in House 1 (Huelsbeck 1989; Samuels 1989). Uncommon items such as decorative shells, including a string of dentalium beads, were concentrated in one rear corner of the house, corresponding to the ethnographic location of high status residential areas.
Various lines of evidence suggest that the occupants of House I, the structure closest to the beach, held higher status than the other two households in the excavated area (Huelsbeck 1989, 1994a; Samuels 1989, 1994; Wessen 1988, 1994a). This was the only house to contain carved wall panels, decorated bench planks and a central hearth, as well as the largest number of decorative shells and whaling gear. Differences in the overall pattern of faunal remains also suggest differential access to resources between households. House 1 had considerably more salmon and halibut bones, suggesting control of the restricted areas in which these could be taken, while the occupants of House 5 had to exploit more widely available fish species (Huelsbeck 1988a, 1989). Analysis of shellfish also indicates that House 5 exploited a different set of beaches than the other two houses (Wessen 1988, 1994a). Huelsbeck (1989:166) concludes:

Houses 1 and 2 exploited similar resource territories but more of the preferred foods were consumed in House 1 than in House 2. These two households probably were members of the same local group, with House 1 ranked higher than House 2. House 5 exploited a different suite of territories and almost certainly belonged to a different local group.

The preserved house deposits at Ozette allow a remarkably complete picture of late precontact lifeways. They provide unique insights into all aspects of a functioning community, including the social realm. Ozette serves as an invaluable reference point in interpreting the more poorly preserved archaeological remains from shell midden sites, which provide most of the evidence on which our understanding of Nuu-chah-nulth, Ditidaht and Makah culture history is based. As the main excavated area at Ozette is protohistoric, however, dating only to the period immediately preceding European contact, this site yields little evidence on the origin or development of the cultural traits evident.
Table 10
Radiocarbon Dates From Ozette

<table>
<thead>
<tr>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Location</th>
<th>Comments</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>180±70</td>
<td>I-7175</td>
<td>midden trench</td>
<td>lower stratum - likely too recent</td>
<td>McKenzie 1974:27</td>
</tr>
<tr>
<td>585±210</td>
<td>WSU-499</td>
<td>midden trench</td>
<td></td>
<td>J.C.Sheppard, pers. comm.</td>
</tr>
<tr>
<td>900±305</td>
<td>WSU-506</td>
<td>midden trench</td>
<td></td>
<td>J.C.Sheppard, pers. comm.</td>
</tr>
<tr>
<td>1495±300</td>
<td>WSU-507</td>
<td>midden trench</td>
<td></td>
<td>Daugherty and Fryxell n.d.</td>
</tr>
<tr>
<td>1835±305</td>
<td>WSU-505</td>
<td>midden trench</td>
<td></td>
<td>J.C.Sheppard, pers. comm.</td>
</tr>
<tr>
<td>440±65</td>
<td>WSU-1609</td>
<td>upper terrace</td>
<td>near base</td>
<td>Friedman 1976:84</td>
</tr>
<tr>
<td>710±65</td>
<td>WSU-1610</td>
<td>upper terrace</td>
<td>near base</td>
<td>Friedman 1976:84</td>
</tr>
<tr>
<td>440±90</td>
<td>WSU-1778</td>
<td>House 1</td>
<td>hearth</td>
<td>Samuels 1991:186</td>
</tr>
<tr>
<td>790±80</td>
<td>WSU-1865</td>
<td>house area</td>
<td>stratum below houses</td>
<td>Samuels 1991:180</td>
</tr>
<tr>
<td>810±70</td>
<td>WSU-1777</td>
<td>house area</td>
<td>stratum below houses</td>
<td>Samuels 1991:180</td>
</tr>
<tr>
<td>285±180</td>
<td>?</td>
<td>south end of site</td>
<td></td>
<td>Daugherty and Fryxell n.d.</td>
</tr>
<tr>
<td>495±330</td>
<td>?</td>
<td>south end of site</td>
<td></td>
<td>Daugherty and Fryxell n.d.</td>
</tr>
<tr>
<td>980±180</td>
<td>WSU-1122</td>
<td>Tskawahyah Is.</td>
<td></td>
<td>Moss and Erlandson 1992:84</td>
</tr>
<tr>
<td>2010±190</td>
<td>WSU-1123</td>
<td>Tskawahyah Is.</td>
<td>near base</td>
<td>Samuels and Daugherty 1991:11</td>
</tr>
</tbody>
</table>
Hoko River

Two excavated sites lie close together near the mouth of the Hoko River, on the Strait of Juan de Fuca approximately 30 km from the northwest tip of the Olympic Peninsula at Cape Flattery. The Hoko River was considered the ethnographic boundary between the Makah and the Clallum, a Straits Salish-speaking group to the east. Both groups apparently maintained seasonal fishing stations along the lower river. A number of Makah families moved from Neah Bay each summer and fall to fish along the Hoko River, a practice which continued into the beginning of this century (Virden and Brinck-Lund 1980).

The oldest of the two sites is the Hoko River Wet/Dry site (45CA213), located on the river about half a kilometre from its mouth. The "wet" portion of the site was formed in a lagoon or estuary setting, where vegetal materials, such as twigs and pine cones, became water-logged and sank in the still waters (Croes 1976:203; Blinman 1980:64). The organic mats that were formed in this way also include numerous artifacts of plant fibre that were lost or discarded in the estuary and also sank to the bottom. Subsequently, the deposits were uplifted by tectonic activity and exposed by the changing course of the river, although most remain within the range of tidal fluctuations and can only be examined during low tides. The "dry" portion of the site, consisting of the sands and gravels above the "wet" deposits, represents the original bank on which the fishing camps were located (Croes and Hackenberger 1988:21). An initial test of the waterlogged deposits in 1967 employed what is thought to have been the first developed hydraulic excavation techniques employed on any Northwest Coast site (Croes 1976:209; 1992a:100; Croes and Blinman 1980:47). A later test excavation in 1973 was followed by more extensive fieldwork from 1977 to 1987.
This site contains the oldest perishable materials in the study area. Radiocarbon dates from both the wet riverside deposits and the dry campsite cluster between about 2800 and 2200 B.P. (Croes 1976:206; Blinman 1980:87, 89; Flenniken 1981:34). An additional date, taken from a hearth in an excavation unit further downriver, toward the late period rockshelter near the mouth of the Hoko, is 1700 B.P. (Croes, pers. comm. 1995). This suggests that the lower Hoko area as a whole may have been used seasonally throughout most of the last 3000 years. See Table 11 for all radiocarbon dates from the Hoko River sites.

Numerous plant fibre artifacts are encased in the layers of vegetal fibre that characterize the waterlogged deposits. Cordage is by far the most common artifact class, comprising about 61% of the total, with most representing parts of fishing lines or leaders (Croes 1980c, 1993; Ayers 1980:126). Basketry artifacts, including baskets, mats, and hats, in several distinct styles, are also abundant (Croes 1980b). Many of the baskets are open-weave pack baskets, of the type used for carrying fish (Croes 1988:145). Over 400 wooden fishhooks recovered from the riverbank indicate the major activity carried out at this site (Croes 1988:134, 145; 1989:102; 1993:35; Croes and Hackenberger 1988:21). These fishhooks are of two types, the most common being V-shaped composite hooks with bone barbs, believed to have been used mainly for flatfish, while U-shaped bentwood hooks are thought from experiments to have been primarily for Pacific cod (Hoff 1980; Croes 1988:134, 146-7). Several hafted microliths, still held in their cedar splint handles with spruce root, are believed through replicative analysis and experimental use to have been fish processing knives.
Wooden wedges, floats and small points were also found, as were a number of large unilaterally barbed points, some of which are elaborately decorated (Croes 1976, 1992a; Ayers 1980). A finely-carved wooden sculpture depicting two birds (possibly kingfishers or pileated woodpeckers) shown beak-to-beak came from the earliest levels at this site and may be the oldest known artwork in wood on the Northwest Coast (Croes 1988:137).

The dry campsite area lacks any preservation of organic materials, but contains stone tools and such features as slab-lined hearths, concentrations of fire-cracked rock, and manufacturing areas for vein quartz microliths (Flenniken 1981; Howes 1982; Croes and Hackenberger 1988:21; Croes 1989:102). The stone tools include chipped basalt and chalcedony projectile points, large ground slate projectile points, small rectangular celts, quartz crystal microblades and vein quartz microliths (Howes 1982; Croes 1989). Small post molds suggest that a cluster of temporary mat-covered dwellings, similar to those used in ethnographic summer fishing camps, once provided shelter at this location (Howes 1982:120; Croes 1988:148).

At the mouth of the Hoko River is the second excavated site, the Hoko River Rockshelter (45CA21). Shell midden deposits, reaching a maximum depth of 3.3 m, fill a large natural rockshelter. Forty-three 1 x 1 m units were excavated between 1979 and 1985, resulting in a large sample of faunal remains and over 1600 artifacts (Wigen and Stucki 1988). The most common of the latter were small bone bipoints and harpoon arming points, along with mussel shell knives and abrasive stones. Chipped stone implements, however, including cores, cobble tools, cortex flakes, and scrapers, were also fairly common. Numerous features, including hearths and refuse dumps, identify living surfaces
and activity areas within the rockshelter (Miller 1984; Croes and Hackenberger 1988:21). This site represents a considerably later occupation than the nearby wet/dry site, spanning the period from about 900 to 100 B.P. (Miller 1984:174; Wigen and Stucki 1988:90; Croes 1989:107).

Fishing appears to have been the primary activity carried out at Hoko River over the past 3000 years. Flatfish such as halibut dominate the faunal remains from the wet site, followed by rockfish, cod, salmon and dogfish (Huelsbeck 1980:105; Croes 1992b:346). At the later rockshelter site, most of the fishbones represent locally available rocky-bottom fish, such as greenling and rockfish, followed by salmon; halibut and other flatfish are relatively rare (Wigen and Stucki 1988:90-91). Bones of a variety of bird and mammal species, the latter dominated by northern fur seal, are also preserved in the rockshelter's shell midden deposits. Seasonality assessment based on shellfish suggests high collection levels for late spring through summer, followed by a drop in fall and probable abandonment of the site in the winter (Miller 1984). Fish remains from the wet site also suggest a summer and probable fall occupation (Huelsbeck 1980:108).

In a series of articles based on the Hoko River research, Croes (1987, 1988, 1989, 1992a, 1992b) and Croes and Hackenberger (1988) have argued that the well established "phases" or "culture types" for the southern coast are better understood as economic plateaus. Based on such lithic artifact types as thick ground slate points, chipped contracting stem points, and quartz crystal microblades, the Hoko River wet/dry site has been placed in the Locarno Beach culture type established for the Strait of Georgia (Mitchell 1990). The later deposits of the rockshelter, dominated by small bone points, are placed within the late prehistoric Gulf of Georgia culture type. Such shifts in economic
Table 11
Radiocarbon Dates for Hoko River Sites

**Hoko River Wet/Dry Site (45CA213)**

<table>
<thead>
<tr>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2210±70</td>
<td>WSU-1442</td>
<td>wet site</td>
</tr>
<tr>
<td>2530±60</td>
<td>WSU-2014</td>
<td>wet site</td>
</tr>
<tr>
<td>2570±70</td>
<td>WSU-2201</td>
<td>wet site</td>
</tr>
<tr>
<td>2580±80</td>
<td>WSU-2016</td>
<td>wet site</td>
</tr>
<tr>
<td>2610±100</td>
<td>WSU-2015</td>
<td>wet site</td>
</tr>
<tr>
<td>2750±90</td>
<td>WSU-1443</td>
<td>wet site</td>
</tr>
<tr>
<td>2750±90</td>
<td>WSU-2200</td>
<td>wet site</td>
</tr>
<tr>
<td>2520±90</td>
<td>WSU-2203</td>
<td>dry campsite</td>
</tr>
<tr>
<td>2770±90</td>
<td>WSU-2202</td>
<td>dry campsite</td>
</tr>
<tr>
<td>1700±65</td>
<td>WSU-2656</td>
<td>from hearth, downriver from main site</td>
</tr>
</tbody>
</table>

(Croes and Blinman 1980:89; Flenniken 1981:34; Croes, pers. comm. 1995)

**Hoko River Rockshelter (45CA21)**

<table>
<thead>
<tr>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>150±60</td>
<td>WSU-2872</td>
<td>near surface</td>
</tr>
<tr>
<td>185±85</td>
<td>WSU-2344</td>
<td></td>
</tr>
<tr>
<td>175±70</td>
<td>WSU-2873</td>
<td></td>
</tr>
<tr>
<td>225±120</td>
<td>WSU-2308</td>
<td>3 m depth</td>
</tr>
<tr>
<td>720±95</td>
<td>WSU-2307</td>
<td></td>
</tr>
<tr>
<td>920±50</td>
<td>WSU-2343</td>
<td></td>
</tr>
</tbody>
</table>

(Croes, pers. comm. 1995)
adaptation and technology, in this argument, characterize a broad region and
have no direct bearing on ethnicity. Perishables such as basketry and cordage
are believed to be far more sensitive indicators of ethnicity than implements of
stone and bone (Bernick 1987; Croes 1987, 1989). In this regard, Hoko basketry
and cordage styles show closest resemblance to those at the much later Ozette
site, while differing markedly from basketry at temporally equivalent
waterlogged sites, such as Musqueam Northeast, in the Strait of Georgia. In this
argument, then, technological similarities with the Locarno Beach and Gulf of
Georgia culture types are viewed as reflecting similar economic adaptations,
while the ethnic identity of the Hoko River people is linked with Ozette and the
Makah.

Other Makah Area Sites

Two of the five Makah "winter villages" listed by Swan (1870:6) were
located at Neah Bay, on the Strait of Juan de Fuca near Cape Flattery. The
inhabitants of Bihada (Bi7id7a), at the eastern end of the bay, moved in the
mid-19th century to join the residents of Diah (Diiyaa), often rendered as Neah,
near the western end. The modern Makah community of Neah Bay sits on
disturbed shell midden deposits, designated site 45CA22, dating to the late
prehistoric and early historic periods.

Two small-scale archaeological projects have taken place at this site. E.
Friedman (1976) excavated two 1.5 x 1.5 m test pits and one 1 x 2 m unit in the
midden deposits near the beach in 1973 as part of a project of testing several
ethnographic Makah sites to place the Ozette research in a broader context.
Two radiocarbon determinations provided "modern" results (Friedman 1976:80),
despite deposits which reached depths of nearly two metres, although neither
date came from the lowest stratum. In 1988, Wessen (1991) excavated a 1 x 2 m test unit at a location further back from the modern beach, obtaining two radiocarbon dates indicating that this site was occupied over two millennia ago (Table 12). The meagre collection of artifacts from both excavations (a total of 16 objects of aboriginal manufacture from Friedman's work and nine from Wessen's) are dominated by small bone points (Wessen 1991:12, 24). Faunal remains are much more numerous, indicating use of a wide range of marine and terrestrial resources. Bones of fur seal were the most common vertebrate remains recovered by Friedman (1976:103), while fish, particularly greenling and rockfish, dominate the fauna in Wessen's (1991:32-34) sample.

Three sites around Cape Flattery were identified as Makah summer villages by Swan (1870:6). Tatoosh Island (45CA207) lies immediately off the cape, Warmhouse (or Kiddekubbut) (45CA204) is at the entrance to the Strait of Juan de Fuca, while Archawat (45CA206) lies on the open Pacific. All three were tested by Friedman (1976). Only "sparse midden deposits" were encountered at Archawat, where two excavated units yielded only a few artifacts and a small quantity of faunal remains, with fur seal and deer the most common mammals (Friedman 1976:37, 112). Two excavated units at Warmhouse reached depths of over a metre, but again yielded few artifacts or faunal remains, although it appears that the ubiquitous rockfish was one of the major economic resources for residents at this site (Friedman 1976:35, 106). Tatoosh Island, ethnographically a vital Makah halibut fishing location, has deeper and more concentrated, although disturbed, deposits. Two excavated units reached depths of 1.3 and 1.4 metres, while a third unit was discontinued when human skeletal elements were encountered (Friedman 1976:112). In addition to abundant fish remains, bones of sea mammals were common, with
fur seal comprising more than 90% of the total (Friedman 1976:115-116). Artifacts were primarily small bone points, although bone harpoon valves and stone fishhook shanks were also found. Radiocarbon dates for Archawat and Warmhouse show occupation only within the last several hundred years, while use of Tatoosh Island dates back at least a millennium. In addition, an unexcavated site at Cape Flattery (45CA2) has yielded a date of approximately 2000 years, based on charcoal taken from an exposed midden face (Wessen, pers. comm. 1995). Table 12 lists all known radiocarbon dates for Makah-area sites.

Wayatch (Wa7acht'; 45CA1), on the open Pacific side of the Olympic Peninsula, is another of the major "winter villages" identified by Swan. Eleven 4 foot x 4 foot (1.2 x 1.2 m) units, forming two trenches, were excavated at this site in 1955 (Taylor 1974). No radiocarbon samples were taken and little specific information has been reported, except that clams, mussels and sea mammals, particularly whales, made up much of the diet. In 1991 Wessen (1993:18) excavated a 1 x 2 m unit at this site, obtaining two radiocarbon dates within the last 200 years (Table 12). Much greater time depth, however, is indicated by a road cut through a ridge back from and above the excavated unit and the modern beach. A profile cleared at this location revealed about 1.6 m of midden deposit and yielded radiocarbon age estimates of 1790 B.P from the uppermost stratum and 3810 B.P. from near the bottom of this exposure (Wessen 1992, pers. comm. 1995). The latter date makes this the earliest dated site on the ocean coast of Washington. Faunal remains, consisting largely of sea mammals and deep water fish, suggest a fully maritime economy from earliest occupation (Wessen 1992). Faunal remains also indicate that, despite the
ethnographic classification as "winter village," this site was probably occupied year-round (Wessen 1993:19; Huelsbeck and Wessen 1995).

Further south, about halfway between Cape Flattery and Ozette, is the ethnographic "winter village" of Tsoo-yess or Sooes (Ts'uuyas; 45CA25). Friedman (1976) excavated two 1 x 2 m units and one 2 x 2 m unit at this site, in deposits that reached 3 m depth. Radiocarbon samples from near the base of the deposit in two different units yielded age estimates of approximately 1000 and 1100 years (Table 12). The small artifact assemblage consists largely of bone points, but harpoon valves, several stone fishhook shanks, and a decorated bone comb were also found. As at the other open-ocean Makah sites, a maritime economy is indicated in the faunal remains by a variety of fish species and a mammalian assemblage heavily dominated by northern fur seal (Friedman 1976).

Two excavated sites lie a short distance south of Ozette, in an area that may have been used by both the Makah and the Quileute (Renker and Gunther 1990; Powell 1990). The most northerly, and the first to be excavated, is the White Rock Village site (45CA30). Initial test excavations in 1955 were followed by a larger project in 1961 (Guinn 1963). Twenty-nine 5 foot x 5 foot (1.5 x 1.5 m) squares were excavated, forming several long trenches, into deposits reaching 1.7 m depth. A total of 248 artifacts was collected, of which 69 (27.8%) are wedges, primarily of whalebone. Other artifact types include bone points, harpoon valves, abrasive stones, and stone sinkers. Sea mammal hunting, fishing, and shellfish collecting were the basis of the economy. Guinn's (1963:13) assessment of late age for the site was borne out by one radiocarbon determination of less than 400 years.
A short distance south of White Rock is the Sand Point site (45CA201), located on what appears to be on an old marine terrace a considerable distance back from the modern beach. It was first tested by Daugherty and the Ozette crew in 1966, during the initial examination of the Cape Alava area (Wessen 1984:3; 1993:19-20). Unfortunately, no field notes or other documentation from this early work are available, although a radiocarbon age of over 6000 years was apparently obtained (Daugherty and Fryxell n.d.:4, 13; Wessen 1993:20). As the exact circumstances and provenience of this date are unknown, and as it was not substantiated by later fieldwork, this date must be considered suspect.

This suggestion of an early age prompted Wessen to do further work at this site. In 1979 he excavated a 1 x 2 m unit near the location of the original test (Wessen 1984), returning in 1991 to excavate a 0.5 x 2 m extension to this unit (Wessen 1993). Radiocarbon dates, taken from the uppermost and lowermost cultural strata in the 1.8 m deep exposure (Table 12), indicate that this site was occupied between about 1600 and 2300 years ago (Wessen 1984:15; 1993:20). The 82 artifacts recovered from the combined three field projects differ from those at other open-ocean Makah sites in that chipped stone implements comprise the majority (Wessen 1993:43). Most are debitage, showing evidence of both simple and bipolar percussion techniques, but retouched spall tools and several biface fragments were also found. Bone implements are dominated by small bone points and bipoints, but also include unilaterally barbed points and a fishhook shank. Fish, primarily halibut, rockfish and lingcod, were the most abundant faunal remains (Wessen 1993:50). Fur seal bones were also numerous, comprising over 80 per cent of all mammal remains (Wessen 1993:53). Faunal studies suggest a multi-season, possibly year-round, occupation at this site (Wessen 1993:60).
An unexcavated shell midden site (45CA423) is on the lower terrace near Sand Point, directly below 45CA201. This was examined as part of the 1991 fieldwork, in an attempt to understand the timing of terrace formation. Whalebone eroding from the beach face of the midden yielded a radiocarbon age of 650 B.P., while charcoal from the inland edge of the midden gave a date of 1550 B.P. (Wessen 1993:38). This indicates an occupation of at least 900 years, beginning shortly after the final date for the upper terrace site. Probing at another unexcavated site at Cedar Creek (45CA29), a short distance south of Sand Point and also associated with modern sea levels, provided a date of over 1100 years (Wessen, pers. comm. 1995).

Although Sand Point is the only raised terrace site in the area to have been excavated, several others have been recorded. Upper Wayatch (45CA400), located several kilometres inland from Wayatch, yielded a radiocarbon date of 2690 B.P. from charcoal recovered under an uprooted tree. This is only slightly older than Sand Point and considerably younger than the oldest date from Wayatch. At Norwegian Memorial (45CA252), south of Sand Point, charcoal from a pothunter's hole provided an age estimate of just over 1000 years (Table 12), a date that Wessen (pers. comm. 1995) considers unrealistically late for this elevated site context.

Although several of the ethnographic sites yielded only very recent dates, evidence for earlier occupation is becoming more abundant. The area historically occupied by the Makah seems to have been first settled at least 3800 years ago, based on the earliest date from Wayatch, although there is no evidence of continuous occupation from that date to the historic settlement. Sites with dates in the 2000 to 3000 year range consist of Hoko River, Sand Point, and Upper Wayatch, with Neah Bay and Ozette being first occupied by the end of
### Table 12
Radiocarbon Dates from other Makah-Area Sites

<table>
<thead>
<tr>
<th>C14 Age</th>
<th>Lab No.</th>
<th>Comments</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;modern&quot;</td>
<td>WSU-1607</td>
<td>83 cm depth</td>
<td>Friedman 1976:80</td>
</tr>
<tr>
<td>&quot;modern&quot;</td>
<td>WSU-1608</td>
<td>150 cm depth</td>
<td>Friedman 1976:80</td>
</tr>
<tr>
<td>2170±60</td>
<td>Beta-28734</td>
<td>probably disturbed</td>
<td>Wessen 1991:22</td>
</tr>
<tr>
<td>2070±70</td>
<td>Beta-28735</td>
<td>near base</td>
<td>Wessen 1991:22</td>
</tr>
<tr>
<td>150±60</td>
<td>WSU-1604</td>
<td>near base (122 cm depth)</td>
<td>Friedman 1976:85</td>
</tr>
<tr>
<td>200±60</td>
<td>WSU-1603</td>
<td>near base (96 cm depth)</td>
<td>Friedman 1976:82</td>
</tr>
<tr>
<td>960±70</td>
<td>WSU-1606</td>
<td></td>
<td>Friedman 1976:87</td>
</tr>
<tr>
<td>1970±80</td>
<td>Beta-58385</td>
<td>from exposure face</td>
<td>Wessen 1995*</td>
</tr>
<tr>
<td>110±60</td>
<td>Beta-47545</td>
<td>from test pit</td>
<td>Wessen 1995*</td>
</tr>
<tr>
<td>180±70</td>
<td>Beta-47546</td>
<td>from test pit</td>
<td>Wessen 1995*</td>
</tr>
<tr>
<td>1790±70</td>
<td>Beta-47547</td>
<td>from road cut (top)</td>
<td>Wessen 1995*</td>
</tr>
<tr>
<td>3810±60</td>
<td>Beta-47548</td>
<td>from road cut (bottom)</td>
<td>Wessen 1992, 1995</td>
</tr>
<tr>
<td>2690±60</td>
<td>Beta-80923</td>
<td>raised terrace inland</td>
<td>Wessen 1995*</td>
</tr>
<tr>
<td>980±60</td>
<td>WSU-1611</td>
<td>at base (2.88 m depth)</td>
<td>Friedman 1976:91</td>
</tr>
<tr>
<td>1110±60</td>
<td>WSU-1612</td>
<td>near base (2.52 m depth)</td>
<td>Friedman 1976:93</td>
</tr>
<tr>
<td>387±42</td>
<td>not given</td>
<td>lowermost level</td>
<td>Guinn 1963:13</td>
</tr>
</tbody>
</table>
this time range. The latter two continued to be inhabited villages into historic times. Chipped stone implements, absent or very rare at all later deposits, are common at Sand Point, Hoko River, and the lower levels of the Ozette midden trench. Otherwise, most implements found at these sites characterize later time periods as well, and most investigators have emphasized cultural continuity to the historic occupants. The hypothesis that Wakashan-speaking peoples arrived on the Olympic Peninsula only about a thousand years ago, as proposed on linguistic evidence (Chapter 2), does not appear to be supported by the archaeological evidence, although the chipped stone which characterizes the period prior to about 2000 B.P. may possibly reflect an earlier population.

<table>
<thead>
<tr>
<th>Site</th>
<th>Layer</th>
<th>Radiocarbon Date</th>
<th>Age</th>
<th>Notes</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand Point (45CA201)</td>
<td>1600±75</td>
<td>SI-4366</td>
<td>uppermost deposit</td>
<td>6650%0</td>
<td>Wessen 1984:15</td>
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<tr>
<td></td>
<td>2270±75</td>
<td>SI-4367</td>
<td>lowermost deposit</td>
<td>2270k75</td>
<td>Wessen 1984:15</td>
</tr>
<tr>
<td></td>
<td>6065±250</td>
<td>WSU-498</td>
<td>date not accepted</td>
<td>650%0</td>
<td>Wessen 1993:20</td>
</tr>
<tr>
<td>Sand Point - lower terrace site (45CA423)</td>
<td>650±60</td>
<td>Beta-57136</td>
<td>beach erosion -whalebone</td>
<td>650%0</td>
<td>Wessen 1993:38</td>
</tr>
<tr>
<td></td>
<td>1550±80</td>
<td>Beta-57566</td>
<td>back of midden</td>
<td>1550SO</td>
<td>Wessen 1993:38</td>
</tr>
<tr>
<td>Cedar Creek (45CA29)</td>
<td>1120±70</td>
<td>Beta-55630</td>
<td>Raised terrace</td>
<td>1120k70</td>
<td>Wessen 1995*</td>
</tr>
<tr>
<td>Norwegian Memorial (45CA252)</td>
<td>1070±50</td>
<td>Beta-68682</td>
<td>Raised terrace</td>
<td>1070k50</td>
<td>Wessen 1995*</td>
</tr>
</tbody>
</table>

* All Wessen 1995 references are personal communications.
CHAPTER 4:  
THE EMERGENCE OF THE WEST COAST CULTURE TYPE

Cultural Antecedents

Archaeological Evidence

No excavated sites in the study area date to the Early Period of Northwest Coast prehistory, generally considered to predate about 5000 B.P. (Borden 1975; Carlson 1979, 1983a, 1990, 1996a; Fladmark 1982, 1986; Matson and Coupland 1995). Yuquot, with a date of about 4200 B.P. for Zone I deposits, is the oldest dated site in Nuu-chah-nulth territory. Similarly, the date of 3800 B.P. from Wayatch is the earliest from Makah territory. Evidence of much earlier human presence in surrounding regions, however, suggests that archaeological traces of the first occupants of the study area have not yet been recovered.

The date of initial human arrival on the coasts of southern British Columbia and adjacent Washington is uncertain. The archaeological record in this area at present extends back nearly 9000 years, but few would argue that this dates the earliest occupation. If the initial entry into the Americas was by a southward movement along the west coast at a time when large areas of coastal shelf were exposed by lowered sea levels, as argued by Fladmark (1979), any trace of this passing would now lie below the waters off the outer coast. Evidence that large areas of now-submerged land would have been available to early human migrants along the coast was obtained in a geological core sample taken from the ocean bottom north of Vancouver Island at a depth of 95
metres. The core contained a paleosol with \textit{in situ} rooted plant remains that were radiocarbon dated to 10,500 B.P., indicating that this was dry land at that time (Luternauer \textit{et al.} 1989).

A controversial claim for archaeological evidence of human presence around 12,000 B.P. comes from the Manis Mastodon site (45CA218) on the northern Olympic Peninsula. Excavation at this site exposed a largely complete mastodon skeleton, which was interpreted by the investigators as evidence of human hunting and butchering practices (Gustafson, Gilbow and Daugherty 1979). Support for this view came primarily from what was thought to be a bone "projectile point" embedded in a rib of this animal. As this pointed bone is not indisputably of human manufacture, however, the claim that people were hunting elephants in this region at this early period remains unsubstantiated.

More definite evidence for human presence in southern coastal British Columbia and adjacent Washington is evident at about 9000 B.P. This early stage is "... defined on the basis of the co-occurrence of unifacial pebble choppers and leaf-shaped bifaces in early assemblages, but it includes assemblages of pebble (or cobble) tools by themselves" (Carlson 1990:62). The predominance of crudely flaked pebble tools in such assemblages led Carlson (1979, 1983a, 1983b, 1990, 1996a) to term this the Pebble Tool Tradition. Although pebble tools served as general purpose implements, appearing in a number of different cultural contexts, their abundance in this early stage becomes a defining characteristic. Matson (1976) and Matson and Coupland (1995) use the term "Old Cordilleran Culture" to refer to the same stage, while Mitchell (1971) places this within his Lithic Culture Type. More than just terminological preferences are involved here, however, as "Old Cordilleran" implies a generalized culture of the interior mountains, only later moving to the
coast, while Carlson (1990:66; 1991:113; 1996a:8) argues that this was initially a coastal adaptation, later following the salmon up the rivers to the interior. Dates as early as 9700 B.P. for similar materials from the lowest levels at the Namu site, on the central British Columbia coast, lend support to this view (Carlson 1996b).

Much of our information on this early stage comes from the oldest component at the Glenrose Cannery site, located on the lower Fraser River (Matson 1976, 1996). The earliest radiocarbon date from this deep, multi-component site is $8150 \pm 250$ B.P., although this was obtained about one metre from the base of cultural deposits. Matson and Coupland (1995:70) date the Old Cordilleran (or Pebble Tool) component at Glenrose to between about 8500 and 5000 B.P. Cobble tools dominate the artifact assemblage, comprising about 44% of the total, while bifacial leaf-shaped points are present, but in small numbers. A barbed antler point and several antler wedges also occur in this assemblage. Bones of elk (wapiti) and deer, followed by seal, are the most abundant faunal elements, although these primarily date to the later part of this component. Fish remains include salmon, flatfish, eulachon, and stickleback. Substantial lenses of concentrated shell occurred at considerable depths, indicating that shellfish gathering was part of the economy throughout this component. A seasonal encampment of generalized hunters, fishers, and gatherers is indicated for this early occupation.

A similar picture comes from Bear Cove, an early Pebble Tool tradition site located on northeastern Vancouver Island (C. Carlson 1979). A radiocarbon date of $8020 \pm 110$ B.P. was obtained from near the base of deposits underlying a shell midden. As at Glenrose, the upper levels of this component are undated, but are older than about 4500 B.P. Similar, but undated, material from non-shell
deposits at the base of the nearby O'Conner site (Chapman 1982) may also belong to this period. The artifacts from Bear Cove closely resemble those from Glenrose, with a small number of bifacial leaf-shaped points and knives and abundant pebble tools, the latter comprising 48% of the total.

Despite the similarities in age and artifact forms, the faunal remains from Bear Cove differ significantly from those at Glenrose (C. Carlson 1979; Matson 1996; Matson and Coupland 1995:76-77). Mammal bones, which are twice as numerous as those of fish, are dominated by several species of sea mammals. Fully 80% of sea mammal remains from Bear Cove were identified as *Delphinidae* (porpoise), with northern fur seal and Stellar sea lion making up most of the rest. Fish remains were dominated by rockfish (*Sebastes* spp.), with salmon a distant second. The numerous porpoise, fur seal, and rockfish elements provide evidence that a developed maritime economy existed at this early period. Intensive hunting of sea mammals such as porpoises would have required watercraft and probably harpoons with bone or antler heads. However, all faunal remains at Bear Cove came from the upper levels of this component and cannot demonstrate that the earliest arrivals at this location brought with them a fully developed maritime economy.

Only a short distance from Bear Cove across Vancouver Island is Quatsino Sound, immediately north of ethnographic Nuu-chah-nulth territory. During survey in Quatsino Sound in 1973, Carlson and Hobler (1976:126) recorded six locations where stone tools produced by simple percussion flaking were found on intertidal beaches, in two cases without any above-tide midden present. Several hundred pebble tools, pebble cores, flakes and several leaf-shaped bifaces are among the chipped stone artifacts collected (Carlson and Hobler 1976; Apland 1982). Carlson and Hobler (1976:134) place these in their
"Early Period", estimated at 9000 to 4000 B.P. These objects were considered to be "essentially identical" to those recovered from the early component at Bear Cove (C. Carlson 1979:190). In a detailed study of the chipped stone artifacts from intertidal sites in Quatsino Sound and the central coast, Apland (1982) described the Quatsino assemblage as based on a pebble-spall technology, closely affiliated with the Pebble Tool Tradition. He argued that the Quatsino Sound chipped stone objects are not only distinct from the intertidal lithics of the central coast, but are likely to be earlier, probably predating 5000 B.P.

A number of undated surface discoveries of chipped stone tools in Nuu-chah-nulth territory have raised the question of the cultural relationships of the earliest occupants. A series of elevated sites along the Somass River in the Alberni Valley (McMillan 1981, 1996; McMillan and St. Claire 1982) may cast some light on this issue. Lithic artifacts of a well-developed microblade industry are found with bifacial leaf-shaped points, retouched cortex spalls, and other large flake tools; pebble tools and cores occur but are relatively rare (Figure 20). Microblade technology has a north to south temporal gradient on the Northwest Coast. In southeastern Alaska microblades first appear between about 9200 and 8900 B.P. (Ackerman 1992; Davis 1990; Carlson 1990). In the Gwaii Haanas region of the southern Queen Charlotte Islands microblade cores are found at several intertidal locations dated as early as between 9400 and 9000 B.P. (Fedje et al. 1996). By about 8500 B.P. microblade technology appears on the central coast, where it is added to the Pebble Tool tradition assemblage at Namu (Carlson 1996b). The Somass River sites may similarly represent an interface where technologies based on pebble tools and bifaces merge with those based on microblades. Borden (1975, 1979) had earlier speculated that bearers of these two early cultural traditions met somewhere in the vicinity of northern
Vancouver Island, with their merger providing the basis for subsequent development of Northwest Coast cultures. Artifact typology and the elevated nature of the Somass River sites argue for their placement within the Pebble Tool tradition, although the presence of microblades would suggest that they date toward the later end of that tradition, perhaps in the 7000 to 5000 B.P. range (Carlson 1990:67; McMillan 1996:214). They certainly predate the
excavated Shoemaker Bay site, with a basal date of 4000 B.P., which is associated with modern sea levels (McMillan and St. Claire 1982).

Surface discoveries of chipped stone artifacts have also been made on the outer coast of Nuu-chah-nulth territory, in undated intertidal contexts (Figure 21). In Nootka Sound, Marshall (1992a, 1992b, 1993) reports beach discoveries of leaf-shaped bifaces, cores, and flakes. Most implements were produced by a pebble-spall flaking technology and closely resemble the beach discoveries from Quatsino Sound (Marshall 1993:80). Similar discoveries have also been made in Barkley Sound, including a large leaf-shaped biface similar in style and material to Nootka Sound specimens (McMillan and St. Claire 1991:69). A basalt core with three long narrow flake scars, found on a beach in Nootka Sound, indicates the former presence of the blade technology (Arcas Consulting Archeologists 1993). These implements may have been used in the intertidal zone and lost or discarded directly onto these beaches, or may have eroded out from midden deposits behind the beaches. However, as chipped stone artifacts were extremely rare in the 4200 year sequence established for Yuquot, another explanation for the intertidal materials in Nootka Sound would be that they predate the earliest deposits at Yuquot, representing the remains of sites which were occupied when sea levels were lower. If these intertidal lithics are related to the Pebble Tool tradition, this would provide a logical cultural antecedent for the West Coast culture type. It would also link the early period in Nuu-chah-nulth territory with surrounding areas and raise the possibility that historic Wakashan and Salishan populations shared a distant common ancestor, as argued earlier by Carlson (1983a, 1983b, 1990, 1991).

It must be stressed, however, that no site in Nuu-chah-nulth, Ditidaht, or Makah territory has been shown to be older than 4200 years. Furthermore, few
Fig. 21. Chipped stone bifaces from inter-tidal contexts in Barkley and Nootka Sounds. (a, from DfSi 72, near Toquart Bay, Barkley Sound; b, from DkSo 6, Nootka Sound; c, from DjSo 8, Muchalat Inlet, Nootka Sound) (b, c, from Marshall 1992:109; 1993:75).
sites predate about 2500 B.P. This situation is at least in part attributable to the fact that most archaeological fieldwork has concentrated on sites associated with modern sea levels. Archaeologists must also consider geological factors that may have affected site visibility and accessibility on the west coast.

**Geological Factors**

During the climax of Wisconsinan glaciation much of the study area as it now exists would have been rendered uninhabitable, with only the Brooks Peninsula and the end of the Hesquiat Peninsula spared from glacial ice (Clague, Armstrong and Mathews 1980:Fig. 1). Valley glaciers from the central Vancouver Island mountains reached the outer coast through what are today the major inlets. In Barkley Sound, several local glaciers met and coalesced, extending in two lobes out onto the continental shelf (Carter 1973:443). A radiocarbon age of 16,700 ± 150, obtained from a sample of *Pinus contorta* found at the top of glaciofluvial sediments clearly overlain by till of the last glaciation, provides an estimate for the onset of the final glacial advance in the Clayoquot Sound area (Clague, Armstrong and Mathews 1980). Further radiocarbon determinations, from post-glacial marine deposits in Hesquiat Harbour and Clayoquot Sound, suggest that glacial retreat had freed the outer west coast by about 13,000 B.P. (Friele 1991:79; Clague *et al.* 1982; Howes, in Haggarty 1982:37). Similarly, a radiocarbon date of 10,280 ± 150 provides a minimum age for deglaciation of southwestern Vancouver Island (Alley and Chatwin 1979).

Shortly after deglaciation, the sea rose rapidly relative to the land along western Vancouver Island. Marine inundation reached 32 to 34 metres above present sea level at Hesquiat Harbour (Clague *et al.* 1982:611). Elevation of post-glacial marine deposits above modern sea levels increases with distance
inland along the inlets, presumably due to the greater weight of ice inland, reaching about 45 metres near the head of Espinosa Inlet, between Nootka Sound and Kyuquot Sound (Howes, in Haggarty 1982:37). In the Alberni Valley, at the end of the long Alberni Inlet, the marine limit reached about 90 metres above modern levels (Fyles 1963:90; Holland 1964:117; Mathews, Fyles and Nasmith 1970:692, 693).

Relative sea levels dropped rapidly following these early post-glacial highs. Radiocarbon dates on in-situ stumps in the intertidal mud near Tofino in Clayoquot Sound indicates that the sea was about three metres below present levels between 7000 and 8000 B.P. (Bobrowsky and Clague 1992; Friele 1991:80). Based on fieldwork on Vargas Island, Friele (1991:78) has prepared a sea level curve which he believes is generally applicable to the west coast of Vancouver Island from Nootka Sound to Barkley Sound, an assumption supported by recent research in Barkley Sound (Friele and Hutchinson 1993:839). Friele proposes that sea levels rose gradually from the Early Holocene lows, attaining a height of about three metres above the present level by 5100 B.P. Relative sea levels then remained stable for over a thousand years, a period Friele (1991) has termed the Ahous Bay Stillstand. After 4000 B.P. sea levels began to drop, reaching another stillstand around 2200 B.P., at which time mean sea level stood about two metres higher than today (Friele 1991:78, 91). The land has gradually emerged relative to the sea over the past several millennia along the west coast of Vancouver Island, in a process which is still continuing (Friele 1991; Hebda and Rouse 1979; Clague et al. 1982:612). This is in contrast to the inner coast, on the east side of Vancouver Island, where the sea is presently rising relative to the land (Clague et al. 1982:612).
Late Holocene emergence on the outer Olympic Peninsula also appears to be still in progress (Wessen 1993:8).

Tectonic uplift is generally considered to be the driving force behind Middle and Late Holocene emergence of the land along the outer coast of Vancouver Island (Clague et al. 1982:616; Muller 1980:9; Hebda and Rouse 1979:129; Friele 1991:92; Friele and Hutchinson 1993:840). Late Holocene uplift appears to have been continuous and gradual, with only limited evidence of subsidence from megathrust earthquakes in the vicinity of Vancouver Island (Clague and Bobrowsky 1990; Bobrowsky and Clague 1991). This is in contrast to the coast of Washington, where Atwater (1987) has documented at least six events of tectonic subsidence punctuating late Holocene emergence, corresponding to major earthquakes which rocked the area over the last 7000 years.

Associated with massive earthquakes are tsunamis, which can often affect areas far from the quake centre. The huge 1964 earthquake in Alaska, for example, resulted in a tsunami which caused extensive damage along the west coast of Vancouver Island, particularly to communities such as Port Alberni which lie at the ends of long inlets. Clague, Bobrowsky and Hamilton (1994) identify a widespread sand sheet just below the marsh surface at the end of Alberni Inlet as having been deposited by the 1964 event, and argue by analogy that similar sand sheets at lower levels in the same location identify the presence of prehistoric tsunamis. Similarly, sand sheets overlying peaty soil have been identified at several tidal marsh locations on the outer coast near Tofino and Ucluelet. Clague and Bobrowsky (1994a, 1994b) interpret these deposits as former marsh surfaces that subsided suddenly during a large earthquake and were covered with sand from the ensuing tsunami. They suggest that several such quakes may have occurred in the last 500 to 800 years, and
that they could have been more powerful than the 1964 event (Clague and Bobrowsky 1994a). To the south, at the Makah community of Neah Bay, Wessen (1991:21) identifies several thin sand layers in shell midden deposits well back from the modern beach as possible evidence of past tsunamis.

Nuu-chah-nulth oral traditions provide additional evidence of these past catastrophic events. An Ohiaht story tells how a huge wave following an earthquake destroyed a village at Pachena Bay, just to the east of Barkley Sound, killing many of the inhabitants (Clamhouse et al. 1991:230-231; St. Claire 1991:67). Similarly, stories of a great ebb of the sea followed by a massive flood may reflect ancient tsunamis. Sproat (1868:183-185) recorded such a tradition for Barkley Sound, recounting how the Toquaht and Tseshaht survived the great flood. Swan (1870:57) was told a similar flood story by a Makah chief, in a version which also accounts for the close relationship between the Makah and Vancouver Island groups.

A long time ago, but not at a very remote period, the water of the Pacific flowed through what is now the swamp and prairie between Waatch village and Neeah Bay, making an island of Cape Flattery. The water suddenly receded, leaving Neeah Bay perfectly dry. It was four days reaching its lowest ebb, and then rose again without any waves or breakers, till it had submerged the Cape, and in fact the whole country, excepting the tops of the mountains at Clyoquot. The water on its rise became very warm, and as it came up to the houses, those who had canoes put their effects into them, and floated off with the current which set very strongly to the north. Some drifted one way, some another; and when the waters assumed their accustomed level, a portion of the tribe found themselves beyond Nootka, where their descendants now reside.

Informants among the Quileute and Chemakum related to Swan the same tradition, which was seen as an explanation for the separation of these two related peoples.
These geological data have major archaeological implications. If Friele's sea level curve is accurate, then all evidence of occupation prior to about 6000 B.P. may lie below modern tides, eroded and inaccessible. Any cultural deposits later than this time, but prior to the advent of the Ahous Bay Stillstand at about 5100 B.P., would have been eroded by both rising and falling sea levels. Intertidal lithic artifacts found along the coast may represent eroded sites associated with lower relative sea levels than today. In more recent times, earthquake-induced coastal subsidence may have occurred along at least the central west coast of Vancouver Island, possibly on several different occasions. Tsunamis may also have played a role in reshaping foreshores, although the extent of damage to archaeological sites is unknown.

The earliest intact and dated archaeological remains occur late in the Ahous Bay Stillstand. At Yuquot, artifacts and faunal remains from the lowest levels are water-rolled and are interpreted as being deposited on a low-lying sand and gravel spit that was subject to periodic wave action (Dewhirst 1980:43). Today, these deposits are about five metres above the high tide line. The lowest levels at Ch’uumat’a, one of the Toquaht sites in Barkley Sound, also contained waterworn artifacts and faunal remains apparently deposited on an old beach which was later uplifted. At Little Beach, near Ucluelet, waterworn fire-cracked rock and sandy layers interbedded with midden show that the lowest deposits, now about six metres above sea level, were just above wave action when the site was first occupied (Arcas Consulting Archeologists 1991:5; Friele and Hutchinson 1993:838). In all three cases, extensive midden deposits did not begin to accumulate until roughly 4000 years ago, corresponding to the onset of lowered sea levels, when these low-lying areas became more suitable for human habitation. Areas occupied during the height of the Ahous Bay Stillstand, which
would have been abandoned as uplift exposed new land and moved the former
surface further from the beach, should now be sought on raised terraces above
the level of the Late Holocene shell midden sites. Several archaeological tests at
elevated terrace sites in Makah territory (see Chapter 3), however, failed to
yield evidence of such an age.

In summary, although data are scarce and inconclusive, the surface lithic
discoveries in Nuu-chah-nulth territory suggest early ties to the widespread
Pebble Tool tradition. Changing sea levels have rendered much of the evidence
for the earliest periods in Nuu-chah-nulth territory inaccessible. A distinct West
Coast culture type, as defined by Mitchell (1990:357), covers "the post-3000
B.C. period," although the earliest excavated archaeological remains are
associated with the 4200 B.P. date at Yuquot. This chapter examines the
archaeological evidence in Nuu-chah-nulth territory predating 2000 B.P. Before
turning to the West Coast data of this age it is necessary to examine how the
culture type was defined.

Definition of the West Coast Culture Type

The term "culture type" was introduced to Northwest Coast studies by
Mitchell (1971), in a reaction to theoretical inadequacies with the "phase"
concept which was in common use. A more specific attack on the phase concept
was launched by Abbott (1972), who documented the widespread seasonal round
of ethnographic Salish peoples and questioned whether any archaeological unit
could be correlated with past social groups. In addition, a confusing number of
local phases had been proposed in the Strait of Georgia region. Instead, Mitchell
borrowed from Spaulding (1955:12) the concept of the "culture type," defined
loosely as "a group of components distinguishable by the common possession of a group of traits," which was applied to entire regions. Culture types are viewed by Mitchell (1990:34) as "tentative, largely intuitive archeological units whose strength and probable endurance lie in the generality of their definition." In practice, however, most archaeologists on the Northwest Coast continue to use "phase" or "culture type" as roughly equivalent terms.

The West Coast culture type was proposed by Mitchell (1990) as part of a broad synthesis of prehistory for the coasts of southern British Columbia and northern Washington. Mitchell divided the culture history of the Strait of Georgia area, the ethnographic homeland of the northern and central Coast Salish, into four temporally distinct culture types, while two culture types were proposed for the territory of the Kwakwaka'wakw, on northern Vancouver Island and the adjacent mainland.1 Of the three broad regions reviewed by Mitchell, only Nuu-chah-nulth territory was perceived as having a single culture type throughout its entire known culture history.

Excavated data from Yuquot and Hesquiat, the only major archaeological projects on the west coast of Vancouver Island at that time, provided much of the basis for Mitchell's formulation of the West Coast culture type. Claims for lengthy continuity to the historic occupants at these sites, particularly Yuquot, led Mitchell to propose that Nuu-chah-nulth culture history could be encompassed within a single culture type. In reviewing the archaeological data from these two projects, he concluded that:

The archaeological assemblages are so like described Nootkan material culture that a lengthy reconstruction of the technology is not necessary. There are artifacts interpretable as whale, small sea mammal, and salmon harpoons; parts of

---

1Mitchell (1988) included an additional "Old Cordilleran culture type" in another review of Kwakwaka'wakw territory, but this early period was outside the mandate of his 1990 article.
composite fishhooks; knives suitable for butchering salmon or herring or for preparing other fish and foods; woodworking tools; and tools for shaping the numerous bone implements. . . these tools are represented even in the 2800-1200 B.C. levels at Yuquot Village.

(Mitchell 1990:357)

Elsewhere, in reviewing patterns of faunal remains, Mitchell (1988:279) refers to the west coast as a region that "has seen little or no change." He concludes that the entire archaeological sequence known for the Nuu-chah-nulth area "can be characterized as one of relatively little change in subsistence and other aspects of technology" (1990:357).

Distinguishing features of this culture type are defined almost entirely in terms of artifacts. Mitchell (1990:356) lists the distinctive traits as:

... ground stone celts; ground stone fishhook shanks; hand mauls; abrasive stones; unilaterally barbed bone points; single barb points; bone fishhook shanks; unilaterally and bilaterally barbed bone nontoggling harpoon heads; bone single points; bone bipoints; large and small composite toggling harpoon valves of bone or antler, small ones with two-piece "self-armed" variety with ancillary valve; sea mammal bone foreshafts; bone needles; bone splinter awls; ulna tools; whalebone bark beaters; whalebone bark shredders; perforated tooth and deer phalanx pendants; mussel shell celts; and mussel shell knives.

The absence or rarity of flaked stone tools and detritus is also seen as an identifying trait. In fact, stone implements in general are relatively rare. The major exception is abrasive stones, which were essential in the technology used to produce the numerous ground bone artifacts found and probably also served as a vital part of the woodworking toolkit.

Although a strong continuity through time is clearly evident at these sites, placement of the entire 4200 year sequence into a single culture type, with a single list of identifying features, tends to project an image of an unchanging culture. As Dewhirst stresses for Yuquot, gradual change in artifact forms did
occur. Also, the rarity of diagnostic artifacts poses a problem for such schemes. Most archaeological assemblages, particularly those from the small test excavations, consist primarily of abrasive stones and small bone points; chipped stone points and other diagnostic artifacts used to separate culture types in the Strait of Georgia (Mitchell 1971, 1990) are rare or absent on the west coast of Vancouver Island. Basketry and other perishable materials, in the few locations where these have been preserved, are much more sensitive indicators, providing clearer insights into past cultural change and affiliation than implements of stone and bone (see, for example, Bernick 1987; Croes 1987, 1988, 1989, 1992). Where such organics are lacking, classifications based on artifacts may not adequately reflect cultural diversity and change.

Although the West Coast culture type was defined almost entirely on data from Yuquot and Hesquiat, it was intended to describe the culture history of the entire west coast of Vancouver Island. More recent excavations in Barkley Sound can be used to assess regional and temporal variation in the culture type. These include several of the earliest known sites in the Nuu-chah-nulth area and suggest a somewhat different picture than that seen for the early period at Yuquot.

The West Coast Culture Type to 2000 B.P.

Even at a relatively late stage of Northwest Coast prehistory there are few known sites in Nuu-chah-nulth, Ditidaht, and Makah territory. Yuquot, with a date of 4200 B.P. from near the base of cultural deposits, is the oldest excavated site in this area. Only five sites offer dates in the 4000 to 3000 year range. Yuquot and Ch'uعامat'a provide the fullest sequences, extending through
this time span to the historic period. Little Beach falls entirely within the 4000 to 3000 B.P. period. The final two dates of this age offer little cultural information. Shoemaker Bay has an initial date of roughly 4000 years, but this refers only to a few waterworn artifacts on the old beach surface, prior to accumulation of major midden deposits. The 3800 year date for the Makah site of Wayatch came from the bottom of a road cut exposure and does not date any of the excavated materials, which belong to a much later time.

The lowest component at Shoemaker Bay and the Hoko River wet/dry site join Yuquot and Ch'uumat'a in covering the 3000 to 2000 B.P. period. However, both contain large numbers of chipped stone artifacts and do not fall within the West Coast culture type as it is presently characterized. Near the end of this temporal span we also have dates from two sites on Nitinat Lake and from Sand Point on the Olympic Peninsula. All three, however, are known only from very limited test excavations and the Sand Point materials also seem to lie outside present definitions of the West Coast culture type. Finally, at about 2000 B.P., we have evidence for initial occupation at Ozette and Neah Bay. The beginning of major midden deposits at these sites is argued to mark the period of more intensive occupation in the study area discussed in the next chapter.

**Continuity and Change**

The pre-2000 B.P. period at Yuquot encompasses all of Zone I and lower and middle portions of Zone II. Claims of cultural continuity throughout the occupation of this site were reviewed in Chapter 3. Dewhirst (1980:337) notes that almost all artifact classes from the earliest levels also occur in later deposits and concludes "that the basic cultural patterns of later periods are well established in the Early Period." By Zone II deposits, Dewhirst (1980:338)
maintains that artifacts "reflect basic cultural patterns that are known ethnographically." Faunal remains are poorly preserved in the early strata, hindering attempts to assess changes in economic adaptation.

Despite the evidence for cultural continuity at Yuquot, changes over time are evident in artifact forms. Narrow, round-polled celts, for example, are restricted to Zone I and the lower levels of Zone II, eventually being supplanted by flat-polled and broad celts in a process that Dewhirst (1980:339) considers to be stylistic evolution rather than functional change. Small flaked pebbles, classified as "wedges" by Dewhirst, are also restricted to Zone I and the base of Zone II. Their apparent "early" classification, however, is called into question by the presence of similar chipped pebbles at Kupti, a much later site in Nootka Sound (McMillan 1969). Several fragments of what appear to be whalebone war clubs were found in lower levels of Zone II, dated by association with a firepit to around or slightly earlier than 2000 B.P. (Dewhirst 1980:341). Although no examples were found in later deposits at Yuquot, similar clubs were collected historically from the Nuu-chah-nulth. Important absences from the pre-2000 B.P. artifact inventory at Yuquot include stone fishhook shanks, bone fishhook shanks with rectangular bases, and mussel shell tools. Changes also occurred in the form of composite toggling harpoon heads; slotted valves and channeled valves with biconical arming points are restricted to later time periods, leaving only simple and self-arming valves in the earlier stages.

Some evidence of temporal change is also evident in the Toquaht Project data, particularly from Ch'uumat'a, the only excavated Toquaht site with deposits predating 2000 B.P. With the exception of a small number of flake tools at several of the sites, chipped stone artifacts occur only in the lower levels of Ch'uumat'a. A concentration of lithic detritus of a distinctive green chert,
including several retouched flakes, came from two nearby units in levels dated to about 2000 to 2300 B.P. A chipped leaf-shaped biface came from somewhat older strata in a different unit, and a small pebble with bipolar flaking, classified as a pièce esquillée, was found even deeper in that unit, one level below a radiocarbon date of 3480±80. In addition, a number of stone celts were found at Ch’uumat’a, all but one from deposits which predate the other Toquaht sites. Celts are absent in the much larger assemblage from T'ukw'aa, except for one reworked non-functional greenstone example.

At Ucluelet, the Little Beach site falls entirely within this pre-2000 B.P. period. Cultural remains recovered from this site, as discussed in Chapter 3, contrast sharply with later excavated materials from the area, such as those from Tukw'aa, only a short distance away across Ucluelet Inlet. Although both small sample size and the specialized use of this site as a burial area may skew comparisons, there appears to have been a major cultural change over time in this area. The Little Beach site also offers a considerable contrast to equivalent time periods at Yuquot, and challenges the model of continuity established for that site. Along with Shoemaker Bay, Little Beach has been interpreted as evidence of occupation by a non-Nuu-chah-nulth group, with closest ties to the Strait of Georgia region. This is examined below in the context of regional variation.

*Regional Variation and the "Salishan Hypothesis"

Hypothetical models based on linguistics, reviewed in Chapter 2, suggest that the original Wakashan homeland was northern or northwestern Vancouver Island. Nuu-chah-nulth oral traditions and linguistic evidence indicate that the southernmost Wakashans, the Ditidaht and Makah, moved into their historic
territories in relatively recent times. The west coast of Vancouver Island south of Barkley Sound was presumably home to Salishan-speaking peoples prior to the Ditidaht arrival. Similarly, the Alberni Valley and much or all of the Alberni Inlet were occupied by Salishan peoples until quite late times. Barkley Sound may also have been culturally linked to the peoples of eastern Vancouver Island prior to Nuu-chah-nulth expansion. If this were the case, the earliest evidence from Barkley Sound should exhibit significant differences from temporally equivalent deposits at Yuquot. This section examines the archaeological evidence prior to 2000 B.P., in an attempt to determine whether this is best understood as regional variation within the West Coast culture type or as evidence of occupation prior to Nuu-chah-nulth arrival, the so-called "Salishan hypothesis."

The evidence seems clearest from the Shoemaker Bay site in the Alberni Valley (see Chapter 3). Shoemaker Bay I, the earliest component, contains such diagnostic implements as chipped stone points and knives, ground stone points, microblades, and rectangular celts (McMillan and St. Claire 1982). These artifact types, which do not occur at Yuquot, are typical of the Locarno Beach and Marpole culture types in the Strait of Georgia. A radiocarbon date of 4000 B.P. marks the initial occupation at this site. Combined with continued strong similarities to Strait of Georgia cultures during the latest component, along with the ethnographic evidence for Salishan presence in the early historic period, this site presents a solid case for cultural ties to the Strait of Georgia region prior to late Nuu-chah-nulth arrival. Any group living in the Alberni Valley would have been linked to Barkley Sound by way of Alberni Inlet, and faunal analysis at
Shoemaker Bay indicates at least some use of open-ocean resources throughout the site occupation (Calvert and Crockford 1982).²

Excavation at Little Beach yielded similar cultural material from an open-ocean setting near the western edge of Barkley Sound. Although only a small artifact sample was obtained, this included such diagnostic objects as a large chipped stone projectile point, a thick ground slate fragment, a crude cobble tool, and a possible fragment of a flanged labret. Such traits were seen as precluding assignment to the West Coast culture type, and strong parallels with Shoemaker Bay I were noted (Arcas Consulting Archeologists 1991). Midden inhumations, including boulder cairn burials, were also found at both Little Beach and Shoemaker Bay I. Cairn burials, unknown from sites of the West Coast culture type, also suggest cultural ties to the Strait of Georgia.

Along with the earliest levels at Shoemaker Bay I and the Hoko River wet/dry site on the Olympic Peninsula, Little Beach has been placed in the Locarno Beach culture type (Arcas Consulting Archeologists 1991), generally dated to about 3300 to 2400 B.P. (Mitchell 1990; Matson and Coupland 1995). This major stage in the culture history of the Strait of Georgia region is characterized by such artifacts as thick faceted ground slate points, large leaf-shaped chipped stone points, and labrets (Mitchell 1971, 1990), as well as cairn burials and other midden inhumations (Matson and Coupland 1995:161). The Little Beach materials closely fit this description and the site clearly would have been classified as a Locarno Beach component if located in the Strait of Georgia region. Initial dates of 4000 B.P. for both Little Beach and Shoemaker Bay, however, indicate that if these are Locarno Beach components than this culture

²Open-ocean fauna identified in Shoemaker Bay deposits that are unlikely to have been available at the end of the long Alberni Inlet include whales (species unidentified), California sea lion, northern fur seals, bluefin tuna, sea urchins, and California mussel.
type has its earliest known manifestations on the west coast of Vancouver Island rather than in the Strait of Georgia.

Other archaeological discoveries in Barkley Sound have suggested strong links to the Strait of Georgia in earlier times. An undated private collection from a site in Ohiaht territory near Bamfield (DeSg 10) includes chipped leaf-shaped and contracting-stem projectile points, chipped pebbles, rectangular celts, and shaped abrasive stones. A review by Mackie (1992), based on collections and records of the Royal British Columbia Museum, identified numerous artifacts found in Nuu-chah-nulth territory, including many flaked stone implements, that seem out of place in the culture history as it is understood from sites such as Yuquot. These anomalous items include a chipped obsidian leaf-shaped projectile point from the head of Ucluelet Inlet, a quartz "whatzit" (Gulf Islands complex artifact) from Tofino, and a zoomorphic carved stone bowl from Meares Island in Clayoquot Sound. The trench embankment site (DfSg 3) at Bamfield is also unique in Nuu-chah-nulth territory, while such sites are relatively common in the Strait of Georgia.

Such traits, however, may not be totally out of place in sites of the West Coast culture type. Excavations at both the defensive earthwork and its associated village yielded only late prehistoric materials of the West Coast culture type (see Chapter 3). Chipped stone objects also occur in late period West Coast sites, although they are relatively rare. A jasper projectile point fragment, quartz crystal microblade, several cores and a pebble tool came from Hesquiat Village (Haggarty 1982). A number of small chipped pebbles and a pebble tool were excavated at Kupti (McMillan 1969), and several of the Toquaht sites have yielded flake tools (McMillan and St. Claire 1992). Pebble tools, cortex spall tools, pièce esquillées, and heavy ground slate knives are also
reported for the Ozette midden, in an assemblage interpreted as ancestral to the historic Ozette people (McKenzie 1974). Chipped stone points are also reported for the late period Hoko River rockshelter (Wigen and Stucki 1988:90). In addition, a thin piece of polished ground stone from Zone I at Yuquot has been identified a possible labret fragment (Dewhirst 1980:322).

The Nootka Sound discoveries of chipped bifaces and flakes in intertidal contexts may also be interpreted in ways other than as eroded early deposits. As indicated above, chipped stone artifacts are not unknown even in quite late West Coast sites. Also, many of the beaches where bifaces and other chipped stone objects have been found have also yielded small pebble celts of a form characteristic of the West Coast culture type. A good example occurs at DkSo 30, where over a hundred lithic implements were recorded in the intertidal zone in 1991 (Marshall 1992a, 1993) and 1993 (Arcas Consulting Archeologists 1993). These include several bifaces, numerous flakes and cores of basalt, a small basalt blade core, and almost twenty celts, primarily of the round-polled pebble celt variety. Perhaps the most likely interpretation is that the celts were deposited as part of later use of the beach in front of this site, and that they post-date the flaked implements. Marshall (1993), however, argues that these beach assemblages may indeed be roughly contemporaneous and were deposited directly on the beach surface as part of activities carried out at that location. The numerous celts, plus evidence that this was a particularly important area for gathering cedar in historic times, suggests that woodworking was the activity involved. In this argument, chipped stone tools can be placed within evolving Nuu-chah-nulth culture as part of a specialized toolkit, which would be absent from such village locations as Yuquot.
The Toquaht site of Ch'uumat'a is well situated to cast light on such questions. With deposits that span the period from about 3900 to 200 B.P., Ch'uumat'a provides evidence of equivalent age to Little Beach, only a short distance away. Of the four units excavated at this site, however, only one at the back of the site encountered deposits that are this early. Two more central units have basal dates around 2300 to 2500 B.P., while one closer to the beach contains only much younger deposits (see Chapter 3). Table 13 lists all artifact types from levels predating 2000 B.P. at Ch'uumat'a. Chipped stone artifacts, including a large leaf-shaped biface, are fairly common (14.4% of the total), with most consisting of a cluster of chert flakes found at levels dating between about 2000 and 2300 B.P. (Figure 22). Several ground slate fragments include the tip of a thick faceted projectile point. Two celts include a small nephrite fragment and an extensively shaped, flat-polled example, both unlike celts from equivalent periods at Yuquot. The assemblage, however, is dominated by small bone points and bipoints (46.6%), along with bone awls (12.7%), typical of later periods and of the West Coast culture type. In all, bone artifacts comprise 76% of the total, compared to 25% at Little Beach. Even restricting the comparison to the lower levels in the back unit, which would be contemporaneous with the Little Beach midden, does not appreciably change this picture. The small sample of artifacts from these oldest deposits contains a pièce esquillée, a chipped slate fragment, several ground slate fragments, and an abrasive stone, but small bone points were still the most common artifact type.

The chipped stone and faceted ground slate point fragment from the early levels of Ch'uumat'a suggest ties to the contemporaneous occupation at Little Beach. Such objects seem less anomalous in the Ch'uumat'a sequence, however,
Table 13
Ch'uumat'a Artifacts Predating 2000 B.P.

<table>
<thead>
<tr>
<th>Stone</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>chipped chert detritus</td>
<td>14</td>
<td>11.9</td>
</tr>
<tr>
<td>leaf-shaped projectile point</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>chipped slate</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>pièce esquillée</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>hammerstone</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>ground slate</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>celts</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>abrasive stones</td>
<td>4</td>
<td>3.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bone</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>points, bipoints, pointed fragments</td>
<td>55</td>
<td>46.6</td>
</tr>
<tr>
<td>awls</td>
<td>15</td>
<td>12.7</td>
</tr>
<tr>
<td>needles</td>
<td>15</td>
<td>12.7</td>
</tr>
<tr>
<td>harpoon valves</td>
<td>15</td>
<td>12.7</td>
</tr>
<tr>
<td>barbed point fragment</td>
<td>15</td>
<td>12.7</td>
</tr>
<tr>
<td>ground faceted bone disks</td>
<td>15</td>
<td>12.7</td>
</tr>
<tr>
<td>misc. worked bone, including whalebone</td>
<td>15</td>
<td>12.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shell</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>dentalium bead</td>
<td>1</td>
<td>0.8</td>
</tr>
</tbody>
</table>

| Totals                        | 118 | 99.7|

as the most common artifact classes (bone points, bipoints and awls) are those that dominate the West Coast culture type. Some items not found at Yuquot, such as ground slate points, occur in small numbers in much later Toquaht sites and may simply represent regional variation in the culture type. Much of Little Beach's distinctive nature may be attributable to its status as a burial site.
Sand Point and the Hoko River wet/dry site on the Olympic Peninsula also overlap in time with early Ch'uumat'a materials. Chipped stone dominates the artifact assemblage at both sites, although Sand Point also had a number of small bone points and bipoints, as well as a bone fishhook shank. Bone and antler are not preserved at Hoko River, but such distinctive lithic artifact types as chipped projectile points, thick ground slate points, small rectangular celts,
and quartz crystal microblades place this site within the Locarno Beach culture type. Hierarchical cluster analysis, using lithic artifact variables only, links Hoko River most closely with Montague Harbour I and Georgeson Bay I, two Locarno Beach components in the Gulf Islands, as well as with Shoemaker Bay I (Croes 1992b:344). As discussed in Chapter 3, however, Croes and Hackenberger (1988) argue that such "culture types," defined primarily on the basis of stone and bone artifacts, are better understood as broad plateaus in economic adaptation, with little insight into cultural affiliation or ethnicity. At sites such as Hoko River, where water-saturated deposits have preserved plant fibre artifacts, basketry and cordage styles are thought to provide the most compelling insights into cultural affiliation (Bernick 1987; Croes 1987, 1989, 1993). Such comparisons link Hoko River perishables with those at the much later Ozette site and with historic Makah basketry, while Strait of Georgia basketry of the same age as Hoko is markedly different. This raises the question of whether any cultural identification based on stone tool types is valid. Would the Little Beach site, for example, be excluded from Nuu-chah-nulth culture history if basketry and other perishable artifacts were preserved?

The whole question of ethnic identification in the past raises major theoretical issues for archaeologists. Whether distinct ethnolinguistic groups can be detected in the archaeological record is a moot point, and many researchers have questioned any direct correlation of such units with specific material culture items (see, for example, Hodder 1982; Weissner 1983; also Fladmark 1986:48). Nevertheless, with caution, the culture history of some historic ethnolinguistic groups can be extended a considerable distance into the past through demonstrated continuity in the archaeological record. Dewhirst (1978, 1980) makes such a convincing case for Yuquot, leading Mitchell (1990)
to characterize the West Coast culture type as the material record of Nuu-chah-nulth culture history. Such ethnic continuity is not necessarily the case in the Strait of Georgia, however, where greater change over time is evident in the archaeological record. While Mitchell (1971, 1990), Carlson (1983b, 1990), and Carlson and Hobler (1993) stress lengthy cultural continuity, Burley and Beattie (1987) argue for population replacement around 2400 B.P., at the interface between the Locarno Beach and Marpole culture types. Sites such as Shoemaker Bay and, less certainly, Little Beach can be linked culturally with the Strait of Georgia, but are not necessarily "Salishan."

The so-called "Salishan hypothesis" for Barkley Sound, although it cannot be convincingly sustained on present evidence, presents some intriguing possibilities. The cultural ties to the Strait of Georgia demonstrated for the Alberni Valley likely extended, at least to some degree, down Alberni Inlet and into Barkley Sound. Little Beach presents interesting evidence that this was indeed the case. At a more speculative level, this could be tied to linguistic suggestions that Nuu-chah-nulth origins were further north on Vancouver Island, allowing the possibility that Barkley Sound was occupied by populations culturally linked to the Strait of Georgia prior to Nuu-chah-nulth expansion south. The Toquaht, at the western end of Barkley Sound, hold the territory which would have been first occupied by any such movement into the sound. Sproat's (1868:19) early observation that the other Barkley Sound groups considered the Toquaht to be the original population, "the tribe from which the others sprung," takes on new meaning when viewed in this perspective. Unfortunately, excavation at Ch'uumat'a failed to provide evidence which would allow conclusive assessment of this scenario, and the cultural affinities of sites such as Little Beach remain uncertain.
Emergence of the Ethnographic Pattern

Even for the earliest deposits at Yuquot, Dewhirst (1980) and Mitchell (1990) maintain that the Nuu-chah-nulth ethnographic pattern was in place. While some changes in artifact forms occurred over time, Dewhirst (1980:336) argues that this only reinforces the picture of cultural continuity, as more complex artifact forms emerge from earlier simpler versions. Large, rock-rimmed firepits, found in lower and middle Zone II levels, were frequently superimposed, suggesting that their spatial location was constrained, such as would occur if they had been built inside a permanent structure (Dewhirst 1980:46-51). Dewhirst (1980) and Folan (1972) interpret this as evidence of a large multi-family house similar to those known historically. Presumably this structure had a permanent framework, which was clad with split cedar planks in the ethnographic fashion. The location of the excavation trench within the centre of this presumed house area would explain why no large post molds were encountered. Small stake holes around several of the firepits and concentrations of small fire-cracked beach stones in the pits suggest the historic cooking practices of roasting food over the fire and boiling it in wooden containers, using rocks from the fire to heat the water. Both techniques can be seen in the famous drawing by John Webber, showing the inside of a Nuu-chah-nulth house at Yuquot in 1778 (Cook 1784; Arima 1983:63; Arima and Dewhirst 1990:398).

Even from this earliest period, the economy of these west coast peoples was strongly maritime. With the exception of Shoemaker Bay, all of the earliest sites (Yuquot, Little Beach, Ch'uumat'a, Wayatch) are on the open ocean. Few faunal remains are preserved from Zone I at Yuquot, but Zone II was dominated by a variety of fish species, as well as such open-ocean fauna as northern fur
seal and albatross. Fish elements also dominate the faunal remains from Little Beach and Ch'uumat'a. Whalebone was found in considerable quantities in these sites, but is not necessarily evidence for active whaling, as artifacts clearly associated with whaling do not appear until later. The abundance of whalebone in archaeological deposits, however, suggests that whales were important in the economy and the use of whalebone to cap burials at Little Beach suggests that this importance might have extended into the symbolic realm. Unfortunately, little else can be said for this early period. Faunal analysis for Yuquot remains incomplete, particularly for fish and mammals. Only an incomplete preliminary analysis exists for Little Beach fauna (Arcas Consulting Archeologists 1991:32-34), while faunal analysis at Ch'uumat'a is only in initial stages (Monks 1992). The early date from Wayatch is from a road cut and is not associated with any excavated data. By the end of this period, at around 2000 B.P., the great numbers of fur seal elements at Sand Point and in the lowest levels at Ozette confirm the highly maritime nature of early occupants in the Makah area.

Procurement technology for sea mammals consisted of harpoons with bilaterally barbed whalebone heads. Three such implements came from the middle portion of Zone II at Yuquot, from near a firepit dated around 2000 B.P. (Dewhirst 1980:290, 341). A similar example came from Ch'uumat'a, although from somewhat later deposits. Composite toggling harpoon heads, with self-armed valves or simple valves with wedge-based arming points, were also in use. These appear to be too small for larger sea mammals and may have been primarily for salmon. Other fish were taken on hooks, with bone or wooden shanks and bone barbs. Many of the numerous small bone points in collections from all sites in this area functioned in such a fashion. The large quantity of wooden fishhooks preserved in the waterlogged deposits at Hoko River, however,
show that not all fishhooks had bone barbs (Hoff 1980; Croes 1992a). Slender bipoints, also numerous in these sites, were baited and used as gorges, ethnographically for taking diving ducks as well as fish (Drucker 1951:34).

Despite the very maritime nature of adaptation at West Coast sites from earliest times, some use was made of inland resources. Coast deer make up a substantial portion of the faunal remains from all time periods at Yuquot (Dewhirst 1979). Recent evidence for hunting marmot (*Marmota vancouverensis*), a creature of the alpine and upper sub-alpine meadows which rarely descends to lower elevations, shows human use of the Vancouver Island mountains at this early period. Although Shoemaker Bay is the only excavated village site on Vancouver Island with marmot remains, several high-altitude caves inland in Nuu-chah-nulth territory have been discovered with clusters of marmot bones showing cut marks. Radiocarbon dates of 2490 ± 50 and 2630 ± 50 B.P. have been obtained on cut marmot bones from a cave on the Clayoquot Plateau, at an elevation of 1220 m asl, in the mountains behind Clayoquot Sound (Nagorsen, Keddie and Luszcz n.d.; Arcas Consulting Archeologists and Archeotech Associates 1994:47-48; Keddie, pers. comm. 1995).

The period beginning around 3300 B.P., corresponding to the Locarno Beach culture type in the Strait of Georgia, has been seen by a number of recent researchers as crucial in the development of the ethnographic pattern on the Northwest Coast (Croes and Hackenberger 1988; Croes 1992b; Matson 1992; Matson and Coupland 1995). In computer simulation modeling based on Hoko River data, Croes and Hackenberger (1988) project that population growth in the preceding St. Mungo stage reached the area's carrying capacity. The development of storage techniques then allowed continued population growth and marked the beginning of the next economic plateau, the Locarno
Beach stage (Croes 1992b:343). At Hoko River the major resource for intensification and production of a stored surplus was flatfish (particularly halibut and petrale sole). In this argument, intensification of salmon fishing, which may have been "given too much credit in this evolutionary process" (Croes 1992b:351), occurred later, after the storage technology was already in place.3

Based on his work at Crescent Beach in the Strait of Georgia, Matson (1992) also argues for the development of large-scale storage techniques at the beginning of the Locarno Beach period. Salmon was the dominant resource at this site from Locarno Beach times on; no evidence of a pre-salmon flatfish storage period was detected (Matson 1992:422; Matson and Coupland 1995:245). This may simply represent intensification based on suitable local species in two different environmental settings, or may indicate that flatfish were being processed in a way that did not leave a discernible archaeological trace. Evidence for salmon storage in the Locarno Beach and Marpole stages at Crescent Beach comes from under-representation of salmon cranial elements, indicating that these fish were procured and processed elsewhere and brought to this site as dried food. Older deposits at Crescent Beach have fewer salmon remains and these include cranial elements. Matson (1992:423) confidently concludes that "we appear to be on the verge of being able to say with certainty that the Northwest Coast salmon-storage economy came into being during the 3500-3000 BP period." Not all researchers would accept this relatively late date, however; Cannon (1991:61, 64), for example, maintains on more tenuous evidence that salmon storage was a feature of the economy at Namu since at least about 7000 B.P.

3 Monks (1987), who coined the phrase "salmonopia", similarly attacks a preoccupation with salmon among Northwest Coast archaeologists.
A storage-based economy is thought to have allowed higher population levels and the development of the full Northwest Coast ethnographic pattern. Considerable agreement now exists that social stratification emerged only after salmon specialization and storage techniques were in place (Croes and Hackenberger 1988; Matson 1992; Matson and Coupland 1995), although these may have continued to be "mutually reinforcing" (Ames 1981:798). Archaeological indicators of social distinctions include labrets and the enigmatic "Gulf Islands complex artifacts," which adorned the face through holes in the nose, lips or ears, conveying messages regarding the personal status of the wearer (Dahm 1994). Marked social distinctions may have characterized the Strait of Georgia region as early as about 4000 B.P. (Carlson and Hobler 1993:45; Dahm 1994:107). Status indicators, however, do not necessarily mark the full Northwest Coast pattern of hierarchical ranking based on birth (Ames 1981:797), something that may not have been achieved in the Strait of Georgia until Marpole times (Burley 1980; Burley and Knusel 1989).

Possible evidence of distinctions in social status at Hoko River comes from the presence of preserved knob-topped hats, as well as conical flat-topped hats, in the waterlogged deposits (Croes 1992b; Croes and Hackenberger 1988:77). Knob-topped hats historically identified members of the upper class among the Nuu-chah-nulth and Makah. If, by analogy, the hat styles at Hoko River can be interpreted as demonstrating similar social distinctions, then individuals who owned and managed resources and territories on behalf of extended family units were a feature of west coast life by almost 3000 years ago. Zoomorphic carving in wood, such as on a number of barbed wooden projectile points from Hoko, might also, more speculatively, reflect early social distinctions, as emerging elites manipulated symbols to demonstrate ties to the
supernatural world. Such a process, termed "ritual promotion," is a common phenomenon in the emergence of ranked societies (Ames 1981:800; 1994:212).

Little evidence of such social distinctions can be found in sites of the West Coast culture type. Lack of preservation of wood and basketry has removed much of the evidence, and the general unimportance of stone in the technology means that many of the key artifact types in the Strait of Georgia region do not occur here. Several fragments of whalebone clubs, tentatively identified at Little Beach and from lower Zone II at Yuquot, may possibly have status implications. A handle fragment from Yuquot with a carved zoomorphic image is one of the few decorated artifacts found at this site. Among the historic Nuu-chah-nulth, a carved whalebone club was the badge of office of the war chief (Drucker 1951:335).

The models of intensification and storage presented for Hoko River and Crescent Beach cannot be fully evaluated at West Coast sites. Detailed faunal analyses are essential to detect such processes in the archaeological record, and none have been completed on West Coast sites of this age. The models that have been derived from nearby regions, however, were intended to have some application to the entire Northwest Coast, although the extent and tempo of change would vary at the local and regional level. The people of the West Coast culture type should not be seen as living in an isolated and marginal environment, contrary to the views of some early anthropologists (see Chapter 2), but would have been participants in broad economic developments that occurred along the coast. Salmon may not have played the vital role that it did in the Strait of Georgia region, as good salmon rivers were scarce and valued commodities, providing much of the incentive for later inter-group hostilities (Swadesh 1948). Maritime resources seem to have been sufficient, however, to
allow the degree of sedentism suggested at Yuquot, where superimposed hearth features and other indications of house deposits suggest the presence of large permanent structures in early Zone II deposits, dating roughly from 3000 to 2000 B.P. The continuity seen at Yuquot suggests to Dewhirst (1978, 1980) and others (Folan 1972; Mitchell 1990) that the ethnographic pattern of resource use was in place early in the archaeological record for western Vancouver Island.

As discussed above, few West Coast sites significantly predate 2000 B.P. Evidence for increased population in Nuu-chah-nulth and Makah territories comes from a number of additional sites which were first occupied around this date and continued in use into historic times. The more complete archaeological record available from these later sites gives fuller evidence of the evolution of the ethnographic pattern, as is outlined in the next chapter.
CHAPTER 5:
THE LATE WEST COAST CULTURE TYPE

A larger number of sites and fuller range of data allow a more complete understanding of West Coast life in the final two millennia prior to contact with Europeans. With this more extensive information, archaeological reconstructions can approach "ethnographies of the past," including social and ideological dimensions. The humanistic nature of "holistic archaeology" promotes the investigation of past belief systems and other symbolic aspects of culture. Ethnographic accounts of the Nuu-chah-nulth are used as a framework against which to assess archaeological data, allowing the recent past to be evaluated in terms of evolving Nuu-chah-nulth culture, consistent with the "direct historic approach" advocated by Trigger.

By 2000 B.P. the initial occupants had settled at Ozette and Neah Bay, two villages which persisted into modern times. The earliest evidence of occupation in Ditidaht territory, based on dates from two sites on lower Nitinat Lake, is a few centuries earlier. By 1800 B.P. there is evidence of initial occupation at Macoah in Barkley Sound and at DiSo 9, a habitation cave in Hesquiat Harbour, followed at 1500 B.P. by settlement at Chesterman Beach. An expansion in the number of dated settlements occurs around 1200 B.P., with the earliest dates from Kupti, Hesquiat Village, T'ukw'aa, and Aguilar Point, followed prior to 1000 B.P. by Tsoo-yes and Tatoosh Island. Once established, all continued as occupied villages into historic times. In addition, the earlier sites of Yuquot and Ch'uumat'a, discussed in the previous chapter, continued as
occupied villages through this period. See Chapter 3 for locations and details of radiocarbon dates.

This chapter examines evidence of the West Coast culture type from roughly 2000 to 200 B.P., terminating with the initial contact between indigenous West Coast peoples and the European explorers and traders of the late 18th century. All the defining traits of the West Coast culture type as outlined by Mitchell (1990) were characteristic of this period, although not all date to its inception. Throughout the area, the archaeological remains reflect the culture history of the Nuu-chah-nulth people.

Subsistence and Settlement

Settlement Patterns

The considerable increase in the number of dated sites in Nuu-chah-nulth and Makah territories indicates population increase and expansion after 2000 B.P., with the pace becoming more rapid after about 1500 B.P. The location of these sites on the outer coast and in the major sounds suggests that maritime-adapted populations were expanding along the outer coast. Excavated data also indicate increased efficiency of adaptation to open-ocean resources at this time. Dewhirst (1980) notes this as a general feature of his Late Period, corresponding to Zone III deposits at Yuquot, which is dated to after about 1200 B.P. The key technological indicators he uses to argue for greater maritime adaptation include large toggling valves for composite harpoon heads, which would have been armed with points of ground mussel shell and used in whaling, and stone shanks for composite fishhooks, of the type used ethnographically for open-ocean salmon trolling. Although such stone fishhook shanks occur late in the Late
Period at Yuquot, they are found at all four Toquaht sites, dating to about 1200 B.P. at Ch’uumat’a. Based primarily on the Nootka Sound data, Marshall (1993:40) has argued for widespread changes in settlement pattern along the outer coast between about 1500 and 1000 B.P. The small number of sites excavated and dated, however, renders the nature and timing of such a shift somewhat speculative. Recent radiocarbon dates suggest that this shift was well underway somewhat earlier than this estimate and was largely in place by about 1200 B.P.

Whaling may have been the key adaptation which allowed this relatively late population expansion along the outer coast. According to traditions reported by Drucker (1951:49), whaling originated among two outer coast groups in northern Nuu-chah-nulth territory, on the outside of Nootka Island and outside Esperanza Inlet. Both groups were year-round occupants of the outer coast and lacked access to salmon streams, instead adopting whaling as an economic mainstay. The lengthy continuity evident in the archaeological record at Yuquot, plus evidence of an increasing adaptation to maritime resources over time, supports the ethnographic tradition that reliable whale hunting techniques developed in situ in the general region of Nootka Sound. Once established in northern Nuu-chah-nulth territory, such whaling techniques would have allowed greater population concentrations on the outer coast and fostered the spread of Nuu-chah-nulth people along the coast to the south. Marshall (1993:138, 143) argues for such a Nuu-chah-nulth expansion south along the outer coast and islands, which would have been lightly populated prior to that development, and for population replacement in Barkley Sound. Similarly, Arima (1988:23; Arima et al. 1991:289) attributes the Ditidaht and Makah occupation of their historic homelands to their mastery of effective whaling techniques and consequent
shifts in their settlement pattern. The importance of whaling in the evolution of Nuu-chah-nulth culture is explored further in the next section.

Sites on the outer coast are frequently large, with deep midden deposits suggesting fairly continuous occupation from the initial settlement. Yuquot is the largest of the excavated Nuu-chah-nulth sites, but even larger examples, such as the Tla-o-qui-aht village of Opitsat (DhSl 11) in Clayoquot Sound, are known. T'ukw'aa also is impressive in the extent and depth of its deposits. In Makah territory, the huge site of Ozette is by far the largest. Excavated data are highly biased toward these large outer coast sites. Of the 24 excavated sites with dates between 2000 and 600 B.P., 15 are on or near the open ocean coast. An additional six are in the upper sounds or harbours, two are on lower Nitinat Lake, and only one, the Shoemaker Bay site, is on an inlet, although this site appears to be unrelated to Nuu-chah-nulth culture history. Regional surveys show that the sites along the inlets have a very different pattern, consisting of numerous small and medium settlements, often with quite shallow deposits (Marshall 1993:114, 137; McMillan 1981:91). These tend to be located in proximity to specific resources, such as salmon streams, and reflect seasonal economic activities. The outer coast sites, by contrast, show a more generalized resource base and their locations are primarily determined by ease of access and shelter from rough water and storms.

The antiquity of the ethnographic settlement pattern has been a subject of contention among researchers in this area. The widespread Nuu-chah-nulth pattern documented in the ethnographies involved seasonal movement between "outer" locations, providing access to such important open-ocean resources as whales, sea lions, fur seals, and halibut, and "inner" settlements, with their rich salmon rivers and streams. Warfare, alliance, and confederation were the
ethnographic strategies to obtain rights to locations in both environmental settings. Dewhirst (1980:15) maintains that groups which occupied only one type of environment would have been subject to extreme hardships, and that the historic pattern of seasonal movement between inner and outer locations was a long-established one in Nootka Sound. Other researchers (Calvert 1980; Haggarty 1982; Inglis and Haggarty 1986; St. Claire 1991), however, trace the ubiquitous nature of this settlement pattern among the Nuu-chah-nulth to the depopulation caused by early historic epidemics, which forced political amalgamations of surviving groups and the emergence of the seasonal round as a consequence of holding a much larger consolidated territory. Calvert's (1980) detailed faunal analysis of three sites in Hesquiat Harbour documents year-round occupation and indicates that access to different local habitats accounts for most of the assemblage variation between sites. The numerous large shell midden sites recorded by intensive survey in the Broken Group islands of Barkley Sound (Haggarty and Inglis 1985; Inglis and Haggarty 1986) also suggest the former presence of many separate polities resident in year-round villages exploiting local resources within socially constrained territories. A similar pattern is emerging in Makah territory, where faunal analyses indicate that the seasonal "winter villages" described by Swan (1870) were actually occupied for much or all of the year (Huelsbeck and Wessen 1995). Some people undoubtedly left temporarily for seasonal camps associated with specific economic resources, but a relatively permanent resident population seems to have been characteristic of the larger communities.

The development of political confederacies brought a change in settlement pattern to the northern groups sometime just prior to or immediately following European contact. Confederated polities maintained their
distinct tribal identities, with separate winter villages and seasonal resource sites, but aggregated in large populations at outer coast villages such as Yuquot during the summer months (Drucker 1951; Mitchell 1983). Morgan (1980) has pointed out that these confederated polities developed in areas of limited availability of salmon, suggesting that confederation was a strategy to obtain access to a wider range of resource territories. Whaling also may have played a role, facilitating the distribution of large quantities of meat and blubber to an assembled population at outer coast locations during the summer (Mitchell 1983:104-106). Groups to the south of Nootka Sound, with access to more abundant salmon resources, never developed confederated polities, retaining the winter villages as the largest population aggregates.

Marshall (1993:131) maintains that a distinctive West Coast settlement pattern can be distinguished in the archaeological landscape. Much of her argument is based on her survey and mapping fieldwork in Nootka Sound (Marshall 1992a), but comparisons are made to the results of surveys in southern Clayoquot Sound (Arcas Associates 1988; Mackie 1983) and Pacific Rim National Park (Haggarty and Inglis 1985; Inglis and Haggarty 1986). She divides recorded habitation sites into five classes, from Very Small to Very Large (Table 14). Small and Medium sites are characteristically the most numerous. Large sites are relatively rare and Very Large sites even more so. Large and Very Large sites, characteristically exhibiting platforms, ridges, and other surface features marking the former presence of large house structures, tend to be on or near the outer coast, while Very Small sites, representing specific economic activity locations, are most common on islands in the sounds. An exception to the general pattern occurs in Hesquiat Harbour, where Very
Small sites, many in rockshelters, comprise 65% of the total (Marshall 1993:126, 127).

Results of the Toquaht Project survey can be compared to these findings (Table 14). The long exposed coastline of western Barkley Sound that makes up most of Toquaht territory (Figure 4) provides few protected locations for settlement. Only 51 sites were recorded in the survey area, of which 14 (27.5%) are habitation sites. This contrasts markedly with the nearby Broken Group islands in central Barkley Sound, where numerous sheltered locations contained a total of 163 sites, of which 80 (49%) are habitation sites (Inglis and Haggarty 1986:242-243). Three of the Toquaht habitation sites have been largely destroyed and their former dimensions are unknown, leaving only 11 to be classified. T'ukw'aa, at roughly 12,000 m$^2$, is the largest site in Toquaht territory, although it does not qualify with Yuquot (at 24,000 m$^2$) for Marshall's Very Large category. Table 14 compares settlement pattern data for southern Clayoquot Sound, Long Beach and the Broken Group (two sections of Pacific Rim National Park, on each side of the Toquaht), and Toquaht territory. Site lengths were used as a guide to site size for the Pacific Rim and Toquaht surveys, while Clayoquot Sound sites were classified by total site area. The size classes used follow those established by Marshall (1993:126). Although site numbers are very small, the Toquaht data fit the general pattern characteristic of other Nuu-chah-nulth regions. The exposed coastline has resulted in a much smaller total number of sites, but the proportions of size classes are roughly the same.
Table 14

Settlement Size Distributions - Clayoquot Sound, Long Beach, Broken Group Islands, and Toquaht Territory

<table>
<thead>
<tr>
<th>Class</th>
<th>Length Range</th>
<th>Clayoquot Sound*</th>
<th>Long Beach*</th>
<th>Broken Group*</th>
<th>Toquaht Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Small</td>
<td>&lt;20 m</td>
<td>35 28%</td>
<td>9 26%</td>
<td>20 25%</td>
<td>2 18%</td>
</tr>
<tr>
<td>Small</td>
<td>21-60 m</td>
<td>46 37%</td>
<td>16 47%</td>
<td>34 42%</td>
<td>3 27%</td>
</tr>
<tr>
<td>Medium</td>
<td>61-200 m</td>
<td>28 23%</td>
<td>7 21%</td>
<td>23 29%</td>
<td>4 36%</td>
</tr>
<tr>
<td>Large</td>
<td>201-350 m</td>
<td>13 10%</td>
<td>2 6%</td>
<td>3 4%</td>
<td>2 18%</td>
</tr>
<tr>
<td>Very Large</td>
<td>&gt;350 m</td>
<td>3 2%</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>Site Totals</td>
<td></td>
<td>125</td>
<td>34</td>
<td>80</td>
<td>11</td>
</tr>
</tbody>
</table>

* data from Marshall 1993:126

Whaling

As discussed in Chapter 2, the whaling practices of the Nuu-chah-nulth, Ditidaht, and Makah posed a fascinating problem for early researchers. The limited distribution of whaling on the Northwest Coast and the numerous similarities with Eskimo-Aleut groups in Alaska led to proposed models of an early broad coastal continuum, later broken by arrival of the more northerly Northwest Coast groups (Lantis 1938; Borden 1951; Drucker 1955a). In this view, the Nuu-chah-nulth people became isolated and marginal survivors of an earlier way of life, retaining whaling as part of a much earlier coastal adaptation. As such diffusionist explanations gradually lost their hold on anthropological thought, whaling came to be seen as an ingenious innovation, developed indigenously by these open-ocean peoples. The timing of this development, however, still causes some debate.
In the ethnographic traditions, whaling emerged among the "outside" people of Nootka Island and Esperanza Inlet in response to food shortages. Whaling then provided a secure food supply similar to salmon for the "inside" groups (Drucker 1951:49). This view gives temporal priority to an "inside", salmon-based economy. Dewhirst (1977, 1978, 1980) reinforces this view in his interpretations based on Yuquot. Whaling is seen as a late development, occurring as part of general trend toward more a more maritime adaptation. Other researchers, however, have questioned this picture. In a review of Nuu-chah-nulth site distribution, Haggarty and Inglis (1983:16) conclude: "The pattern that emerges is one of emphasis on the outside with scheduling to exploit the inside on a seasonal basis." In the Broken Group islands of Barkley Sound, for example, numerous large shell middens suggest lengthy year-round occupation, while the small shallow sites which dominate the inlets and other inner locations reflect relatively recent and limited seasonal use (Inglis and Haggarty 1986; McMillan and St. Claire 1982). It now appears that prior to early historic disruptions in political structure and settlement pattern, most of the large outside settlements were occupied for much or all of the year. Reliable access to whales would have been a key aspect in effective occupation of the outer coast.

Some use of whale products characterizes the entire archaeological record in Nuu-chah-nulth territory. Whalebone was recovered from all zones at Yuquot, although it was not abundant (Dewhirst 1977; 1979:6). Whalebone artifacts and fragments occur "in significant quantities" at Yuquot at least as early as 3000 B.P. (Dewhirst 1978:5). The presence of a whale barnacle (Coronula reginae), which is found on the flesh of the humpback whale, in Zone II deposits at Yuquot indicates that such whales were being consumed by about
2200 B.P. (Dewhirst 1977:15; Dewhirst and Fournier 1980:100). Whalebone also came from the deepest deposits at Ch'uumat'a and from Little Beach, where its association with cairn burials argues for considerable importance in the culture, placing use of whales as early as nearly 4000 B.P. Concentrations of whalebone occurred throughout the Ozette midden trench (McKenzie 1974), in deposits spanning roughly the last 1500 years. Whalebone also occurred frequently at T'ukw'aa and makes up a major portion of the faunal remains from Hesquiat Village, both occupied over the last 1200 years. In fact, whalebone is found in almost all excavated faunal assemblages of any size in the study area, including at the end of the long Alberni Inlet, at the Shoemaker Bay site (McMillan and St. Claire 1982). Whalebone was so abundant in the late period Ozette house deposits that Huelsbeck (1988b) refers to whales as "the most important food resource of the Ozettes."

The whales represented by the bones in the Ozette house deposits had clearly been hunted by harpooning, using large toggling harpoon heads in the ethnographic fashion. The thin lines of mussel shell evident on a number of the whalebones are the still-embedded remnants of the harpoon cutting blades (Huelsbeck 1994:281; Fisken 1994:367). Complete harpoon heads with mussel shell cutting blades, still in their protective sheaths or pouches, along with harpoon shafts and line, were found with other items that were in the excavated Ozette house when the mudslide struck (Kirk and Daugherty 1974:128-9; Huelsbeck 1994:280). Huelsbeck (1994:302) concludes that the "pattern of [whale] procurement was essentially unchanged throughout the last 2000 years." The basis for this claim is not clear, however, as all the unambiguous evidence for whaling comes from the late period house deposits.
Dead whales that floated ashore, commonly known as "drift whales," were important sources of meat and oil for the historic Nuu-chah-nulth and Makah. Chiefs jealously guarded their drift rights to anything that washed up on the beaches of their territories (Drucker 1951:39; Arima 1983:23), and bitter intertribal disputes over dead whales occasionally ensued (Sproat 1868:228; Clamhouse et al. 1991:297). Rituals held to cause drift whales to wash ashore involved secluded whalers' shrines, use of human corpses, and occasional sacrifice of slaves (Drucker 1951:171-173; Arima 1983:24; Webster 1983:52). All of the whalebone from earlier midden deposits at Ozette could have come from drift whales, as is also true for whalebone at early levels at Yuquot, Ch'uumat'a, and other sites. The ethnographic importance of drift whales, however, is linked to the active pursuit of whales. Many of the drift whales that washed up on beaches were animals that had been struck during active whaling, subsequently dying of their wounds and washing ashore. Jewitt's account of Mowachaht whaling indicates that whales struck and lost greatly exceeded those taken (Drucker 1951:50). Thus even unsuccessful whaling increased the chances of acquiring whales, and chiefs could benefit from the activities of whalers in neighbouring communities. Prior to the development of whale hunting techniques, drift whales would not have been as numerous as they were historically, and occasional good fortune in finding a beached whale may not be sufficient to account for the considerable number of whalebones in early midden deposits.

Dewhirst (1977, 1978, 1980) argues that development of the full ethnographic whale hunting technology did not occur until the Late Period at Yuquot (after 1200 B.P.), when large composite toggling harpoon valves first appeared. Most of the Yuquot valves, however, are too fragmentary to classify,
too small to have been used in whaling, or lack provenience; only one example (Dewhirst 1980:Fig. 222), incised with the punctate zigzag motif often seen on ethnographic specimens, seems definitely to be a whaling harpoon. No such large valves were found at Kupti, in the upper sound (McMillan 1969). Although toggling harpoon valves were relatively common at Hesquiat Village and the upper component of DiSo 9 in Hesquiat Harbour (Calvert 1980:135; Haggarty 1982:181), both dating to after 1200 B.P., only a few were the large slotted valves meant to take a broad cutting blade as used for whaling. Six valves from T'ukw'aa, which also dates to after 1200 B.P., were judged to be of a size and type consistent with identification as whaling gear, as were two from Ch'uumat'a, from levels dating within the last 1000 years. Slotted harpoon valves, some large enough to have been used in whaling, were also found in the middle and upper portions of the Ozette midden trench (McKenzie 1974).

The small number of definite whaling harpoon heads recovered from these sites indicates the difficulty in dating the advent of whaling by use of such evidence. These artifacts are rare even in late prehistoric and early historic deposits, when whaling was known to have been practiced. The harpoon heads were carefully treated and stored, with their effectiveness ritually enhanced through incised designs representing the lightning serpent (hiy'itl'iik), associated in myth with the whaling activities of the Thunderbird (Sapir 1922:314). Such valued implements would rarely be discarded in archaeological contexts, and would be abundant only in such unusual circumstances as the Ozette house floor. Also, it is possible that other types of harpoons were used in earlier times, at least occasionally, to take whales. Dewhirst (1980) reports unilaterally and bilaterally barbed harpoon heads, several of which are very large, from as early as about 2000 B.P. Although these clearly would be less efficient than the later
large toggling harpoon heads, it is possible that whaling technology evolved over time and that whales were occasionally being taken well before development of the technology used ethnographically.

A major problem in assessing this issue is that the quantity of whalebone in archaeological sites does not directly reflect the number of whales taken. Whales were hauled onto the beaches, where they were butchered. Meat and blubber were brought up to the village, as was the "saddle" area from the back of the whale, which was taken to the whaler's house and ritually honoured (Swan 1870:21-22; Drucker 1951:178-180; Waterman 1920:46; Arima 1983:43). No special treatment was accorded the bones, which were discarded on the beach (Waterman 1920:47). Their presence in the site reflects cultural activities not directly related to the food quest. Many were selected as raw material for tool manufacture; large pieces of whalebone with tool "blanks" removed were found at Ozette (Huelsbeck 1994b:284, 288; Fisken 1994:369) and T'ukw'aa. Virtually all excavated sites contain artifacts of whalebone, which number over 1000 at Ozette (Huelsbeck 1988b:7, 1994b:271). In addition, whalebones were hauled up to the village area to be used in various structural features. At Ozette, whalebones were stacked up as retaining walls and were used with wooden planks to line trenches for diverting water away from the houses (Huelsbeck 1994b:289; Samuels 1991:187; Mauger 1991:93). At T'ukw'aa, whalebone had been dragged up to the top of the defensive site, where a complete whale scapula was used to brace a small post in the shallow deposits above bedrock, and several large whalebone alignments were found in the village area of the site (McMillan and St. Claire 1992:135-6). Attempts may also have been made to extract oil from whalebone, as quantities of chopped whalebone, not evidently products of tool manufacture, were found at Ozette (Huelsbeck 1994b:300) and
Kupti (McMillan 1969:101). Finally, some whalebone in the village sites may represent trophies of the successful hunt, as is likely for several whale skulls stacked to the side of House 1 at Ozette. Ethnographically, whalers attempted to accumulate such memorials of their successes, beaching the whales in front of the village to add their bones to those of previous kills (Drucker 1951:55; Arima 1983:43) or attempting such feats as joining two islands with the bones of their kills as monuments to their whaling prowess (St. Claire 1991:157).

While the whalebone in an archaeological site gives only a limited view into the importance of whales in the diet, the actual meat and blubber taken into the village leaves almost no archaeological trace. The only indication of their presence comes from the occurrence of barnacles which live exclusively on the skin of whales, primarily humpback. Their presence within the house deposits at Ozette indicates that whale products were being consumed in the houses. Whale barnacles have also been identified at Yuquot (Fournier and Dewhirst 1980) and Hesquiat Village (Calvert 1980:192). They give little indication of the total quantity of meat and blubber consumed, however.

As most whalebone found in archaeological sites has been fragmented or made into tools, relatively few elements can be identified to species. Only at Ozette and the Toquaht sites of T'ukw'aa and Ch'uumat'a has whalebone identification been made to the species level. At Ozette, the identifiable whalebone was almost equally divided between California grey whales (50.5%) and humpback (46.5%), with a small number of right (2.3%) and finback (0.7%) whales (Huelsbeck 1994b:271). The latter two species were likely obtained as opportunistic kills or as drift whales. Analysis of the excavated Toquaht data is in process, but humpback whales are clearly the dominant species in the whalebone identified (Monks, pers. comm. 1995). Humpback remains were
found at both Tukw'aa and Ch'uumat'a, including at the deepest levels of the latter site. Grey whale and killer whale elements were also identified at Tukw'aa. A small number of additional whalebones, as yet unidentified, suggest the presence of additional species in the Toquaht sites.

Ethnographically, Swan (1870:19) and Waterman (1920:42) list seven whale species known to the Makah, as does Drucker (1951:48-49) for the Nuu-chah-nulth. Not all whales, however, were hunted. The California grey was the species most commonly associated with Nuu-chah-nulth and Makah whaling (Swan 1870:16; Waterman 1920; Swanson 1956; Curtis 1916:18; Arima 1983:38). It appears seasonally, migrating along the coast each spring. According to Drucker (1951:48), it was "thought to be running, just like salmon." Similarly, Sapir (1924:80) states in a story of two Ditidaht whalers that "When winter was over, the California whales began to run." Although their migration takes them close to shore, the greys tend to stay on the outside coast, rarely entering the sounds (Banfield 1974:271). Sapir's (1910-14) ethnographic work with Nuu-chah-nulth informants documents their movements for Barkley Sound. The whales crossed from Cape Beale through the outer Deer Group islands in Ohiaht territory to the outer islands of the Broken Group, then up the Ucluelet coast, not entering western Barkley Sound or Ucluelet Inlet. Tukw'aa and the sites on the George Fraser Islands were well situated to intercept this migration, but the Toquaht villages further into Barkley Sound were not.

Although often considered secondary to the grey, the humpback is also identified as a major prey species in the ethnographic literature. It was hunted during the summer when the seas were calm and most of the California greys were gone (Sapir 1924; Drucker 1951:48). Their high oil content would make them a more attractive resource than the greys, which were arriving on the
west coast after a prolonged period of fasting. This species is "rather docile and ... easily approached" and "one of the slower whales" (Banfield 1974:279). Unlike the greys, the humpbacks frequently entered the bays and sounds to feed on small fish, with some staying in Barkley Sound throughout the summer months (Banfield 1974; Kool 1982; Cavanagh 1983). Dewhirst (1978:6) initially speculated that humpbacks may have been the more common prey in earlier times, at least for the more northerly Nuu-chah-nulth, a position that Kool (1982) has further documented. Depletion of humpback stocks by commercial whaling in the 19th and early 20th centuries may have left so few humpbacks that only the grey whales were remembered at the time most ethnographic data were collected. When the Sechart whaling station opened in upper Barkley Sound early in this century, it quickly and drastically reduced whale populations, with humpbacks comprising the vast majority of the animals killed (Webb 1988).

In areas such as Barkley Sound, humpbacks may have provided a year-round resource, as some individuals are known to remain through the winter (Cowan and Guiguet 1965:270). One of Sapir's Tseshaht informants, Frank Williams, stated that the humpbacks went up the inlets feeding on herring in the winter months. Specific accounts place the humpbacks in Alberni Inlet in November, Uchucklesit Inlet in December, and Effingham Inlet in January and February (Sapir 1910-14). The whales were so numerous that Williams describes tapping the canoe thwarts to frighten them away while raking for herring in Alberni and Effingham Inlets. Similarly, an early non-native settler described his fears that the numerous whales in Effingham Inlet might capsize his canoe (Kool 1982:34). Sapir (1910-14) also noted that the Uchucklesaht were whalers, but that their hunt was restricted to Alberni Inlet and only in
winter, as they held no "outside" territory for summer whaling. The waters of these protected bays and inlets are much calmer than the outer coast during the winter months, and whaling in these narrow confines likely had a higher rate of success than on the outer coast.

As a result of these facts, archaeological evidence of whaling in Barkley Sound cannot be assumed to represent spring and summer activities, as implied by the ethnographic record. Whales appear to have been available within the sound for much or all of the year. Kool's (1982:43) hypothesis that a major excavation in Barkley Sound would provide evidence that humpbacks were the primary species exploited in precontact whaling is supported by the Toquaht data. In contrast, Ozette is in a different environmental setting, on the outer coast far from any major bays or inlets. Humpbacks and greys would both have been available during their coastal migrations, and the two species are found in roughly equal numbers in the site. In these circumstances, whaling would have been primarily a spring and summer activity. As Ozette was a year-round village, however, and as small numbers of whales were present during much of the year, whaling could have occurred occasionally during the winter as well. Also, drift whales were most likely to wash up on the beaches during winter storms (Drucker 1951:39). Simple occurrence of whalebone in the site cannot be used as evidence for seasonality.

Drucker (1951:49) maintains that whaling was primarily a prestige activity and that successful hunts were relatively rare events. Based on the limited number of whalebones excavated at Yuquot, Dewhirst (1978:5-6) also concludes that the role of whaling in the economy has been exaggerated. He also recognizes, however, that the location of the excavated trench, well above the beach and in a possible house area, is unlikely to yield much trace of activities.
which took place on the beach (1979:6; 1980:33-34). Despite the limitations of the archaeological record, whales clearly played a significant role in the economy for many groups. This is particularly evident at Ozette, where whalebones were very numerous, with over 3400 complete enough to be identified (Huelsbeck 1988b, 1994b). A minimum of 67 individual whales is represented by the bones in the house floor deposits, which accumulated over a relatively short period of time. Huelsbeck (1994b:267) estimates that whales could account for between 70 and 85% of all meat and oil available to the inhabitants of the excavated Ozette houses, assuming all whalebone in the site represents animals fully utilized for food. Whalebone was also abundant at Hesquiat Village, where whales are estimated to account for 86% of the total food potential in the excavated faunal remains (Huelsbeck 1988a:160). This vast amount of meat and oil suggests that trade in whale products was an important part of the precontact economy for these groups (Cavanagh 1983; Huelsbeck 1988a, 1988b, 1994b).

Some ethnographic and ethnohistoric evidence suggests that whaling was of considerably greater importance to the central and southern groups than in Nootka Sound and other northern areas. Meares (1790:125), at Nootka Sound in 1788, thought that Wickaninish's people from Clayoquot Sound had a "more thriving appearance," which he attributed to being from an area "where whales were in greater plenty." Similarly, Haswell in 1789 was of the opinion that the people of Clayoquot Sound placed more emphasis on whaling than any other group on the west coast of Vancouver Island (Howay 1941:70). In 1785, Walker (1982:47) noted 11 skeletons of recently killed whales on the beach in front of a village in Hesquiaht or Ahousaht territory. Banfield (1858) observed whaling among the southern groups, stating that "the Netineth [Ditidaht], as well as the
Macaws [Makah], kill a great many in a season." Swan (1870:19) describes whales and halibut as the "principal subsistence of the Makahs" in the 19th century. These observations are consistent with the archaeological evidence of greater emphasis on whaling south of Nootka Sound, and help to reconcile the views of Drucker and Dewhirst with the excavated data from Hesquiat Village, T'ukw'aa, and Ozette.

Whaling was essential to chiefly power and authority. Hunting whales was a chiefly prerogative, a demonstration of the chief's prowess and ability to draw on supernatural power. As befitting an event of such importance, the whale hunt was preceded by ritual bathing and other ceremonials carried out by the whaler and his wife (Curtis 1916:16; Sapir 1924; Gunther 1942; Jewitt 1967:110-111; Densmore 1939:47; Koppert 1930:56-57; Drucker 1951:169-170; Singh 1966:44-45). The killing of the first whale of the season required a ceremony at which a slave might be sacrificed, an event noted by several late eighteenth century observers (Howay 1941:77-78; Archer 1993:150). A chief's prestige was enhanced by distribution of the great quantity of meat and oil from a successful hunt or from a whale beached on his lands. It was a demonstration of his personal, political, and ritual power.

Whaling also provided an incentive for population movements and dislocations. Although Nuu-chah-nulth oral traditions are filled with accounts of outside groups conquering inside territories for their productive salmon streams, there are also accounts of conquests of outer coast territories for access to whaling. Several of the Kennedy Lake groups, for example, successfully waged war against the people living on the outer coasts of Clayoquot Sound, beginning a period of Tla-o-qui-aht expansion (Drucker 1951:240). These events, according to Drucker, took place early in the historic period. Centuries earlier, whaling
may have provided the economic base for southern Nuu-chah-nulth, Ditidaht, and Makah movement into what became their historic territories. As argued earlier in this chapter, this seems to have taken place between about 2000 and 1200 B.P.

Other Economic Aspects

The Nuu-chah-nulth, Ditidaht and Makah demonstrated ingenious adaptations to a wide range of open-ocean resources. Sea mammals, fish, and aquatic birds, many of them taken far from shore, were important aspects of the diet. Many of these resources required levels of technological sophistication and ritual preparation that were similar to whaling. Although whaling has captured much of the public interest and anthropological attention, it was only part of a range of subsistence activities demonstrating mastery of the maritime environment.

Fur seal are migratory and pelagic, with only young animals straying into littoral waters along the British Columbian coast (Cowan and Guiguet 1965:346-347; Banfield 1974:360). Drucker (1951:46) maintains that fur seal were not hunted prior to the sealing schooner trade in the late 19th century. Singh (1966:21), noting that fur seals were hard to hunt, also claims that they became economically important only in historic times. Archaeological data clearly show that these opinions are in error, reaffirming that ethnographic data should be evaluated through the archaeological record. Fur seal bones heavily dominate the vertebrate faunal remains from the Ozette trench, showing that fur seal was a major economic resource throughout the entire time represented by the midden deposits (Gustafson 1968). In all excavated open-ocean Makah-area sites, from Tatoosh Island to Sand Point, fur seal is the most abundant of
the mammalian remains and often dominates the entire faunal assemblage (see Chapter 3). The Makah were in the most favourable location for taking fur seals as the spring migration brought the animals in close to the rocks around Cape Flattery, but fur seal bones are also numerous in such excavated Nuu-chah-nulth sites as Yuquot (Dewhirst 1979), Hesquiat Village (Calvert 1980), Chesterman Beach (Wilson 1994), and Aguilar Point (Coates and Eldridge 1992). Faunal remains have not yet been analyzed for the Toquaht sites, but fur seal almost certainly played an important role in the economy of this area as well.

Other seals and sea lions played a vital role in the economies of all Nuu-chah-nulth, Ditidaht and Makah groups. Their bones are found in virtually all excavated sites. Such animals were easier to take than fur seal, as they could be harpooned in coastal waters close to the villages or clubbed where they gathered on rocky islets (Drucker 1951; Singh 1966). Porpoises, which are fast, agile, and can only be taken from watercraft, posed much more of a challenge to the aboriginal hunter. Although their flesh was prized, they were only occasionally taken, using the same type of harpoon as was employed for seals and sea lions (Swan 1870:30; Koppert 1930:67; Drucker 1951:26, 36). Their bones, however, occur in many excavated sites. They were relatively common at T'ukw'aa and dominated the mammalian remains at DgSI 61, one of the Chesterman Beach sites (Wilson 1991).

In general, sea mammals made up a large portion of the aboriginal diet, as seen in both the archaeological record and ethnographic accounts. A good example comes from the Hesquiat Harbour sites. Excavated data provided by Calvert (1980) were used by Huelsbeck (1988a:160) to calculate the percentage contribution by meat weight of each major faunal category to the total food
available. At DiSo 9, in the upper harbour, sea mammals made up almost half the food consumed as indicated by the faunal remains. At DiSo 1, the Hesquiat Village site near the outer coast, the abundance of whalebones in the deposit reduces all other taxa to minor levels. Whales are estimated to account for over 86% of all available food, with the total sea mammal contribution reaching a whopping 96%. A near-identical situation prevails at Ozette, where whales make up almost 88% of the food represented by faunal remains, with the total contribution from all sea mammals again estimated at 96% (Huelsbeck 1988a:154).

The maritime adaptation of the ethnographic groups is also evident in several species of fish taken. Halibut were second only to whales in the economy of the Makah (Swan 1870:22; Singh 1966:48) and dried halibut was a winter staple. Although chum salmon outweighed halibut in importance among the Nuu-chah-nulth, halibut was an important resource and some outer coast groups such as the Kyuquot relied extensively on it (Drucker 1951:36). Halibut hooks showed great ingenuity and required skill in use. Although some halibut were taken close to shore, the major fishery for large halibut was on the off-shore banks. Sproat (1868:223) states that the best halibut grounds were 12 miles off land. Sapir and Swadesh (1955:41) report that Nuu-chah-nulth men would set out from villages in Barkley Sound when it got dark, paddling all night to reach the halibut banks by dawn. Similarly, the Ditidaht set off around midnight for their favoured halibut banks, about 15 to 25 miles offshore, arriving in the early morning (Clamhouse et al. 1991:295). Singh (1966:32) estimates that the Makah halibut banks were eight to ten miles offshore, while Swan (1870:22-23) places them 15 to 20 miles from land. Tatoosh Island, off Cape
Flattery, was a major summer residence for many Makah while they were intensively fishing for halibut.

Despite the ethnographic importance of halibut, it is not well represented in the excavated sites. Although halibut bones occur in all but the lowermost deposits at Yuquot, the relatively small quantities led Dewhirst (1979:7) to conclude that halibut "does not seem to have been a major food species" and to suggest that its importance has been exaggerated due to Nuu-chah-nulth participation in the late commercial halibut fishery. Halibut remains are very rare in all excavated Hesquiat Harbour sites (Calvert 1980) and are absent at Kupti (Marshall 1990:109). Although halibut elements occur in some quantity in the late period house deposits at Ozette, this fish ranks well behind lingcod, rockfish, greenling, sculpin, and salmon in importance (Huelsbeck 1994a:71-73). This anomaly is at least in part attributable to taphonomic factors, as ethnographically halibut were cleaned and processed on the beach (Swan 1870:23) and many of their bones may have been discarded there. However, Swan's (1870:23) description of how halibut were prepared indicates that the heads, the tails, and the vertebrae with adhering flesh were all dried and packed away for later consumption, indicating that the technique of processing cannot fully explain the low representation of halibut in the excavated sites.

Nuu-chah-nulth mastery at exploiting marine resources is also evident in the presence of bluefin tuna elements at almost all excavated sites. This is a large and powerful fish, up to three metres in length, that entered British Columbian waters during conditions of warmer weather (McMillan 1979; Crockford 1994). No ethnographies describe the taking of these huge fish and there are only a few brief ethnohistoric references to the consumption of tuna, such as mention of a tuna and porpoise stew served during Vancouver's visit to
Nootka Sound in 1792 (Newcombe 1923:120). Despite this lack of ethnographic attention, tuna were clearly an important resource in the precontact economy. Tuna elements are found at Yuquot, Kupti, Hesquiat Village, the Toquaht sites (T'ukw'aa, Ch'uumat'a, and Macoah), Shoemaker Bay, and Ozette (Crockford 1994), and are also tentatively identified at Chesterman Beach (Wilson 1994:15). They occur in all four zones at Yuquot, covering the entire known span of Nuu-chah-nulth culture history (McMillan 1979:117-118). While most sites have only a few tuna elements, they are relatively common in the Toquaht sites, with cut marks and burning on some of the vertebrae suggesting butchering and cooking practices (Crockford 1994:165). Bluefin tuna travel on the warmer surface water and enter the sounds and inlets to feed. Recent research with Mowachaht informants indicates that tuna were harpooned at night as they fed at the surface of shallow water well inside Nootka Sound (Crockford 1994). Such activities resembled whaling in terms of equipment and skill required.

As would be expected, the degree of dependence on open-ocean resources varied with local conditions. Substantial differences are evident in the excavated faunal remains. At Yuquot, the bones of coast deer were the most numerous of the identified mammalian remains (Dewhirst 1979). This contrasts with a much more maritime economy evident in the identified mammals at Ozette, which are dominated by whales and fur seals, with deer and elk playing a very minor role.

Some argument has been made that pelagic resources became important only within the last millennium (Matson and Coupland 1995:272). Matson (1983:131) has used Calvert's (1980) data from Hesquiat Harbour to argue for intensification of pelagic sealing in relatively recent times. As success in hunting fur seals led to improved technology and greater commitment to pelagic sealing, greater emphasis would simultaneously have been placed on hunting sea...
mammals of all types while use of other resources would have declined. This argument fits well with Dewhirst's (1977) model of late development of effective whaling techniques. Only one of the excavated Hesquiat sites predates 1200 B.P., however, and it is located in the upper portion of the sound. Certainly the great abundance of fur seal bones throughout the midden trench at Ozette (Gustafson 1968) and substantial numbers of fur seal elements in Zones II to IV at Yuquot (Dewhirst 1979) argue for a longer period of emphasis on such open-ocean resources.

Social Relations

Warfare

In the ethnographic literature warfare appears to have permeated all aspects of Nuu-chah-nulth life. All such sources document the well-developed military complex among these people, and the texts collected by Sapir from Barkley Sound groups are filled with accounts of specific hostilities, told from a native perspective. Swadesh (1948:76), in reviewing the motivations underlying Nuu-chah-nulth warfare, noted that "the entire social structure of band and tribe, kinship and caste, as well as economy and social philosophy, are illuminated against the war background."

War chiefs, often younger brothers of the main chiefs, led the military campaigns (Swadesh 1948:93; Drucker 1951:270). As was required for any activity of great importance, such leaders prepared for war by ritual bathing and other ceremonial activity (Drucker 1951:170; Koppert 1930:105). A favoured tactic was a night or dawn raid on a sleeping village, with specific members of the attacking party assigned to each house of the target village
Aggressor groups might launch prolonged campaigns of attrition against their enemies or those whose resource territories they desired. At the culmination of a successful attack, heads of all the slain were taken as trophies, captured women and children were taken as slaves, and the houses were plundered and burnt. Treachery was also a tactic successfully employed according to a number of oral traditions, as a group feigned peace offers and invited their foes to a feast, only to strike out against their guests at a prearranged signal from the war chief (Drucker 1951:338). Slave raiding expeditions were also part of Nuu-chah-nulth hostilities, with war parties setting out to pick off small groups of individuals engaged in tasks away from their villages. Slaves and booty provided important economic motivations for hostilities, as numerous slaves enhanced a chief's wealth and prestige (Ferguson 1984b; Mitchell 1984; Donald 1983).

The underlying motivations behind Northwest Coast warfare have been the subject of considerable theoretical debate (Ferguson 1983, 1984b; Coupland 1989; Langdon 1976). On a broader level, Yesner (1980) maintains that the relatively high population densities and semisedentism characteristic of maritime hunter-gatherers promote a greater degree of territoriality and higher levels of endemic warfare than among hunter-gatherers in other environmental settings. Vayda (1968) has championed an ecological-functional perspective on warfare, visualizing it as a system to redistribute populations to resources. The ecological-functional theorists view both warfare and the potlatch on the Northwest Coast as mechanisms for controlling population to resource ratios (Langdon 1976). Warfare is linked to feasting and potlatching, as redistribution of food supplies neutralized potential enemies and bound them as allies (Ferguson 1983:135). In structuralist analysis, "... war is the other side of
exchange within a structure of relations - war is an exchange gone bad, and exchange is a war averted" (Ferguson 1984a:17). Codere (1950:105), while linking potlatching to warfare among the historic Kwakwaka'wakw, denies any economic motivation for warfare, a position strongly at odds with ethnographic studies among the Nuu-chah-nulth.

Virtually all ethnographic sources on the Nuu-chah-nulth emphasize the economic basis of warfare (Swadesh 1948; Drucker 1951:333; Arima 1983:105). The oral traditions are replete with accounts of "outside" groups seeking to acquire "inside" resources, particularly productive salmon streams (Swadesh 1948; Sapir and Swadesh 1955; St. Claire 1991). Slaves, booty, and ceremonial privileges were additional incentives for war. Revenge was frequently mentioned as a motivation for warfare by Nuu-chah-nulth informants, but this may be a convenient rationalization (Swadesh 1948:91; Drucker 1951:333; Ferguson 1984b:308). In varying circumstances, insults or other grievances could be forgotten or serve as rallying points, even long after the events, and were often merely justifications for wars of territorial expansion or for slave raiding.

Individual motivation, however, should not be dismissed as a frequent source of hostilities. War chiefs, in particular, stood to gain prestige in successful military ventures. Warriors who had taken many heads were feared and respected. Relatives of someone killed in war may demand revenge, requiring a war chief to mount a retaliatory expedition. Warfare also provided ambitious chiefs with an opportunity for self-aggrandizement through use of military might to increase territorial holdings, slaves, and prestige.

Weapons, designed for combat in close quarters, consisted of wooden spears with fire-hardened tips, clubs, and daggers (Drucker 1951:335; Koppert 1930:104; Mills 1955:59; Arima 1983:105). Drucker's informants also told him
that slings were used in warfare prior to the introduction of firearms. Only the war chiefs wore armour, made from several thicknesses of elkhide (Cook 1784:307-8; Drucker 1951:335; Koppert 1930:105); wooden rod armour was also described to Drucker by a Hesquiaht informant. Military leaders carried clubs of stone or whalebone, often finely carved and referred to by ritual names or euphemisms such as "orphan maker" (Drucker 1951:335). Whalebone clubs with handles carved in the stylized image of the Thunderbird suggest the importance of supernatural power in military endeavours. Finely carved stone and whalebone clubs are well-represented in ethnographic collections made among the Nuu-chah-nulth late in the eighteenth century (Gunther 1960:271-274; 1972:40-44, 209-211; King 1981:Plate 41, 47; Kaeppler 1978:257; Boas 1907; 1927:284-287), before firearms replaced these as high-status weapons shortly after European contact.

Few archaeological traces remain in Nuu-chah-nulth sites to gauge the antiquity of these practices or their extent in precontact times. This is in contrast to the archaeological record on the northern British Columbian coast, which indicates that warfare was well established prior to 2000 B.P. (Fladmark, Ames, and Sutherland 1990:234). The evidence comes primarily from a series of midden interments in the Prince Rupert Harbour area, where male skeletons show unusually high levels of trauma, including parry fractures of the forearm and depressed skull fractures (Cybulski 1990:58), and are associated with grave goods which include decorated bone and stone clubs. No such evidence comes from Nuu-chah-nulth territory, where midden interment is almost unknown in the archaeological record of this period.¹ Occasional discoveries, however, have

¹The only known midden interments for the late West Coast culture type (2000 B.P. to historic contact) are one articulated human skeleton partially visible in the wall of a unit at
Fig. 23. Whalebone club handles from Nuu-chah-nulth sites: left, from Yuquot (DjSp 1), Zone II, ca. 2000 B.P., note the break at a drilled perforation for suspension at the wrist; right, from Macoah (DfSi 5), age unknown.

the Toquaht site of Ch’uumat’a, several interments encountered during excavation at Tatoosh Island (Friedman 1976), and a number of burials disturbed during house construction at Hesquiat Village (R. Inglis, pers. comm. 1995). All were exposed and left in place; no detailed reports are available.
been made of weapons in archaeological contexts. Three fragments of whalebone clubs in the distinct Nuu-chah-nulth style were found at Yuquot, in deposits dating to about 2000 B.P. (Dewhirst 1980:327-329). Two are blade fragments while one is a slender decorated handle, carved with a zoomorphic image with a downturned beak-like mouth and feather-like projections (Figure 23). It resembles a simplified version of the stylized zoomorphic handles known from late 18th century collections (Dewhirst 1978:Fig. 20; Boas 1907:404; Gunther 1972:Figs. 19, 20). Another decorated handle fragment, with the stylized Thunderbird characteristic of historic Nuu-chah-nulth examples, came from the Toquaht site of Macoah (McMillan and St. Claire 1991:75-76). Unfortunately, it was not recovered as part of the controlled excavation and cannot be assigned any age estimate; it may belong to the historic component at that site. Several similar whalebone clubs, in both uncompleted and fully finished forms, came from the late precontact house deposits at Ozette (Huelsbeck 1994b:286; Fisken 1994:364; Daugherty and Friedman 1983:Fig. 10:11).

The major evidence for precontact Nuu-chah-nulth warfare comes from the occurrence of sites in places that were clearly selected for defense. These are situated in elevated locations, such as on rocky headlands or steep-sided islets, reached only by a steep climb or in some cases by ladders. Access was difficult and living in such conditions would have been inconvenient, yet such sites offered good vantage spots to watch for enemies and were highly defensible locations. Many had their defensive capabilities enhanced with construction of stockades or log ramparts. Known variously as "forts," "defensive sites," and "refuges," such sites are distributed along the north Pacific shores from the outer Aleutian Islands to the Oregon coast (Moss and Erlandson 1992:76).
Fig. 24. Location of recorded defensive sites or lookouts in Nuu-chah-nulth, Ditidaht, and Makah territories. Only four of the eight recorded defensive sites near the entrance to Kyuquot Sound are shown.
At least 33 such sites are recorded for Nuu-chah-nulth territory, along with one (the well-known fortified village of Whyac) in Ditidaht territory.² Three more are found among the Makah. Their locations are shown in Figure 24. Such sites are likely to be underrepresented in the archaeological record, as other examples are known through ethnographic and ethnohistoric sources.³ Also, other types of defensive locations are not included in this category. Stockades are known to have been erected around a number of historic villages (Sproat 1868:196; Swan 1870:51; Drucker 1951:338), including Macoah (Sapir and Swadesh 1955:437; McMillan and St. Claire 1991:71). The category of "defensive site" here refers only to sites on elevated rocky headlands, islets, sea stacks, or similar locations, today draped with relatively shallow midden deposits. It is recognized, however, that some of these sites may have served primarily as lookouts for migratory sea mammals.

With the exception of several examples along the inlets of Nootka Sound, all known defensive sites are on the outer coast (see Figure 24). They tend to be located where they could control the access to major sounds and inlets. Clusters of such sites guard the entrances to Kyuquot Sound and Barkley Sound, in particular. Movements of people along the coast could have been monitored and controlled from fortified settlements in such strategic locations as Yuquot, Cape Beale (at the eastern entrance to Barkley Sound), and Cape Flattery.

²A computer search of the British Columbia site records by the Archaeology Branch, Victoria, located most sites identified here as "defensive," "refuge," or "fortification." Several others were added through examination of regional survey reports (Haggarty and Inglis 1985; Inglis and Haggarty 1986; Marshall 1992).

³For example, in 1789 Haswell noted a "fortification bluff" visible as he entered the harbour near modern Tofino (Howay 1941:68). Several of the war texts collected by Sapir for Barkley Sound also contain references to defensive locations. Before their defeat by the Ucluelet and Tla-o-qui-aht, the people of Effingham Inlet retreated to their "hill village," equipped with log rollers (Sapir and Swadesh 1955:374). As such sites have not been archaeologically located and recorded they are not included here.
Many of the most impressive defensive sites are in immediate association with large villages, either as part of one continuous site or in close proximity, such as on an off-shore islet. T'ukw'aa (DfSj 23), the largest Toquaht village, is a good example, with midden deposits from the main village area extending to the top of an immediately adjacent steep-sided headland (Figures 11 to 13). Similarly, the Tseshahht village of Hutsatswilh (DfSh 31), on Dicebox Island in the Broken Group, is located beside a high flat-topped defensive area (DfSh 79) with steep cliffs in all directions except for immediately over the village (Figure 25). A very similar situation prevails in Ohiaht territory near Bamfield, where a steep-sided defensive area (DeSh 2) towers over the major village of Kiiix7in (DeSh 1)(Figure 26). In all three cases, the village and defensive area are so closely associated that it is logical to assume that the presence of a suitable flat elevated area for defense was a major criterion in selecting the village location. In Ditidaht territory, the only recorded defensive site is at the major village of Whyac (Waayaa7ak), strategically located on the rocks at the entrance to Nitinat Narrows. Explorer Robert Brown discussed the defensive features of Whyac in 1864:

... most of the Nettinaht villages were fortified with wooden pickets to prevent any night attack, and from its situation, Whyack, the principal one (built on a cliff, stockaded on the seaward side, and reached only by a narrow entrance where the surf breaks continuously), is impregnable to hostile canoemen.

(Bouchard and Kennedy 1991:26)

Among the Makah, Sproat (1870:51) notes "stockade forts at Tatoosh Island, and on one of the rocky islets composing Flattery Rocks." As the latter are immediately offshore from Ozette, Sproat is likely referring to Tskawahyah (also known as Cannonball) Island. This impressive, steep-sided islet, surmounted by relatively extensive midden deposits, is joined to the main Ozette
Fig. 25. The defensive site (DfSh 79) on Dicebox Island, Broken Group, Barkley Sound. The Tseshalt village of Hutsatwilh (DfSh 31) is to the left of this picture.

Fig. 26. The Ohiaht village of Kiix7in (DeSh 1) is in the trees in the centre of this picture. Its defensive site (DeSh 2), known locally as "Execution Rock", is atop the steep cliffs to the right.
site at low tides and would have provided a convenient lookout for sea mammals as well as a refuge in times of war.

Oral traditions tell of prolonged residence in such locations during times of danger. House platforms are evident on the surface of many defensive sites. Other features relate to defensive measures. Stockades were erected at some sites, traps and warning devices were set along trails, and logs were stacked along the cliff edge to roll down on attackers. Informants described the defensive strategy of pegging in large logs along the upper lip of the defensive site bluff at Hutsatswilh (Dicebox Island), to be released against ascending attackers, a technique apparently successfully employed by the Tseshahht against the Ahousaht (McMillan and St. Claire 1982:30; St. Claire 1991:146). Similarly, ethnographic accounts describe a large log roller at the top of the Kiix7in fort, meant to be used against Clallum raiders (Clamhouse et al. 1991:224-225; Scott 1972:255). Among the Makah, Swan (1870:51) describes "stockades of poles and brush" around houses and identifies several "stockade forts" on islands. The only fort in existence at the time of his observations, however, was among the Quileute, to the south of Ozette. He describes a "precipitous rock," with a single difficult trail to the summit, from which "great logs" could be rolled down on an attacking force. Curtis (1913:143), referring to the same site, describes "rolling bowlders" down on the enemy.

The Aguilar Point defensive site (DfSg 3), on a rocky headland in eastern Barkley Sound near the entrance to Bamfield Inlet, overlooks the ethnographic Ohiaht village of 7O:ts'o:7a (DfSg 2). To protect the landward side of this defensive site a trench was dug across the headland, with the earthen embankment on the inside of the trench probably originally supporting a palisade. This defensive earthwork is unique among West Coast sites, although
such features are relatively common in the Strait of Georgia region. Buxton (1969) lists 58 recorded sites of this type in southwestern British Columbia and adjacent Washington. Except for the defensive earthwork, however, this site and its associated village are typically Nuu-chah-nulth. An Ohiaht legend refers to Aguilar Point as the "fort" of a "bear man" and his family, who constructed a rampart to protect their home on the landward side but eventually were destroyed by their enemies (Scott 1972:260-262).

Radiocarbon dates from several excavated defensive sites give some idea of the antiquity of intensive warfare among the Nuu-chah-nulth and Makah. The earliest date for the defensive portion of T'ukw'aa is about 800 years (Table 6); however, as the village area was occupied as early as about 1200 years ago, occasional use of the adjacent headland that forms the defensive site likely also dates to that time. At Aguilar Point, the trench embankment appears to have been constructed about 700 years ago (Buxton 1969); another radiocarbon date, however, indicates that people were living out on this headland, presumably for defensive purposes, about 1200 years ago (Table 8). In Makah territory, rocky Tatoosh Island was inhabited by about 1000 years ago (Table 12). Although this was ethnographically a major halibut fishing and processing location, the steep sides of this island would have also made it an admirable defensive area and Swan (1870:51) describes a "stockade fort" there. At Ozette, radiocarbon dates for deposits atop Tskawahyah Island are 980±80 and 2010±190 B.P. (Table 10), the later providing the oldest date at Ozette and possibly the oldest date for a defensive site on the Northwest Coast (Moss and Erlandson 1992:84). Another date of about 2000 years comes from an exposure face at an unexcavated site (45CA2) high atop a bluff at Cape Flattery (Table 12). Such dates closely
correspond to what appears to be the beginning of intensive settlement in this area.

Such elevated locations served as lookout points for migrating sea mammals and vantage places for sentinels to watch for enemies, as well as places of refuge during hostilities. Racks for drying fish may have stood on some sites, as they offered better exposure to the winds than the sheltered villages (Buxton 1969:41; Moss and Erlandson 1992:76). Some not directly associated with villages were only sporadically used, primarily as lookouts. Others, particularly those on elevated points adjacent to major villages, were occupied on a fairly sustained basis. This would be the case, for example, at Whyac, at T'ukw'aa, and at the defensive site (DjSp 32) associated with Yuquot (Marshall 1993:122). Excavated defensive sites contain ordinary domestic refuse, indistinguishable from materials obtained at the village sites. At T'ukw'aa, for example, the same types of artifacts and faunal remains occur across the site, including the top of the defensive area. This situation also has been noted for excavated defensive sites in other coastal regions, such as at the Rebecca Spit trench embankment in the Strait of Georgia (Mitchell 1968), three defensive islets in Kwakwaka'wakw territory (Mitchell 1981), and a number of Tlingit "forts" (Moss and Erlandson 1992:76). While these elevated locations offered defensive capabilities in times of warfare, most of the activities that took place there were common domestic ones.

Although archaeological evidence is limited, the distribution and ethnographic importance of these steep-sided defensive locations, plus the prominence of war accounts in the recorded oral histories (Sapir and Swadesh 1955), attest to the importance of warfare in shaping Nuu-chah-nulth life. The appearance of defensive sites on the Olympic Peninsula by about 2000 B.P. and
in Barkley Sound by perhaps 1200 B.P. corresponds closely with the period earlier suggested for the expansion of southern Wakashan peoples into their historic territories. As populations increased and territorial tensions became more prevalent, these highly visible sites became public statements of the group's military power. Ethnographically, chiefs enhanced their power and prestige through expansion of territory, control of trade, and possession of wealth, including slaves. Heavily defended sites enabled chiefs to maintain control of their territory and all trade that passed by, and raids on weaker or hostile neighbours allowed a chief to acquire additional slaves and booty. Evidence of heightened hostilities seen in the defensive sites suggests the presence of social hierarchies and the control of territory and wealth.

Trade

The transfer of goods and services between individuals or groups is the central feature of all exchange systems. The extent of trade and types of exchange systems provide some insight into the level of complexity of the society. On the Northwest Coast, powerful chiefs controlled the trade routes, maintaining exclusive access to important resources within their territories. Such commodities might be traded for economic gain to neighbouring groups or might be publicly redistributed in status-enhancing events such as the potlatch. Archaeologists, however, deal only with the tangible and durable products of trade, usually recoverable as artifacts of exotic raw materials or remains of non-local fauna. Such intangibles as names, songs, and ritual prerogatives, which were exchanged ethnographically at potlatches, are not recoverable archaeologically, and only rarely do archaeologists get insight into such major trade commodities as dried salmon and halibut, oolachon oil, clover roots, furs
and hides, and slaves. Intragroup exchange in local commodities may also elude archaeological attention; most archaeological evidence consists of exotic items indicating long-distance trade.

Ethnographically, most Nuu-chah-nulth trade was with other Nuu-chah-nulth groups. Although the Chicklishtaht and Kyuquot in the north had some contact with the Kwak'wak'wakw of Quatsino Sound, the most important arteries of commerce with the Kwak'wak'wakw were the overland trails which led across Vancouver Island from the heads of Kyuquot and Nootka Sounds to the Nimpkish River (Drucker 1951:Map 1). Trails also led from the ends of Muchalat and Alberni Inlets across Vancouver Island to the Comox, Pentlatch, and other Salish groups. The Ditidaht traded extensively with the Makah, although some commerce was also transacted with the neighbouring Sooke Salish. In the south, the Makah were strategically situated for coastal commerce, trading goods received from the Nuu-chah-nulth and Ditidaht south as far as the Chinook of the lower Columbia River (Swan 1870:30-31). The importance of this activity was evident to Swan (1870:30), who described the Makah as "emphatically a trading, as well as a producing people."

A first-hand account of Nuu-chah-nulth trade early in the historic period comes from the observations of John R. Jewitt, held as a captive among the Mowachaht from 1803 to 1805. His journal notes the arrival in Nootka Sound of various Nuu-chah-nulth groups and the Makah, as well as the Kwak'wak'wakw from the Nimpkish River, who had arrived via the overland trail.

The trade of most of the other tribes with Nootka [the Mowachaht] was principally train oil [whale oil], seal or whale's blubber, fish fresh or dried, herring or salmon spawn, clams, and muscles [sic], and the yama [salal berries], a species of

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4The importance of these trails is shown in the names of the villages where they began. Both locations, in Kyuquot Sound and in Nootka Sound, were known as Tahsis (or Tacia), meaning "doorway" (Drucker 1951:224, 228).
fruit which is pressed and dried, cloth, sea otter skins, and slaves. From the Aitizzarts [Ehattisaht], and the Cayuquets [Kyuquot], particularly the former, the best I-whaw [dentalium shells] and in the greatest quantities was obtained. The Eshquates [Hesquiaht] furnished us with wild ducks and geese, particularly the latter. The Wickinninish [Tla-o-qui-aht] and Kla-iz-zarts [Makah] brought to market many slaves, the best sea otter skins, great quantities of oil, whale sinew, and cakes of the yama, highly ornamented canoes, some I-whaw, red ochre and pelpelth [black mica] of an inferior quality to that obtained from the Newchemass [Kwakwaka'wakw of the Nimpkish River], but particularly the so much valued Metamelth [elk hide], and an excellent root called by the Kla-iz-zarts Quawnoose [camas] . . . the size of a small onion . . . of a most agreeable flavour. From the Kla-iz-zarts was also received, though in no great quantity, a cloth manufactured by them from the fur already spoken of, which feels like wool and is of a grey colour [probably dog hair].

(Jewitt 1967:78-79)

Sproat (1868:79) also notes that the Nuu-chah-nulth traded dried halibut, herrings, and cedar bark baskets to the Salish tribes of southern Vancouver Island in exchange for camas bulbs and swamp rushes for making mats. The southernmost Ditidaht, the Pacheenaht, were famed as slave traders, primarily to the Clallum and Sooke, and also traded canoes, although few were made by them (Banfield 1858:Aug. 14, p. 1; Clamhouse et al. 1991:296). Swan (1870:31) notes that the Makah traded dried halibut, whale oil and blubber to the Nuu-chah-nulth, receiving in turn dried salmon, cedar bark, dentalium shells, canoes, and slaves. These commodities were then traded to the Quileute or other southern groups such as the Chinook.

With the exception of dentalium shells, virtually none of these commodities would be preserved in the archaeological record. Archaeological claims for prehistoric trade networks usually rely on the occurrence of such preserved non-local raw materials as obsidian, chert, catlinite, nephrite and other desirable stone for tool production. Obsidian is particularly useful for such
analysis as it has excellent flaking and cutting properties, was traded widely from a limited number of source locations, and can be attributed to source through several non-destructive techniques. Using x-ray fluorescence, obsidian artifacts from archaeological sites can be matched with known source locations through study of the distinctive pattern of trace elements characteristic of each obsidian flow (Nelson 1975; Nelson, D'Auria, and Bennett 1975; Carlson 1994).

The only excavated site reporting obsidian artifacts in the ethnographic Nuu-chah-nulth area, however, is Shoemaker Bay. Obsidian flakes were fairly common in the early component, Shoemaker Bay I, which was clearly linked to contemporaneous cultures in the Strait of Georgia region (McMillan and St. Claire 1982). Most of the analyzed obsidian came from two unlocated sources on the south-central coast of British Columbia, although two specimens were traced to known flows in central Oregon (McMillan and St. Claire 1982:70), indicating at least sporadic contacts far to the south. No such items came from sites of the West Coast culture type, although a fragment of a chipped projectile point made of jasper came from Hesquiat Village. Its unique form and material for West Coast sites led Haggarty (1982:120) to conclude that it "was likely obtained in trade." In the Toquaht sites, a small bit fragment of a nephrite celt came from Ch'uumat'a, from a level dating to about 2300 B.P., and a reworked greenstone celt came from a level at T'ukw'aa dating to about 900 B.P. The main source location for nephrite is thought to be the Fraser River canyon, while a major quarry for greenstone is known in the Bella Coola valley (Carlson 1994:337). While non-local lithic materials are often used in archaeological analyses as indicators of extensive exchange networks, their paucity in West Coast sites likely reflects only the general unimportance of stone in Nuu-chah-nulth material culture.
Less direct evidence may also be used to understand the extent of exchange systems in late precontact times. Huelsbeck (1988a, 1988b) argues, based on the huge amount of oil and blubber represented by the whalebones in the protohistoric house deposits at Ozette, that whale products would have dominated all other food sources at this site and would have provided a surplus that served as a major trade commodity. The faunal remains from Hesquiat Village yielded a similar pattern, leading Huelsbeck (1988a) to suggest that the Ozette and Hesquiat economies were specialized, with whaling providing a surplus that could be exchanged for non-local necessities. Yuquot, with its relative paucity of whalebone, lacked evidence for such specialization. This is consistent with the ethnographic importance of trade in whale products among the Ditidaht and Makah (Clamhouse et al. 1991:297; Swan 1870:32; Singh 1966:82), who received in exchange such products as cedar canoes and house planks (Swan 1870:31; Huelsbeck 1988a:171). The northern Nuu-chah-nulth appear to have been the recipients of whale products in such trade. Although John Jewitt noted few whales being taken by the Mowachaht during his two and a half years of captivity in Nootka Sound, he frequently made references to the consumption of whale oil and blubber. Despite Jewitt's aversion to such food, it was a year-round staple, traded in by other groups, often at some distance (Cavanagh 1983:56, 134). On the 15 occasions noted by Jewitt when whale oil or blubber was brought to Nootka Sound, almost half involved the Tla-o-qui-aht, while the remaining trading expeditions were by the Hesquiaht, Ehattesaht, and Makah (Marshall 1989b:267; 1993:251).

In extraregional trade, the Nuu-chah-nulth were famed as the suppliers of dentalium shells (*hiixwa*), a wealth good valued far inland. These were procured and traded by the peoples of western Vancouver Island, including the
Kwakwaka'wakw of Quatsino Sound and Cape Scott areas as well as the Nuu-chah-nulth. Major dentalium beds have been noted in the territories of the northern Nuu-chah-nulth: the Chicklisah, Kyuquot, and Ehattesaht (Drucker 1951; Barton 1994). One of the most important was in the waters of Ehattesaht territory, although chiefs of the Kyuquot, Chicklisah, and Nuchatlaht also owned dentalium fishing rights there (Drucker 1951:111, 256). Drucker (1951:112) also mentions an important dentalium bed in Barkley Sound, although he does not give a specific location. More recently, dentalium sources have been noted in Clayoquot Sound and Hesquiat Harbour (Bouchard and Kennedy 1990). Elaborate devices were developed to procure dentalium in fairly deep off-shore waters (Drucker 1951:112-113; Jewitt 1967:63; Ellis and Swan 1981:73; Andrews 1989:96-109; Barton 1994:57-93). Dentalium were also known to wash ashore in locations such as Long Beach (Drucker 1951:112; Ellis and Swan 1981:73), but this was only a minor source of supply. In Nootka Sound, the Mowachaht seem to have relied on trade with neighbouring groups. In 18 transactions noted by Jewitt where Maquinna received dentalium, the Ehattesaht were the suppliers in 14 cases, the Nuchatlaht twice, the Chicklisah once, and an unknown group to the south, possibly the Hesquiaht, in the final case (Barton 1994:108, 111). To the south, the Makah traded with the Nuu-chah-nulth for dentalium (Swan 1870:31; Singh 1966:83), which they traded further south. The artist Paul Kane, however, noted in the mid-19th century that dentalium occurred in abundance at Cape Flattery and described the technique by which it was taken (Kane 1968:165).

Dentalium shells, then, were highly sought after, were traded between Nuu-chah-nulth groups, and had important uses and meaning in Nuu-chah-nulth society. Drucker (1951:139-140) describes (and illustrates) long hair
ornaments covered in dentalium which were worn by pubescent girls of high status; these required a major potlatch or public feast before they could be removed. Swan (1870:13, 16) also describes and illustrates dentalium shell headdresses and pendants worn by Makah girls at puberty. Bracelets and necklaces consisting of a number of strings of dentalia were worn by the nobility (Jewitt 1967:62). Jewitt observed these shells used in ceremonial contexts by the Mowachaht, describing on two occasions the burial of high status individuals with considerable quantities of dentalium (1967:105, 111; 1988:57); he also noted the transfer of large strings of dentalium to Maquinna during a marriage ceremony (1988:112).

Dentalium was also a valuable commodity in the early maritime fur trade. Aware of the high regard in which this shell was held by the native peoples of the coast, some European traders purchased quantities from the Nuu-chah-nulth to use in exchange with other groups. In 1793-94 the captain of the Jefferson purchased "160 fathoms" (about 300 metres) of strung dentalium from the Nuu-chah-nulth of Clayoquot and Barkley Sounds (Magee 1794; Gibson 1992:229).

In archaeological contexts, dentalium shells are found as far inland as the Plains and Western Subarctic. They are found in small quantities at several Northwest Coast sites as early as about 4400 B.P. (Andrews 1989:141). By 2500 B.P., dentalia are found in greater numbers, both on the southern coast and in the interior plateau (Barton 1994:2). In the Strait of Georgia region, dentalia frequently are found in burial contexts dating to the Marpole period (Burley 1980:29, 61; 1981:401; Burley and Knusel 1989; Mitchell 1971:52; 1990:346). Certainly most dentalium shells found in Strait of Georgia sites had an origin on the west coast of Vancouver Island. Barton (1994), however,
cautions that other source possibilities exist, and dentalia should not uncritically be interpreted as evidence of trade networks involving the Nuu-chah-nulth or their Kwakwaka'wakw neighbours.

Despite the ethnographic importance of dentalium among the Nuu-chah-nulth, known patterns of trade in dentalium between Nuu-chah-nulth groups, and the occurrence of dentalium from the Pacific coast in archaeological sites far inland, almost no evidence of this trade exists in West Coast sites. Only two fragmentary dentalium shells were excavated at Yuquot, and both came from historic levels (Clarke and Clarke 1980:46). Similarly, a single dentalium shell came from T'ukw'aa, again from historic deposits. At Ch'uumat'a, one dentalium shell came from a level dated at over 1000 B.P., while a second, decorated with an incised design, came from a level dated at 2000 B.P. At Shoemaker Bay, a single dentalium shell, with a single incised encircling line, came from the upper component (McMillan and St. Claire 1982:111), frustrating speculations that this site was a vital link in the dentalium trade between the west coast and the Strait of Georgia (Burley 1981:406). Despite the great quantities of dentalia from the Strait of Georgia and the Plateau attributed to Nuu-chah-nulth sources, these six shells are all that are reported from West Coast sites. The difference is almost certainly attributable to the lack of midden interments in sites of the West Coast culture type, resulting in a near-absence of wealth items in archaeological contexts. Only in the unique circumstances at Ozette do we find dentalium shells in some quantity. The protohistoric house deposits at that site contained 256 dentalium shells, almost entirely from the high status House 1 (Wessen 1994b:353). The only other Makah-area site with reported dentalium is Tatoosh Island (E. Friedman 1976:156).
Highly valued metal objects were also important late precontact or protohistoric trade items. The late house deposits at Ozette contained small numbers of woodworking tools and knives with iron cutting blades, as well as pendants of copper (Wessen 1990:416). Perez noted small quantities of copper and iron among the natives who came out to his ship near the entrance to Nootka Sound in 1774 (Beals 1989:89; Moser 1926:163; Mills 1955:71). Four years later, Cook (1784:267) noted the abundance of iron chisels and knives among the natives of Nootka Sound, stating that they seemed "perfectly acquainted with the use of that metal." In trying to determine the source of metal implements, Cook discounted the Spanish who had preceded him by only a few years, considering iron "too common, in too many hands and too well known for them [the Nuu-chah-nulth] to have had the first knowledge of it so late" (Cook in Beaglehole 1967:321). Instead, Cook (1784:332) speculated that these objects were traded along aboriginal trade networks from more distant European sources. Mills (1955:71-72), on the other hand, argues that iron might ultimately have come from the Bering Sea region of Alaska, where it is found in archaeological contexts dating back several millennia. The late date of metal artifacts in Nuu-chah-nulth sites, however, supports Cook's contention that they were of European origin, rapidly distributed along native trade routes, reaching areas such as Nootka Sound in advance of direct European contact. Control of vital trade routes, such as the overland trails across Vancouver Island, would have greatly enhanced the power and prestige of chiefs.

While exchange systems at some level characterize virtually all human societies, the social context in which exchange occurs varies. The evolution of social hierarchies has been linked to the development of centralized redistribution systems, where chiefs controlled access to valued resources
(Earle and Ericson 1977; Earle 1994). Earle (1994), however, distinguishes between trade in the subsistence economy and exchange in prestige goods, maintaining that only the latter was a significant element in the development of complex societies. The West Coast dentalium trade would clearly be an example, as ethnographically access to dentalium procurement areas and control of the trade in dentalium were jealously guarded prerogatives of high status individuals. The ethnographic importance of trade among the Nuu-chah-nulth, however, is poorly reflected in the archaeological record.

**Status Distinctions**

Mortuary data provide one of the most productive avenues to the detection of social inequalities in the archaeological record (see, for example, Peebles and Kus 1977; Chapman, Kinnes, and Randsborg 1981; O'Shea 1984). Among other indicators, differential treatment in burial form and associated materials may reflect social differences during life. Burial of wealth items with certain individuals, including subadults and both sexes, suggests the presence of ascribed ranking, rather than that achieved during the lifetime of the individual. Such arguments have been used to present a convincing case that ascribed ranking characterized the Strait of Georgia region by Marpole times (Burley and Knusel 1989; Matson and Coupland 1995:209-210).

The lack of midden interments in West Coast sites, however, frustrates such analysis. Burials have been excavated at Shoemaker Bay and Little Beach, but both sites are early and neither can be encompassed within the West Coast culture type (see Chapter 4). No midden burials have been reported
for late West Coast sites predating European contact. Most human remains analyzed from Nuu-chah-nulth territory date to the historic period and involve above-ground disposal of the body in caves, rockshelters, or trees (Cybulski 1978; McPhatter 1986; Schulting and McMillan 1995), although human remains were found in the upper midden deposit at Yuquot (Cybulski 1980) and an apparent historic burial was excavated at Bamfield (McLeod and Skinner 1987). Artificial cranial deformation, frequently advanced as evidence for status distinctions in the Marpole period (Mitchell 1971:54; 1990:346; Matson and Coupland 1995:209), was noted on individuals from Yuquot, Hesquiat Harbour, and Bamfield. The frequent occurrence of this trait among historic Nuu-chah-nulth remains, plus ethnographic claims for the universality of this practice (Drucker 1951:122), make this trait unsuitable for use as an indicator of status distinctions in this area.

As little direct evidence for status distinctions exists in the archaeological record, we are forced to rely on ethnographic analogy. This is consistent with Trigger's (1989a:377) advocacy of a humanistic outlook, employing a direct historic approach. The continuity demonstrated at sites such as Yuquot supports the utility of such an approach. Status distinctions featured prominently in ethnographic Nuu-chah-nulth life (Drucker 1951:243-247; Arima 1983:67-71). Hereditary chiefs (hawilh) controlled access to all valued economic resources, coordinated group economic and ceremonial activities, distributed food and goods at feasts and potlatches, managed the supernatural realm through inherited secret knowledge, and were ultimately responsible for group prosperity and security. They were distinguished from other members of the

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5 As indicated previously, however, this does not mean that no such burials exist. Midden interments dating to this time were exposed, but not removed, at Hesquiat Village, Ch'uumat'a, and Tatoosh Island. Little analysis was done, and no reports are available.
society by occupying particular high-status areas of the houses and by wearing more elaborate clothing and ornamentation, at least on public occasions. Such traits are potentially recognizable in the archaeological record, and there are a few indications that such status distinctions characterized the entire period of the late West Coast culture type.

Drucker (1951:244) specifically mentions "ornaments of abalone shell and dentalia" as part of the more ornate costume that marked chiefly status. The limited occurrence of dentalia in West Coast sites, largely attributable to the absence of excavated mortuary contexts, has already been mentioned. Two abalone pendants, for suspension from the ears or nose, came from late prehistoric deposits at a Toquaht site (DfSj 30) on the George Fraser Islands (McMillan and St. Claire 1994). A number of small bone pendants and combs from various West Coast sites may have served the same type of function. Several fragments of decorated whalebone clubs from Yuquot, dating to about 2000 B.P., led Dewhirst (1980:341) to suggest that "status and ranking" was present that early.

More complete and convincing evidence comes from the waterlogged house deposits at Ozette. The abundance of carved and decorated items preserved at this unique site suggests chiefly patronage and control of inherited crest images. Particularly revealing is the occurrence of a large decorated wooden replica of a whale saddle (the area around the dorsal fin), suggesting chiefly rituals associated with whaling, as were known ethnographically. Differences in faunal assemblages between the houses at Ozette have been related to differing access to resources, reflecting status distinctions, between the social groups occupying them (Huelsbeck 1989, 1994a; Samuels 1989, 1994; Wessen 1988, 1994a; see also Chapter 3). Within House 1, which shows
evidence of being the most highly ranked, a concentration of dentalium shells and other wealth items occurred in one rear corner, ethnographically corresponding to the domestic space of the highest ranked individual. The spatial patterning of food remains in this house even led Huelsbeck (1989:166) to infer that feasts were being hosted by high-status individuals. Although these data relate only to the period immediately prior to European contact, they likely reflect social systems which had been achieved considerably earlier. Status distinctions are likely to have characterized much or all of the two millennia which make up the late West Coast culture type.

**Ideology/Cosmology**

Glimpses into perceptions people in the past held of their relationship with the supernatural world come from the images that they created that have survived the passage of time. These include carved bone and stone objects occasionally found in West Coast sites, abundant wooden artworks recovered from the waterlogged house deposits at Ozette, and the painted or carved images left on the rocks at a number of locations in Nuu-chah-nulth, Ditidaht, and Makah territories. With some caution, several archaeological sites can also be considered ritual places, reflecting ancient belief systems.

An underlying theme in Nuu-chah-nulth life is the ritual necessity to prepare and purify the body prior to any important undertaking. This included fasting, sexual continence, and ceremonial bathing, often scrubbing the flesh with hemlock boughs until it bled. Whaling was one of the most supernaturally charged activities and required more elaborate ritual preparation. The whaler might retire to an isolated location, where rituals could be carried out in secret.
Human corpses or skeletal elements and carved wooden representations of humans and whales were used in rituals at such locations. The Mowachaht whalers' "shrine" or "washing house," located on a small island in a lake near Yuquot, is the most famous example (Boas 1930:261-269; Drucker 1951:171-172). The entire shrine, including the wooden structure, nearly one hundred carved figures, and a number of human skulls, was disassembled and taken to the American Museum of Natural History in New York in 1904 (Cole 1985:161-163; Jonaitis 1988:183-185), in a move which still causes controversy and resentment (Nootka Sound & Picture Co. 1994). The former location of this shrine has been archaeologically detected and recorded (as site DjSp 6), although little remains but several post remnants and an area where the rocks have been removed to allow canoe access (Inglis and Haggarty 1984; Marshall 1992a:83-84). Ethnographically, Folan (1972:56) mentions another whaling shrine on Crawfish Lake, also on Nootka Island, and Brabant (1977:50) describes a whaling shrine with human skeletons that once existed at Hesquiat. Similarly, Drucker (1951:172-174) refers to whaling shrines among the Hesquiaht and Ahousaht, as well as a Muchalaht shrine used in rituals to ensure abundant salmon.

In addition to ritual preparation prior to whaling, ceremonial treatment of the whale followed the successful hunt. Mention has already been made to the ritual welcoming of the whale and the removal of the whale's "saddle" to the home of the whaling chief. The presence of a carved wooden effigy of a whale saddle in the house deposits at Ozette shows that this practice extends back into precontact times. Sea otter teeth inset into the side of the wooden effigy outline the image of the Thunderbird (tuta or tutuut-sh) with the Lightning Serpent (hiy'il'iik) (Daugherty and Friedman 1983:184). In Nuu-chah-nulth
mythology, the thunderbirds preyed on whales, hurling the lightning serpents as their harpoons (Sapir 1922:314; Drucker 1951:153). The frequent association of the thunderbird, whale, and serpent is a prominent feature of ethnographic Nuu-chah-nulth and Makah art, symbolically reflecting the cultural importance placed on whaling.

More modest welcoming rituals extended to certain other animals hunted. When a bear was killed it was set up in the house, sprinkled with eagle down in welcoming, and offered provisions (Jewitt 1967:96; Drucker 1951:180-181). After the bear was butchered and cooked, a feast was held. Although not mentioned in the ethnographies, special disposal of the bones may be associated with such treatment. A burial cave in Nootka Sound was found to contain about 22 bear skulls, along with other bones, perhaps representing ritual treatment of this animal (McMillan 1969:46-49). Similarly, a cave located in inner Clayoquot Sound near Kennedy River, containing seven bear skulls thought to be deliberately placed, has been interpreted as a ritual place (Arcas Consulting Archaeologists and Archeotech Associates 1994:58).

Depictions on artworks recovered archaeologically may also reflect such ritual beliefs. Small carvings in stone, bone, or antler, however, are rare in West Coast sites. The decorated handles of whalebone clubs from Yuquot and Macoah, the former with a simple bird-like head and the latter with the stylized Thunderbird characteristic of historic Nuu-chah-nulth examples, have already been mentioned (Figure 23). Such images reflect the importance of supernatural power in military endeavours. A small stone carving of a whale was recovered from late precontact deposits at Tukw'aa, as was a small zoomorphic bone pendant (possibly representing the Thunderbird), a bone fragment with an incised eye design, and a bone cut-out figure possibly representing a stylized
whale's tail (McMillan and St. Claire 1992). A cut-out and incised zoomorphic antler figure came from late period deposits at Ch'uumat'a (McMillan and St. Claire 1994). A cut-out bone figure of the Thunderbird, in typical Nuu-chah-nulth style, was excavated in historic levels at Yuquot (Dewhirst 1980:334-335). Among several decorated objects from the Ozette midden trench was a bone comb with an incised human face (McKenzie 1974:73). The relative paucity of such artworks reflects factors of preservation, as most artistic production was in wood.

The waterlogged deposits at Ozette clearly demonstrate the wealth of decorated objects that were part of Makah households in late precontact times. Boxes, bowls, clubs, tool handles, and other implements were embellished with fine carving, in a style characteristic of historic Nuu-chah-nulth and Makah art (Daugherty and Friedman 1983). Thunderbirds and wolves are depicted on a large incised and painted wall panel, while the outline image of a whale covers another. Thunderbirds and whales reflect the importance of whaling, while the wolf was the dominant supernatural figure in the most important Nuu-chah-nulth and Makah ceremonial (Ernst 1952; Moogk 1980; Drucker 1951:387-417; Curtis 1916:68-98; Arima 1983:152-159). Finely carved owl faces, dreaded by the Makah as transformed spirits of the dead (Ernst 1952:23), embellish both ends of a slender wooden club. As this shows no evidence of actual use, it may have been a ceremonial object (Daugherty and Friedman 1983:195). Human figures are also well represented in the artwork at Ozette.

One of the most enigmatic of archaeological site types, and one which holds the promise of casting light on past belief systems, is the category of "rock art." At 29 locations in the study area, images have been left on prominent rock surfaces. In 12 cases, these were painted in red ochre (pictographs), while at the
remaining 17 sites these were carved or pecked into the rock surface (petroglyphs). Figure 27 shows all rock art locations in the study area. Individual sites range from single depictions on a rock surface to large clusters of carved or painted images. At the Wedding Rocks site (45CA31) just south of Ozette, for example, over 40 carved images can be seen on a cluster of boulders extending for a considerable distance along the beach.

Several patterns seem to be clearly evident in rock art distribution in the study area (Figure 27). Pictographs are located along protected inner waterways, while petroglyphs are found in exposed outer coast locations. The only exceptions are two petroglyph sites in the Alberni Valley, at Sproat and Great Central lakes, and these may have been executed prior to the relatively late acquisition of this area by Nuu-chah-nulth peoples. Pictographs are concentrated in northern Nuu-chah-nulth territory, particularly in the inlets of Nootka Sound, where they are the only recorded rock art type. The only other pictograph sites are two locations in the inlets of upper Barkley Sound. Aside from the two Alberni Valley examples, the only petroglyphs recorded in Nuu-chah-nulth territory are outside Hesquiat Harbour and at Quisitis Point, in outer-coast Ucluelet territory. The Ditidaht have seven recorded sites, all petroglyphs, with two near Pacheena Point and five near the major ethnographic village of Clo-oose. Makah territory has six petroglyph sites, with two near the village of Archawat and four clustered near Ozette. All of the latter consist only of one or two images, with the exception of the major concentration at the Wedding Rocks site (Ellison 1977).

Typical images are those that characterize historic Nuu-chah-nulth, Ditidaht, and Makah art. Whales are prominent depictions at such large and important sites as Clo-oose Hill (Figure 30) and Wedding Rocks (Figure 31). The
Fig. 27. Location of recorded rock art sites in Nuu-chah-nulth, Ditidaht, and Makah territories.
thunderbird, with his distinctive downturned beak and frequently outstretched wings, is carved into the rocks at both the Blowhole and Hill sites near Clo-oose (Hill and Hill 1974:74,76,78) and painted in Nootka Sound pictographs (Figure 28). Fish are also featured at such petroglyph sites as Wedding Rocks and Quisitis Point, as well as in the pictographs at Effingham Inlet. Anthropomorphs are common, shown as heads (Figures 29, 31) or full figures, and are often engaged in activities. A full-bodied human appears to be holding a trophy head at the Clo-oose Hill site (Hill and Hill 1974:79), while at Wedding Rocks one human holds a whale and another uses what appears to be a fish spear or dip net (Ellison 1977:29,32). Rays emanating from the head of one anthropomorph with upraised arms (Hill and Hill 1974:69; Ellison 1977:32) may indicate shamanic power, although Ellison (1977:70) interprets these as a headdress used in whaling rituals. Sexual imagery is also common in Ditidaht and Makah petroglyphs. Among the other images carved into the sandstone bedrock at the Clo-oose Hill site is a copulating couple (Hill and Hill 1974:79), and vulvic depiction on anthropomorphs occurs at the Clo-oose sites, Carmanah Point, and Wedding Rocks (Figure 31). An isolated bisected oval, interpreted as vulvic imagery, is one of the most common elements of the rock art at Wedding Rocks (Figure 31, 33), and also occurs at another of the Ozette sites, one of the Archawat sites, Clo-oose Hill, and Pacheena Point.

Some rock art images may reflect specific myths or traditions. Marshall (1992a:79-80; 1992b), for example, interprets a pictograph site (DkSp 31) in Hisnit Inlet, Nootka Sound, in such a manner. The site consists of two anthropomorphic faces with radiating lines, suggesting sun figures. These may relate to the story of Umiq, the founding ancestor of the local group which occupied Hisnit Inlet. In this story, as originally recorded by Curtis (1916:183-
Fig. 28. Red ochre pictograph of thunderbird (DkSp 8), Hisnit Inlet, Nootka Sound (courtesy Yvonne Marshall).

Fig. 29. Photograph and drawing showing red ochre pictograph of anthropomorphic face (DgSh 7), Toquart Bay, Barkley Sound.
Fig. 30. Anthropomorphs and whales, Clo-oose Hill petroglyph site (DdSe 14). (photo from rubbing by Beth Hill, courtesy Royal British Columbia Museum)

Fig. 31. Petroglyphs on boulders at the Wedding Rocks site (45CA31) south of Ozette: left, anthropomorphic faces and whales; right, anthropomorphic figures with vulvic imagery.
186), Umiq was impregnated by a supernatural being and gave birth to four children whose origins were from the sun, including a boy whose "face was of dazzling brilliance" (Curtis 1916:184). The location and nature of this pictograph strongly suggest that it depicts an element of Umiq's story.

The two inland petroglyphs, located on lakes in the Alberni Valley, differ from other rock art in the study area. At Sproat Lake, a group of mythical marine creatures, with x-ray vision showing internal details, give the illusion of movement across a vertical rock face at the edge of the water (Figure 32). Stylistically, they closely resemble images at sites on the east side of Vancouver Island, such as the famous Nanaimo petroglyphs. Although Newcombe (1907) interpreted them as representations of the Nuu-chah-nulth *hiy'itl'iik* (Lightning Serpent), these finned creatures with sinuous bodies lack any counterparts in Nuu-chah-nulth rock art but are closely paralleled in the Nanaimo images (see Hill and Hill 1974:102). They provide yet another cultural link to the Strait of Georgia, and likely predate Nuu-chah-nulth arrival in the Alberni Valley. Sproat (1868:268) was unable to gather any specific information on these images from Tseshahaht and Opetchesaht informants, who could tell him only that "Quawteaht [Kwatyat] made them." Similarly, Boas, in an early article in a German journal, noted that the rock bluff into which the images were carved was said by his informants to be "the house of Quotiath [Kwatyat]" (Lundy 1974:312).

Although none of the rock art sites have been dated, they do not give an impression of great age. Few of the petroglyphs show signs of extensive erosion. Some of the pictographs are faded and indistinct, but others are still clear. Most images are assumed to date to the late precontact period. Ellison (1977), in an analysis of the petroglyphs near Ozette, links the style and motifs of the rock
Fig. 32. Detail of the Sproat Lake petroglyphs (DhSf 1), showing mythical marine creatures.

Fig. 33. Sailing ship and vulvic image carved on beach boulder, Wedding Rocks site (45CA31).
art to the late precontact artworks excavated in the buried house deposits. Some images, however, clearly post-date contact with Europeans. Several glyphs, at Clo-oose Hill and Ozette, appear to have been cut with metal blades (Lundy 1974:330; Ellison 1977:52), while others display items introduced by Europeans. Depictions of men on horseback occur in a pictograph at the end of Muchalat Inlet (Marshall 1992a:79; 1993:60) and a petroglyph at the Clo-oose Blowhole site (Hill and Hill 1974:76). An image at Wedding Rocks appears to be a man using a firearm (Hill and Hill 1974:66; Ellison 1977:43). Four detailed depictions of sailing ships occur on the rock ledge at the Clo-oose Blowhole site (Hill and Hill 1974:72-73; Ellison 1977:135), while another is carved on a boulder at Wedding Rocks (Figure 33). The Clo-oose Blowhole site also contains the detailed image of a steamship, almost certainly the Beaver, a Hudson's Bay Company ship which first appeared along the west coast in 1836 (Hill and Hill 1974:77; Lundy 1974:326). The arrival of this first steamer, belching black smoke as it traversed the coast, must have seemed an event worth commemorating among the other images on the rock.

Once again, the Sproat Lake petroglyphs may be an exception. Carlson (1993) has attempted to establish a chronology for rock art styles based on comparison with art from dated archaeological contexts. The bold curvilinear style of carving which characterizes the Sproat Lake and Nanaimo images is linked to art recovered from Marpole period sites in the Strait of Georgia. Through this analysis, Carlson (1993:8) places the Sproat Lake petroglyphs in the period between 2500 and 1000 B.P.

Questions of the function and meaning of rock art defy complete resolution, and certainly no one explanation encompasses all known rock art sites. Shamanism undoubtedly provides the underlying motivation behind the
creation of many rock art images (Carlson 1993; Hill and Hill 1974). Shamanic rituals, however, involved secret knowledge, and many of the rock art sites are in such prominent and public locations that other explanations must be sought. A similar motivation involves ritual attempts to gain supernatural control over the creatures and wealth of the sea (Hill and Hill 1974:283; Ellison 1977:172). This fits well with the Ditidaht and Makah petroglyphs, with their open-ocean locations and frequent depictions of whales and fish, but cannot explain all images at these sites. One of the Nootka Sound pictographs (DjSo 1) is on a prominent rock face overlooking a rockshelter burial site and may have served as a grave marker or memorial (McMillan 1969:45-46,50,53; Marshall 1993:60). The large prominent petroglyph sites near the villages of Clo-oose and Ozette could possibly have functioned as boundary markers. Whatever the immediate motivation, the rock art sites symbolized the fundamental values of Nuu-chah-nulth, Ditidaht, and Makah society, including the vital role of whaling, sexuality, and the myths of founding ancestors.

**Regional and Temporal Variation**

The West Coast culture type, as defined by Mitchell (1990), was based almost entirely on artifacts from Yuquot and Hesquiat. As additional excavation projects on the west coast of Vancouver Island are completed, variation in the culture type is becoming evident. Excavated data from Makah territory on the Olympic Peninsula, not considered in Mitchell's original formulation, can also now be encompassed within the culture type. Regional differences are discussed below and are shown in Tables 15 and 16. These differences, however, should not obscure the basic similarities in West Coast artifact assemblages, which are
heavily dominated by small bone points, bone bipoints, bone splinter awls, the valves and points of composite toggling harpoon heads, and abrasive stones. Typical artifacts of the later West Coast culture type are shown in Figure 34.

The Shoemaker Bay site remains outside the culture type for its entire period of occupation. The most recent component, Shoemaker Bay II, begins about 1500 B.P. (McMillan and St. Claire 1982). Abrasive stones are by far the most common artifacts, comprising 27.6% of the total for that component. Chipped stone points, ground stone points, and ground stone knives suggest close ties to sites of equivalent age in the Strait of Georgia. In fact, Shoemaker Bay II is best considered a component of the Strait of Georgia culture type. There are a few traits, however, such as the presence of bone fishhook shanks, that give this assemblage a distinct "West Coast" flavour.

Table 15 summarizes the artifact assemblages from five major excavated West Coast sites. Only Zone III at Yuquot, dating from about 1200 B.P. to the beginning of European contact, is considered here. T'ukw'aa and Hesquiat Village are contemporaneous large sites, both with initial dates of roughly 1200 B.P. Although Ch'uumat'a has dates as early as 3900 B.P. for its oldest deposits, only the period from 2000 B.P. to European contact is included here. The Ozette midden trench dates to roughly the same time span, although its initial date may be somewhat less. For comparability, some changes had to be made to the original investigators' artifact typologies. Reclassification has resulted in a certain amount of "lumping," reducing the total number of artifact categories. Differences in analytical procedures have also inhibited comparisons. At Yuquot and Ozette, for example, where artifacts were categorized according to presumed function, fragments which could not be assigned categories were eliminated from the analysis. As most of these fragments would have been bone,
Fig. 34. Artifacts of the later West Coast culture type: a, stone celt (Yuquot); b, stone fishhook shank (Yuquot); c, bone fishhook shank (Ch'uumat'a); d, mussel shell celt (T'ukw'aa); e, bilaterally barbed harpoon head (Ch'uumat'a); f, channeled valve for composite harpoon head (T'ukw'aa); g, slotted valve for composite harpoon head (Yuquot); h,i, bone bipoints (T'ukw'aa); j, bone point, probably a fishhook barb (T'ukw'aa); k, bone point, probably for arming a composite toggling harpoon head (T'ukw'aa); l, bone splinter awl (T'ukw'aa); m, barbed bone point, possibly an arrow point (Yuquot); n, single barb point, probably a fishhook barb (T'ukw'aa); o, bone needle (Ch'uumat'a); p, canine tooth pendant (T'ukw'aa); q, bone comb (T'ukw'aa). Length of 'a' is 7.1 cm; rest are drawn to same scale. Yuquot artifacts are redrawn from Dewhirst 1980; all others are drawn from originals.
this reduces the total percentage of bone in relation to other raw material categories as compared to the other three sites.

One of the distinguishing features of the West Coast culture type as originally defined is "the near absence of any flaked stone artifacts or flaking detritus" (Mitchell 1990:356). No such materials came from Zone III at Yuquot. They are also rare at T'ukw'aa and the upper portion of Ch'uumat'a. Although still only a small portion of the total, chipped stone was more abundant at Hesquiat Village. This site also had a wider range of items and materials, including a chipped jasper projectile point fragment, quartz crystal core fragments and possible microblade, and a cobble tool. Of the five sites, the Ozette midden trench had the largest numbers of chipped stone objects, consisting primarily of scrapers and other tools based on cortex flakes. Cores, scrapers, cobble tools, and other chipped stone implements were also relatively common at the late period Hoko River Rockshelter (D. Croes, pers. comm. 1995).

Ground stone tools, with the exception of numerous abrasive stones, were described as "comparatively infrequent" by Mitchell (1990:356). Stone celts and fishhook shanks occur in most West Coast sites. Ground stone points are restricted to the Toquaht sites, where they are found in small numbers. Ground slate knives are found at Ozette and are considered to be characteristic of late prehistoric shell middens on the Olympic Peninsula (Wessen 1990:414).

Major differences are evident in the relative importance of stone in the artifact assemblages of the five sites. At Yuquot and Hesquiat Village implements of stone make up over 50% of the artifact totals, while stone objects comprise only six to 15% of the total at the other three sites. The elimination of unclassifiable worked bone fragments from the artifact totals at Yuquot would
have raised the relative importance of stone somewhat, but this was not the case at Hesquiat. The high values for stone in these two sites is almost entirely attributable to the great quantities of abrasive stones that were excavated. Abrasive stones alone make up almost 55% of the artifact total at Yuquot and 48% at Hesquiat. By comparison, abrasive stones at the other three sites range from 3.7 to 5.2% of the totals. If abrasive stones were removed, stone artifacts would drop to very modest levels at all five sites.

The great importance of bone and antler, particularly the former, in the manufacturing technology is clearest at T'ukw'aa, where 92.5% of all excavated artifacts were of these materials. Particularly abundant are bone points of several styles and presumed functions, bipoints, bone splinter awls, and pointed bone fragments from such implements. At T'ukw'aa these together comprise over 70% of the artifact total. Bone bipoints, most presumably used as gorges for fishing although some may have served as barbs on composite fishing hooks or teeth on herring rakes, were particularly abundant at T'ukw'aa and Ozette, comprising 24.5% and 33.7% of the artifact totals, respectively. Valves for composite harpoon heads, of varying sizes and styles, were also common artifacts at all five sites.

Mussel shell artifacts also occurred in four of the five sites listed in Table 15, although in small numbers. At the Hoko River rockshelter, however, mussel shell knives were one of the most common artifact types. Ethnographically, mussel shell was an important raw material for knives and harpoon cutting blades. The comparative rarity of mussel shell tools at most excavated sites almost certainly stems from problems of recognition and recovery in middens consisting largely of mussel shell, often in a very poor state of preservation. Red
Table 15
Comparison of Artifacts from Five Excavated Sites

<table>
<thead>
<tr>
<th>Stone</th>
<th>Yuquot Zone III</th>
<th>Hesquiat Village</th>
<th>Tukw'aa</th>
<th>Ch'uu-mat'a*</th>
<th>Ozette Trench</th>
</tr>
</thead>
<tbody>
<tr>
<td>chipped projectile point</td>
<td>1 0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pebble/cobble tools</td>
<td>1 0.1</td>
<td></td>
<td>8 1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cores</td>
<td>12 1.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>flakes/ flake tools</td>
<td>2 0.2</td>
<td>3 0.2</td>
<td>2 0.6</td>
<td>28 4.9</td>
<td></td>
</tr>
<tr>
<td>pièce esquillée</td>
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<td></td>
<td>8 1.4</td>
<td></td>
<td></td>
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<td>ground slate points</td>
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<td>1 0.3</td>
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<td></td>
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<td>2 0.1</td>
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<tr>
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<td>3 0.3</td>
<td>1 0.1</td>
<td>8 2.3</td>
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<tr>
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<td>27 3.0</td>
<td>2 0.1</td>
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<td>4 0.7</td>
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<td>1 0.1</td>
<td>1 0.3</td>
<td>4 0.7</td>
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<td>edge-ground cobbles</td>
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<td>1 0.1</td>
<td>1 0.1</td>
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<tr>
<td>grooved sinkers</td>
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<td>hammerstones</td>
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<td>saws</td>
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<td>4 0.4</td>
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<td>abrasive stones</td>
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<td>433 47.9</td>
<td>61 4.3</td>
<td>18 5.2</td>
<td>21 3.7</td>
</tr>
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<td>Subtotal - Stone</td>
<td>503 58.4</td>
<td>491 54.3</td>
<td>85 6.0</td>
<td>36 10.4</td>
<td>88 15.3</td>
</tr>
</tbody>
</table>

<p>| Bone and Antler                            |               |                  |         |             |               |
| harpoon valves                             | 48 5.6        | 22 2.4           | 53 3.8  | 19 5.5      | 43 7.5        |
| harpoon arming points                      | 44 5.1        | 16 1.8           | 66 4.7  | 8 2.3       | 39 6.8        |
| other unipoints                            | 84 9.8        | 18 2.0           | 171 12.2| 37 10.7     | 42 7.3        |
| bipoints                                   | 32 3.7        | 66 7.3           | 345 24.5| 49 14.1     | 194 33.7      |
| awls                                       | 38 4.4        | 10 1.1           | 42 3.0  | 21 6.1      | 31 5.4        |
| needles                                    | 9 1.0         |                  |         | 9 2.6       | 2 0.4         |
| pointed bone frags                         | 93 10.3       | 407 28.9         | 84 24.2 |             |               |
| single barb points                         | 20 2.3        | 4 0.3            | 5 1.4   | 1 0.2       |               |
| barbed fixed points                        | 13 1.5        | 6 0.7            | 11 0.8  | 1 0.3       | 13 2.3        |
| barbed harpoons                            | 4 0.5         |                  | 3 0.9   |             |               |
| harpoon foreshafts                         | 5 0.6         |                  |         |             |               |
| wedges or chisels                          | 4 0.5         | 4 0.4            | 12 0.9  | 2 0.6       | 33 5.7        |</p>
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<td>dentalium shell beads</td>
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<td>0.6</td>
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<td>3</td>
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<td></td>
<td>1407</td>
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<td>347</td>
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<td>575</td>
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</table>

*Ch'uumat'a - deposits post-dating 2000 B.P. only.
ochre stains on a large clam shell from the Ozette midden show the use of such objects as containers, but this rarely can be detected archaeologically. Dentalium shells, presumably used as ornaments, were rare in these sites, as was discussed earlier in this chapter. Single examples came from the two Toquaht sites considered here, although they were more frequently encountered in the late precontact house deposits at Ozette. Olivella shells, with one end ground off to allow stringing as beads, came only from T'ukw'aa in this sample. These were widely used by the Makah for their ornamental value, and were found in some quantity in the Ozette house deposits (Wessen 1994b:352) and the Hoko River rockshelter (D. Croes, pers. comm. 1995).

Artifacts from the five sites listed in Table 15, plus the assemblage from Shoemaker Bay II (see McMillan and St. Claire 1982: Table 29), are further compared in Table 16. This table uses a Spearman correlation matrix, based on the ranked order of each artifact class. As expected, the two Toquaht sites of T'ukw'aa and Ch'uumat'a show relatively high correlation. Yuquot (Zone III) also demonstrates considerable similarity with the two Toquaht sites. Hesquiat Village correlates most strongly with Ch'uumat'a, then with Shoemaker Bay II. Shoemaker Bay II also shows moderately high correlation with Ch'uumat'a, although the correlation with T'ukw'aa is much lower. The artifact assemblage from the Ozette trench excavation is not closely linked to that from any of the Vancouver Island sites, appearing particularly dissimilar to Shoemaker Bay II.

Multi-dimensional scaling of the correlation matrix in Table 16 produced the plot shown in Figure 35. The degree of similarity between the assemblages is indicated by the distance separating them in this diagram. As the stress in two dimensions is 3%, the position indicated for the six sites is considered to be 97% consistent with the original correlation matrix. Although there is considerable
Table 16

Spearman Correlation Coefficients from Six Nuu-chah-nulth Area Sites

<table>
<thead>
<tr>
<th></th>
<th>Yuquot (Z. III)</th>
<th>Hesquiat</th>
<th>T'ukw'aa</th>
<th>Ch'uumat'a</th>
<th>Ozette trench</th>
<th>Shoemaker Bay II</th>
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</thead>
<tbody>
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<td>Yuquot</td>
<td>--</td>
<td>0.483</td>
<td>0.519</td>
<td>0.636</td>
<td>0.352</td>
<td>0.464</td>
</tr>
<tr>
<td>Hesquiat</td>
<td>0.483</td>
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<td>0.475</td>
<td>0.595</td>
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<tr>
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<td>0.519</td>
<td>0.475</td>
<td>--</td>
<td>0.602</td>
<td>0.385</td>
<td>0.375</td>
</tr>
<tr>
<td>Ch'uumat'a</td>
<td>0.636</td>
<td>0.595</td>
<td>0.602</td>
<td>--</td>
<td>0.413</td>
<td>0.565</td>
</tr>
<tr>
<td>Ozette trench</td>
<td>0.352</td>
<td>0.394</td>
<td>0.385</td>
<td>0.413</td>
<td>--</td>
<td>0.262</td>
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<tr>
<td>Shoemaker</td>
<td>0.464</td>
<td>0.514</td>
<td>0.375</td>
<td>0.565</td>
<td>0.262</td>
<td>--</td>
</tr>
</tbody>
</table>

DIMENSION 2

Fig. 35. Multi-dimensional scaling of six Nuu-chah-nulth area sites.
clustering, the Ozette trench assemblage is clearly differentiated from the others, as is, to a much lesser extent, Shoemaker Bay II.

Unfortunately, faunal analysis is incomplete for most sites, frustrating attempts at broader comparisons than simply artifact types. Differing levels of intensity of maritime adaptation were noted earlier in this chapter. At Yuquot, the most abundant mammalian remains were from coast deer (Dewhirst 1979), while whale and fur seal dominate the mammalian fauna from Hesquiat Village (Calvert 1980) and Ozette (Huelsbeck 1988, 1994a, 1994b). Resources from the land, such as deer and elk, played only a very minor role in the economy at Ozette. The outer-coast Toquaht sites are also thought to have had a highly maritime economy, although no data yet exist for the full range of species exploited.

Some change over time is also evident, although most tools that characterized this area at contact were present at the beginning of the period considered here, about 2000 B.P. Chipped stone implements almost totally disappeared from Ch'uumat'a shortly after 2000 B.P. On the Olympic Peninsula, however, chipped stone tools declined in importance over the two millennia of midden accumulation at Ozette, but continued in small quantities into recent levels and were common at the late period Hoko River rockshelter. Stone fishhook shanks appear relatively late in Zone III at Yuquot, substantially later than shanks of bone. At Ch'uumat'a, however, stone fishhook shanks occur somewhat earlier than at Yuquot and are about the same age as bone examples, while all fishhook shanks at Hesquiat Village and the Ozette midden trench are of stone. Stone celts greatly decline in numbers over time at the Toquaht sites. The large excavated sample from Tukw'aa, all post-dating 1200 B.P., contains a single stone celt, a reworked greenstone example
which differs considerably from all other stone celts found. Stone celts were much more abundant in the smaller artifact sample from Ch’uumat’a, with all but one found in levels which predate the earliest deposits at T’ukw’aa. It is possible that stone celts were largely replaced in Barkley Sound during the late period by celts of mussel shell, although only a few such implements were recovered, while at Yuquot stone celts continued into the historic period. Similarly, bone needles in Barkley Sound came only from Ch’uumat’a and only from deposits which predate the other excavated Toquaht sites, while they are found into historic levels at Yuquot.

The minor nature of temporal changes within the last two millennia can be seen at one of the Hesquiat sites, DiSo 9, a habitation cave in the upper harbour. Two precontact components have been defined within the midden deposits underlying historic surface burial materials (Calvert 1980; Haggarty 1982). Component I has four radiocarbon dates clustering around 1800 B.P., while component II has three clustering around 1200 B.P. (Table 5). Faunal analysis shows few differences between the two components. Fish elements dominate the faunal remains by bone count, with herring comprising just over half the total in each case. Salmon elements increase slightly from component I to II at the expense of midshipman. Among the birds, ducks increase at the expense of loons from component I to II. Sea mammals make up only a very small portion of the total bone count in both components, but are marginally more important in component I. The two components also contained basically the same artifact assemblages. However, although the small sample sizes make any comparisons tentative, implements of the food quest, such as bipoints and the valves and points of composite harpoon heads, were more abundant in component II.
Excavated materials from West Coast sites of this age reflect Nuu-chah-nulth culture prior to the disruptions of the early contact period. The temporal changes which can be shown to occur in this late period are, in general, few and gradual. After contact with Europeans late in the eighteenth century, cultural change became abrupt, pronounced, and, for some groups, catastrophic. The nature of these changes is discussed in the next chapter.
CHAPTER 6: THE TRANSITION TO RECORDED HISTORY

The late-18th century arrival of European ships off the west coast of Vancouver Island brought profound changes to the aboriginal inhabitants. It also brought a new concept of history, as something based on written documents. Aboriginal concepts of their history, maintained through oral narratives, received little attention. History became the study of European achievements, as recorded in written documents, while indigenous populations around the globe became "people without history" (Wolf 1982; see also Trigger 1984:360; 1985:17, 34), relegated to the subject matter of anthropology and perceived as essentially unchanging. Trigger (1980, 1984, 1989a, 1989b) rejects the "traditional dichotomy" between history and anthropology, characterizing such outdated views as "colonialist archaeology." Instead, he advocates an holistic approach to native history that incorporates all available knowledge, whether obtained through historic records, archaeology, linguistics, or native oral traditions.

A definitive historical treatment of the early contact period is far beyond the scope of this study. This chapter examines the impact of the early contact period on the Nuu-chah-nulth people and the nature of the cultural adaptations pursued by the Nuu-chah-nulth in these changing circumstances. It integrates data from historic records, indigenous oral histories, and archaeological research in an historical anthropological perspective to understand the events and cultural adjustments following contact. In assessing the magnitude of change over the past two centuries, it evaluates the applicability of ethnographic
information collected in the early 20th century as analogy in the reconstruction of late precontact and early contact period lifeways.

The Meeting of Two Cultures

Brief History

The first recorded encounter between Nuu-chah-nulth and Europeans occurred on 8 August 1774, as the Spanish ship Santiago, under the command of Juan Perez, anchored somewhere near Estevan Point at the entrance to Nootka Sound (Howay 1941:59; Gunther 1972:11; Cook 1973:63; Pethick 1976:42-43; Beals 1989:144-149). This early meeting became incorporated into native oral histories, which were recounted to subsequent European arrivals (Haswell in Howay 1941:59; Ingraham in Beals 1989:216; Moziño 1970:65-66). Although initially fearful, some Nuu-chah-nulth soon paddled their canoes out to examine what they perceived as a huge floating house with people walking on top (Moser 1926:164; Efrat and Langlois 1978:59-60). The Spanish conducted a brisk trade with these natives, exchanging iron knives and abalone shells from California for sea otter skins and native garments, including the distinctive Nuu-chah-nulth woven hats (Gunther 1972:12; Pethick 1976:43; Beals 1989:89; Moser 1926:162). This was a brief encounter, after which the Spanish departed without entering the sound or observing a native village. A second Spanish voyage in 1775 passed the west coast of Vancouver Island well out to sea and in poor weather, without coming into contact with native people.

It was the arrival of Captain James Cook on 29 March 1778 that ushered in the period of intensive contact between the Nuu-chah-nulth and

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1 In the Nuu-chah-nulth language the word *mamalhni*, meaning "living on the water," is still the term applied to any person of European descent.
outsiders. The famed British mariner, on his third voyage of discovery, spent nearly a month in Nootka Sound. He and his officers became the first Europeans to enter and describe a native village on the Northwest Coast, and the journals from this expedition provide invaluable observations on Nuu-chah-nulth life at this early period of contact. The Nootka Sound natives showed not "the least mark of fear or distrust" (Cook in Beaglehole 1967:295), eagerly going out in their canoes to guide Cook's ships into the harbour. Trade was the basis for much of the subsequent interaction between the two races. In exchange for metal objects so desired by the native people, the British obtained furs, artworks, and items of food. The extent of the native concept of ownership soon became clear to the British, as payment was demanded for wood, water, and any other use of the land, and John Webber, the expedition artist, had to surrender the brass buttons from his jacket before he was allowed to sketch the carved figures inside a house. Cook's initial impression that a profitable fur trade could be established was confirmed when the ships reached China and it was discovered that the thick, soft pelts of the sea otter obtained from the Nuu-chah-nulth could be sold at high prices. This was a discovery of momentous consequence for Northwest Coast peoples, turning Nootka Sound into a scene of international commerce in only a few years.

By the mid-1780s the rush for fur trade wealth had begun. The first of the commercial traders to arrive was Captain James Hanna in 1785, in a ship fittingly renamed the Sea Otter. Anchoring in Nootka Sound, he soon procured a "valuable cargo of Furs" (Gibson 1992:23), stimulating further commerce. British, French, Spanish, and American vessels soon were vying for pelts along the coast, but the trade was dominated by the British (called "King George Men" by the coastal peoples) and the Americans (known as "Boston Men" for their
home port). Nootka Sound remained the major trade centre, although the American captains favoured Clayoquot Sound. In the 20 year period between 1785 and 1805, nearly fifty trading expeditions arrived at Nootka Sound (Inglis and Haggarty 1987).

Hunting for sea otters was an ancient practice for the Nuu-chah-nulth, who highly valued the soft fur for their own robes or cloaks. These garments are described in several early historic accounts, which note that they were held in high esteem and were generally the mark of the noble class (Meares 1790:251; Moziño 1970:14; Jewitt 1967:38). Ethnographic accounts also associate such clothing with high status or wealthy individuals (Koppert 1930:51; Drucker 1951:103). These items virtually disappeared along the coast, however, as the fur trade made them too valuable to wear. Hunting techniques also changed, as single hunters with harpoons or bows and arrows were replaced by communal hunts under the direction of the chiefs, using lines of canoes to sweep across a broad area and to surround the animals (Drucker 1951:46-48; Mills 1955:38; Moon 1978:71; Arima 1983:47; Brabant 1977:94; Gibson 1992:8). As the Nuu-chah-nulth were already traders and sea otter hunters at contact, they required only the intensification of long-established skills to take advantage of the European desire for furs.

As early as Cook's arrival in Nootka Sound it was clear that Nuu-chah-nulth chiefs regarded the newcomers as an owned economic resource, in the same way that they would claim drift rights over anything that floated into their territory. Cook was well aware that the presence of his ships was causing some dispute between the people at Yuquot and their neighbours and that the former were monopolizing the trade, requiring others to go through them to obtain items of European manufacture. It also became evident that the people of Yuquot
were immediately exchanging the items they received from the British for additional trade commodities. As Cook (1784:278) noted:

... many of the principal natives, who lived near us, carried on a trade with more distant tribes, in the articles that they procured from us. For we observed, that they would frequently disappear for four or five days at a time, and then return with fresh cargoes of skins and curiosities.

Walker (1982:110), at Nootka Sound in 1786, noted the same control of the trade as Cook had earlier:

These Savages wished to secure all the advantages of our Commerce to themselves. They claimed the exclusive priviledge of buying or selling any thing. They carefully watched and excluded Strangers from any intercourse with us. At last indeed after they had sold all their own commodities, and exhausted the resources of the Sound, they admitted the other Neighbouring tribes to a Share in the Trade. But even this was done under restrictions. They constituted themselves the Agents or Brokers, and assumed the prerogative of introducing the new Comers to us.

Walker (1982:110) also reports the harsh measures taken by the residents of Yuquot when other natives attempted to violate this trade monopoly. Similarly, Meares (1790:142) describes the violent retribution exacted by Wickaninish at Clayoquot Sound when a stranger attempted to trade directly with the ship.

Three powerful native leaders, each controlling a large trade block, emerged early in the maritime fur trade period. Maquinna consolidated his political and economic power through his trade monopoly in Nootka Sound. He also dominated the trade of the more northerly Nuu-chah-nulth. In Clayoquot Sound, Wickaninish had expanded his power and territory through a series of aggressive wars. Even the important Chief Hanna of Ahousaht had to surrender his furs to Wickaninish before they could be sold (Meares 1790:146). Wickaninish controlled the trade at least as far south as Barkley Sound. As a result, this area was never able to emerge as a trading centre like Nootka or
Clayoquot Sounds as few furs were available, most being gathered by Wickaninish for his own trading purposes (Howay 1941:79; Magee 1794; Bishop 1967:106; Gibson 1992:115). According to Meares (1790:230), Wickaninish's domain extended as far south as "Nitta-natt." The third major economic force was Tatoosh, the powerful leader of the Cape Flattery villages. These three prominent chiefs maintained close social ties; their frequent visits to each others' villages are remarked upon in the 18th century accounts. Furthermore, they were all linked by ties of marriage (Marshall 1993:213), which served to consolidate alliances. Maquinna had acquired nine wives by 1803, each symbolizing the formation of an alliance with another group (Wike 1951:99).

Ritual elements featured prominently in the Nuu-chah-nulth view of the fur trade, at least at its inception. Canoeloads of people met Cook's ships, giving them a ceremonial welcome to Nootka Sound through speeches, songs, and dances. Cook (1784:266) noted a large decorated canoe carrying a prominent individual who appeared to be a chief, who shook a rattle carved in the form of a bird. This individual is described by one of Cook's officers (King in Beaglehole 1967:1394):

> He stood upright in the middle of the boat, & upon a plank laid across to be more conspicuous; the naked parts of his body & arms were painted with a red, & his face with a whitish paint, his head was wildly Ornamented with large feathers, which were tyed to a stiff string or sinew & fastened to the hair, so that they hung in different directions projecting from the head.

Another individual danced in his canoe, using two masks and wearing a wolf skin, while others sang, shook rattles, and threw feathers and red ochre on the water (Cook 1784:266; King in Beaglehole 1967:1394; Samwell in Beaglehole 1967:1089-90; Gunther 1972:19-20). Such actions must have seemed

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2 This, of course, would be the Nuu-chah-nulth pronunciation of "Ditidaht", referring to the large open-ocean villages of Whyac and Clo-oose.
incomprehensible to the British, who had no knowledge of native rituals for welcoming guests. As new groups arrived, each initiated trade with a ceremonial greeting.

On their first coming, they generally went through a singular mode of introducing themselves. They would paddle, with all their strength, quite round both ships, a Chief, or other principal person in the canoe, standing up with a spear, or some other weapon, in his hand, and speaking, or rather hollowing, all the time. Sometimes the orator of the canoe would have his face covered with a mask, representing either a human visage, or that of some animal; and, instead of a weapon, would hold a rattle in his hand...After making this circuit round the ships, they would come along-side, and begin to trade without further ceremony. Very often, indeed, they would first give us a song, in which all the canoe joined, with a very pleasing harmony. (Cook 1784:273-4)

A formal protocol, involving ceremonial greetings, gift exchange, and negotiations over price, characterized the actual trading. In 1788, Wickaninish honoured Meares with a feast and presented him with prime sea otter skins (Meares 1790:139-142). Such generosity required reciprocal gift-giving. The Europeans began attempting to evade such gifts, as they cost more than those received in trade (Howay 1941:265). Formalities might also involve the exchange of names; an Ahousaht chief took the name Hanna after such an exchange with the first of the European traders to arrive. The traders often resented such formalities as time-consuming and unproductive, but for the Nuu-chah-nulth trade had important political and social elements, rather than consisting merely of commercial transactions.

As European goods became commonplace, native demands shifted. Cook (1784:267) remarked that the natives of Nootka Sound "were more desirous of iron, than of any other of our articles of commerce." The market quickly became glutted, and by 1787 sheet copper was about the only article in steady demand.
at Nootka Sound (Wike 1951:39). In 1791 an American trader on the Columbia ruefully stated that "iron they would scarcely take as a gift" (Howay 1941:187). Colnett (1940:202) in 1790 was trading sheets of copper, blankets, and "ear shells" (almost certainly abalone from California), along with muskets. Boit, on the Columbia in 1791, noted that they "got many Sea Otter and Land furs" from the Chicklisahaht "for Copper, Iron and Cloth," and also bartered with beads and fishhooks for food supplies (Howay 1941:371). At Tatoosh Island the natives demanded copper for their furs, and exchanged halibut and salmon for nails and beads (Howay 1941:371-2).

Firearms also became major items of trade, supplied primarily by the American traders. The demand for muskets and gunpowder was such that Colnett (1940:202), at Clayoquot Sound in 1790, noted that "few Bargains can be made without it." By 1791 Wickaninish had acquired over 200 firearms and a large quantity of ammunition (Howay 1941:312). Maquinna had sufficient muskets to trade them, along with other European goods, across Vancouver Island by the overland trail, receiving additional furs in return. Menzies, with Vancouver in Queen Charlotte Strait in 1792, observed that the Kwakwaka'wakw were well supplied with muskets, which he determined had been obtained through trade with Maquinna, the "grand agent" of commerce (Newcombe 1923:80). Mozino (1970:48), at Nootka Sound in 1792, noted that firearms had replaced the bow and arrow for hunting land animals and shore birds. The new weapons also made inter-tribal warfare more deadly and posed a threat to the European traders.

Relations between the Nuu-chah-nulth and outsiders worsened considerably in the decades following Cook. This was to a large degree a result of highhanded and violent tactics employed by some of the traders. Driven by the
desire to make a large profit in a short period of time, some unscrupulous traders stooped to plundering native villages for their furs (Ingraham 1971:225; Kendrick 1991:87; Jane 1930:22; Jewitt 1967:92) or for supplies (Howay 1941:53), leaving the next arrivals to face the hostility of the victimized natives. The Spanish in Nootka Sound also stole house planks from native villages to use in their own buildings (Mozinó 1970:79; Cook 1973:285). Native thefts from European ships also led to violent retribution from the traders. After the theft of a chisel, Captain Hanna fired on native canoes in Nootka Sound, reportedly killing upwards of 20 people and forcing Maquinna to leap overboard and swim for his life (Jewitt 1967:92). In Barkley Sound, thefts from their ship led the crew of the Jefferson to attack the native village of Seshart, killing several people, ransacking the houses, and taking several of the best canoes (Magee 1794). On several occasions chiefs were forcefully held as hostages aboard the ships (Magee 1794; Colnett 1940:191; Howay 1941:186, 188). Many "unprovoked attacks" reported by traders stemmed from such behaviour by their predecessors in the area. Jewitt, held as a captive in Nootka Sound after such an attack, was well aware that his misfortune was largely a result of such native grievances.

I have no doubt that many of the melancholy disasters have principally arisen from the imprudent conduct of some of the captains and crews of the ships employed in this trade, in exasperating them by insulting, plundering, and even killing them on slight grounds.

(Jewitt 1967:93)

Even more disastrous for the Nuu-chah-nulth was the traders' violent reaction to perceived threats to their ships. When Colnett (1940:201) feared in 1790 that canoeloads of natives in Clayoquot Sound planned to attack his vessel, he drove them off with a volley of musket shot, then fired his cannon into
the major village of Opitsat. Much greater destruction came at the hands of an American trader, Captain Gray of the Columbia, in 1792. In response to a failed plot against his ship, Gray ordered the complete destruction of Opitsat by cannon fire (Howay 1941:390-91). Later, he used his cannon against "a large Canoe with at least 20 Men in her" and "no doubt kill'd every soul in her" (Howay 1941:395). He also attacked a village in Esperanza Inlet, killing several natives and taking their sea otter skins after a dispute over trading rates (Gibson 1992:163; Cook 1973:343; Jane 1930:22).

The destruction of Opitsat deserves special comment. Meares (1790:203) visited this village in 1788 and described it as "very large and populous," with houses "commodiously constructed, possessing a greater share of their rude magnificence than any which we had yet seen." The latter refers to his earlier observation of another of Wickaninish's villages, where he had been astonished at the vast size of the chief's house, and commented on the "gigantic images, carved out of huge blocks of timber" that supported the "rudely carved and painted" rafters (1790:138). The American traders stated that the Clayoquot villages were "larger and more numerousy inhabited" than those at Nootka Sound (Howay 1941:69), with about 200 houses at Opitsat in 1792 (Howay 1941:391). The house occupied by Wickaninsh was so large that Hoskins (in Howay 1941:263) estimated that 600 persons attended a ceremony there, with nearly twice as many observing from outside. Boit, who was charged by Gray with carrying out the destruction, expressed his regret:

I ... am greived to think Capt. Gray shou'd let his passions go so far. This Village was about half a mile in Diameter, and Contained upwards off 200 Houses, generally well built for Indians ev'ry door that you enter'd was in resemblance to an human and Beasts head, the passage being through the mouth, besides which there was much more rude carved work about the dwellings some of which was by no means
innelegant. This fine Village, the Work of Ages, was in a short
time totally destroy'd.

(Howay 1941:390-91)

In addition to such attacks, in some cases land was usurped by the European arrivals. An area at one end of the village of Yuquot was appropriated in 1788, when Meares set up an on-shore facility for building a boat. In the following year the Spanish under Martinez established a garrison at Yuquot in an attempt to enforce their claims to sovereignty over the coast. The seizure of British ships in Nootka Sound at that time precipitated an international incident. When Maquinna and his people moved to another village on the outer coast, the Spanish took over the village site, taking some building materials from the abandoned native houses. Martinez's autocratic manner alienated the native occupants of the sound, and his murder of Callicum, the second-ranked chief, led to the complete abandonment of the site by Maquinna, who went to Wickaninish for protection (Mozifio 1970:75-76; Colnett 1940:62; Wagner 1930:162). Not until the Spanish finally departed in 1795 did Maquinna and his people reclaim the site and rebuild their village. A second Spanish fort, constructed at Neah Bay in 1792, also led to hostilities with the local people. In retaliation for the death of a Spanish pilot, the commander fired on two canoes, killing most of the occupants (Wagner 1933:64; Howay 1941:409; Cook 1973:351). The Neah Bay fort was also short-lived, being abandoned after only a few months.

Such incidents fostered native desires for vengeance, leading to two well-known incidents of fur trade violence. In 1803, Maquinna reacted to being insulted by Captain Salter of the Boston by seizing the ship and killing all on board, with the exception of John Jewitt, the ship's armourer, and one other (Jewitt 1967, 1988; Brathwaite and Folan 1972). Maquinna's reduced economic
situation following his prolonged expulsion from Yuquot may have stimulated this attack as much as Salter's insult. The capture of this ship with its full trading cargo provided Maquinna with new wealth for trading and potlatching, restoring his diminished status. Jewitt (1967:38-40) describes the arrival of other Nuu-chah-nulth groups and the distribution of goods from the *Boston*:

> When the ceremony was concluded, Maquina invited the strangers to a feast at his house, consisting of whale blubber, smoked herring spawn, and dried fish and train oil, of which they eat most plentifully... On this occasion Maquina gave away no less than one hundred muskets, the same number of looking glasses, four hundred yards of cloth, and twenty casks of powder, besides other things... In this manner tribes of savages from various parts of the coast, continued coming for several days, bringing with them, blubber, oil, herring spawn, dried fish and clams, for which they received in return, presents of cloth, &c.

In 1811 the American ship *Tonquin* was attacked in Clayoquot Sound, but exploded and sank with loss of life of all aboard.

By this time the fur trade had long been in decline. Fewer skins and higher prices resulted in the trade gradually shifting northward. As early as 1793 Moziño (1970:91) noted that the natives of Nootka Sound had killed so many sea otters that they had destroyed the basis of the trade. Yuquot had become primarily a safe port to take on water and supplies. The massacre of the crew of the *Boston* may have temporarily enhanced Maquinna's economic position, but it put an end to Nootka Sound's reputation as a safe haven. Few ships passed this way in the ensuing several decades and the Nuu-chah-nulth lived in near-isolation until the mid-19th century, when a demand for dogfish oil to service the growing logging industry brought about a resumption of trade.
The Toquaht Case

It was the maritime sea otter trade that first brought the Nuu-chah-nulth of Barkley Sound into contact with Europeans. The first to arrive was Captain Charles William Barkley in the British trading vessel *Imperial Eagle*, who sailed into the sound in 1787. He named the sound after himself, and a number of prominent landmarks, such as Cape Beale, after members of his ship's company. Both Barkley and Captain John Meares, who arrived the following year aboard the *Felice Adventurer*, anchored in the Broken Group near the large native village of *Huuumuuwa*, where they traded for furs.

The earliest information which pertains directly to Toquaht traditional territory comes from the Spanish explorations under the command of Don Francisco Eliza in 1791. In May of that year the vessel *Santa Saturnina*, commanded by José Maria Narvaez, entered Barkley Sound, which they termed the "Boca de Carrasco" (Wagner 1933:146). The map of the sound produced by this expedition is reasonably accurate, showing such features of Toquaht territory as the Stopper Islands, the George Fraser Islands, and the lower portions of Toquart Bay and Pipestem Inlet (Archives of British Columbia, Maps Collection). Five native villages are shown in the sound, one of which is in Toquaht territory. It is placed about halfway along the western shore of the sound, immediately south of a major river. It seems likely that this would be the Macoah, the major ethnographic Toquaht village. However, as Macoah is not situated on a river, this may have been the small ethnographic fishing camp near the mouth of the Maggie River.

In 1793 Captain Josiah Roberts arrived in the ship *Jefferson* and wintered over near the head of Toquart Bay. An unpublished journal kept by his first officer, Bernard Magee, describes a village on the west side of the Sound "...
larger than any we had before visited" (Magee 1794). Magee described visits to
the ship by "Hiuquis\(^3\) the Cheeff of Tooquot." He noted that furs were difficult to
obtain as trade throughout the area was controlled by Wickaninish, the powerful
chief of Clayoquot Sound to the north. Wickaninish himself, along with several of
his brothers, appears among Magee's list of important chiefs who arrived in
Toquaht territory to trade with the ship, as does Hanna, chief of the Ahousaht.
He also reports the visit of "a Canoe from Clahaset," showing that the Makah
were traveling this far to trade. Relations between the European traders and the
Nuu-chah-nulth were occasionally uneasy, and at one point the chiefs "Hiuquis"
and "He:che:nook" were seized and held until restitution was made for various
items stolen from the ship.

The next ship to arrive was the Ruby under Captain Charles Bishop in
1795. Sailing into the western edge of the Sound, they were met by Chief
"Hyhocus" who came out to the ship "... in a Large can noe attended by many
Smaller ones." "Hyhocus" acknowledged that he was subject to "Wiccannanish
at Cloaqoit," who arrived within a few days to take part in the trade (Bishop
1967:106).

Several decades elapsed before another trading vessel is known to have entered western Barkley Sound. Pressures of the fur trade drove the sea otter to
near extinction on this part of the coast, forcing the trade to move north. Even
within Nuu-chah-nulth territory, Barkley Sound saw few trading vessels
compared to the major fur trade centres of Nootka and Clayoquot Sounds.
Ethnohistoric documents for the Toquaht area are lacking until resumption of
contact in the second half of the 19th century. By this time the fur trade was
long over, and contact centred on European settlement, commercial exploitation

\(^3\)Elsewhere in the journal this name is written as "Hyuquis".
of the land, and restriction of native people to small reserves within their traditional territories.

A brief resumption of trade by the 1850s was brought about by the demand for dogfish oil, required for lubrication by the developing lumber mills in the Fraser Valley and Puget Sound. A number of trading schooners, primarily American, visited Barkley Sound, and the various Nuu-chah-nulth groups there industriously caught and processed large quantities of dogfish for this trade. William Eddy Banfield, a British trader and later a colonial government agent, wrote a series of letters and articles describing the country and people of Barkley Sound. These provide comments and population estimates for all native groups in the sound. He refers specifically to "...a small tribe of Indians...called Taquats", noting with approval the natural abundance of their territory (Banfield 1858). By 1860 the first trading store in Barkley Sound was established in Ucluelet. The same year saw logging operations begin for the first export sawmill in British Columbia, which was established at the head of Alberni Inlet.

After British Columbia entered confederation, attention turned to the Indian land issue. In 1874 George Blenkinsop was sent to Barkley Sound by the federal Indian Commissioner to gather information on native needs and desires in regard to land. The account of his three-month sojourn among the Nuu-chah-nulth of Barkley Sound is filled with interesting observations. A map of tribal territories which he prepared shows the boundaries of Toquaht territory as confirmed by modern informants. "Hi.yoo.meek" is listed as chief of the Toquaht. Blenkinsop commented favorably on the resources in Toquaht territory, stating that, "Fish and game are abundant: their country is without exception beyond anything in this respect I have yet seen" (1874:34).
Peter O'Reilly, the Indian Reserve Commissioner, visited the various Barkley Sound groups to allocate reserves in 1882. He described the Toquaht as "solely fishermen, gaining their living by sealing and selling fish oil; in addition to which they subsist largely on salmon, halibut and herring, which are found here in profusion" (O'Reilly 1883:100). Five reserves were laid out for the Toquaht, led by a chief named "New-cha-na," who at this point numbered only 25 individuals. These reserves include their main villages of Macoah and Tukw'aa, plus their major salmon fishery on the lower Toquart River and two other fishing stations, but not the large village site of Ch'uumat'a, which had lapsed into disuse by this time. O'Reilly considered it unnecessary to allocate any further lands, as the people looked to the sea for their existence.

The Twin Spectres: Disease and Warfare

Encounters with the new arrivals during this early period of trade were to have unforeseen and catastrophic effects on the Nuu-chah-nulth. Intensification of indigenous patterns of warfare, plus a number of disastrous encounters with European cannons and muskets, claimed many native lives. Even more deadly was exposure to a variety of introduced diseases, which exacted a great toll of native life from earliest contact. The resulting depopulation forced major changes in fundamental aspects of Nuu-chah-nulth culture.

Various afflictions brought by early European explorers and traders plagued aboriginal communities. The most deadly, however, was smallpox, which had a catastrophic effect on native populations throughout the Americas (see, for example, Ramenofsky 1987). On the Northwest Coast this lethal disease
began its destruction of native life shortly after initial contact with Europeans (Boyd 1990, 1994; Harris 1994). It was present among the Ditidaht prior to 1791, when Hoskins (in Howay 1941:196) noted smallpox scars on Cassacan, the chief of "Nittenat" (the Ditidaht village of Whyac). Boit (in Howay 1941:371), on the same vessel, noted that "these Natives had been visited by that scourge of mankind the Smallpox," indicating that the evidence was fairly widespread. The first documented epidemic, which Boyd (1990, 1994) dates to the late 1770s and Harris (1994) to 1782, affected the Ditidaht and their Halkomelem and Straits-speaking Salish neighbours on Vancouver Island. There is no evidence that the Nuu-chah-nulth and Makah were impacted this early, but they were not to be so fortunate in subsequent epidemics which swept the coast. An epidemic in 1852-53 reduced an already depleted population (Drucker 1951:12; Boyd 1990:141). As late as 1875 Brabant (1977:38-41) described an outbreak of smallpox among the Mowachaht and Hesquiaht, which presumably affected other Nuu-chah-nulth groups.

Other infectious diseases, such as measles and influenza, spread rapidly among all coastal groups. Measles played a major role in reducing the Makah population throughout the 1840s, and an 1848 outbreak also affected the northern Nuu-chah-nulth (Boyd 1990:145). Tuberculosis also made an early historic appearance among the Nuu-chah-nulth (Schulting and McMillan 1995). Although this disease is known to predate European arrival in the Americas (Buikstra and Williams 1991), there is no convincing evidence from the Northwest Coast prior to the early historic period (Boyd 1990:137; Cybulski 1990:57; 1994:83). Tuberculosis is known to have been present among Captain Cook's crew at Nootka Sound in 1778, and a Nuu-chah-nulth individual with this disease was observed at this same location by Menzies in 1793 (Boyd
1990:137). As late as 1887 Brabant (1977:104-105; Moser 1926:116) was lamenting the loss of many Hesquiaht and Mowachaht children to measles, noting that many of the survivors then succumbed to "consumption" (tuberculosis).

Venereal diseases, transmitted by European seamen, were also rampant in this early period. Hoskins (in Howay 1941:196) noted in 1791 that Chief Cassacan of "Nittenat" was "troubled with the venereal." In the following year the Spanish at Nootka Sound observed that the Nuu-chah-nulth there were "beginning to experience the terrible ravages of syphilis" (Jane 1930:115). Venereal diseases not only killed many, but rendered large numbers of others infertile (Duff 1964:43; Mozino 1970:43), further contributing to a declining population.

Intensification of warfare in the early historic period, stimulated by the introduction of firearms and new trade rivalries, as well as by a destabilized economy as many groups concentrated on hunting sea otters and trading furs, also resulted in widespread and catastrophic loss of life. Groups such as the Tla-o-qui-aht were able to expand militarily at the expense of their neighbours due to their early superiority in firearms. In a war text dating to the late 18th century, at a time when the Barkley Sound groups did not yet have muskets, the Ucluelet used their alliance with the Tla-o-qui-aht to seize Effingham Inlet and eliminate the former occupants (Swadesh 1948:79; Sapir and Swadesh 1955:373-377). In a well-documented war of expansion, the Ahousaht nearly exterminated the Otosotaht and absorbed their territory early in the 19th century (Drucker 1951:344-345; Arima 1983:107-117; Webster 1983:59-64; Bouchard and Kennedy 1994:224-141). The Barkley Sound groups became embroiled in a deadly series of hostilities known as the "Long War," dating to
around the 1840s (Swadesh 1948:79-80; Sapir and Swadesh 1955:412-439; see Chapter 1). Intergroup warfare resulted in extinction of some groups and forced amalgamation of others, greatly reducing the number of independent political units among the Nuu-chah-nulth.

Population levels at European contact are unknown. Recent intensive archaeological surveys on western Vancouver Island (eg. Inglis and Haggarty 1986; Marshall 1992a) give the impression of a "filled landscape" prior to contact, with populations greatly exceeding those of the ethnographic period, although the problem of demonstrating site contemporaneity is a difficult one. An important early historic population estimate comes from Meares (1790:229-231), who in 1788 calculated the number of people under the authority of each of the major chiefs. Maquinna, in his estimation, had about 10,000 subjects, while Wickaninish had 13,000; Hanna and Detootche, two Ahousaht chiefs, were considered independent and credited with 1500 subjects each; Tatoosh, at Cape Flattery, had another 5000. This makes a total of about 31,000 people for the three "Nootkan" divisions. Arima et al. (1991:1-2) accept Meares's estimates as reasonably accurate, concluding that the early contact population was approximately 30,000. Boyd (1991) takes a more conservative approach, estimating that at contact the Nuu-chah-nulth population was at least 6000, while the Ditidaht and Makah together had another 4320 people. Epidemic diseases and intensified warfare rapidly resulted in great population losses. By 1885, when the first accurate census data became available, the combined Nuu-chah-nulth and Ditidaht population was about 3500 (Duff 1964:39). The population continued to decline until 1939, at which time the Nuu-chah-nulth and Ditidaht were reduced to a total of only 1605 people (Duff 1964:39).
Turning to Barkley Sound, and more specifically the Toquaht, we get a glimpse of the magnitude of destruction wrought by warfare and disease. The Toquaht loss of life is detailed in several of the war texts recorded by Sapir. Kwishanishim, Sapir's Ucluelet informant, tells how the Toquaht had "become few" prior to the end of the 18th century, through warfare with the Effingham Inlet tribes (Sapir and Swadesh 1955:373). By the end of the mid-19th century "Long War" in Barkley Sound, Kwishanishim notes that, "There were only a few Tukwaa [Toquaht] people now" (Sapir and Swadesh 1955:430). Throughout the late 19th century, Euro-Canadian observers noted the diminished state of the Toquaht and their neighbours and were well aware of the forces which caused their reduced numbers. Banfield (1858) stated that the Toquaht were "once a much larger tribe, but some ten years since they were engaged in an intertribal war with the Nitnats [Ditidaht], and in consequence were reduced to their present small number." Blenkinsop (1874:10) commented on the "numerous old village sites," which he felt "prove incontestably that the population of Barclay [sic] Sound must have been at no very remote period ten times its present number." He attributed this great population loss to "war in former years, and disease. . . in latter years." Turning specifically to the Toquaht, Blenkinsop (1874:32-33) commented that they were "dwindling away from a once powerful tribe to scarcely a tenth of what they were fifty years since." He further stated that:

Continual wars with their more powerful neighbours and disease have reduced them to their present weak state. On one occasion Dysentery swept off more than half the tribe, and smallpox and measles decimated them frequently. They are now the smallest tribe on the Sound.

Sproat (1868:104-5) refers to the "ancient . . . tribe of Toquahts, now reduced by war to a comparatively small number" and describes them as "the remnant of a
large tribe distinguished formerly in war. In addition, the former presence of the eleven Toquaht political subdivisions recorded by Boas (1891:584; see Table 2, Chapter 1) indicates that the population must once have been substantial. Table 17 lists population estimates for the Toquaht, beginning in the mid-19th century. By this time, however, immediately following the Long War, the Toquaht already had been greatly reduced in numbers.

Table 17
Toquaht Population Estimates

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Political and Settlement Pattern Changes

Depopulation forced major cultural adjustments, particularly in the political and economic realms. One of the most evident effects was the disappearance of many independent political groups. Some were forcefully incorporated into other polities by warfare, while others sought voluntary
alliance with related groups when their populations sank to levels that could not be sustained. In the latter case they often retained their name and a sense of separate identity, becoming a ranked component group of a larger political unit. The number of independent political groups among the Nuu-chah-nulth and Ditidaht continued to drop throughout the historic period, in a process extending well into the twentieth century.

The amalgamation of small local groups into larger "tribal" units brought about shifts in resource use and settlement pattern. Independent local groups, the basic Nuu-chah-nulth political form (see Chapter 1), tended to exploit a relatively small, culturally constrained territory from a year-round base. Amalgamation of several local groups produced a larger consolidated territory that could not be managed effectively from a single location. The development of the ethnographic seasonal round, with a fixed pattern of movement to specific locations to exploit seasonal resources, was an outcome of such amalgamations. This seasonal round became particularly pronounced when "outside" groups obtained rights to salmon rivers on the "inside," establishing late summer and fall camps at such locations. This stimulated further warfare, as groups lacking productive salmon streams attempted to acquire them by force. A Nuu-chah-nulth ideal became the control of a variety of resource areas, including both "inside" and "outside" locations. Expansion of group territories by the forceful seizure of such resource areas is a dominant theme in Nuu-chah-nulth oral traditions spanning the late 18th and first half of the 19th centuries (Swadesh 1948; Sapir and Swadesh 1955; Drucker 1951:37; Inglis and Haggarty 1986:321; St. Claire 1991:81-84).

While the above was a common pattern throughout the Nuu-chah-nulth area, considerable variation existed. The people of Hesquiat Harbour and
Muchalat Inlet remained at the local group level of political organization until late in the 19th century, while those from Kyuquot Sound to Nootka Sound formed confederacies. In Barkley Sound a series of bitter wars and conquests shaped the nature of the five existing "tribal" groups and their ethnographic territories, while amalgamation to form the modern Ditidaht appears to have proceeded primarily through peaceful means. Two specific areas, Nootka Sound and Barkley Sound, with differing patterns of post-contact political adaptations, are examined here.

Nootka Sound

The four northern Nuu-chah-nulth political units - the Mowachaht, Ehattesaht, Nuchatlaht, and Kyuquot - all formed confederacies early in the historic period. Such federated polities characteristically emerged after a period of warfare, when peace was established and rights to residential and resource locations were exchanged. Joint residence at a confederacy village during the summer months enhanced group solidarity, as did an integrated ranking of the chiefs, but individual political units within the confederacy maintained considerable autonomy and held their own village locations, to which they retired during much of the year.

Warfare continued to play a role in confederacy formation, as once such groups emerged their neighbours were either forced to form similar political units or were absorbed. The Nuchatlaht confederacy, for example, appears to have been created from the groups that remained after the Ehattesaht and Mowachaht confederacies emerged (Drucker 1951:228). Surrounded by these two newly-formed and powerful confederacies, the groups which comprise the historic Nuchahhtlaht would have had little choice but to amalgamate for
common defense. The Chicklisaht in the north and the Muchalaht in Nootka Sound survived as independent groups into the late 19th century, but ultimately joined the Kyuquot and Mowachaht, respectively.

The history of the Mowachaht confederacy is complex and occurred in a number of stages. Its formation, however, is better documented than that of any other Nuu-chah-nulth confederacy (Drucker 1951; Folan 1972; Dewhirst 1990; Marshall 1993). It provides a good example of the role of both warfare and alliances in creating more complex polities. It also illustrates the state of flux in political organization and territorial holdings experienced by Nuu-chah-nulth groups in the first century of contact.

Legendary history gives a dominant role to groups on the "outside" of Nootka Island. These were the people who invented whaling techniques and who received from the Wolves the major Nuu-chah-nulth ceremony (Drucker 1951:228). These also were the people who took the first steps in confederacy formation. Through alliances with independent local groups on Tahsis Inlet, each living year-round at a village on a salmon river, they gained their first holdings on the "inside" of the sound. Control of the upper portion of Tahsis Inlet, with its major salmon rivers and the entrance to the overland trail across Vancouver Island, was bequeathed to a chief of the outer coast people when the former occupants moved into Esperanza Inlet to join the Nuchatlaht confederacy (Drucker 1951:228; Dewhirst 1990:39; Marshall 1993:198). Warfare also played a role, as the outer coast people forcefully seized Yuquot (Folan 1972:43; Dewhirst 1990:38; Marshall 1993:197), driving out a group that formerly had been "the sole owners of Yuquot, and the largest tribe on the sound" (Curtis 1916:184). The resulting consolidated territory stretched from upper Tahsis Inlet to Yuquot and the open ocean sites of Nootka Island. Chiefs exchanged
rights to build houses at the major villages of Yuquot, Kupti, and Tahsis, and an economic round of seasonal movement between them developed. Folan (1972) and Dewhirst (1990) refer to this consolidated group as the "Yuquotalh," while Marshall (1993) terms this "the Yuquot-Tahsis confederacy."

This confederacy, along with a seasonal pattern of movement throughout the consolidated territory, was established before the arrival of Europeans in Nootka Sound (Curtis 1916:185; Folan 1972:42). In fact, Marshall (1993:156-160, 198) argues that it emerged as early as 300 to 400 years ago. She notes archaeological evidence for the expansion of Kupti and possibly Yuquot in the late precontact period, attributing this to seasonal occupation by a larger confederated population. At the same time, E'as, one of the original "outside" villages, appears to have declined in importance as the economic focus of the confederacy shifted to resources of the sound and inlet. Certainly the early historic descriptions make clear that the people of Yuquot in the late 18th century were engaged in a seasonal round of movement that took them from the outer coast beaches to upper Tahsis Inlet. Cook in 1778 speculated that the houses he observed at Yuquot were only seasonally occupied, stating that "one cannot look upon their houses to be any thing more than temporary habitations for the summer season when the fishery calls them down to the Sea coast, And it is very probable . . . that they have others farther inland which they retire to in the winter" (Cook in Beaglehole 1967:318). This speculation was confirmed by subsequent visitors to Nootka Sound, such as the American traders on the Columbia who visited Tahsis in 1789, describing it as "the winter village of the Uquat [Yuquot] Inhabitants" (Haswell in Howay 1941:83).

The relative rank of the chiefs of the confederated groups, publicly expressed through the order of seating in potlatches, became fixed. The highest
ranked position belonged to the head of a lineage from E'as, one of the "outside" villages (Drucker 1951:230). Throughout the early historic period the chief who held this position took the hereditary name of Maquinna. The second ranked position belonged to Callicum, who traced his origin to Tahsis, an "inside" location (Dewhirst 1990:43). Visitors to Yuquot in the 1780s noted the chiefly authority of both men, but recognized that Maquinna held the superior position (Walker 1982:67-68; Meares 1790:108). The other component groups also held ranked positions within the confederacy, retaining their individual identities and some measure of influence within the larger polity.

At the time of the early European observations at Yuquot, the villages in the eastern part of the sound were politically separate from the Yuquot-Tahsis confederacy. In fact, a state of warfare existed for at least part of this period, as Haswell (in Howay 1941:55) commented in 1788 that the inhabitants of Yuquot were at war with "the people of the opposite side of the sound." The villages in Tlupana Inlet had also politically amalgamated, bringing together a number of formerly independent local groups, each associated with a village at the mouth of a salmon stream. This tribal organization emerged as one group became dominant and offered its neighbours residential rights at the village of O'wis, in the upper sound (Drucker 1951:230). An integrated system of ranking for its chiefs and joint occupation of O'wis during the winter months consolidated this tribal grouping. Its chief, the head of the dominant local group, was Tlupananutl, who is frequently mentioned in the early historic documents for Nookta Sound. Tlupananutl's village is shown at the head of Tlupana Arm in a Spanish map of 1791 (in Mozifio 1970: plate 4). Menzies, at Yuquot with Vancouver in 1792, refers to an "aged Chief named Floopannanoo [Tlupananutl], whose Tribe occupied one of the North west branches of the Sound" (Newcombe 1923:115).
Vancouver's account of his 1794 visit to Tlupananutl's village of "Mooetchee" (Muwach'a) clearly recognizes the people of Tlupana Inlet as distinct from those at Yuquot, noting "the superiority of Maquinna's authority, when compared with that of the neighbouring chiefs; amongst whom Clewpaneloo [Tlupananutl] was reputed to be one of the first in wealth and power" (1984:1406).

The Mowachaht confederacy emerged through political amalgamation of the Tlupana Inlet people with the Yuquot-Tahsis confederacy. Tlupananutl was linked by marriage to Maquinna and it was through transfer of marriage rights at a potlatch that the Tlupana Inlet people acquired house sites and potlatch seats at Yuquot (Drucker 1951:230-31; Folan 1972:45; Marshall 1993:257). They continued, however, to winter separately at O'wis and to retire seasonally to their fishing stations in Tlupana Inlet. This union appears to have taken place early in the 19th century, as Jewitt's descriptions of visitors to Yuquot from Tlupana Inlet indicate that these were still separate polities as late as 1804 (Dewhirst 1990:41), yet the Tlupana people are said to have moved to Yuquot during the time of Tlupananutl (Curtis 1916:183), an aged chief when described by Vancouver and the Spanish in the 1790s. It took a considerable period of time, however, to work out an integrated series of ranking for their chiefs. In fact, Drucker (1951:230-31) states that it was not until the middle of the 19th century, when people began to live at Yuquot for much of the year and the occupants were invited as a single group to potlatches held by other Nuu-chah-nulth, that this was finally achieved. At this point the Mowachaht confederacy, as known through ethnographic descriptions, was established. Why the confederacy derived its name from Tlupananutl's village of Muwach'a is unknown (Drucker 1951:231; Folan 1972:37; Dewhirst 1990:40; Marshall
1993:257), but it reflects the shift in emphasis from outside resources to those of the inner sound and inlets.

A late stage in political union involved the Muchalaht, whose villages were along Muchalat Inlet at the eastern side of the sound and along the major rivers near its head. These villages existed as independent local groups, occasionally warring among themselves, until forced by outside aggression to consolidate (Drucker 1951:232). Around the mid-19th century the Mowachaht initiated a lengthy war of attrition, with the rich salmon fisheries of the Gold and Burman Rivers on Muchalat Inlet providing the incentive for attempted conquest. A leading figure in these hostilities was Shewish, the Mowachaht war chief who had taken political leadership when his elder brother, who held the title Maquinna, had died. The beleaguered Muchalaht faced additional threats, as the Opetchesaht crossed overland to attack villages on Gold River, as did the Namgis (Nimpkish) Kwakwaka'wakw from across the island, while the Ahousaht were raiding villages along Muchalat Inlet (Drucker 1951:234, 354, 356, 359). The death of Shewish at the hands of a Muchalaht war chief removed one of the chief instigators of the war and possibly saved the Muchalaht from annihilation. By the time the hostilities came to an end around the early 1870s, the Muchalaht survivors had consolidated at the village of Ahaminaquus (Aa7aminkis; DkSm 4), at the mouth of Gold River, where they had built a palisaded fort of cedar timbers (Drucker 1951:234, 363). The two small defensive sites (DkSm 2 and 3) recorded by Marshall (1992a:17-18; 1993:51-52) on either side of Gold River may also relate to these hostilities, particularly since at the time Shewish was killed the Muchalaht were living "at an old site just across the river [from Ahaminaquus] which they considered more defensible" (Drucker 1951:361). After building a large house at Ahaminaquus, the
Muchalaht chief invited the Mowachaht and Ahousaht to a potlatch, at which he sprinkled eagle down on his guests and formally established peace (Drucker 1951:353-365).

In the final decades of the 19th century the Muchalaht who had survived the war consolidated into a single group, although without an integrated ranking of potlatch seats (Drucker 1951:235). The marriage of a Muchalaht chief's daughter to the second-ranking Mowachaht chief led many of her relatives to follow her to Yuquot (Drucker 1951:231). When the primary Mowachaht chief died early in the 20th century, the position, including the name of Maquinna, passed to a Muchalaht man and most of the remaining Muchalaht joined the Mowachaht at Yuquot (Drucker 1951:231; Marshall 1993:263). The Muchalaht were never formally integrated into the Mowachaht confederacy, however, instead establishing and maintaining their own ranked series of potlatch seats. As joint residence encouraged continued intermarriage, individuals came to acquire potlatch seats and other privileges from both groups. Finally, in 1951 the Muchalaht formally joined the Mowachaht as a single band under the Canadian administrative system. Later, the federal government encouraged the entire band to move to the former Muchalaht site of Ahaminaquus at Gold River. Even today, however, traditions of separate histories are strong, and in 1994 the band was formally renamed the Mowachaht/Muchalaht4 (Canada, Indian and Northern Affairs 1995).

Marshall (1993:166, 265) maintains that historic settlement patterns in Nootka Sound remained relatively stable compared to Nuu-chah-nulth areas to the south. Archaeological survey of Nootka Sound revealed that most large shell

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4 A similar situation exists among the northernmost Nuu-chah-nulth. The Chicklisah formally merged with the Kyuquot band under the Canadian legal system, but continued to maintain their own chiefs and identity. Today both groups are members of the Kyuquot band, but they have begun to refer to themselves as the Kyuquot/Chicklisah.
midden sites continued to be occupied into the historic period, often into the 20th century. Furthermore, most ethnographic village locations had archaeological evidence of earlier use, indicating that few new sites had been established in this late period. People continued to return to previously established village locations, although the intensity and duration of occupation would have changed over time, as would the political composition of the site residents. The lack of evidence for widespread abandonment of older sites and the rarity of ethnographic sites with no archaeological presence suggests a different pattern of events than that seen from surveys in Hesquiat Harbour and Barkley Sound. It seems likely that the more complex political organization achieved by the northern Nuu-chah-nulth allowed them to make a more orderly transition to the contractions and amalgamations caused by historic depopulation, as opposed to the violent and disruptive events which characterized the early historic period in Nuu-chah-nulth areas to the south.

A prominent theme running throughout these early historic changes is the shift in emphasis from outer ocean resources to those of the protected inner sound and inlets. Outer coast sites such as E'as, formerly dominant in legendary history and the home of the highest-ranked division of the Mowachaht, declined in use throughout the historic period. Archaeological evidence comes from Yuquot, where excavation in the historic levels shows that less emphasis was placed on the procurement of open ocean fauna. Albatross, the dominant avian fauna throughout earlier levels, is reduced in importance while Canada goose remains become much more common, and mussel shells, which form much of the midden matrix from precontact levels, are largely replaced by clams of several species (Dewhirst 1979; McAllister 1980; Clarke and Clarke 1980). Large quantities of land mammal bones also show the historic importance
placed on hunting deer (Dewhirst 1980:347). The name of the 19th century confederacy, taken from the Tlupana Inlet village of Muwach’a, indicates the increasing importance of the upper sound and inlet locations. The Mowachaht, literally "the People of the Deer," were by this time focused on deer and salmon, while the whales which had preoccupied their ancestors played a role only in the oral traditions of a glorious past.

Barkley Sound

The first century of contact was a tumultuous period for the Barkley Sound Nuu-chah-nulth, who were devastated by warfare and disease. Most of the independent political units occupying the sound at contact were eliminated by these catastrophic forces. The few surviving political units are primarily 19th century amalgamations of formerly autonomous groups. Such amalgamations resulted in the abandonment of many large, formerly year-round village sites, while the larger territorial holdings of each amalgamated group stimulated an economic round of seasonal movement.

Unlike Nootka Sound, no single polity assumed control over all of Barkley Sound. In the late 18th century, however, Wickaninish exerted a trade hegemony over the sound. Captains Barkley in 1787 and Meares in 1788 were able to trade successfully for furs in the sound (Meares 1790:180; Hill 1978:37), but after that time Wickaninish forced local chiefs to trade their furs through him. Many of the early European visitors noted this control of trade exerted by the powerful Tla-o-qui-aht chief (Magee 1794; Bishop 1967:106; Haswell in Howay 1941:79). Wickaninish enforced his control through military power, telling the crew of the Jefferson at Barkley Sound that he had been forced to kill 40 people locally to keep them in line (Magee 1794). The list of tributary groups
given by Wickaninish to Meares (1790:230) in 1788 includes the Ucluelet and Uchucklesaht, with "Qu-quaet" probably referring to the Toquaht. Wickaninish's overlordship may not have extended to the eastern shores of the sound, however, as Bishop (1967:108) observed in 1795:

we where visited by two Chiefs from the East shore, their Names where Yapasuet & Annathat. They made some trade with us, and Promised to return . . . I believe these People are independant of Wiccananish, but speak the same language and are of the Same Manners . . .

This trade hegemony seems to have collapsed when the maritime fur trade came to an end. Wickaninish is not mentioned in the written accounts of the next period of contact in Barkley Sound, which began around the mid-19th century, nor is his influence recognized in the ethnographic traditions.

Evidence for extensive disruption and displacement shortly after contact is evident in the archaeological landscape of Barkley Sound. The areas which have been intensively surveyed provide evidence for a shift in settlement pattern in the recent period. In Toquaht territory, a number of ethnographically important village locations, occupied seasonally while fishing for salmon, have no archaeological deposits (McMillan and St. Claire 1991:69-70), suggesting a late development of the ethnographic pattern of seasonal movement. The same may be true for Alberni Inlet (McMillan and St. Claire 1982:32). In the Broken Group islands of the central sound, a number of large shell midden sites lack any ethnographic information (Inglis and Haggarty 1986:265, 279), suggesting early historic abandonment. Other large village sites, remembered by informants as origin places of various Tseshahaht sub-groups, were reduced to occasional seasonal use when the surviving occupants left to join other groups. During the process of amalgamation, sites which offered superior defensive capabilities or the best access to valued economic resources continued to be occupied, while
those less favoured fell into disuse. By the time the Reserve Commissioner
examined native land use patterns late in the 19th century, many large village
sites in the Broken Group were no longer being used, as was also the case for the
important Toquaht site of Ch'uumat'a.

The Tseshaht (*Ts'ishaa7ath*) offer the best-documented example of the
process of amalgamation in Barkley Sound. At least six formerly independent
political groups coalesced in the century following contact to form the modern
Tseshaht. Inglis and Haggarty (1986:279) suggest that there may once have
been as many as 15 separate local groups in the Broken Group islands, based on
the presence of that number of large village sites, indicating that the
ethnographic data may refer only to the later stages of a lengthy process of
amalgamation. From a small area in the outer islands of the Broken Group
occupied by the original Tseshaht local group, the amalgamated Tseshaht grew
to become one of the dominant political units in the sound, occupying all of the
Broken Group, the western portion of the Deer Group islands, most of the
northern shore of Barkley Sound, and much of the Alberni Inlet and the lower
Somass River in the Alberni Valley (Figure 3). Sapir (1922:307) describes the
Tseshaht as:

\[\ldots\] a cluster of various smaller tribal units, of which the
Ts'isha'ath, that gave their name to the whole, were the
leading group. The other subdivisions were originally
independent tribes that had lost their isolated distinctness
through conquest, weakening in numbers, or friendly removal
and union. Each of the tribal subdivisions or "septs" had its
own stock of legends, its distinctive privileges, its own houses
in the village, its old village sites and distinctive fishing and
hunting waters that were still remembered in detail by its
members. While the septs now lived together as a single tribe,
the basis of the sept division was really a traditional local one.

The process of amalgamation which brought the component groups
known ethnographically into the larger Tseshaht polity began shortly after
contact. The *Maktli7ii7ath*, neighbouring the original Tseshaht in the outer islands of the Broken Group, were among the first to be absorbed, probably in the late 18th century (St. Claire 1991:26). Wars with the *Hach'aa7ath* had so reduced their numbers that they could no longer sustain an independent existence. The *Hach'aa7ath* wars also nearly destroyed the *Waanin7ath*, originally an offshoot of the *Maktli7ii7ath* (Golla 1987:83, 88; St. Claire 1991:40), who were forced to rejoin their parent group and then move with them to merge with the Tseshaht. Somewhat later, wars with the *Hach'aa7ath* and possibly the Tseshaht brought the *Nash7as7ath* of the upper sound into the Tseshaht polity (St. Claire 1991:41-44). All these groups lost their autonomy, becoming subordinate to the Tseshaht, and their former territories were incorporated into the holdings of the larger political unit.

At the beginning of the historic period the *Hach'aa7ath* were a large and successful group, waging wars of expansion against most of their neighbours in Barkley Sound and raiding as far away as the Ahousaht and Ditidaht (St. Claire 1991:28). Their territory included some of the eastern Broken Group islands and the Vancouver Island shore along Sechart Channel, including the important site of *Hiikwis*. A war of subjugation against the *A7uts'ath* reduced the latter to a subordinate group and added Effingham Inlet to *Hach'aa7ath* territory. Along with the neighbouring Ekoolthaht (*Hikwulh7ath*), the *Hach'aa7ath* expanded up Alberni Inlet, seizing by conquest the rich salmon fishery of the lower Somass River (McMillan and St. Claire 1982:14; Inglis and Haggarty 1986:130-31; St. Claire 1991:30). After some conflict between the two groups, the *Hach'aa7ath* occupied the eastern bank of the Somass River, while the Ekoolthaht took the western bank. Before the end of the 18th century, however, *Hach'aa7ath* fortunes dramatically turned. In warfare with the Toquaht over
the location of their boundary, the *Hach'aa7ath* inadvertently killed a Ucluelet man. This brought the Ucluelet, along with their powerful Tla-o-qui-aht allies, into the war (Sapir and Swadesh 1955:373-377). Using trade muskets recently acquired by the Tla-o-qui-aht, the allies struck a devastating blow against the *Hach'aa7ath*. The few survivors eventually joined the Tseshahht, leaving the *Hach'aa7ath* to exist only as a component group of the larger polity.

The final group to join the amalgamated Tseshahht was the Ekoolthaht (*Hikwuulh7ath*). This once powerful group held territories in the upper sound and along the lower Somass River, which it had taken by conquest. The Ekoolthaht had become greatly weakened by warfare, losing many in the Qualicum Salish raids against the Opetcheshahht and other residents along the Somass River (St. Claire 1991:37). Blenkinsop (1874:41) referred to them in 1874 as "once a large tribe now numbering only forty eight men, women and children." As their population dropped they became increasingly associated with the Tseshahht, but still were considered a separate and independent group when observed by Blenkinsop in 1874 and Brabant (1977:52-53) in 1876. Blenkinsop (1874:41) described their situation:

> About sixty years since being hard pressed by the other Indians, and having through sickness and war become unable to cope with their enemies, they of their own accord joined the Se.shah.ahts [Tseshahht], as they say for protection only and did not at the time surrender the right to control their own lands. The latter however seem to look on them as a conquered race . . .

The Ekoolthaht complained to Blenkinsop that the Tseshahht had sold the Ekoolthaht land near the mouth of the Somass River to the new mill company without their consent, leaving them "living a wandering life and having no village they can call their own either for summer or winter" (Blenkinsop 1874:41). Blenkinsop recommended that they be assigned a separate reserve adjacent to
that of the Tseshahlt on the lower Somass River. Despite this recommendation, when Reserve Commissioner O'Reilly (1883) laid out the reserves in 1882 he failed to provide separate land for the Ekoolthaht, forcing their final amalgamation with the Tseshahlt.

Although these formerly independent local groups were absorbed into the Tseshahlt, they did not disappear. They retained their names and separate traditions, with their chiefs holding ranked potlatch seats within the larger grouping. The primarily role these component groups played among the amalgamated Tseshahlt, however, was as ceremonial units. Sayaach'apis, Sapir's main Tseshahlt informant, described the ceremonies taking place at Hiikwis:

> When living there, when all had come together, someone gave a potlatch. They went to dance with the other divisions possessing names in the village. When a Nashas [\textit{Nash}\textit{7as7ath}] person gave a potlatch, the whole Tsisshaa [\textit{Tseshahlt}] Band danced into the house. Then the Wanin [\textit{Waanin7ath}] Band danced in. Then the large Maktlii [\textit{Maktlii7ii7ath}] Band would all dance in. And they gave gifts to the Nashas. The Nachimwas [\textit{Nach'imuuwasi7ath}] Band also danced in. The Hikuuthl [\textit{Hikuulhi7ath}] people also danced in. The Hachaa [\textit{Hach'aa7ath}] people also danced in. That was the complete number of bands in the village of Hiikwis.
> (Sapir and Swadesh 1955:43-44)

Even after the Tseshahlt became an amalgamated group, considerable changes took place in their territories. During the Long War around the 1840s, when the Tseshahlt were greatly suffering from losses at the hands of the Ucluelet, they largely abandoned the Broken Group islands, instead wintering at a village on Sarita River in modern Ohiaht territory (Inglis and Haggarty 1986:133, 137). The site of Hiikwis at this time was held by the Ucluelet, as Sayaach'apis indicated that "the Ucluelet houses filled the space from end to end at Hiikwis" (Sapir and Swadesh 1955:412). By the end of the war the
Tseshaht had regained Hiikwis and made it their main winter village site. From Hiikwis people moved to Huumuuwa, a former Maktli7ii7ath site in the outer Broken Group which became the major summer village of the amalgamated Tseshaht. Sayaach'apis described how the people stayed together because of fear of the Ucluelets:

We always moved away [from Hiikwis] when the herring finished spawning. We would go to Huumuuwa (Village Island), the whole Tsishaa Tribe staying together because the war had ended only recently. We did not want to get separated.  
(Sapir and Swadesh 1955:39)

As tensions eased in the following years the individual component groups began to revisit their origin places in the Broken Group islands, using them as seasonal resource camps, while Hiikwis and Huumuuwa continued as the amalgamation sites (Sapir and Swadesh 1955:44-45; Inglis and Haggarty 1986:137). As the Tseshaht acquired rights to the Somass River through amalgamation with the Ekoolthaht and Hach'aa7ath they began to winter along the Somass, reducing Hiikwis to a seasonal camp used in the spring (St. Claire 1991:135). By the end of the 19th century the amalgamated Tseshaht were spending the winter on the Somass River at the Tsahaheh reserve, near the growing Euro-Canadian community of Port Alberni, and traveling to various seasonal resource locations along Alberni Inlet and the Broken Group islands from spring to fall. This set of activities was the seasonal pattern of movement that has been documented ethnographically (Sapir and Swadesh 1955:27-46; McMillan and St. Claire 1982:17-23). It reflects, however, only a late stage in a changing pattern of political organization and resource use in central Barkley Sound.

The modern Ucluelet (Yuulhuu7ilh7ath) are also the result of historic amalgamations, incorporating at least six formerly independent local groups
Three of these groups once occupied the open ocean shores of the Ucluth Peninsula and as far north as Green Point on Long Beach, where they bordered on the Tla-o-qui-aht. The remaining three had villages along the sheltered water of Ucluelet Inlet. That these were year-round villages is made clear by Kwishanishim, who told Sapir:

They were called the Ucluelet Arm Tribe because they lived there all the time. They only occasionally moved outside of that place.

(Sapir and Swadesh 1955:362)

Once again it was an "outside" local group that gave its name to the amalgamated polity, yet residence shifted to an "inside" location, in the territory of the Hitats'u7ath local group.

Early in the historic period, the Ucluelet embarked on several aggressive wars of expansion. Allied with the Tla-o-qui-aht, the Ucluelet destroyed the Effingham Inlet people and seized their territory (Sapir and Swadesh 1955:373-377). Their search for a productive salmon river also led the Ucluelet to wipe out the Namint7ath, an independent local group at the mouth of the Nahmint River on Alberni Inlet, in a series of raids (Sapir and Swadesh 1955:362-367). That this was carried out primarily by the Hitats'u7ath, prior to full amalgamation of the Ucluelet, is clear in Kwishanishim's comment that, "Only the Ucluelet Arm people without the other Ucluelets went on the war party" (Sapir and Swadesh 1955:363). The long journey to fish at Nahmint River hastened the process of amalgamation as it made the Hitats'u7ath vulnerable to attacks from the Ohiaht. The Hitats'u7ath offered the outer coast groups fishing rights at Nahmint and house sites at their village of Hitats'u in exchange for assistance against the Ohiaht (St. Claire 1991:60; Inglis and Haggarty 1986:157). The amalgamated Ucluelet then developed a seasonal pattern of movement throughout their consolidated territory, from the outer coast beaches to Alberni
Inlet. During the Long War of the mid-19th century the Ucluelet seized portions of Tseshaht territory and began to winter at the village of Hiikwis. These lands were lost by the end of the war and the Ucluelet, considerably reduced in numbers, consolidated at Hitats'u. By the late 19th century this was their principal community, although the outer coast villages were still seasonally occupied for halibut fishing and Nahmint remained their primary salmon fishery. Today the entire band resides on Ucluelet Inlet at the Ittatsoo (Hitats'u) reserve.

The modern Ohiaht (Huuzii7ath), whose territory covered all of eastern Barkley Sound (Figure 3), also formed through amalgamation of independent local groups. According to Sapir's informants, this process had begun prior to European arrival (St. Claire 1991:68-69; Inglis and Haggarty 1986:179). A war text collected by Sapir, "Uchucklesits Exterminate Kiihin" (Swadesh 1948:78; Sapir and Swadesh 1955:339-341), describes a war of expansion by the Uchucklesaht (Huuchukwtls7ath) against the Kiix7in7ath, who occupied the coastline from Banfield Inlet nearly to Cape Beale. In fact, the war affected all the groups of eastern Barkley Sound, who were defeated and made into subject peoples, while the Uchucklesaht seized the entire eastern coastline of the sound to Cape Beale and along the outer coast as far as Tsusiat River, well within modern Ditidaht territory (Inglis and Haggarty 1986:186, 189; St. Claire 1991:75; Clamhouse et al. 1991:231). Several of the outer coast local groups disappeared as independent polities at that time, either due to losses in warfare or as a result of a natural catastrophe, an earthquake and tsunami which destroyed a village in Pachena Bay (Clamhouse et al. 1991:230-231). By the time the Uchucklesaht were driven out, only two separate polities remained, the Kiix7in7ath along the coastline and the Ohiaht in the Deer Group islands and

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along the Sarita River. Later, a bitter war with the Clallum further reduced their numbers and forced the survivors to retreat to the Sarita River (Inglis and Haggarty 1986:190; Clamhouse et al. 1991:209). The Long War in Barkley Sound brought further losses, primarily at the hands of the Ucluelet. By this time the Ohiaht were a single amalgamated polity. When Blenkinsop described them in 1874 they were wintering at "Noo.muk.em.e.is" (Nakamii), at the mouth of Sarita River, and spending the summers at "Keh.ahk.in" (Kiix7in), the former village of the Kiix7inath near Banfield Inlet. Shortly after, Kiix7in was abandoned as the Ohiaht moved around the trading post at Dodger Cove in the Deer Group islands. In recent times the Ohiaht have resided at the Anacla reserve at Pachena Bay.

Like the Uchucklesaht, the Toquaht saw their former dominance greatly diminished in the early historic period. Formerly the most powerful group in the western sound, their fortunes declined as their population dwindled through disease and warfare and as they became eclipsed by the rising power of the Ucluelet. Modern Toquaht informants maintain, as discussed in Chapter 1, that the Toquaht once protected the inhabitants of Ucluelet Inlet. Certainly their large fortified village of T'ukw'aa, controlling the entrance to Ucluelet Inlet, put them in a position of dominance. However, this likely refers to a period prior to the amalgamation of the Ucluelet Inlet groups with the outer coast people. After amalgamation sometime early in the historic period, the Ucluelet presented a much more formidable political and military force. It was likely at that time that the Toquaht shifted their main village from T'ukw'aa, which was reduced to use as a seasonal resource camp, to Macoah, which is further up the sound and more distant from the Ucluelet. This move also would have allowed the Toquaht to protect their major salmon fishery on the Toquart River. Despite moving
further away from the Ucluelet, however, continued close relations with that group and declining Toquaht numbers nearly led to the disappearance of the Toquaht as a separate polity. During the Long War the Ucluelet had settled with the remaining Toquaht at a village on the Toquart River (see Chapter 1). Kwishanishim, who was himself half Ucluelet and half Toquaht, noted that the two groups "had now become one tribe" (Sapir and Swadesh 1955:427). Had the Ucluelet not initiated further fighting in an attempt to take ownership of the Toquart River, the Toquaht may have been absorbed peacefully by their larger neighbour.

The Toquaht may have been at a competitive disadvantage as other groups in Barkley Sound amalgamated. It is not clear whether Toquaht history involved amalgamation of independent local groups. Certainly their ethnographic territory is as large as several of the known amalgamations. Sayaach'apis told Sapir (1910-1914; St. Claire 1991:54) that the people of Macoah, the Ma7akwuu7ath, were once a distinct group which amalgamated and became subordinate to the Toquaht. Arima (1983:5) also states that the Ma7akwuu7ath were a separate group, joining the Toquaht only in the 19th century, but does not indicate the basis for this claim. Another of Sapir's Tseshaht informants, William, credited the Ch'uumat'a7ath, at the large village of Ch'uumat'a, with once being a separate tribe. Unlike the other Barkley Sound groups, however, no oral traditions of amalgamation remain among the Toquaht, nor are there separate ranked chiefly positions or potlatch seats. The relative lack of large abandoned shell midden sites, particularly when compared to the Broken Group islands, also suggests that amalgamation, if it occurred at all, involved only a few component groups. Opportunities for further peaceful amalgamation and consolidation of territory dwindled when the people of
Ucluelet Inlet joined with those of the outer coast of the Ucluth Peninsula. The Toquaht were then caught between two powerful and expansionist amalgamations, the Ucluelet and Tseshaht, contributing to their early historic decline in population and influence.

In summary, the post-contact period in Barkley Sound, as at Nootka Sound, was marked by a shift from outer coast locations and resources to those of the upper sound and inlets. The original Tseshaht were a small local group occupying several outer coast islands. Eventually they became part of a much larger amalgamated polity with a greatly increased territory, shifting their winter residence first to the upper sound and then to the end of Alberni Inlet, along the Somass River. The limited nature and extent of archaeological deposits along Alberni Inlet suggest that this pattern of seasonal movement developed only recently. The Ucluelet, who also take their name from an outer coast local group, consolidated on Ucluelet Inlet while maintaining their important salmon fishery on Alberni Inlet. The Toquaht moved from the large outer coast village and fortress from which they derive their name to their 19th century principal residence on the upper sound. These shifts of residence entailed changed patterns of resource use, requiring development of a seasonal round of movement.

Barkley Sound and Nootka Sound were examined here as specific examples of a more widespread pattern. Similar changes, involving a reduction in the number of independent local groups and a shift from outer coast to "inside" locations, were taking place throughout the territories of the Nuu-chah-nulth and their relatives. The Ditidaht retained a number of independent polities and outer coast villages into quite late times, but eventually consolidated at their modern village on Nitinat Lake. Even the Makah, whose territory lacks
"inside" sounds or inlets, eventually abandoned the outer coast villages such as Ozette and Tsoo-yess for the comparatively sheltered location on Neah Bay where their modern community is situated.

**Culture Change and the "Ethnographic Present"**

Pioneering anthropologists among the Nuu-chah-nulth, as among other native peoples, assumed the presence of an earlier "traditional culture" that could be recovered and recorded through the knowledge held by elderly informants. Working early in the 20th century, anthropologists such as Sapir, Drucker, Curtis, and Koppert viewed themselves in a race with "progress" to record the traditional knowledge of native communities before it was irretrievably lost. The memories of their oldest informants, however, could extend back only to the middle or late 19th century. This period of time then became the "ethnographic present," characterized by an essentially unchanging "traditional culture," minimizing changes that had occurred earlier in the historic period. In fact, as the "ethnographic present" floated in a timeless state, indigenous cultures were rarely viewed in an historical perspective. Little recognition was accorded to cultural changes that occurred before the late advent of extensive acculturation to Euro-Canadian society.

Yet, as outlined in this chapter, aspects of native cultures were subject to constant restructuring throughout the period following European contact. Disease and warfare were driving factors, as declining populations destabilized economies and forced new political accommodations. Small local groups living year-round in one place were transformed into amalgamated units with larger territories, requiring a seasonal round of activities to manage resources
effectively. In the "traditional culture" as it became ethnographically known, the seasonal round was a universal Nuu-chah-nulth pattern. Even the political units of ethnographic study, such as the Mowachaht and Tseshaht, were 19th century amalgamations which do not represent the nature of the societies encountered in the same areas during the first decades of recorded contact.

Similar patterns of change were occurring among other coastal groups during the early contact period. Galois (1994) has documented extensive early historic shifts in settlement pattern among the neighbouring Kwakwaka'wakw. Recent archaeological research among the Haida of the southern Queen Charlotte Islands also shows a shift from numerous small year-round settlements in the period prior to contact to the large seasonally-occupied villages that were recorded ethnographically (Acheson 1995).

The ethnographic documentation of a fixed pattern of seasonal movement is suspect even for quite late periods. Among the Makah, for example, Swan (1870) lists five "winter villages," yet, through analysis of faunal remains recovered archaeologically, Huelsbeck and Wessen (1995) argue that at least some people were living at these sites throughout the year. Even place name research with modern Nuu-chah-nulth informants suggests that the pattern was more flexible than that indicated by the ethnographies. For example, a Toquaht informant maintained that some people lived at Macoah year-round, as "a sort of headquarters for all the creeks around" (St. Claire 1991:71). Although populations certainly would have fluctuated with the availability of seasonal food resources in other locations, it is likely that many of the major Nuu-chah-nulth villages had a permanent core of residents.

Recognition of extensive cultural change in the early contact period debunks the myth of an unchanging "traditional culture" stuck in the
"ethnographic present." Although few would argue that native life had been static, the ahistorical nature of these concepts discouraged consideration of the nature and extent of culture change. Ethnohistoric and ethnographic observations spanning a considerable period of time frequently have been conflated into a single description of "traditional" native lifeways (Stahl 1993:246; Lightfoot 1995:204). Sahlins (1985:xviii), in advocating a more historically aware anthropology, dismisses the long-held anthropological view of a timeless "ethnographic present" as "a kind of occupational and theoretical hazard." Anthropological perceptions of the "ethnographic present" implicitly served to perpetuate the colonialist myth of the "unchanging native" so effectively attacked by Trigger (1980, 1981, 1984, 1985).

Evidence of early historic cultural change challenges the use of ethnographic data in interpreting the archaeological past. As argued in this chapter, the cultures observed by Cook and Vancouver differed markedly from those carried in the memories of elderly Nuu-chah-nulth individuals interviewed by Curtis and Drucker. Imposition of ethnographic data on the archaeological past precludes recognition of differing earlier patterns, a problem that Wobst (1979) refers to as "the tyranny of the ethnographic record in archaeology." Similarly, Marshall (1990:124) maintains that such an exercise serves only "to colonize the past from the present." Trigger (1981:13; 1985:28) argues that any "ethnographic present," if it is meant to describe cultures prior to European-induced changes, will have to be defined archaeologically.

Clearly the lack of historical perspective inherent in the concept of the "ethnographic present" must be countered and caution must be exercised in how ethnographic data are used in archaeology. Despite these concerns, however, there are many aspects of Nuu-chah-nulth culture that appear to have a
lengthy continuity. As discussed in Chapter 3, many archaeological discoveries at Yuquot, for example, have direct counterparts among the historic Nuu-chah-nulth occupants of Nootka Sound. While the Nuu-chah-nulth pattern of resource use across the landscape appears to have changed considerably during the historic period, the technology of resource procurement remained relatively constant until very recent times. Belief systems, ceremonial practices, rules for tracing descent, and other basic aspects of Nuu-chah-nulth life seem to have survived the tumultuous years of rapid change relatively intact. Even political groups which had lost their independence survived as ceremonial units within the larger polities. Oral traditions collected by the ethnographers also hold great value, providing insights into history from a native perspective. Although ethnographic information cannot be extended uncritically into the past, such data provide a rich body of knowledge for comparison with that generated archaeologically. The integration of these distinct sets of data, along with contributions from fields such as historical linguistics, provides the basis for an holistic archaeology.
CHAPTER 7:
DISCUSSION AND CONCLUSIONS

Trigger's "holistic archaeology" provides the theoretical framework for this dissertation. In this approach, all relevant sources of knowledge must be integrated in a multi-faceted reconstruction of aboriginal history. Archaeology, historical linguistics, and aboriginal oral traditions play vital roles in investigating the Nuu-chah-nulth past, with ethnography and ethnohistory enriching our knowledge of the later time periods. Geological factors must also be taken into consideration, particularly in interpreting the limited evidence for the earliest sites on western Vancouver Island. Integration of such approaches allows a broad perspective on the unique culture history of the Nuu-chah-nulth, Ditidaht, and Makah peoples.

Linguistic evidence allows speculative reconstruction of Nuu-chah-nulth origins and spread. Through several lines of analysis the Wakashan homeland is suggested to have been on northern or northwestern Vancouver Island (see Chapter 2). Several scholars, on both linguistic and archaeological grounds, argue that the northern branch, containing the ancestors of the Kwakwaka'wakw and the Heiltsuk, expanded to the adjacent mainland, disrupting a Salishan continuum and isolating the Nuxalk in the Bella Coola valley. Mitchell (1988:282-285) has suggested, based on changes in artifact and faunal assemblages at sites along Queen Charlotte Strait, that a population replacement took place sometime between 500 B.C. and A.D. 300.

The southern branch, which ultimately gave rise to the Nuu-chah-nulth, held western Vancouver Island at least as far south as Nootka Sound, as
indicated by the evidence of continuity at Yuquot. As the ancestors of the Nuu-chah-nulth expanded down the coast to around Barkley Sound, a series of dialectal differences emerged. Linguistic and ethnographic evidence suggest that the Vancouver Island coastline south of Barkley Sound was formerly held by members of the Salishan family, while the northern Olympic Peninsula was occupied by Chemakuan peoples (see Chapter 2). A final southern Wakashan expansion dislodged these groups and gave rise to the Ditidaht and Makah. These closely related languages, with little dialectal variation, represent a fairly recent split from Nuu-chah-nulth. Their arrival on the northwestern corner of the Olympic Peninsula seems to have occurred prior to 2000 B.P., based on initial dates from Ozette and Neah Bay (see Chapter 3). Claims for cultural continuity at Ozette, however, are based on data recovered from the main excavation trench, which is poorly dated. Linguistic evidence (see Chapter 2) suggests an even later arrival, at about 1000 B.P., a time which would appear to be somewhat too late to account for the archaeological evidence. According to the oral traditions, the ancestors of both groups may have lived on the Olympic Peninsula until the people who were to become the Ditidaht moved to the adjacent coast of Vancouver Island. Only these southern groups have traditions of having lived elsewhere, with Ditidaht oral histories, in particular, telling of various earlier villages and relocations, prior to settling around Nitinat Lake and the adjacent outer coast.

The evidence from Barkley Sound is inconclusive, but it too may have been occupied by non-Nuu-chah-nulth people prior to a late Nuu-chah-nulth expansion, perhaps about 2000 B.P. (see Chapter 4). Evidence comes from the Little Beach site at Ucluelet and the lower component of the Shoemaker Bay site in the Alberni Valley. Both are linked by distinctive forms of lithic artifacts
to the Locarno Beach culture type in the Strait of Georgia region. However, Shoemaker Bay, at the end of the long Alberni Inlet, is only a short distance from the Strait of Georgia and Nuu-chah-nulth arrival is known to have been recent, perhaps around the time of European contact (McMillan and St. Claire 1982; St. Claire 1991; see Chapter 2). The Little Beach site has too small an artifact sample to make conclusive statements. Comparison with the lower portion of the nearby Toquaht site of Ch'uumat'a failed to resolve the issue (see Chapter 4). Although Ch'uumat'a contained chipped stone objects like Little Beach and Shoemaker Bay, the majority of artifacts recovered were the bone points and other objects typical of the West Coast culture type. The Nuu-chah-nulth would have arrived in Barkley Sound from the north, first settling in what became ethnographic Toquaht territory. This may explain the ethnographic tradition that the Toquaht were the original Barkley Sound group, from which the others emerged (Sproat 1868:19).

The Hoko River wet/dry site on the Olympic Peninsula offers a challenge to this speculative scenario. Like Shoemaker Bay and Little Beach, this site, which was first occupied about 2800 B.P., contains distinctive stone tools which are characteristic of the Locarno Beach culture type in the Strait of Georgia region. Croes (1987, 1988, 1989, 1992a, 1992b), however, maintains that such artifact types mark only "adaptive plateaus," and that basketry and cordage provide much better insights into ethnicity in material culture (see Chapter 3). His identification of the Hoko River perishables as ethnically Makah places the Makah on the Olympic Peninsula earlier than the linguistic or other archaeological data. One possibility is that the expanding southern Wakashan population that gave rise to the Makah leap-frogged over a still-Salish coast from about Barkley Sound south to settle on the Olympic Peninsula. Only later,
in this view, did the Ditidaht split off from the Makah to take over the southern portions of the west coast. Perhaps at this time Nuu-chah-nulth expansion reached Barkley Sound. Another possibility is that the basketry and cordage at Hoko River actually represent the handiwork of Chemakuan peoples, distantly related to the Wakashans according to Powell (1976).

A basic problem is that the archaeological record provides only limited insights into past ethnicity. Items of material culture cannot be expected to correspond exactly with any distinct ethnic group. Integrating archaeology, linguistics, and oral traditions provides a multi-faceted approach that may partially surmount this problem, although any correlation of specific linguistic groups and objects recovered archaeologically remains speculative. The most convincing claims involve direct continuity in the archaeological record from known historic occupants back in time. Such is the case at Yuquot, where Dewhirst (1978, 1980) has argued that most culture change involves more complex artifacts emerging from earlier and simpler forms. This demonstrated cultural continuity allows a direct look at evolving Nuu-chah-nulth material culture as early as 4200 B.P. Such lengthy cultural persistence cannot be demonstrated at more southerly Nuu-chah-nulth sites. We still have very limited knowledge of the period prior to about 2000 B.P. throughout Nuu-chah-nulth, Ditidaht, and Makah territory.

All of the earliest sites in the study region, with the exception of the culturally distinct Shoemaker Bay site, are on or near the open ocean shores. Increased efficiency in technology for taking such open ocean resources as whales and fur seals allowed and promoted expansion along the outer coast. Clusters of defensive sites in outer coast locations, particularly guarding the entrances to the major sounds, were established to control access to individual
group territories (see Figure 24). Some may date to the initial population movements along the outer coast, although many clearly featured in later conflicts. In the oral traditions collected ethnographically, outer coast groups frequently held a dominant position.

A shift to "inside" locations can be documented late in Nuu-chah-nulth culture history (see Chapter 6). In a process which continued into historic times, outer coast groups, through warfare or alliance, acquired important "inside" resource locations, particularly salmon rivers. The depopulation brought about by historic warfare and diseases resulted in new amalgamated social units, holding a variety of local environments that had previously been the exclusive territories of their constituent groups. A seasonal pattern of movement developed to exploit the resources of these larger and more diverse territorial holdings. The Nuu-chah-nulth cultures documented ethnographically by Drucker, Curtis, and others reflect this late period of amalgamated polities with seasonal economic rounds.

Table 18 presents a summary of Nuu-chah-nulth culture history as interpreted from information presently available. Gaps in our knowledge are clearly evident, particularly for earlier time periods. The nature and timing of the Wakashan expansion south, ultimately giving rise to the Makah and Ditidaht, are still poorly understood. Few sites provide evidence on the period prior to 2000 B.P. and most excavated data are restricted to the final 1200 years of Nuu-chah-nulth culture history. Relatively few sites have been excavated and even fewer have been analyzed and reported in any depth.

The changes evident over time in Nuu-chah-nulth culture history challenge a basic element of the West Coast culture type as presently conceived (Mitchell 1990). The West Coast culture type, encompassing over four millennia
Table 18
Summary of Nuu-chah-nulth Culture History

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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</thead>
<tbody>
<tr>
<td>present</td>
<td>Modern political concerns, including land claims and treaty negotiations</td>
</tr>
<tr>
<td></td>
<td>Formation of the Nuu-chah-nulth Tribal Council</td>
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<tr>
<td>100 B.P.</td>
<td>Canadian government administration and establishment of reserves</td>
</tr>
<tr>
<td></td>
<td>Historic epidemics and population decline, amalgamations to form the modern</td>
</tr>
<tr>
<td></td>
<td>political units, shift of residence to &quot;inside&quot; locations and adoption of a</td>
</tr>
<tr>
<td></td>
<td>seasonal round</td>
</tr>
<tr>
<td>200 B.P.</td>
<td>Contact with Europeans - Perez (1774) and Cook (1778)</td>
</tr>
<tr>
<td>500 B.P.</td>
<td></td>
</tr>
<tr>
<td>1000 B.P.</td>
<td>Intensive reliance on open-ocean resources indicated by large toggling harpoon</td>
</tr>
<tr>
<td></td>
<td>heads and stone fishhook shanks</td>
</tr>
<tr>
<td></td>
<td>Increase in number of occupied sites (initial dates for Hesquiat Village, Kupti,</td>
</tr>
<tr>
<td></td>
<td>Tukw'aa, and others)</td>
</tr>
<tr>
<td>1500 B.P.</td>
<td></td>
</tr>
<tr>
<td>2000 B.P.</td>
<td>Initial occupation of Ozette and Neah Bay (Wakashan arrival on the Olympic</td>
</tr>
<tr>
<td></td>
<td>Peninsula?)</td>
</tr>
<tr>
<td>2500 B.P.</td>
<td>Nuu-chah-nulth expansion south?</td>
</tr>
<tr>
<td>3000 B.P.</td>
<td></td>
</tr>
<tr>
<td>3500 B.P.</td>
<td></td>
</tr>
<tr>
<td>4000 B.P.</td>
<td>Initial occupation at Yuquot</td>
</tr>
<tr>
<td>4500 B.P.</td>
<td></td>
</tr>
<tr>
<td>5000 B.P.</td>
<td>Surface discoveries of chipped stone tools in the Alberni Valley may date to this</td>
</tr>
<tr>
<td></td>
<td>time (possibly also beach discoveries in Nootka Sound)</td>
</tr>
<tr>
<td>6000 B.P.</td>
<td></td>
</tr>
<tr>
<td>10,000 B.P.</td>
<td>Coastal British Columbia and adjacent Washington are occupied, but no sites of</td>
</tr>
<tr>
<td></td>
<td>this age have been found in Nuu-chah-nulth territory</td>
</tr>
</tbody>
</table>
of Nuu-chah-nulth culture history, is essentially ahistorical. A single set of defining characteristics is applied to this lengthy culture type, which is described as a period "of relatively little change" (Mitchell 1990:357). This masks or minimizes the temporal aspect to Nuu-chah-nulth culture history. As described in earlier portions of this study, significant cultural changes over time are discernible in the archaeological record. Such temporal changes are reported for Yuquot, DiSo 9 at Hesquiat, Ch'uumat'a and Ozette. Some artifact types, such as toggling harpoon valves and stone celts, changed gradually over time. New technological items, such as large toggling harpoon heads and stone fishhook shanks, appeared in relatively late times, indicating increased reliance on open-ocean resources. Between 2000 and 1200 B.P. there was a great increase in the number of occupied sites, many of which continued in use into historic times. This suggests a region-wide increase in population and substantial shifts in settlement patterns. The pace of change increased dramatically in the early historic period, as disease, warfare, and the resultant declining populations forced substantial cultural restructuring, as discussed in Chapter 6. Such changes took place within the framework of evolving Nuu-chah-nulth, Ditidaht, and Makah cultures, with continuity to the historic occupants evident at many sites.

The ahistorical nature of the West Coast culture type regrettably (and inadvertently) perpetuates the outdated stereotype of the "unchanging native," so strongly challenged by Trigger (1980, 1981, 1984, 1985). An assumption that the native past would exhibit little evidence of change or cultural development is a characteristic of what Trigger calls "colonialist archaeology." Even as recently as the mid-20th century, as discussed in Chapter 2, the Nuu-chah-nulth were
being described as conservative and unchanging, tenaciously retaining elements of early coastal cultures.

Dewhirst (1980:336) suggests that the term "tradition" would be appropriate for the long period of cultural continuity demonstrated at Yuquot. Such traditions can then be divided into site-specific stages or "periods." While the concept of the culture type should be retained for comparability with surrounding regions, the lengthy period represented by the West Coast culture type should be redefined in terms of an evolving tradition. Strong continuity could then be emphasized within a perspective of change over time.

The approach advocated here calls for an integrated, holistic, and humanistic perspective in the investigation of Nuu-chah-nulth culture history. The Nuu-chah-nulth, Ditidaht, and Makah are today the inheritors of a rich cultural tradition, which spans a period in excess of four millennia. Native oral traditions, as well as archaeology and linguistics, provide unique insights on earlier populations. The integration of such sources of knowledge best illuminates the aboriginal past in this area, encompassing Nuu-chah-nulth culture history since transformers such as Kwatyat shaped their world.
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