Chapter One: INTRODUCTION

The Tseshaht Archaeological Project

The Tseshaht Archaeological Project was initiated as a joint endeavour of the Tseshaht First Nation and Parks Canada. The Tseshaht, one of the 14 members of the Nuu-chah-nulth Tribal Council on western Vancouver Island, primarily reside today on their reserves near the city of Port Alberni. Their traditional territories, however, include the Broken Group islands of Barkley Sound, now within Pacific Rim National Park Reserve. A major stimulus for the project was the Tseshaht interest in initiating a new relationship with Parks Canada regarding their traditional lands within the park. A Tseshaht-Parks Canada Joint Committee was established in 1998 to discuss mutual concerns, including protection of heritage sites and incorporation of a human history component into the Park's interpretation programs. Such programs in the past have promoted the natural history of the area, emphasizing the "wilderness" experience to park visitors. In the future, it is hoped that boaters, kayakers, and others who travel through the Broken Group islands will not only experience the spectacular scenery and abundant wildlife but will also become aware that this was the homeland of a unique group of people who occupied these islands for thousands of years. The Tseshaht Archaeological Project was designed to contribute to our knowledge of human history in this area, both for Park interpretations and for Tseshaht educational programs. It also served to allow Parks personnel and visitors, as well as a considerable number of Tseshaht people, to experience and learn about archaeological research first-hand.

Benson Island, one of the outer islands of the Broken Group in central Barkley Sound, was selected as the focus of research (Fig. 1). This is a key location in Tseshaht history, as the large and important village of Ts'ishaa, the site from which the Tseshaht (*Ts'ishaa7ath*) take their name, once stood there. Both the depth of midden deposits evident and the importance of this location in Tseshaht oral traditions indicate lengthy occupation. This was the principal site of the Tseshaht for millennia, from their creation at this location in the Tseshaht origin stories to the village's decline during the early contact period. Immediately adjacent is Himayis, where a smaller cluster of houses associated with the main village stood. This provided an opportunity to sample an area known through ethnographic tradition to be contemporaneous but lower in status to the main site area. Today the remains of Ts'ishaa are evident as a large and impressive shell midden site, designated DfSi-16 (204T in the Parks Canada system), while a smaller and shallower shell midden, designated DfSi-17 (205T in the Parks Canada system), marks the location of Himayis.

Fieldwork began in 1999 with five weeks of test excavation at both sites, although the more extensive work was at Ts'ishaa, where a large trench was dug through the centre of the site. In the summer of 2000, the research was restricted to Ts'ishaa. In seven weeks of work, trenches were excavated through the three terraces along the western portion of the site. A higher area behind the main site was also tested in a search for older deposits. Confirmation through radiocarbon dating that the back terrace area predates the main village and was likely occupied at a time when sea levels were higher than present led to five weeks of additional research in 2001. Most attention in that field season was on the back terrace, but two units were also excavated on a low terrace near the eastern edge of the village site and an additional unit was dug at Himayis. Several units were also excavated at a shallow midden on top of a rocky bluff on the north side of adjacent Clarke Island (site DfSi-26; 212T in the Parks Canada system). The results of excavation in the three distinct areas of the Benson Island complex (Ts'ishaa main village and back terrace, plus Himayis) are presented in separate chapters of this report. Throughout, a major goal of the research was to obtain cultural historical information useful in site interpretation and educational programs. This includes length of occupation, subsistence pursuits, and evidence of cultural change through time. The information recovered through archaeological research can then be integrated with the extensive knowledge of traditional Tseshaht history and culture held by Tseshaht elders, particularly as recounted to anthropologists such as Edward Sapir early in the twentieth century.

All fieldwork was co-directed by the authors. Other key personnel are named in the acknowledgements. A core of experienced field workers provided essential direction for the large crew. Each season a group of Nuu-chah-nulth trainees (six in 1999, six plus a supervisor in 2000, and five plus a supervisor in 2001) took part in the field-

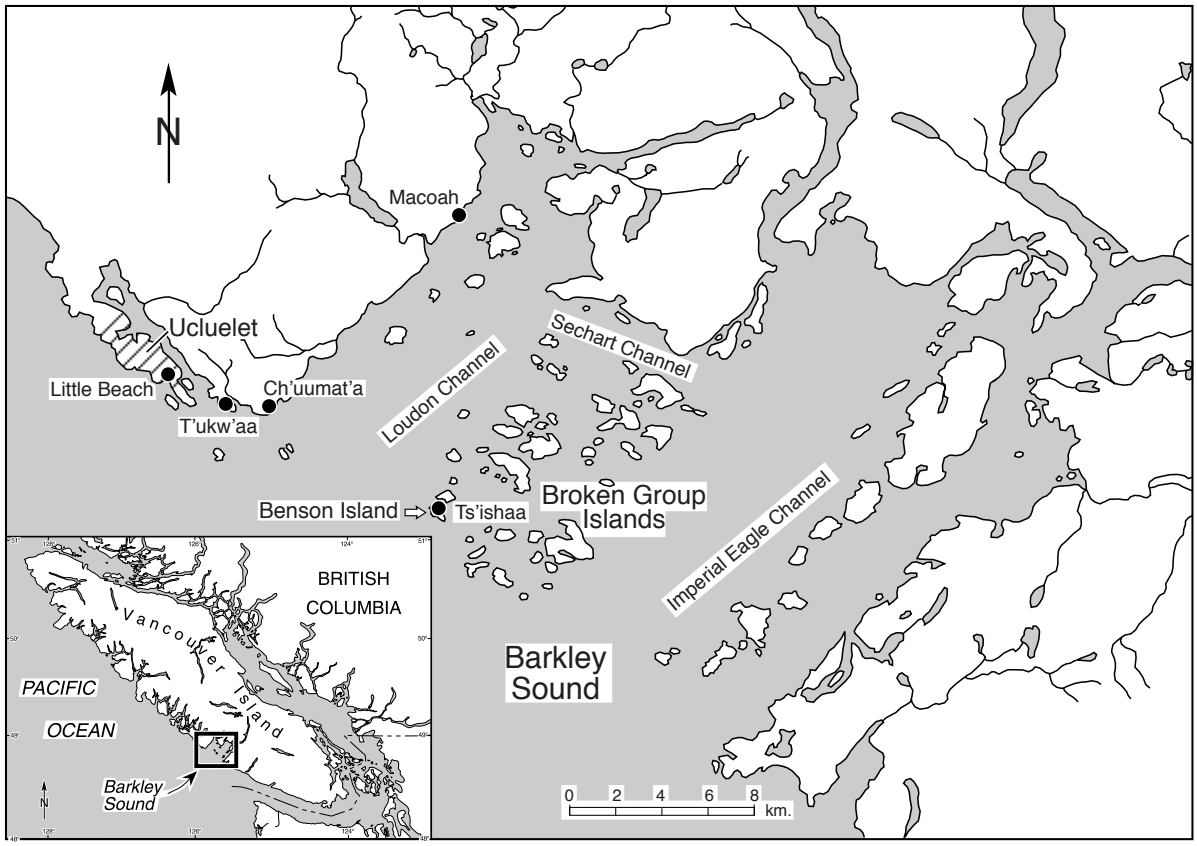

Figure 1. Barkley Sound showing the location of Benson island in the Broken Group and the major archaeological sites mentioned in the text.

work and received training in various archaeological field techniques (Figs. 2 and 3). An additional member of the Tseshaht Nation was hired by Parks Canada in the first two seasons as a site interpreter, presenting Tseshaht heritage and archaeological research to Park visitors. Another Tseshaht person, who had considerable previous experience in archaeological research, was hired as part of the regular crew and took over the interpretation duties in the final season. In addition, Parks Canada placed a number of students employed under the Young Canada Works program on the project on a rotating basis. Crew size was also swelled by many volunteers, a number of whom were Tseshaht, who worked on the project for varying periods of time. While the base crew size remained stable at about 15 to 20, there were up to 30 people working on the project at any one time. In all, a total of 34 people participated in the excavation at various times in 1999, 54 people in 2000 and 37 in 2001.

All radiocarbon dates reported here have been calibrated to more closely approximate actual calendar ages. They are generally given as calibrated age ranges before the present (cal BP), showing the maximum and minimum age estimates at two-sigma standard deviation (95% probability). Dates on marine bone have been corrected for the marine reservoir effect. Information on all radiocarbon age estimates can be found in the tables and on the stratigraphic profiles in Chapters Four and Five.

Throughout this report, but particularly in the ethnographic chapter, an effort was made to include the Nuu-chah-nulth names for places and social groups, as well as other terms. Nuu-chah-nulth words are generally shown in italics throughout the text. They are rendered in the practical orthography developed by Randy Bouchard (1971), of the B.C. Indian Language Project, Victoria. The symbol "*7*" represents a glottal stop (or "catch in the throat"), while an apostrophe indicates that the preceding sound is "strongly exploded" (glottalized). Underlining indicates that the sound is produced further back in the mouth than would otherwise be the case. A fuller published explanation is given as Appendix 1 in McMillan and St. Claire 1982. This orthography differs considerably from earlier

Figure 2. Nuu-chah-nulth trainees at Ts'ishaa, 1999 (from left: Dartwin Jeffrey, David Taylor, Jason Jensen, Nelda Robinson, Maria Clark, Trevor Little).

Figure 3. Tseshaht trainees at Ts'ishaa, 2001 (from left: Ken Watts, Tom Fred, Vance Sieber, Dennis Bill, Hank Gus; Tammy Lucas in front).

Figure 4. Aerial view of Barkley Sound, with the islands of the Broken Group in the foreground and the mountains of Vancouver Island in the background. Effingham is the large island at lower right; Benson is just off the picture to the left (Royal BC Museum PN17844-15A).

writing systems, such as that employed by Edward Sapir. Where such terms occur in quotations, the original spelling is maintained. If the reference is unclear, however, it is followed by the term in the present orthography (in square brackets).

The Natural Setting

The islands and shoreline of Barkley Sound fall within the Estevan Coastal Plain, a comparatively low-lying strip of outer coast immediately backed by the rugged topography of the Vancouver Island Range mountains (Holland 1964) (Fig. 4). The sound itself has been glacially scoured, as Pleistocene ice sheets advanced down the major inlets (such as Alberni and Effingham) and out onto the continental shelf (Wilson, Appendix A). Holland (1964: 20) characterizes the geology of this area as "folded and faulted sedimentary and volcanic rocks." Volcanic rocks such as andesites and basalts predominate, with Tertiary sandstones along the coastal plain overlain with unconsolidated Pleistocene glacial deposits (Carter 1973:442; Wilson, Appendix A). The land is thickly covered with the predominantly coniferous forests of the Coastal Western Hemlock biogeoclimatic zone (Krajina 1969; Meidinger and Pojar 1991), with the principal species being Western hemlock (*Tsuga heterophylla*), Western red cedar (*Thuja plicata*), 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 about 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 recent climatic data for the outer Barkley Sound region, based on stations at Amphitrite Point near Ucluelet, at the western edge of the sound, and Bamfield East, at the eastern edge of the sound.

Two major clusters of islands lie within Barkley Sound. The Broken Group islands occupy the central portion of the sound, while those of the Deer Group are located near the eastern shore. A smaller cluster of islands is in the northwest of the sound. The Broken Group consists of approximately 50 islands, as well as numerous small islets and exposed rocks. This large island cluster provided protected village locations, sheltered waterways, and diversified habitats that supported a wide range of fauna. Benson Island, the focus of this study, is one of the

Table 1. Barkley Sound climatic data (Canada, Atmospheric Environment Service, 1982) (figures refer to the averages from 1951 to 1980).

	Amphitrite Point	Bamfield East
mean January temperature	4.7 C	4.0 C
mean August temperature	14.3 C	14.3 C
mean annual temperature	9.4 C	9.1 C
minimum recorded temperature	–11.7 C	–10.6 C
mean annual precipitation	307.7 cm	287.9 cm
days per year with precipitation	197	193

outer islands, at the western edge of the Broken Group (Fig. 1). It is a relatively small island, at less than one kilometre in greatest length.

Offshore from Barkley Sound lies the La Perouse Bank, with its abundance of marine life. Coastal upwelling across the bank brings deep nutrient-rich water upward to the surface layer, supporting a great concentration of plankton (Thomson 1981:83; Allen et al. 2001). This provides food for large numbers of fish and sea mammals. The resultant high biomass made this area highly productive for Nuu-chah-nulth fishing, sealing, and whaling.

Numerous species of fish, bird, sea mammal, and shellfish would have been available within a short distance of each major village in the Broken Group archipelago. A survey of the birds found in Pacific Rim National Park, including both seasonal visitors and permanent residents, lists 247 species (Hatler, Campbell and Dorst 1978). Economically important bird species include a variety of ducks, geese, grebes, mergansers, cormorants, and gulls. The waters of Barkley Sound and the offshore banks provided an abundant and varied supply of fish, including halibut (*Hippoglossus stenolepis*), cod (*Gadus macrocephalus*), lingcod (*Ophiodon elongatus*), rockfish (*Sebastes* spp.), herring (*Clupea harengus pallasi*), dogfish (*Squalus acanthius*), and salmon (*Oncorhynchus* spp.). The waters also provided access to a variety of sea mammals, including Stellar or northern sea lion (*Eumetopias jubata*), California sea lion (*Zalophus californianus*), northern fur seal (*Callorhinus ursinus*), harbour seal (*Phoca vitulina*), sea otter (*Enhydra lutris*), and a number of cetaceans, the most important of which were the humpback whale (*Megaptera novaeangliae*), grey whale (*Eschrichtius robustus*), and Pacific harbour porpoise (*Phocoena phocoena*). Land mammals, on the other hand, were uncommon in this island environment, with only the coast deer (*Odocoileus hemionus columbianus*) being important in the diet, although bear (*Ursus americanus vancouveri*) and elk (*Cervus elaphus roosevelti*) could have been obtained from the nearby shores of Barkley Sound. Plant food resources were also limited in this outer island setting, although a wide range of berries and other edible plants would have been available in the broader Barkley Sound region. A range of intertidal invertebrates, including several species of clams, mussels, scallops, barnacles, chitons, and sea urchins, were available within the Broken Group and played a vital role in the local economy (Appendix C).

Previous Archaeological Research

Relatively little archaeological research has been carried out on western Vancouver Island (see McMillan 1999). Large-scale and well-dated excavation projects, where a significant quantity of cultural materials was recovered, have occurred only at Yuquot (at the entrance to Nootka Sound), at several sites in Hesquiat Harbour, at several Toquaht sites in western Barkley Sound, and at Shoemaker Bay (at the head of Alberni Inlet). A number of smaller excavations, such as at Chesterman Beach and at two nearby sites on Nitinat Lake, provide additional information. On the Olympic Peninsula, the extensive excavations at Ozette, at both the midden trench and the waterlogged house deposits, provide important information on the culture history of the Makah, close relatives of the Nuu-chah-nulth. Yuquot (DjSp-1) exhibits a long continuous sequence, showing the evolution of Nuu-chah-nulth culture from about 4700 cal BP into modern times (Dewhirst 1980; Hutchinson 1992:14). Recent research in Barkley

Sound, including the early component at Ts'ishaa reported here, extends the known history of this area to about 5000 cal BP.

These dates, however, clearly do not mark the initial settlement of western Vancouver Island. Sea levels have fluctuated dramatically over the millennia, greatly affecting archaeological visibility for all but the most recent period. As a result of such changes, any evidence of human presence prior to about 7000 cal BP may now lie below modern tides, eroded and largely inaccessible, while remains a millennium or two later may be on old strandlines which are now inland, forested and difficult to locate. The large and highly visible archaeological sites associated with modern shorelines date primarily to the last few millennia.

Mitchell (1990), in a major synthesis of archaeological knowledge for this region, proposed the West Coast culture type as the archaeological view of evolving Nuu-chah-nulth culture. Excavated data from Yuquot and Hesquiat Village, at that time the only major archaeological projects on the west coast of Vancouver Island, provided most of the information on which this construct was based. Claims for lengthy continuity at these sites led Mitchell to propose that Nuu-chah-nulth precontact history could be encompassed within a single culture type. Distinguishing features of this culture type, defined almost entirely in terms of artifacts, consist of bone points and bipoints, barbed bone points and harpoon heads, large and small composite toggling harpoon valves of bone or antler, bone splinter awls, stone and bone fishhook shanks, bark beaters and shredders of whalebone, and mussel shell celts and knives (Mitchell 1990:356). The rarity or absence of flaked stone tools and flaking detritus is also seen as an identifying trait. In fact, stone implements in general are rare, with the exception of the numerous abrasive stones which played an important role in shaping tools of other materials. According to Mitchell (1990:357),

> the archaeological assemblages are so like described Nootkan [Nuu-chah-nulth] 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 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 [earliest] levels at Yuquot Village.

The sites later excavated as part of the Toquaht Archaeological Project have the greatest relevance to the research reported here as they are only a short distance away, along the western shore of Barkley Sound near Ucluelet (see Fig. 1). Extensive excavation at two major villages, along with smaller projects at three other sites, revealed a lengthy period of occupation (McMillan and St. Claire 1992, 1996; McMillan 1999). The largest of the excavated sites is T'ukw'aa (DfSj-23), the major traditional village of the Toquaht (*T'ukw'aa7at<u>h</u>*), the Nuu-chah-nulth neighbours of the Tseshaht to the west. As the place from which the Toquaht derive their name, T'ukw'aa has the same historical connection to the Toquaht that Ts'ishaa does to the Tseshaht. Extensive excavation, at both the main village and on top of an adjacent headland that served as a defensive location, uncovered almost 1500 artifacts and a large quantity of faunal remains. A series of radiocarbon dates indicates that this site was first occupied about 1200 years ago, continuing in use until the early twentieth century. A nearby site, Ch'uumat'a (DfSi-4), with even deeper deposits (slightly over four metres at the back of the site), was excavated in an attempt to extend this sequence further back in time. Deposits at this site spanned the period from about 4600 cal BP to early historic times. About 750 artifacts, plus a large quantity of faunal remains, were recovered. Less extensive excavations also took place at Macoah (*Ma7a<u>k</u>wuu7a*), the ethnographic winter village of the Toquaht, and at two lookout or defensive sites elevated on rocky islets near the entrance to Ucluelet Inlet.

Two other excavated sites lie at the western edge of Barkley Sound, at Ucluelet, quite close to the Toquaht sites. One, Ittatso North (DfSj-40), is on the modern Ucluelet (*Yuulhuu7ilh7at<u>h</u>*) reserve. A small test pit at this location showed the midden is at least four metres deep and covers at least the last 2300 years (Arcas Consulting Archeologists 1998). The other is Little Beach (DfSj-100), at the modern town of Ucluelet. Limited test excavation at this open-ocean site revealed that it had been used as a burial area, with graves typically consisting of shallow pits covered with low rock cairns and sometimes also with whalebone (Arcas Consulting Archeologists 1991). The graves came from a deep shell midden deposit dating between about 4500 and 2500 cal BP. There is no evidence of more recent occupation at that location.

Little Beach and the lower (pre-2000 BP) levels at Ch'uumat'a share a number of traits that set them apart from other Nuu-chah-nulth sites such as Yuquot. Cairn burials, chipped stone artifacts and flaking detritus, and several categories of decorative ground stone objects most closely correspond to assemblages from archaeological sites of equivalent age in the Strait of Georgia area, particularly those of the Locarno Beach culture type (McMillan 1998a, 1999). They also closely resemble the materials excavated from Shoemaker Bay in the Alberni Valley, accessible from Barkley Sound by the long Alberni Inlet (McMillan and St. Claire 1982). Oral traditions and ethnographic accounts document the relatively late arrival of Nuu-chah-nulth culture in the Alberni Valley. The similarity of artifacts from these three sites, and their clear ties (particularly at Shoemaker Bay) to the Strait of Georgia, has led to suggestions that these earlier materials provide evidence of population replacement in Barkley Sound, with Nuu-chah-nulth arrival dating to perhaps just over 2000 years ago (McMillan 1998a, 2003). This earlier period is still poorly known, however, and other explanations may be possible for the apparent cultural break at this time.

Although no excavation had taken place in the Broken Group islands prior to the beginning of the Tseshaht Project in 1999, survey and recording of archaeological sites had been conducted (St. Claire 1975; McMillan and St. Claire 1982), most notably by the Pacific Rim survey project for Parks Canada in 1982 (Haggarty and Inglis 1985; Inglis and Haggarty 1986). Systematic site survey throughout Pacific Rim National Park Reserve resulted in the recording of 163 Nuu-chah-nulth heritage sites in the Broken Group islands alone (Inglis and Haggarty 1986: 242). Of these, nearly half (N=80; 49%) are shell middens, of which 18 were classified as villages and 62 as camps. Ts'ishaa and Himayis form one site cluster of the ten large sites or site clusters in the Broken Group, possibly indicating that these islands were once home to ten distinct and autonomous political groups (Haggarty and Inglis 1985:37–8). Rock wall fish traps, constructed in sheltered locations behind islets and in bays, made up another large site category (N=40; 24.5%). Burial sites, most of which are in caves or rockshelters, were also relatively numerous (N=21; 12.9%). Eighteen culturally modified trees (CMTs) (11%) and four isolated find sites (2.5%) complete the total for the Broken Group islands (Inglis and Haggarty 1986: 247).

In 1995, a Parks Canada crew resurveyed and remapped the Benson Island sites (Sumpter, Fedje, and Sieber 1997). In an attempt to get an idea of the depth of deposit and length of occupation at Ts'ishaa, they took several core samples from the back of the main village. This work revealed that the midden was at least 2.8 metres in depth. Charcoal obtained from near the base of one core yielded a radiocarbon date of 2260±50 years (Sumpter, Fedje, and Sieber 1997:31), which would give an age estimate of 2350–2130 cal BP. This date, which is consistent with the results later obtained through excavation, provided an initial minimum age estimate for Ts'ishaa and stimulated interest in this important site which led to the research conducted as the Tseshaht Archaeological Project.