## Chapter 2

## The Study Area

### **Physical Setting**

Gabriola Island is situated in the Gulf (Strait) of Georgia, a distinct natural region bounded on the west by the mountain ranges of Vancouver Island, on the east by the Coast Mountains and the Fraser River canyon, on the north by Seymour Passage, and on the south by Puget Sound (Mitchell 1971). The region as a whole is characterized by a temperate climate and abundant and varied food resources, including fishes, shellfish, waterfowl, land and sea mammals, roots, and berries, making it an appealing setting for human habitation. Of particular importance to the earlier inhabitants were the many streams and rivers flowing into Georgia Strait, which attracted the large populations of anadromous fish upon which traditional subsistence was based.

Gabriola Island is the northernmost of the southern sub-group of Gulf Islands, lying along the southwestern side of the Gulf of Georgia opposite the modern city of Nanaimo (Figure 2.1). The island, which is 15 km long and ranges from 3.5 to 6 km in width, lacks primary streams, and fresh water sources are limited to a few small, marshy lakes and occasional springs. Its terrain is hilly rather than mountainous, with a maximum elevation of 160 m above sea level. The dominant landforms are long, low, westerly-facing cuestas (steep ridges), capped by hard conglomerate and sandstone of Upper Cretaceous age (Williams and Pillsbury 1958). These ridges form a dramatic shoreline escarpment along the western half of the southern shore, then veer several hundred metres inland opposite Mudge Island and False Narrows. Sandy soils derived from bedrock occur above the escarpment, and a transitional zone of thicker material, a mixture of sandy till and colluvium (fallen sandstone and conglomerate blocks), forms an apron along its toe. Behind False Narrows, a gently-rolling lowland of glacial till and marine sediments, underlain by relatively soft and erodible shales and siltstone, extends from the escarpment westward to the ocean front (Muller 1977).

The area was ice-covered during the last Pleistocene (Fraser) glaciation, from about 17,000-13,000 BP (Clague et al. 1982), and since the direction of ice flow was generally parallel to the axis of the Gulf of Georgia, which is also parallel to the bedrock structures of Gabriola Island, the lowland-escarpment contrast may have been enhanced by selective glacial erosion of the softer rock. Between 12,000 and 11,500 years ago, when sea level was much higher than at present, the False Narrows bluffs would have formed a sea cliff; distinctive honeycomb weathering on some of the fallen sandstone blocks and rock outcrops suggests that the fallen blocks reached their present position about this time (Ryder 1992).

Relative sea level dropped abruptly after deglaciation due to isostatic rebound, which outstripped the absolute eustatic rise from glacial meltwater, reaching a nadir of -11 m by about 8,000 years ago. Since then sea level has risen steadily as a result of residual eustatic effects and/or tectonic subsidence of the coast, approaching its present position sometime after 2,000 years ago (Clague et al. 1982; Williams and Roberts 1989; Clague and Bobrowski 1990). From archaeological evidence, Burley (1989) has argued that sea level in the False Narrows region was 3 m higher than present until about 1,800 years ago, when an unspecified seismic event uplifted the coastline to its present position. Although localized fluctuations in landsea relationships are certainly possible, a change of this magnitude is not supported by evidence from other archaeological sites in the region (Whittaker and Stein 1992; Carlson and Hobler 1993).

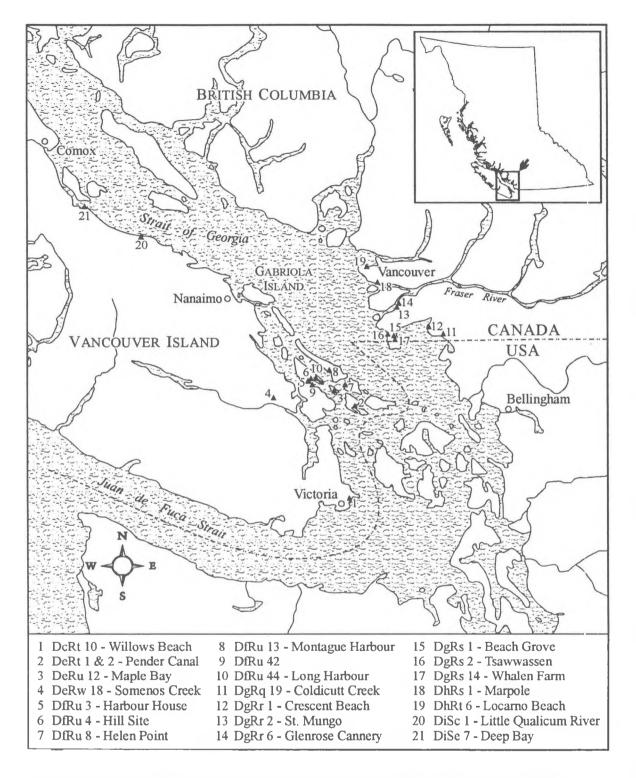


Figure 2.1 Gulf of Georgia region with selected burial sites (scale 1:1,500,000).

Ecologically, Gabriola Island falls within Krajina's (1965) Coastal Douglas-fir Drier Biogeoclimatic Subzone, and the Gulf Islands Biotic Area as defined by Cowan and Guiget (1975). The climate is characterized by warm, dry summers and mild, wet winters. Major vegetation consists of mixed coniferous and hardwood forest; dominant species include Douglas-fir (*Pseudotsuga menziesii*), Western red cedar (*Thuja plicata*), and grand fir (*Abies grandis*), with groves of Garry oak (*Quercus garryana*) and arbutus (*Arbutus menziesii*) occurring on dry, rocky hillsides, and western hemlock (*Tsuga heterophylla*) on cool, northfacing slopes (Williams and Pillsbury 1958).

Currently, mammalian fauna on the island are limited to coast deer, northwest raccoon, and red squirrel, but in the past may have included wapiti, black bear, cougar, and wolf. Birds, especially sea birds, are abundant, particularly in the spring and fall when migrating flocks of ducks and loons pass through the area. Marine life is both plentiful and diverse, with many species of sea mammal, fish, molluscs, and crustaceans colonizing the surrounding waters (Williams and Pillsbury 1958). Modern climatic patterns and biotic regimes in the Gulf Island region are thought to have been relatively stable for the past 3,000 years or more, although minor intra regional fluctuations may have occurred.

### **Ethnographic Context**

Gabriola Island falls within the traditional territory of the Nanaimo peoples, a Halkomelemspeaking division of the Coast Salish ethnolinguistic group. The Coast Salish inhabited the central portion of the Northwest Coast culture area, including the circumference of the Gulf of Georgia, Puget Sound, parts of the Olympic peninsula, and most of western Washington (Drucker 1955). The Halkomelem language includes three main dialect groups: an Island group, spoken by people, including the Nanaimo, who wintered on Vancouver Island; and Downriver and Upriver groups, spoken by people who lived on the mainland along the Fraser River. In addition to the Nanaimo, the Island Halkomelem are comprised of the Nanoose, the Chemainus, the Cowichan, and the Malahat (Suttles 1990).

Boas described the traditional territory of the Nanaimo (Snanaimuq) people as extending from Five Finger Island in the north to Dodds Narrows in the south, encompassing the Nanaimo River basin and Gabriola Island (Figure 2.2). In addition, a coastal strip from Dodds Narrows to Yellow Point was shared by the Nanaimo and the Qalältq (Boas 1889). Bouchard

(1992) gives the Nanaimo Lakes area as the inland (western) boundary, and suggests that Nanaimo territory may have extended slightly further north (to Neck Point) and south (to Boat Harbour) than Boas indicated, and included other offshore islands as well as Gabriola.

In the 19th century, the Nanaimo occupied five fall villages along the Nanaimo river (Boas 1889). Each village was inhabited by a distinct, named group (Barnett 1955), which may have represented a single, large extended family (Rozen 1985), gente or clan (Boas 1889). The names, which apparently referred to village locations, have been variously transcribed as Tē'wētqēn (Tewahlchin or teytexen), Yē'cēqēn (Ishihan or yeshexen), Koltsī'owotl (Kwalsiarwahl, or kwelsiwelh), Osa logul (Solachwan, or xwso lexwel), and Anue'nes (Anuweenis, or enwines) (Boas 1989; Jenness n.d.; Bouchard 1992). The Te'wetgen and the Ye'cegen were the highest ranking or "noblest" of the five groups, and they alone had the hereditary right to use the sxwayxwey mask and dance (Boas 1889; Rozen 1985). The Osa loqul, on the other hand, may have been more dominant economically, since they controlled the only salmon weir on the Nanaimo River (Barnett 1955; Rozen 1985).

The Nanaimo River villages were occupied from August or September until December, during which time the people fished for chum on the Nanaimo River, fished for halibut and collected clams and cockles at Nanaimo Harbour, and collected fern roots from family-owned beds near the Nanaimo River (Rozen 1985). Four of the groups moved to their villages at Departure Bay for the winter ceremonials, where they remained until March; the fifth group, the Osa logul, maintained a separate winter village at the mouth of the Nanaimo River. Subsistence activities while in the winter villages included collecting butter clams and little neck clams along the inner shore of Departure Bay and the northwest side of Newcastle Island, smoke-drying coho salmon, and collecting herring roe (Rozen 1985).

In March or April, the seasonal round brought the Nanaimo to Gabriola Island, where a significant amount of the next winter's food was collected. From their temporary shelters on the island, they fished for cod, grilse, and halibut, gathered clams and mussels, hunted seals and sea lions, raked herring and gathered herring spawn, collected sea urchins, and gathered camas bulbs (Barnett 1955; Jenness n.d.; Rozen 1985). Permanent house frames may have been maintained at the village of *Senewelets* at False Narrows, the site of a major clam bed, and certain clamming areas and camas beds may have been owned by individual families.

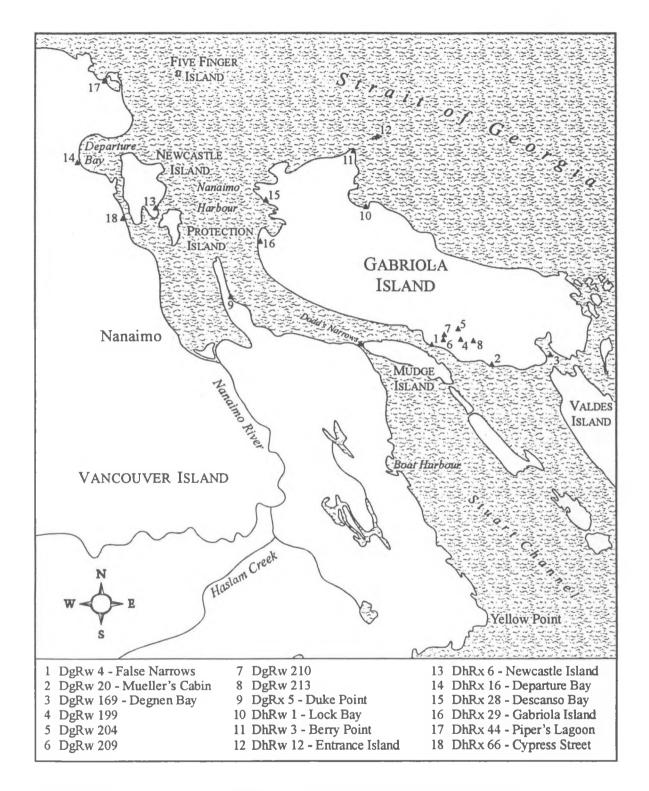


Figure 2.2 Nanaimo region with selected burial sites (scale 1:150,000).

Duff (1952) reported considerable intermarriage between the mainland and island Halkomelem speakers, and those of the Nanaimo with relatives on the lower Fraser River would move there in July and August to fish for sockeye and humpbacks. One of these Nanaimo fishing villages is said to have been located near Fort Langley (Rozen 1985). Other subsistence activities that took place on the mainland were hunting for deer and elk, and gathering edible roots and berries (Murray 1982).

While no comprehensive account of Nanaimo burial practices is available, a general picture of Salishan mortuary ritual may be gleaned from various ethnographic sources, with the understanding that specific practices varied somewhat according to ethnic group, individual family customs, personal characteristics of the deceased, and the preferences of the ritualist who presided over the ceremonies (Barnett 1938, 1955; Boas 1889, 1891, 1894; Jenness n.d.; Maud 1978). After death, the corpse would be washed, dressed in its best clothing, and painted with ochre around the head and face; it was then wrapped in a blanket, bound in a tightly flexed position, and placed in a cedar box which would be deposited either on a raised platform supported by posts, in a mortuary house, on a nearby rocky islet reserved for cemetery use, or, less often, in the branches of a spruce tree. Whatever the location of the final disposal site, family members tended to be placed near one another, either in the same grave house or in family clusters in the communal burial area. Personal belongings of the deceased might be placed in the burial box with the corpse, burnt at the grave site, or distributed amongst the mourners. Food offerings were burnt at the grave site within a few days of the funeral, and periodically afterwards food would be set aside and burnt to propitiate the spirits of the dead.

Exceptions to this general pattern, where reported, appear to have been based primarily on age and status distinctions: infants and slaves might be buried in baskets or blankets rather than in boxes; wealthy or high-ranking individuals might be placed in canoes, or have their burial boxes and/or grave posts embellished by carving or painting; the grave of a renowned warrior might be marked by a carved human figure holding a war club. Other possible bases for differentiation, such as occupation in life (e.g., shaman) or manner of death (e.g., suicide) do not appear to have been recognized in mortuary treatment, and many prehistoric practices, such as cremation, subsurface inhumation, and cairn burial, were unknown ethnographically (Barnett 1955; Jenness n.d.).

Corpses were viewed with apprehension as a possible source of spiritual contagion, so much of the

ritual surrounding death was concerned with cleansing the mourners, particularly the surviving spouse, from their contact with the deceased. Again, specifics of these ceremonies and their length varied according to ethnic identity, degree of relationship to the deceased, and the individual ritualists' practices, but common features appear to have included avoidance of others, dietary restrictions, early morning rites, bathing, cutting/washing/combing the hair, and painting with ochre.

Although little (apart from Boas' cursory 1889 paper) has been reported in the ethnographic literature that deals specifically with the burial customs of the Nanaimo people, 19<sup>th</sup> century paintings of the Departure Bay cemetery by James Alden illustrate many of the features reported by Coast Salish ethnographers, including an apparent canoe burial, carved mortuary posts, above-ground box burials, a carved/painted mortuary house, and a standing human figure holding a rifle (Bouchard 1992: A19; Wilson 1994: 22).

### **Regional Culture History**

The results of almost 100 years of archaeological investigations in the Gulf of Georgia region have illuminated the past 9,000 years of human occupation of the area. This broad span of human history has been placed in a chronological framework of five sequential, named "culture types" (Mitchell 1971), each defined by variations in artifact types and technologies, and inferred subsistence patterns and organizational features. Although some differences of opinion exist on the exact dates (measured in "years before present" or BP) and time spans of these cultural-chronological divisions, the following framework is generally accepted.

# Old Cordilleran Culture Type (9000-4500 BP)

The earliest evidence of human occupation of the Gulf of Georgia region has been attributed to the Old Cordilleran culture, which is best known from the Glenrose Cannery site on the Fraser River (Matson 1976). The material culture is dominated by pebble tools, flake tools, and leaf-shaped bifaces. Ground stone is uncommon, but does occur in the form of abraders used in the manufacture of bone and antler tools, which are relatively abundant. Some sites show extensive use of maritime resources, including salmon, shellfish, and sea mammals, while others exhibit a more terrestrial orientation, indicating a variable focus on locally-available resources. The archaeological re-

cord, which is admittedly sparse, shows no evidence of long-term occupations, seasonal population aggregates, or food storage technology, which are so important to the ethnographic Northwest Coast pattern (Matson and Coupland 1995: 96). However, tantalizing evidence for the beginning of status differentiation has recently been recovered from DeRt 2 on Pender Island, where a midden burial with ochre associations (Weeks 1985: 98) and unequivocal evidence of labret wear on the anterior mandibular teeth (Cybulski 1991a: 7) has been radiometrically dated at  $5150 \pm 220$  BP (Carlson and Hobler 1993: 38). The archaeological culture represented by the Early Midden component materials from this site has not yet been fully characterized, but appears very similar to the succeeding Mayne Phase component (Carlson and Hobler 1993: 45).

The origins of the earliest occupants of the Gulf of Georgia are somewhat controversial. Matson and Coupland (1995: 67) derive Old Cordilleran from the earlier Protowestern Tradition (Borden 1969), which in turn they see as originating from the Paleoindian populations of the continental interior, the biggame hunting Clovis Tradition. Carlson, on the other hand, sees the earliest culture, which he terms the Pebble Tool Tradition, as an extension of coastal Beringinan culture that expanded southward down the coast after deglaciation, and only later progressed up the river valleys into the interior (Carlson 1995:13-18; 1996:8-9).

#### Charles Culture Type (4500-3300 BP)

The Charles culture is commonly subdivided into three regional variants: the St. Mungo phase in the Fraser delta; the Mayne phase on the Gulf Islands; and the Eayem phase in the Fraser Canyon (Pratt 1992: 6). It is distinguished from the preceding Old Cordilleran Culture by a substantial decrease in the number of pebble tools, the introduction of stemmed projectile points (in addition to the leaf-shaped varieties which persist), and a significant increase in ground stone technology (Matson and Coupland 1995: 100). Bone and antler tools are common, and shell artifacts, mainly in the form of beads and other decorative items, appear. Artifacts unique to the Charles Culture include shaped stone tablets with incised marginal lines, and bipointed bone objects ("grubs") incised with parallel grooves (Pratt 1992: 20).

Faunal remains from Charles Culture sites indicate a broad-based subsistence pattern. Large mammals are still present, but there is an increasing emphasis on marine resources, particularly salmon and shell-fish, with bay mussel predominating. The frequency of salmon cranial parts at some sites led Matson and

Copeland (1995: 125) to infer that large-scale storage was absent, but recent evidence of wooden-stake fish weirs at the Glenrose Cannery site, radiocarbon dated to  $3950 \pm 60$  BP and earlier, suggests that intensification of salmon procurement, and by extension, preservation and storage, developed during the Charles culture (Eldridge and Acheson 1992).

Charles period human burials have been reported from a number of sites in the Gulf of Georgia region, including Helen Point (Carlson 1970), Bliss Landing (Beattie 1972), Crescent Beach (Percy 1974), Glenrose Cannery (Matson 1976; Styles 1976), Tsawwassen (Curtin 1991a), and Pender Canal (Carlson and Hobler 1993) but only at the latter two sites have these attributions been substantiated by direct dating of the burials. A multiple burial of 10 individuals at Duke Point, DgRx 5, with a radiocarbon age of  $3490 \pm 125$ BP, may also belong to this culture type, although it has been reported as a Locarno phase interment (Cybulski 1991b). With the exception of the as yet incompletely described collection from Pender Canal, reported to comprise 105 individuals (Carlson and Hobler 1993: 38), burial samples from Charles components are relatively small (2-13 individuals). Burial features range in complexity from simple shallow pits, to rock-lined graves, to more elaborate stone slab cists (Percy 1974; Curtin 1991a; Carlson 1990). Deposition may be on the side, back or seated; legs may be flexed or extended; and both single and multiple interments are known. Intriguing evidence for associated mortuary ritual involving the ceremonial feeding the dead (large clam shells placed near the hand, carved antler spoons placed near the mouth) is reported from Pender Canal (Carlson 1990: 84, 1999).

Charles period burials are often characterized as impoverished and egalitarian in comparison with later Marpole burials (Burley and Knüsel 1989; Matson and Coupland 1995), but this impression may have to be reevaluated as more information on the earlier burial types becomes available. Labrets have been reported as grave goods at Pender Canal (Carlson 1990: 84), while labret facets were observed on the anterior mandibular teeth of two adult males from Tsawwassen (Curtin 1991a: 82). Other inclusions indicative of personal wealth or status, including red ochre, and shell and soapstone ornaments have been found with both adults and subadults at Glenrose Cannery, Pender Canal, Tsawwassen, and Duke Point. Significantly, two of the richest burials known from the entire Gulf of Georgia region, burials D-14 and D-16 from Tsawwassen, have been firmly established in Charles context, with bone collagen dates of 3880  $\pm$  50 BP and  $3800 \pm 60 \text{ BP}$  respectively (Curtin 1991a, 1999). The subadult age of D-14, buried with more than 53,000 beads, effectively challenges the premise that ascribed status was absent prior to the Marpole culture.

## Locarno Beach Culture Type (3300-2400 BP)

The Locarno Beach Culture, once thought to herald the migration of "Eskimoid" peoples to the Gulf of Georgia region (Borden 1951), is now accepted as an evolutionary transition from the earlier Charles Culture (Mitchell 1990: 352; Pratt 1992: 224). In terms of material culture, the main differences between the two are an increase in ground stone and bone tools in Locarno, and the introduction of new ground stone tool types (Matson and Coupland 1995: 163). Distinguishing features of Locarno Beach Culture include composite toggling harpoons, unilaterally barbed bone points, large faceted ground slate points, thick ground slate knives, ground stone and coal labrets, small wellmade ground stone celts, chipped stemmed points, obsidian microblades, quartz crystal microliths, and a distinctive group of finely-made ground stone or bone objects of uncertain function, known as Gulf Island Complex artifacts (Mitchell 1990: 341; Matson and Coupland 1995: 156). Wet sites such as Musqueam NE have also yielded evidence of material culture that normally doesn't preserve in archaeological settings: twine, cordage, netting, basketry, woven hats, wooden wedges, and bentwood fishhooks (Archer and Bernick 1985).

Subsistence data reveal a continuation of the trend towards salmon intensification; not only are salmon remains much more common than in earlier deposits, but the rarity of cranial parts implies that the fish were being processed and stored as preserved salmon backs (Matson and Coupland 1995:173). Innovations in subsistence during the Locarno Beach period include the introduction of large scale herring use, and a shift in emphasis in shellfish utilization from mussel to various species of clam.

The Locarno Beach culture is perhaps the least well known in terms of mortuary patterns, although burials attributed to this period are reported from many sites: Montague Harbour (Mitchell 1971), Crescent Beach (Percy 1974; Trace 1981), Locarno Beach (Beattie 1980), Beach Grove (Ball 1979), Duke Point (Cybulski 1991b), Whalen Farm (Thom 1992), and Pender Canal (Carlson and Hobler 1993). Possible late Locarno (or early Marpole) burials have also been recovered from Willows Beach (Kenny 1974) and Helen Point (McMurdo 1974). [Despite Cybulski's statement (1992: 35) to the contrary, no known Locarno burials were recovered from Tsawwassen]. Cultural-

chronological attributions of these burials were based primarily on stratigraphic and artifactual associations, with only the Beach Grove, Duke Point, and Pender Island assignments supported by radiocarbon dates (and, as was noted above, the Duke Point burials may actually belong to a late Charles rather than a Locarno component). In most cases, sample sizes are quite small, ranging from 2-10 individuals.

Most commonly, Locarno period burials feature semi-flexed to tightly flexed skeletons, placed in shallow oval pits dug into midden deposits, with few or no grave goods. Several burials have associated rock features, varying in elaboration from a simple ring of cobbles capping the burial pit (Percy 1974), to large sandstone slabs placed over a portion of the skeleton (McMurdo 1974), to moderate-sized boulder and cobble cairns (Mitchell 1971; Kenny 1974). One possible cremation was reported from Montague Harbour, although it was uncertain that the observed burning was related to mortuary ritual (Mitchell 1971: 149). Many of the Crescent Beach burials exhibit labret wear facets on the anterior mandibular teeth, which has been variously interpreted as evidence for ascribed (Cybulski 1991a: 15) or achieved status (Matson and Coupland 1995: 182) in Locarno culture; however Cybulski's (1991a: 11) suggestion that all of the burials from the site with such facets date to the Locarno period appears unwarranted given the substantially earlier examples of labret wear at Pender Island and Tsawwassen (see above) and the much later specimen from Coldicutt Creek (see below). The Pender Island burial collection also includes one of the earliest welldated  $(2620 \pm 50 \text{ BP})$  examples of cranial deformation known from the Gulf of Georgia region (Carlson and Hobler 1993: 39).

## Marpole Culture Type (2400-16/1500 BP)

This period in the prehistory of the Gulf of Georgia saw the full achievement of the Developed Northwest Coast Pattern. Marpole Culture exhibits many continuities with the preceding Locarno Culture, and is commonly regarded as an *in situ* development. Distinctive elements of material culture include thin, finely made ground slate knives and points, celts, microblades and microcores, labrets, nipple-top hand mauls, perforated stones, large needles, unilaterally barbed antler harpoons, unilaterally barbed fixed antler points, stone and antler sculpture, and native copper ornaments (Mitchell 1990: 344; Burley 1980: 19-28). Overall, there is a reduction in chipped stone technology, and a greater reliance on ground stone and bone

tools. Perishable artifacts, such as cordage, basketry, and wooden wedges, have been recovered from waterlogged deposits of at least one site (Bernick 1989). House remains are known from a number of sites, providing evidence for both multifamily households, and large villages of planked houses, two essential features of the ethnographic cultures of the Northwest Coast. Faunal analyses and seasonality studies further indicate the presence of the traditional subsistence round, including both specialized resource procurement locations and winter villages dependent on stored salmon (Matson and Coupland 1995: 224).

Marpole period components have yielded the largest sample of burials from the Gulf of Georgia region, as well as the most complex in terms of abundance and richness of grave inclusions (Burley 1980: 29; Burley and Knüsel 1989: 7; Cybulski 1992: 34). So strong is the perceived correlation between mortuary elaboration and Marpole affiliation that in the past many burials with moderately abundant grave goods, especially shell or stone disc beads, have simply been assumed to be of Marpole age (Calvert 1970: 59; Hall and Haggarty 1981: 99; Murray 1982: 128), despite, in some cases, other lines of evidence that clearly indicated otherwise. The rich bead burials recovered from the St. Mungo component of the Tsawwassen site (Section 2.3.2), however, demonstrate that neither the presence of beads nor the abundance of associated grave goods can be considered diagnostic markers of the Marpole culture, as has been suggested in the past (Borden 1970; Mitchell 1971; Burley 1980). This raises some uncertainty as to the accuracy of the cultural-chronological placement of some of the largest and best known "Marpole" burial samples (e.g., Beach Grove, False Narrows, Hill Site) for which no corroborative radiocarbon dates are available, and whose cultural attributions were based primarily on artifact associations. The following discussion of current knowledge of Marpole mortuary practices should be read with these cautions in mind.

Marpole-age burials are reported from at least 14 sites in the Gulf of Georgia, including, on the mainland: Beach Grove (Beattie 1980), Crescent Beach (Percy 1974), Glenrose Cannery (Matson 1976; Styles 1976), Marpole (Beattie 1980), St. Mungo (Calvert 1970) and Tsawwassen (Curtin 1991a); on Vancouver Island: Deep Bay (Monks 1971), Maple Bay (Simonsen 1988), and Somenos Creek (Brown 1996); and on the Gulf Islands: Helen Point (Carlson 1970), Pender Canal, DeRt 1 (Carlson and Hobler 1993), Long Harbour (Johnstone 1991), False Narrows (Burley 1989), Hill Site (Hall and Haggarty 1981), and Montague Harbour (Mitchell 1971). Additional burials

from either late Marpole or early Gulf of Georgia contexts are known from Tsawwassen (Curtin 1991a), Departure Bay (Arcas 1994b) and Willows Beach (Eldridge 1987a, 1987c).

Marpole burial practices appear to have been extremely variable, although the most common mode of corpse disposal was simple unelaborated flexed midden interment with few or no grave inclusions. In some cases, bodies were partially covered by rock slabs (Montague Harbour, Somenos Creek, False Narrows), and larger, more elaborate stone cairns were constructed over others (Hill Site, Deep Bay, Somenos Creek, False Narrows). One of the Somenos Creek burials featured a hearth on top of the burial pit and beneath the cairn (Brown 1996), a possible indication of mortuary ritual involving the burning of food for the dead. Burial boxes may have been utilized at the Hill Site (Burial 4) and Montague Harbour (Burial 7), based on the presence of wood fragments above and below the skeletons; definite box outlines were found at Long Harbour and Somenos Creek, the latter example with a boulder placed on top of the lid (Brown 1996). At False Narrows and at Somenos Creek burials were distributed very densely within a relatively limited space, leading to frequent disturbance of earlier burials by subsequent interments; Brown (1996) interprets this pattern at Somenos Creek as a deliberate attempt to group individuals spatially (perhaps along kinship lines) within the cemetery.

Within the Marpole burial sample there is considerable variability in the distribution and frequency of grave goods. In their 1989 review paper, Burley and Knüsel evaluated the reported burial associations of 145 individuals from 9 designated Marpole components, and concluded that 34 (23%) had welldocumented grave inclusions; only 20 (14%), however, were buried with wealth objects or ritual items. The most common wealth indicators were profuse quantities of dentalia and/or disc beads of either stone or shell, in a few cases occurring so abundantly as to form a thick blanket over the body (reminiscent of the two elaborate St. Mungo phase burials from Tsawwassen, described above). The demographic profile of the "rich" burials mirrors that of the sample as a whole, with both sexes and subadults as well as adults represented, ample evidence to support the existence of ascribed status differences in Marpole times (Burley and Knüsel 1989: 9). Additional evidence of status differentiation may be found in the occurrence of labrets with two of the Hill Site burials, and the presence of labret wear facets on the teeth of a third (Hall and Haggarty 1981).

# **Gulf of Georgia Culture Type (1500 BP - Contact)**

Due to what Matson and Coupland (1995: 218) refer to as a "seamless evolutionary transition" between Marpole and Gulf of Georgia cultures, it is often difficult to distinguish the two archaeologically, or to establish boundary dates between them. Technologically, there is a continuation of the trend, first observed in Marpole, of reduction in chipped stone and increasing dominance of bone and antler in tool manufacture. Some artifact types characteristic of Gulf of Georgia culture are: thin, triangular ground slate points, large ground stone celts, flat-topped hand mauls, antler composite toggling harpoons, decorated bone blanket pins, decorated antler combs, triangular ground mussel shell points, and a variety of bone bipoints and unipoints (Mitchell 1990: 346). Two regional variants of this culture have been identified, the San Juan phase (centred on the Gulf and San Juan Islands) and the Stselax phase (mainland Fraser delta region), but differences between the two appear minimal (Matson and Coupland 1995: 268).

In addition to the winter villages and limited activity, specialized procurement sites known from the Marpole period, defensive sites marked by "trench embankment" fortifications appear after about 1200 BP; these seem to be indicative of a significant level of inter-group conflict during this period (Matson and Coupland 1995: 270). Burial practices undergo marked change as well. The Gulf of Georgia culture saw the appearance of large, earthen burial mounds with interior rock alignments and/or cairns, often containing elaborate grave goods; although few direct dates are available they seem to date between 1500-1000 BP (Thom 1995). Finally, sometime after 700 BP, a shift from sub-surface to above-ground disposal took place, so that by the time of European Contact, interment was virtually unknown (Barnett 1955; Jenness n.d.).

Midden interments dating to the early part of this period, and apparently contemporaneous with the earthen burial mounds and large surface cairns, are reported from a number of sites: Beach Grove (Abbott 1962), Coldicutt Creek (Oliver and Skinner 1986), Crescent Beach (Ham 1982; Conaty and Curtin 1984), and Tsawwassen (Curtin 1991a) on the mainland; Cypress Street (Oliver 1993, Arcas 1993), Departure Bay (Wilson 1990b), Deep Bay (Monks 1977), Little Qualicum River (Bernick 1983), and Piper's Lagoon (Wilson 1988; Skinner and Waddell 1990b) on Vancouver Island; and DfRu 42 (Skinner and McKendry 1984), False Narrows (Burley 1989), Harbour House (Arcas 1994a), Montague Harbour (Mitchell 1971), Mueller's Cabin (Skinner and Thacker 1988), and

Pender Canal (Carlson and Hobler 1993) on the Gulf Islands. With the exception of the large Tsawwassen sample, numbering 76 individuals, burial samples from these sites are small, generally less than 10 individuals, and often consisting of a single skeleton.

A range of variation comparable with the previous Marpole culture is apparent in mortuary patterns, which include simple inhumations in shallow pits (False Narrows, Montague Harbour, Tsawwassen), more elaborate rock-lined pit burials (Tsawwassen, Deep Bay), rock slab burials (Harbour House), cairn burials (Harbour House, Deep Bay), and box burials (Piper's Lagoon, Tsawwassen). Two of the Tsawwassen box burials were capped by a large boulder in a manner similar to the earlier Somenos Creek box burial, and one (D-32) was covered by a large cairn (Curtin 1991a). The Piper's Lagoon box burial may also have originally had an associated cairn, but house construction destroyed much of the contextual data (Wilson 1988). Most bodies appear to have been interred without grave goods, but at least one "rich" burial is known, with more than 100 disc and dentalium beads, some of which were elaborately carved (Curtin 1991a, n.d.); many other burials have small numbers of inclusions, primarily personal ornaments such as pendants or beads. An unusually late occurrence of labret use has been reported from the Coldicutt Creek site near White Rock, where a flexed midden burial of an adult male with artificially deformed skull was found to have labret wear on five anterior mandibular teeth; this skeleton was radiocarbon dated at 1280 ± 135 BP (Oliver and Skinner 1986).

Hearth features have been found in association with burials from Pender Canal, Little Qualicum River, and Tsawwassen, suggesting that burning of food or possessions may have figured in mortuary ritual; more direct evidence of the provision of food for the dead is apparent from the presence of articulated fish remains with one of the Tsawwassen burials, and large whole clam shell valves with two others.

The sudden appearance of burial mounds and large surface burial cairns near the beginning of the Gulf of Georgia period, their co-occurrence with midden interment for at least 500-700 years, and the sudden and apparently total replacement of both forms by the ethnographic pattern of surface corpse disposal is one of the most intriguing puzzles of Northwest Coast prehistory. Thom (1995: 45) has suggested that these changes mark the emergence of social classes in the Gulf of Georgia region, from an earlier social system based on rank status differences, a challenge to previous views that social classes were identifiable by Marpole times (Burley 1989: 62); further research is clearly needed to evaluate this provocative hypothesis.

### Nanaimo Area Prehistory

Archaeological research in traditional Nanaimo territory was initiated in the 1960s and 1970s with a series of large-scale regional site inventory projects (Abbott 1963; Acheson et al. 1975; Cassidy et al. 1974; Murton and Foster 1975; Will and Cassidy 1975), that recorded hundreds of heritage sites along the shorelines of the Gulf of Georgia. The following two decades saw a narrowing of focus of archaeological surveys to the impact zones of specific development projects (Apland 1977, 1980; Duff and Brolly 1978; Simonsen 1991, 1996; Wilson 1987). Apart from small-scale evaluative testing on Newcastle Island (Monks 1971; Noury 1971), Protection Island (McMurdo and Lundy 1975), Gabriola Island (Wilson 1987), and at Departure Bay (Sendey 1970), most excavations in the Nanaimo area have been salvageoriented, stimulated by the anticipated deleterious impact of major development projects to known archaeological sites. These include large-scale mitigative excavations at False Narrows (DgRw 4) on Gabriola Island (Mitchell 1967; Burley 1989), at a series of sites (DgRx 5, 11, 29, and 36) in the vicinity of Duke Point (Apland 1977; Mitchell 1979a; Murray 1982), and at Departure Bay (DhRx 16) in Nanaimo (Wilson 1990a, 1990b, 1991, 1994; Arcas 1994b, 1994c). Additional small-scale salvage excavations have been implemented periodically to recover human remains from a number of sites in the vicinity (Oliver 1990, 1993; Skinner and Thacker 1988, 1989; Skinner and Waddell 1990a, 1990b; Wilson 1988). At nine sites, C-14 dates and/or the presence of temporally-diagnostic artifacts have permitted their placement within the regional cultural chronology, demonstrating a history of occupation dating back more than 4,000 years (Table 2.1).

Of particular relevance to the current project are the many sites in traditional Nanaimo territory that are reported to contain human remains. In Nanaimo itself, the large Departure Bay midden (DhRx 16) has yielded abundant evidence of burials dating to the Marpole and Gulf of Georgia cultures (Acheson et al. 1975; Arcas1994b, 1994c; Wilson 1990a, 1990b, 1994). The majority appear to be flexed midden inhumations with few or no grave goods, but one possible cremation (Arcas 1994b) and several possible surface interments (inferred from the presence of disarticulated skeletal elements) have also been reported (Wilson 1994). Pathological lesions suggestive of syphilitic osteomyelitis were identified on the long bones of one fragmentary, disarticulated skeleton from the Randle Road site (Wilson 1990b). Also in Nanaimo, the Cypress Street site (Oliver 1993; Arcas 1993) has yielded

evidence of one of the latest midden burials recorded in the region, dated at  $410 \pm 50$  BP (Curtin 1999).

On nearby Duke Point, an unusual mass burial of 10 individuals (two young adult males, two young adult females, an adolescent, a juvenile, two children, an infant, and a fetus) was recovered from midden deposits at DgRx 5 (Murray 1982). The skeletons were aligned more or less parallel to each other, with heads oriented either north or south, and, unlike the Departure Bay burials, they appear to have been deposited on their backs with legs semi-flexed or extended (except for one individual whose legs were tightly flexed to either side of the torso). Grave inclusions were limited to 158 shell disc beads, found in association with two subadults, and a bone blanket pin with one of the adult females. The burial was initially attributed to the Marpole component, based primarily on the presence of the shell beads (Murray 1982), but later radiocarbon analysis of bone collagen from one of the skeletons yielded a much older age estimate of  $3490 \pm 125$  years BP, which places the burial event near the end of the Charles or the beginning of the Locarno Beach cultures (Cybulski 1991b). Six of the skeletons exhibit pathological lesions that Cybulski interpreted as evidence of a variety of treponemal diseases, including venereal, congenital, and endemic syphilis; he implies (based on the unusual burial context) that they may have been deliberately killed to prevent further transmission of the disease (Cybulski 1991b: 17).

Just north of Departure Bay at Piper's (Page) Lagoon, a charred cedar box containing the tightly flexed remains of an adult female was recovered from another midden site (**DhRx 44**); the burial may originally have been covered by a stone cairn that was disturbed during house construction (Wilson 1988). Wood from the box yielded a radiocarbon date of 1480 ± 60 years BP, placing it near the Marpole/Gulf of Georgia interface (Skinner and Waddell 1990b).

Human burials have also been found on two small islands in Departure Bay. Oliver (1990) salvaged the flexed burial of a young adult female with artificially deformed skull (suggestive of Marpole or later contexts) from an unspecified midden site on Protection Island, and noted previous reports of human skeletal remains eroding out of the same site. Excavations at **DhRx 6** on Newcastle Island (Monks 1971) uncovered seven inhumations, six of which were found very close to the surface and thought to be relatively recent, possibly the remains of smallpox victims. The historic provenance of two of these was established by the presence of Eurocanadian artifacts (porcelain buttons, silver earrings) and square nails in the burial boxes. Excavations at **DhRx 6** on Newcastle Island (Monks

1971) uncovered seven inhumations, six of which were found very close to the surface and thought to be relatively recent, possibly the remains of smallpox victims.

Table 2.1 Cultural components reported from Nanaimo area sites.

Site	Archaeological Components	Source
DgRx 29	historic Nanaimo; Gulf of Georgia	Миггау 1982
DgRw 20	Gulf of Georgia	Skinner & Thacker 1988
DhRx 66	Gulf of Georgia	Arcas 1993
DgRw 4	historic Nanaimo; Gulf of Georgia; late Marpole	Burley 1989
DgRx 36	historic; early Gulf of Georgia/late Marpole	Murray 1982
DhRx 16	historic Nanaimo; Gulf of Georgia; Marpole; Locarno Beach	Arcas 1994b, 1994c Wilson 1990, 1991, 1994
DgRx 5	Gulf of Georgia; Marpole; Locarno Beach; Charles*	Murray 1982
DgRw 200	early Marpole/late Locarno Beach	Wilson 1987
DgRx 11	Marpole; Locarno Beach	Murray 1982

<sup>\*</sup> not reported by Murray, but Component I radiocarbon date of  $4130 \pm 100$  years BP exceeds known range of Locarno Culture Type.

Two small, rocky islets off Gabriola Island were reported to have been used as burial islands by the Nanaimo people in the late prehistoric and early historic periods: Entrance Island (**DhRw 12**) north of Gabriola Island in Forwood Channel, and a small unnamed islet (**DgRw 169**) in Degnen Bay off the southeast tip of Gabriola. No burials were present, however, when the sites were formally recorded in 1975.

The remaining ten known burial sites are all located on Gabriola Island. They include seven cave/crevice burial sites and three shell midden sites from which burials or scattered human remains have been recovered. Each of the ten is briefly described below.

**DhRw 1**, located above Lock Bay near the northeast end of the island, is a complex of rockshelters and crevices beneath massive sandstone boulders, at least four of which contained human remains. Although the skeletal remains had already been removed by the time the site was formally recorded in 1974, some information on the original burial context was provided by a local resident who had visited the site

about 10 years previously (Cassidy et al. 1974). The largest shelter was reported to contain 8-10 individuals, some with intact skeletons possibly in extended position, along with some small fragments of charred cedar; one of the skulls may also have been partially charred. The two smaller shelters contained the disarticulated remains of two individuals each; and a crevice contained the remains of one individual. The RBCM (Royal British Columbia Museum) skeletal collection from DhRw 1 is comprised primarily of cranial remains from a minimum of 15 individuals (14 adults and one child); some, but not all, of the skulls are artificially deformed, suggesting a late Locarno/early Marpole age. No artifacts are present in the collection.

Almost no information is available about **DhRw 3**, except that it is a small (1.5 m) rockshelter located "just east of Berry Pt. [Orlebar Point?], Gabriola Island". The skeletal remains of two infants were collected from the site in 1968 and accessioned by the RBCM. The pronounced artificial deformation of both skulls and the presence of fragments of cedar bark matting together suggest that these burials may date to the late prehistoric period.

Information about DhRx 28 is also scanty. The site is described as "cave burial", located on the north shore of Descanso Bay, but no details on burial context are available since the skeletal remains were removed before the site was recorded. The RBCM collection from the site is comprised of primarily infracranial remains from a minimum of 11 individuals: 4 adults, 1 adolescent, 5 children, and 1 infant. With the exception of the infant and a 4-6 year-old child, the skeletons are very incomplete, many represented by fewer than 10 elements. The only cranial remains recovered are those belonging to the infant; both frontal and occipital bones have been artificially deformed, suggesting a post-Locarno age for this individual. No artifacts were reported in association with the human remains, but the distal left tibia of a 7-9 year-old child exhibits a pronounced green stain suggesting former contact with a copper object.

DhRx 29, a late prehistoric or early historic rockshelter site, is located near sea level, below the steep sandstone bluffs south of Descanso Bay. The site, first recorded by Sendey in 1967, and revisited by Cranny and Cassidy in 1974, is said to contain the remains of at least seven individuals, as well as fragments of painted bentwood cedar boxes, and cedar or spruce root rope. A local informant indicated that the site has been disturbed over the years, and copper bracelets and a painted panel had been removed.

The three remaining cave/rockshelter burial sites are all located inland along the base of the sand-

stone bluffs behind False Narrows, and were recorded by Ian Wilson (1987) during his survey of the bluff area. The largest of the three, DgRw 199, consists of a small, two-chambered cave containing the remains of at least seven individuals, and two smaller nearby crevices, each containing at least one individual. The main cave was apparently being vandalized, as digging implements were found inside the chamber. To protect the burials from further vandalism, surface remains from the main cave and one of the crevices were collected later that year (Skinner 1991). DgRw 204, near the top of the bluff system, was described as a severely disturbed burial under a rock overhang. Only two human skeletal elements were visible at the time the site was recorded; both were collected by Wilson. DgRw 210 also appeared to be severely disturbed, either through vandalism or animal activity, when recorded by Wilson. The site was described as a rockshelter containing the remains of at least one individual. All human elements visible on the surface were collected in February, 1988 (Skinner and Waddell 1990a).

Excavations at a large shell midden site, **DgRw 4**, on False Narrows in 1966 and 1967 recovered 49 burials reported to contain the remains of 82 individuals (Gordon 1974; Burley 1989). This site and

its burial assemblage are discussed at greater length in Chapter 3.

The final site on Gabriola Island that is known to contain human burials is  $DgRw\ 20$ , a shell midden with associated petroglyph, located on the south side of the island between False Narrows and Degnen Bay. In 1987 human skeletal remains were reported by a local resident to be eroding out of the midden bank, and the partial skeleton of an adolescent male was subsequently recovered (Skinner and Thacker 1988). A primary inhumation, the body was lying on its left side in a tightly flexed position with ochre flecks scattered over top and three polished green pebbles placed by the right wrist. Charcoal samples from beside and above the burial yielded radiocarbon dates of  $900 \pm 60$  and 730 + 55 years BP.

Finally, a human skull fragment was recovered by Ian Wilson from **DgRw 209**, a large midden site located near the base of the False Narrows bluffs (Wilson 1987: 57). This fragment, which was found in a test pit about 40 cm below surface, appeared to be an isolated find, but the occurrence of scattered human remains suggests that intact burials may also be present in the midden.