## Appendix B Artifact Descriptions

Artifacts are defined as portable objects made or modified by humans (Renfrew and Bahn 1991: 41). Summary descriptions of the artifacts recovered from the cave and crevice burials along the False Narrows bluffs are presented below, according to material and method of manufacture. Where provided, dimensions are respectively: maximum length by maximum width by maximum thickness, measured in millimetres. Measurements in parentheses indicate that the artifact was incomplete in that dimension.

## DgRw 199 Feature 1

A total of 145 artifacts or artifact fragments were recovered from DgRw 199 -F1 in the course of two field projects in 1987 and 1992. Artifact numbers prefixed with an " $F$ " were collected by Skinner in 1987; they were also assigned a sequential number consistent with the artifacts collected in 1992. In several instances, artifacts were broken and highly fragmented, so that the number of catalogued items is greater than the total number of artifacts represented. Where possible, broken artifacts were reconstructed.

## Flaked Stone Artifacts ( $\mathrm{n}=15$ )

## Detritus ( $\mathrm{n}=7$ )

Included in this category are all unmodified waste flakes and fragments originating as by-products of stone tool manufacture. The specimens from 199-F1 appear to be randomly distributed throughout the burial cave. They include five platform-bearing flakes (four complete, one proximal half), one piece of flake shatter, and a wedge-shaped block shatter with cortex cover. The flakes are relatively large, but none has cortex, indicating intermediate stages of lithic reduction. A variety of raw materials were used: basalt ( $\mathrm{n}=3$ ), quartzite ( $n=2$ ), greywacke, and quartz porphyry.

| Type | Length | Width | Thick |
| :--- | :---: | :---: | :---: |
| PB flakes-mean | 24.4 | 22.1 | 5.0 |
| -range | $12.2-35.6$ | $15.9-34.7$ | $2.1-7.4$ |
| Flake Shatter | $(30.2)$ | $(18.0)$ | 7.0 |
| Block Shatter | $(42.1)$ | $(39.6)$ | $(15.3)$ |

Microblades ( $\mathrm{n}=5$ ) [Figure B.3: $\mathrm{s}-\mathrm{v}$, x ]Microblades are defined as small, thin, narrow ( $<10 \mathrm{~mm}$ ) flakes with more or less parallel edges and triangular or trapezoidal cross-sections (Loy and Powell 1977). AIthough once thought to be a relatively recent introduction in the Fraser Delta cultural sequence (Borden

1970: 107), microblades are now known from a number of earlier Locarno Beach components, including Montague Harbour I (Mitchell 1971), Bowker Creek (Mitchell 1979b), Georgeson Bay I (Haggarty and Sendey 1976), and Millard Creek (Capes 1977).

The microblades from 199-F1 include two complete specimens (\#49, \#128), two large proximal fragments (\#109, \#125), and one medial section (\#4). Two are slightly asymmetrical with expanding lateral margins; all have two dorsal arres and trapezoidal cross-sections. Three are made of banded black obsidian, and two of smoky grey obsidian. All were recovered from the west end of the burial feature (the "fissure", and EUs 10,12 , and 14). One of the microblades is unmodified, but the rest exhibit use-chipping along one or both lateral margins; one (\#49) also has a small retouched notch on one lateral margin.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 49 | 26.5 | 9.0 | 1.1 | EU 10 level 2 |
| 128 | 25.8 | 8.3 | 0.8 | EU 14 level 3 |
| 109 | $(17.6)$ | 6.6 | 1.7 | EU 12 level 4 |
| 125 | $(15.8)$ | 5.4 | 0.8 | EU 12 lev 5-8 |
| 4 | $(18.2)$ | 6.7 | 1.3 | fissure |

Points ( $\mathrm{n}=2$ ) [Figure B.1: a, c]
Two flaked stone points were recovered from 199-F1. The first (\#81) is a small, nearly complete tear-shaped biface of dark grey chert, from EU level 3 (Figure B.1a). The basal end exhibits a hinged fracture scar, obscuring evidence of the hafting style. Blade margins are contracting-excurvate. Dimensions (33.3) $\times 16.5 \times 5.3$.

The second point (\#101) was collected from the surface of EU 12. It is a complete stemmed biface of medium-grained basalt with an asymmetric contract-ing-excurvate blade and slightly oblique base (Figure B.1c). One surface is coated with a mineral precipitate. Dimensions $55.4 \times 20.7 \times 6.8$.

## Utilized flake ( $\mathrm{n}=1$ )

This category includes lithic detritus that has been modified as a by-product of task use. The single example in this assemblage (\#100), from EU 11 Level 7 , is a medium-grained basalt platform-bearing flake with cortex on the striking platform and along one lateral margin. The opposite lateral margin and the distal margin exhibit irregular bifacial micro chipping produced by use wear, possibly from slicing a soft wood or meat (G. Howe, personal communication). Dimensions $22.8 \times 45.6 \times 8.4$.


Figure B. 1 Chipped and ground stone artifacts: a-c chipped stone projectile points; d-f ground stone projectile points; $\mathrm{g}_{\mathrm{j}} \mathbf{j}$ : ground slate fragments; h: chipped slate knife/preform; i: ground slate knife fragment (actual size).


Figure B. 2 Ground/pecked stone artifacts: a-b: celt/adze blades; c-d,f: shaped abrader fragments; e : polished sandstone fragment; $g$ : atlatl weight (actual size).

## Ground Stone Artifacts (n=25)

Celt/Adze blade ( $\mathrm{n}=2$ ) [Figure B.2: $\mathrm{a}, \mathrm{c}$ ]
Celts are hafted cutting tools, used primarily in woodworking. The two examples from this site have single bevelled bit elements with smoothly tapered ventral surfaces and straight working edges. Lateral margins are ground flat (\#24) or slightly bevelled (\#3). In both specimens, maximum width is attained at the bit end. Polls are asymmetrically rounded, gently curved on \#24, and more strongly curved on \#3. The bit on \#3 has been re-sharpened. Both tools are made of nephrite/serpenti

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :--- | :--- | :--- | :--- | :---: |
| 3 | 58.2 | 18.8 | 11.3 | Fissure |
| 24 | 56.0 | 26.4 | 13.9 | EU 7 level 7 |

Slate knife ( $\mathrm{n}=1$ ) [Figure B. 1: i]
Ground slate knives are thought to have been used primarily in food preparation, particularly in the processing of fish. The single example (\#28), from EU 8 level 3, is a fragment of a thin slate knife, with both surfaces ground smooth to an even thickness. Only a small portion of the original cutting edge is preserved; it exhibits moderate use polish and micro chipping. Borden (1970: 103) considered thin slate knives to be diagnostic of the Marpole phase, and thicker, heavier knives to be typical of the earlier Locarno phase. Thin slate knives are now known from both earlier and later contexts, although they are most abundant in Marpole components (Burley 1980: 22). Dimensions (49.1) x (37.6) x 2.4 .

Slate point ( $\mathrm{n}=1$ ) [Figure B.1: e]
This incomplete specimen (\#147) is missing both its tip and proximal end, so its original shape and


Figure B-3 Miscellaneous stone and copper artifacts: a-f: bilaterally drilled oval ornaments: gm : barrel beads: $\mathrm{n}, \mathrm{r}$ : thick faceted bead; $\mathrm{o}-\mathrm{q}$ : disc beads; $\mathrm{s}-\mathrm{x}$ : obsidian microblades; y : drilled pendant or "button"; z: perforated copper ornament (actual size).
hafting style are unknown. The recovered portion has straight blade margins with double bevelled edges producing a flattened hexagonal cross-section. It was found in EU 15 level 7. Dimensions (42.7) x (21.6) x 3.3.

Drilled oval ornaments ( $\mathrm{n}=6$ ) [Figure B.3: $\mathrm{a}-\mathrm{f}$ ]
These unusual objects are oval to subrectangular in outline, with flat ventral surface and domed dorsal surface, producing a plano-convex cross-section. The smallest specimen is flatter in section than the others. They resemble barrel bead blanks that have been sectioned longitudinally and biconically drilled at either end perpendicular to their longitudinal axis. All six examples are made of finely ground and polished soapstone (or coal?), and all have been burnt, leaving them slightly damaged and friable. Five of the six specimens are complete, and one is about two-thirds complete. Three show evidence of redrilling when drill holes originating on opposite surfaces did not meet.

Two similar artifacts were recovered from the Pender Canal site (DeRt 2), but they are not documented from other sites in the area (Dahm 1994: 56).

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :--- |
| 72 | 20.0 | 9.2 | 5.0 | EU 11 level 1 |
| 102 | 24.8 | 10.3 | 5.6 | EU 12 level 1 |
| 103 | $(20.1)$ | 11.7 | 5.3 | EU 12 level 2 |
| 108 | 13.3 | 7.9 | 2.5 | EU 12 level 3 |
| 127 | 28.3 | 11.6 | 5.4 | EU 14 level 3 |
| 129 | 18.5 | 9.2 | 4.7 | EU 14 level 4 |

Pendant ( $\mathrm{n}=1$ ) [Figure B.3: y ]
This object (\#2; F77) was described as a "button" by Skinner, who collected it in 1987 from the "fissure" area of the burial feature, but it most likely served as a pendant. It is a flattened, slightly concave oval of fine siltstone with a shallowly notched margin on the concave surface, and two drilled holes. The larger biconically drilled hole is located near the centre of
the artifact; it has a maximum diameter of 5.4 mm . A smaller hole (maximum diameter 4.2 mm ) located near the margin was drilled from the convex surface, and barely pierces the concave side. Dimensions 25.4 x $21.4 \times 1.9$.
Stone beads ( $\mathrm{n}=12$ ) [Figure B.3: $\mathrm{g}-\mathrm{r}$ ]
Ground stone beads of various sizes and shapes are known from a number of archaeological sites in the Gulf of Georgia region, dating approximately from 3500-1500 BP (Dahm 1994: 62-67). Four types of ground stone beads were found at 199-F1: symmetrical, round, highly polished disc beads ( $\mathrm{n}=3$, Figure B.3: o-q); thicker asymmetrical irregularly faceted beads ( $n=2$, Figure B.3: $n$, r); small tubular/barrel beads ( $\mathrm{n}=1$, Figure B.3: m), and large barrel beads ( $\mathrm{n}=6$, Figure B.3: $\mathrm{g}-\mathrm{l}$ ). All have been biconically drilled, and all are made of soapstone (or coal?) except the small tubular bead which is mudstone. Two of the disc beads and all of the large barrel beads have been burned, perhaps during the cremation of their wearer. The barrel beads are oval in shape and are thicker through the middle than at either end. One of these has been reconstructed from two fragments recovered from different excavation units. The disc and thick asymmetric beads are all from the east chamber, and the barrel beads cluster in the west chamber.

| Cat. \# | Diam. | Thick | Hole | Provenience |
| :---: | :---: | :---: | :---: | :--- |
| Disc |  |  |  |  |
| 11 | 7.9 | 4.0 | 2.8 | EU 3 level 4 |
| 13 | 7.8 | 3.4 | 2.2 | EU 3 level 4 |
| 17 | 7.7 | 3.4 | 2.9 | EU 4 level 2 |
| Thick |  |  |  |  |
| 14 | 8.5 | 6.6 | 2.9 | EU 3 level 4 |
| 22 | 6.8 | 4.7 | 2.7 | EU 7 level 4 |
| Barrel |  |  |  |  |
| 59 | 5.2 | $(8.0)$ | 3.1 | EU 10 level 4 |
| 32 | 7.7 | 26.8 | 3.2 | EU 9 level 3 |
| 33 | 9.4 | 16.0 | 5.1 | EU 9 level 3 |
| 35 | 9.0 | 19.1 | 3.6 | EU 9 level 4 |
| 36 | 9.9 | 24.1 | 4.5 | EU 9 level 4 |
| 45 | 8.0 | 20.9 | 2.8 | EU 9 level 5 |
| $29 / 58$ | 10.4 | 19.4 | 4.2 | EU 8 level 3/ |
|  |  |  |  | EU 10 level 4 |

## Miscellaneous ground stone ( $\mathrm{n}=2$ )

This category includes two broken fragments of artifacts, each with one surface that is ground and polished. The smaller of the two (\#146) is a block of nephrite [(17.8) x (10.7) x (8.9)] with one ground convex surface. The other (\#73) is a rectangular block of coarse red sandstone [(30.4) x (27.3) x (12.8)] with one surface ground flat and polished to a high sheen (Figure B.2: e). The size, shape, and function of the original artifacts is unknown.

Pecked and Ground Stone Artifacts ( $\mathrm{n}=5$ )
Abraders ( $\mathrm{n}=3$ ) [Figure B.2: $\mathrm{c}-\mathrm{d}$ ]
Abraders are used in the production and rejuvenation of bone, antler, shell, and ground stone tools. Two of the examples from 199-F1 are small, carefullyshaped triangular abraders with smoothly ground margins and surfaces. One (\#142) is made of very finegrained sandstone, and has a rectangular cross-section and asymmetrical outline (Figure B.2: c). The other (\#150), of coarse sandstone, has a flat ventral surface, vertical sides, and a faint median dorsal ridge, producing a flat pentagonal cross-section. This specimen is broken at the base, but retains traces of a circumferential groove, perhaps used for suspension from a cord or thong (Figure B.2: d). The third abrasive stone (\#30), from EU 8 level 7, is an unshaped fist-sized sandstone cobble with one surface worn smooth; this may have been used as a planing tool in woodworking.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :--- | :--- | :--- | :--- | :--- |
| 142 | 49.6 | 19.1 | 4.8 |  |
| 150 | $(42.9)$ | 23.5 | 9.1 | EU 13 level 6 6 |
| 30 | 120.7 | 65.8 | 45.1 | EU level 5 5 |

Atlatl weight ( $\mathrm{n}=1$ ) [Figure B.2: g ]
This nearly complete, boat-shaped artifact (\#5, [F80]) is made of fine-grained laminated sandstone. It has an elongated outline with a flat to slightly convex base, tapered ends, and a hemispherical cross-section. One end is bluntly rounded and more steeply domed; both the top surface and lateral margins taper gently towards the other narrower end. The narrow end is broken near the tip; a 6.6 mm wide U -shaped notch scores the top of the artifact just above the fractured end. Dimensions $134.4 \times 22.5 \times 19.8$.

Atlatl weights provided balance and weight to throwing boards, improving the accuracy of the hunter's aim. Such weights are known from sites in southwestern British Columbia dating from 3000 to 1500 years ago (Keddie 1988). Throwing boards gradually disappeared from the archaeological record after the introduction of the bow and arrow, which occurred sometime between 2500 and 2000 years ago, although the two co-existed for a period of time.

This specimen most closely resembles Butler and Osborne's (1959: 217) Type II atlatl weight, except that only one end is notched rather than both. Butler and Osborne suggest that Type II weights may be part of a continent-wide boatstone tradition. In the northwest, this style of weight is best known from the Columbia River and south-eastern Oregon, where they are found in burial, cremation, and habitation sites.

Hammerstone ( $\mathrm{n}=1$ )
An otherwise unmodified flat oval cobble is battered at both ends and along the periphery of the
narrowest margin, as a result of use as a hammerstone. The remainder of the rock is smoothly polished, as if water-rolled. Dimensions $126.4 \times 85.0 \times 42.3$.


Figure B-4 Bone artifacts: a: harpoon foreshaft; b-d: worked mammal ribs; e: splinter awl tip; f: faceted point fragment; g-j: unipoints; $k$ : worked bone fragment; l-o: fragments of unidentified bone objects (actual size).

## Bone Artifacts ( $\mathrm{n}=14$ [25 pieces])

Awl fragment ( $\mathrm{n}=1$ ) [Figure B.4: e]
The tip of a long bone splinter awl was collected from EU 13 level 6 . It has a rectangular crosssection, flat ground margins, and a double tapered tip with use polish. Dimensions (14.7) x (5.6) x 2.3 .

## Canid jaw ( $\mathrm{n}=1$ )

This edentulous right maxilla (\#1 [F76]) came from the fissure area during Skinner's 1987 project. The entire superior surface has been ground down to, and parallel with, the palatal surface, exposing the molar alveolar sockets (Skinner 1991: 52, Fig. 8). Portions of the ground surface are finely polished. No function is suggested. Dimensions $64.0 \times 30.1 \times 12.7$.

## Harpoon foreshaft ( $\mathrm{n}=1$ ) [Figure B.4: a]

A long cylinder of finely polished bone (\#44) probably functioned as a foreshaft for a composite harpoon. The broken proximal end has an oval crosssection; the distal end is flattened on opposite surfaces, with rounded sides, and tapers to a blunt point. Dimensions ( 158.3 ) x $10.2 \times 8.7$; from EU 9 level 5 .
Unipoints ( $\mathrm{n}=3$ ) [Figure B.4: g -i]
One broken and two complete bone unipoints were recovered from EU 16 . These artifacts were used as arming points and barbs on a wide range of composite fishing tools (Ham 1982: 237). The largest (\#149) is a finely-worked, symmetrical artifact with a rectangular cross-section, quadri-tapered end, and double bevelled base. The second complete unipoint (\#153) is asymmetrical in shape, with a slightly rounded tip and a wedge-shaped base. The incomplete specimen (\#154) is a badly weathered distal fragment with sub-circular cross-section and tapered end.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 4 9}$ | 46.6 | 4.0 | 3.0 | EU 16 level 4 |
| 153 | 33.6 | 3.4 | 2.7 | EU 16 level 7 |
| 154 | $(31.2)$ | 3.6 | 3.1 | EU 16 level 8 |

Faceted point fragment ( $\mathrm{n}=1$ ) [Figure B.4: f]
A medial section of a faceted bone point was recovered from EU 9 level 6. The recovered portion has double bevelled, expanding margins and a hexagonal cross-section. The medullary canal is exposed on one surface. The artifact is charred black on one side, and discoloured on the other. Dimensions (21.7) $\mathrm{x}(14.9) \times(6.5)$.
Unidentified bone object ( $\mathrm{n}=1$ ) [Figure B.4: 1-o] Twelve fragments of an unusual bone artifact
were collected from the west chamber of the burial cave. Six of the pieces were found to articulate with other fragments, but the overall shape of the complete artifact is still unclear. It appears to have had a slender, elongated outline, with faceted margins, and longitudinal grooves or channels on at least two surfaces. All of the recovered fragments have been finely ground and polished, and all are burnt black to blue-grey in colour. The pieces are quite small, averaging 24.3 mm in length (range 11.5-48.2 mm). The majority ( $83 \%$ ) were collected from the northeast quadrant of EU 9, predominantly from levels 4 and 5 .

## Miscellaneous worked bone ( $\mathrm{n}=5$ )

Two long bone and two skull fragments have been minimally modified by sectioning, grinding, and/or polishing, but have not been shaped into formed tools. The worked long bones include an otherwise unmodified bird bone fragment with smoothly polished margins, and a small fragment of mammal bone with one surface ground flat. Two small, rectangular pieces of mammal skull have at least one sectioned margin; the remaining margins although not clearly cut, are smoothed and polished.

## Whalebone bark shredder ( $\mathrm{n}=1$ )

An incomplete bark shredder (\#6, [F81]) was found in the fissure area of the burial cave, in direct association with an obsidian microblade (Skinner 1991: 54, Fig. 13). It is slightly curved anteroposteriorly, with bevelled, expanding lateral margins, a bevelled, finely serrated working edge, and a prominently shouldered handle. The proximal margin of the handle is notched in midline, and shaped like the tail flukes of a whale. A biconically drilled, 5 mm perforation marks the base of the handle. Dimensions 335 x (70) $\times 8$.

## Antler Artifacts ( $\mathrm{n}=6$ [51 pieces])

Carved art object ( $\mathrm{n}=1$ [6 pieces]) [Figure B.5]
This fragmentary object consists of six small, highly polished pieces of burnt antler, five of which articulate to form a triangular slab, one surface of which is carved with an elaborate curvilinear design. One lateral margin is marked bifacially by a shallow notch creating a short, blunt barb-like projection which is incorporated into the carved design; unfortunately only a small segment of this margin was recovered so the presence of other notches/barbs cannot be determined. The two other surfaces are highly polished but otherwise unmodified except for a deep, 11.1 mm long incised groove on the opposite side of the projection. The artifact is too incomplete to identify the figure(s)


Figure B-5 Carved antler object (actual size).
represented, but the design is reminiscent of one depicted on wooden board and box fragments recovered from a Skamel phase (ca. 1500-2000 B.P.) pithouse at the Esilao site ( DjRi 5 ) in the Fraser Canyon (Borden 1983: 156, Fig. 8:28). The six pieces were found scattered through the burial feature, from relatively deep levels of EUs 9 and 10, to the upper five centimetres of EUs 3 and 4. Dimensions (61.6) $\times(18.7) \times(10.4)$.

The presence of the barb/projection raises the possibility that this object may have been an elaborately carved harpoon or spear point, perhaps used only on ceremonial occasions. If so, it is very different from the other such objects described in the literature (Borden 1983: 144, Fig. 8:16c; Carlson 1983: 199, Fig. 11:1b; Smith 1903: 183, Fig. 52). Typically these artifacts have elaborate zoomorphic designs carved in the round on the haft element only. The artifact from 199-F1 differs both in shape (triangular slab), and in the area decorated (single surface, shaft/barb) from the examples reported elsewhere, and may be a unique example of early Northwest Coast art.

Figure B-6 Antler spoon fragment (actual size).
Spoon (?) fragment ( $\mathrm{n}=1$ [2 pieces]) [Figure B.6] The spoon (\#156) is represented by two articulating pieces, recovered from EU 13 level 4, which together form portions of the handle and bowl. The handle is roughly lenticular in cross section, and both surfaces are carved with the same figure, in mirror image, producing a rather flattened carving in the round. The recovered portion depicts the tail and posterior body of a zoomorphic figure, probably a wolf (R. Carlson, personal communication). The proximal end of the handle begins to curve abruptly to one side just below the fractured edge. The unadorned bowl fragment tapers gradually away from the handle, becoming increasingly concave distally. The distal end and one lateral margin of the bowl are missing. Dimensions $(133.2) \times(14.2) \times(6.9)$.

Carved antler spoons are known from other archaeological sites in the region that are roughly contemporaneous with 199-F1. Four decorated wapiti antler spoons featuring geometric, anthropomorphic, and zoomorphic designs were found in a cache at

Musqueam Northeast (DhRt 4) that was dated between 600 and 700 B.C. (Borden and Archer 1975). Perhaps more relevant to Gabriola Island are the specimens recovered from mortuary contexts on Pender Island (Carlson 1991: 122-125) that are coeval with or slightly older than the earliest date of DgRw 199-F1. The Pender Island spoons are more elaborately carved than the Gabriola specimen, but they probably served a similar function, the ritual feeding of the dead.

## Unilaterally barbed point ( $\mathrm{n}=1$ ) [Figure B.7: a]

Artifact \#27 is a long, slender, unilaterally barbed antler point that has been decorated with incised parallel lines down the long axis of the shaft. It is badly weathered with the much of the outer surface exfoliated, but the incised lines appear to be present around the entire circumference of the shaft. It has three extended, triangular barbs and a tapered base with no modifications for line attachment, suggesting that it was a fixed point. There is evidence of post depositional distortion resulting in a slight lateral curvature and a more pronounced antero-posterior curvature, particularly near the distal end. Dimensions 235.0 x $13.4 \times 8.3$; from EUs 7 and 8 , level 6 .

## Unilaterally barbed harpoon fragment ( $\mathrm{n}=1$ ?

 [41 pieces]) [Figure B.7: b-q]At least 41 fragments of what is probably the same unilaterally barbed antler harpoon were recovered from the west chamber of 199-F1. The majority ( $78 \%$ ) were found in a $1 \times 1 \mathrm{~m}$ area encompassing the south half of EU 12 and the north half of EU 11. The pieces are generally small (average length 20.0 mm , range 8.3-40.9 mm), cylindrical to semi-cylindrical in shape, and moderately burnt. Thirteen pieces were found to articulate with other fragments to form four slightly larger segments of the artifact. Twenty-seven of the fragments are incised with circumferential bands of short, parallel, vertical lines, enclosed by pairs of encircling horizontal lines. The remaining pieces attributed to this artifact are five barb and/or notch fragments, a point tip, a line guard fragment, and seven undecorated shaft fragments.

A unilaterally barbed harpoon decorated with the same geometric pattern was collected by H.I. Smith from a midden in North Saanich on Vancouver Island (Smith 1907: 353, Fig. 141a). Designs incorporating similar arrangements of vertical and encircling lines are also found on other artifacts (e.g., the small siltstone pestle from Whalen II), and persist into the Late Period of prehistory (Borden 1983: 159). Other geometric motifs are found on decorated harpoons from mainland sites including Port Hammond and Eburne (Smith, 1903: 182, Fig.90).

## Miscellaneous worked antler ( $\mathrm{n}=2$ )

Two burnt cylindrical fragments of worked antler are probably from points similar to the ones described above, but lack evidence of barbs, notches, hafting style or decoration. One (\#21), from EU 6 level 2, is burnt a deep grey; the other (\#71), from EU 10 level 7, is discoloured to an orangey hue.

## Shell Artifacts ( $\mathrm{n}=22$ )

Dentalium shell beads ( $\mathrm{n}=13$ ) [Figures B.8: i-m;
B.9)
At least nine species of scaphopod molluscs produce the characteristic tusk-shaped shell commonly referred to as dentalium (Barton 1994: 133). None are locally available around Gabriola Island, so the dentalium artifacts found there were probably obtained through trade. The nearest source would have been the west coast of Vancouver Island, although the Queen Charlotte Islands and Northern California may have also contributed dentalium to trade networks, at least in the protohistoric and historic periods (Barton 1994: 134).

The specimens from 199-F1 include 7 complete tubular beads, with both ends cut and polished; 3 incomplete beads, with one broken and one worked end; and 3 fragments with both ends broken. Average length of the complete beads is 14.3 mm (range 11.2 17.5 mm ), with a mean maximum diameter of 3.6 mm (range 3.2-4.2 mm). One of the incomplete specimens has been carved with five rows of a geometric zigzag pattern (Figure B.9); interestingly, this bead fragment is larger than any of the complete beads ( 22.3 mm ). All of the dentalium artifacts were recovered from the west chamber of the burial cave, from adjacent excavation units (EUs 11, 13, and 15).

Although Barnett (1955) reported that dentalia were not used by the ethnographic Coast Salish, they are well known from archaeological sites in the region, where they are most often found in mortuary contexts. The nearby False Narrows midden (DgRw 4) yielded nearly four thousand beads and fragments, including one that was carved in a continuous spiral design (Burley 1989: 129). Carved dentalia are less common, and presumably of greater value, than undecorated shells. Several dentalia with carved patterns similar to the one from DgRw 199-F1 were found associated with a 1500-year-old burial from the Tsawwassen site (DgRs 2), on the mainland (Curtin 1991a: 191). The zigzag motif is not limited to dentalia, however: Smith (1903:181) illustrates two geometrically carved bone objects from Port Hammond with similar patterns.


Figure B-7 Antler artifacts: a: unilaterally barbed point; b-q: fragments of decorated unilaterally barbed points or harpoons (actual size).

## Pendants ( $\mathrm{n}=3$ ) [Figure B.8: e, f, h]

Three worked rectangular pieces of shell with drilled perforations are interpreted as pendants. The smallest (\#53), made of thin clam shell, has a flat proximal end, slightly expanding lateral margins, and an irregularly notched inferior margin (Figure B.8: h). A 1.7 mm perforation located near the centre of the artifact was drilled unifacially from'the outer surface.

An incomplete sea mussel ornament (\#148) is broken along one edge (Figure B.8: f). The three intact margins and the outer surface have been ground flat. Two 2.5 mm perforations have been drilled unifacially from the outer surface along one of the long margins of the artifact; apparently one of the holes was too close to the edge to support its weight, necessitating the drilling of another.

The third pendant (\#151), also made of sea mussel, has been reconstructed from two small pieces, but part of the inferior margin is still missing (Figure B.8: e). It is roughly rectangular in shape with margins and dorsal surface ground flat and a 2.3 mm perforation drilled unifacially from the outer surface. This artifact also has two shallow oval depressions ground on the outer surface near the proximal margin, one on either side of the perforation. All three pendants came from the west chamber of the burial cave.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :--- |
| 53 | 19.1 | 13.5 | 1.0 | EU 10 level 4 |
| 148 | 12.0 | $(26.7)$ | 1.8 | EU 15N lev 5 |
| 151 | 13.1 | 20.3 | 1.6 | EU 16 level 5 |

Scallop shell fragments ( $\mathrm{n}=3$ ) [Figure B.8: c-d]
Three lateral valve fragments of weather vane scallop (Pecten caurinus) were recovered from 199F1, two from the east chamber (EUs 1 and 3 ) and one from the west chamber (EU 10). Traditionally, scallop shells were perforated near the hinge, strung together on a wooden hoop, and used as rattles (Suttles 1990: 29), often forming part of the sxwayxwey dancer's paraphernalia (Suttles 1974: 225, 409). Although none of the three specimens from 199-F1 is a perforated hinge fragment, their lateral margins appear smoothed and rounded, possibly ground. They are clearly artifacts and not merely food remains. Pecten shell rattles are not common in prehistoric archaeological sites, but where found (e.g., False Narrows [DgRw 4] burial 23a-67), are generally interpreted as evidence of wealth or ritual (Burley 1989: 61).

## Shell ornament ( $\mathrm{n}=1$ ) [Figure B.8: n ]

An unusual ornament of unidentified shell (possibly abalone) was recovered from EU 14. Roughly hemispherical in shape, it has been carefully worked on both surfaces, and all margins are ground smooth. A key-hole shaped perforation extends from the flat margin to the centre of the artifact. A shallow groove runs obliquely across the centre of the outer surface, and margin of one of the "arms" has two shallow notches. It is unclear how this artifact would be used, although it has been suggested (G. Howe, personal communication) that it may have served as a nose ornament. Dimensions $15.7 \times 22.0 \times 1.6$.

## Miscellaneous worked shell ( $n=2$ )

Two small shell fragments (California mussel and clam) have ground and/or sectioned edges, but no discernible predetermined shape or inferable function. They may be portions of larger, broken tools or merely waste fragments from tool manufacture. The clam fragment is badly weathered, which may obscure other modifications.

## Wood Artifacts ( $\mathrm{n}=1$ )

## Pointed wood object ( $\mathrm{n}=1$ )

A worked piece of cedar, very similar to the wooden objects found in a cache at DgRw 213 (see Chapter 4), was collected from the surface of EU 10. It has double bevelled, expanding-parallel margins, and slightly convex upper and lower surfaces, producing a roughly lenticular cross-section. Both sides and surfaces are ground smooth, and taper gently to the faceted, bluntly pointed tip. Dimensions (63.5) x $12.5 \times$
4.7.

## Copper Artifacts ( $\mathrm{n}=1$ )

Drilled ornament ( $\mathrm{n}=1$ ) [Figure B.3: z ]
A small, thin, rectangular piece of sheet copper (\#105) has a single 1.2 mm perforation near the middle of one of the long margins. It may have formed one element of a composite ornament, such as a nosering or earring, or have been sewn to an item of clothing. The object is now bent and crumpled, but the original dimensions are estimated to have been about $15 \times 8 \times 0.4 \mathrm{~mm}$; from EU 12 level 3 .

Copper ornaments are not common in archaeological sites from the region, but a few ornaments and fragments were recovered from the False Narrows site (DgRw 4) on Gabriola Island (Burley 1989: 130), and a possible copper pendant from $\operatorname{DgRx} 11$, near Nanaimo (Murray 1982: 306).

a

n

Figure B-8 Shell artifacts: a-b: adze blades; c-d: worked scallop shell fragments; e-h: drilled shell ornaments; i-m: dentalia beads; n: possible nose ornament (actual size).

## DgRw 199 Feature 9

The artifact inventory from $\operatorname{DgRw}$ 199-F9 consists of eight items: one ground slate point fragment, one flaked core, and six pieces of flaking detritus.

## Flaked Stone Artifacts (n=7)

Flaked core ( $\mathrm{n}=1$ )
Cores are remnant blocks of stone from which flakes have been removed for tool manufacture. The single example from F9 is a water-rolled greywacke cobble fragment with small areas of polished cortex present on two faces. At least seven flake scars are pre sent, but there is no discernible pattern to their detachment. Dimensions $90.7 \times 85.4 \times 52.4$; from EU 3 level 7.

## Lithic detritus ( $\mathrm{n}=6$ )

Six large unmodified platform-bearing flakes were recovered from F9. Four of the six retain remnants of outer cortex, indicative of early stages of lithic reduction. Two flakes with cortex-covered striking platforms and dorsal surfaces are probably primary decortication flakes. Raw materials include coarsegrained basalt ( $n=3$ ), light green felsite, reddish gritstone, and greywacke.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :--- |
| 1 | 26.8 | 17.7 | 4.2 | EU 1 level 5 |
| 2 | 32.3 | 36.8 | 9.5 | EU 1 level 6 |
| 3 | 51.7 | 27.4 | 12.2 | EU 2 level 2 |
| 6 | 63.7 | 57.6 | 15.4 | EU 5 level 4 |
| 7 | 48.0 | 38.1 | 16.6 | EU 5 level 5 |
| 8 | $(25.4)$ | $(31.0)$ | 3.4 | EU 6 level 3 |

## Ground Stone Artifacts ( $\mathrm{n}=1$ )

Ground slate point fragment ( $\mathrm{n}=1$ ) [Figure B.1: f] This fragment (\#4) appears to be from a thick faceted ground slate point that has been split transversely so that only one worked surface is present. It has an elongated triangular shape with a flat surface and steeply bevelled margins. Dimensions (40.6) x (14.3) x (3.6); from EU 3 level 7.

## DgRw 204 Feature 1

A total of 57 artifacts were recovered from DgRw 204-F1: 50 made of stone, 4 of shell, and 3 of bone. Only those recovered from the upper four levels of the deposit are potentially associated with the human remains; the remainder date to an earlier transitory use of the cave as a temporary shelter.

## Flaked Stone Artifacts ( $\mathrm{n}=45$ )

## Cobble chopper ( $\mathrm{n}=1$ )

A fist-sized wedge-shaped greywacke cobble has been modified into a chopping tool by unifacial removal of three flakes from the narrow end, producing a steep (ca. $80^{\circ}$ angle) working edge measuring 45 mm . The remainder of the surface is cortex. Dimensions $78.0 \times 87.7 \times 37.3$; from EU 2 level 13.

## Detritus ( $\mathrm{n}=40$ )

The largest class of artifacts from DgRw 204F1, lithic detritus includes 13 platform-bearing flakes, 24 pieces of flake shatter, and 3 pieces of block shatter. Most are relatively large in size, and retain remnants of cortex on striking platforms and/or dorsal surfaces, indicative of the early stages of lithic reduction, or perhaps the testing of cobbles for flaking suitability. The most common raw material is medium to coarsegrained basalt, but granite diorite, shale, slate, greywacke, and several unidentified coarse-grained rocks with crystalline inclusions were also used.

Lithic detritus has a non-random distribution at the site: the majority ( $65 \%$ ) were recovered from EU 3 , and none was found in the inner, eastern recess of the rockshelter where the human remains were concentrated. The vertical distribution confirms the lack of association with the human remains: $75 \%$ of the detritus came from the deeper, pre-burial deposits.

| Type | Length | Width | Thick |
| :---: | :---: | :---: | :---: |
| PB flake-mean | 29.4 | 29.0 | 7.7 |
| -range | $14.7-72.7$ | $12.9-65.5$ | $1.4-18.1$ |
| Shatter-mean | $(23.8)$ | $(16.8)$ | $(3.9)$ |
| -range | $10.4-42.2$ | $5.1-41.6$ | $0.8-10.1$ |
| Block-mean | 35.3 | 23.0 | 15.1 |
| -range | $23.2-46.8$ | $11.8-37.7$ | $10.3-18.8$ |

Flaked slate knife (n=1) [Figure B.1: h]
A rectangular piece of slate has bifacial retouch along one long, slightly convex margin; the opposite margin has been intentionally blunted by grinding. This is interpreted as a flaked knife, but the absence of use wear along the prepared edge raises the possibility that it is a blank or preform for a ground slate knife. Dimensions $41.5 \times 101.5 \times 8.6$; from EU 1 E , level 4.

Obsidian microlith ( $\mathrm{n}=1$ ) [Figure B.3: w ]
This artifact resembles the proximal end of a microblade, but too little is present to be certain of the original shape. It is made of opaque black obsidian, and has two dorsal arres and a trapezoidal crosssection. There is no evidence of retouch or use wear along the extant margins. Dimensions (7.8) x $5.7 \times 1.6$; from EU 2, level 4.

## Pièce esquillée ( $\mathrm{n}=1$ )

Used for splitting bone and antler, these artifacts are characterized by bipolar battering and flaking, producing a double wedge shape (Loy and Powell 1977). This example is a rectangular piece of mediumgrained basalt with battering on both sides of the dorsal face, and a small area of retouch on the ventral distal margin. The proximal end is cortex-covered. Dimensions $26.0 \times 31.3 \times 8.6$; from EU 2 N , level 4 .

## Retouched flake ( $\mathrm{n}=1$ )

A large flake of heat-treated shale has been modified by continuous bifacial retouch along the entire 49 mm long distal margin, and exhibits use polish of the same edge. Dimensions (55.6) x (71.5) x (10.9); from EU 3N level 4.

## Ground Stone Artifacts ( $\mathrm{n}=3$ )

## Slate point ( $\mathrm{n}=1$ ) [Figure B.1: d]

A virtually complete thin, leaf-shaped projectile point was reconstructed from three fragments found at opposite ends of the burial feature: EU 1 S level 2; EU 3 level 2; and EU 3N level 3. Both faces of this finely-worked tool have a median longitudinal ridge which tapers gently towards the lateral margins, producing a double tapered, diamond-shaped crosssection. The base is narrow and ground to a blunt convex curve. Dimensions $111.1 \times 29.2 \times 4.9$.

Miscellaneous ground slate fragments
$(\mathrm{n}=2)$ [Figure B.1: $\mathrm{g}, \mathrm{j}$ ]
Two rectangular pieces of slate may represent
fragments of a larger artifact such as a knife. Both exhibit grinding along one extant margin, and irregular discontinuous flaking along another margin; in both cases ventral and dorsal surfaces are unmodified.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :--- |
| 53 | $(55.9)$ | $(32.5)$ | $(4.0)$ | EU 3N level 1 |
| 58 | $(36.2)$ | $(93.3)$ | $(5.6)$ | EU 3N level 4 |

## Pecked And Ground Stone Artifacts ( $\mathrm{n}=1$ )


#### Abstract

Abraders ( $\mathrm{n}=1$ ) [Figure B.2: f] A fragment of a probable shaped abrader (\#14) was recovered from EU 2 level 13. The shape of the complete artifact is indeterminable, but the small section of original margin that was preserved is ground to a smoothly convex edge. Both surfaces are lightly ground and shallowly indented, and one exhibits a narrow linear groove. Dimensions (34.2) x (27.3) x 7.0 .

\section*{Bone Artifacts ( $\mathrm{n}=3$ ) <br> Worked ribs ( $\mathrm{n}=2$ ) [Figure B.4: $\mathrm{b}, \mathrm{d}$ ]}


Two carefully worked rectangular sections of mammal rib were recovered from F1. They are approximately the same length, but one is twice as wide as the other. Both are ground and polished on all surfaces and margins; the larger has two blunt ends, the smaller one blunt end and one slightly bevelled. They were found in EU 1SE, at the base of a chimney-like crevice connecting F1 with F6, where a similar artifact was recovered (see below). It seems likely that these two items were originally deposited in F6, but worked their way down the chimney to be redeposited in F1. Burley (1989: 115) describes 5 worked ribs recovered from the False Narrows site, but his specimens are somewhat shorter, wider, and thicker than these. These artifacts have no apparent utilitarian function, although Smith (1903: 165) suggested that similar bone objects from Port Hammond may have served as net gauges.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :--- |
| 4 | 118.0 | 8.1 | 3.3 | EU 1SE level 1 |
| 5 | 119.2 | 16.4 | 3.9 | EU 1SE level 1 |

Bone unipoint fragment ( $\mathrm{n}=1$ ) [Figure B.4: j]
The basal end of an incomplete bone unipoint
(\#45) was collected from EU 3 level 12. It has an asymmetric hexagonal cross-section and a blunt faceted proximal end. Unipoints are often used as components in composite fishing tools; this specimen may have functioned as a barb from a leister or fish gorge. Dimensions (27.8) $55.5 \times 3.9$ ).

## Shell Artifacts ( $\mathrm{n}=4$ )

Celts/Adze blades ( $\mathrm{n}=2$ ) [Figure B.8: $\mathrm{a}, \mathrm{b}$ ]
These two artifacts are both made from sea mussel shell (Mytilus californianus). The larger (\#2) is broken longitudinally with one lateral margin missing but most of the poll intact (Figure B.8: a). It has been carefully shaped with all extant margins and the distal third of the dorsal surface ground smooth. Although incomplete, it appears to have had expanding lateral margins, so the greatest width would have fallen at the bit end. The bit has a steep single bevel (ca. $60^{\circ}$ ) with a convex outline; the poll is also concave, and exhibits evidence of battering.

The smaller, complete adze blade (\#9) is rectangular in shape with all edges ground smooth (Figure B.8: b). The poll end is slightly convex and the sides are straight and gently converging so its narrowest width is at the bit end. The bit is single bevelled with a $40^{\circ}$ edge angle; its outline is incomplete due to use chipping of the dorsal surface.

| Cat <br> $\#$ | Length | Width | Thick | Provenience |
| :---: | :---: | :---: | :---: | :--- |
| 2 | 98.2 | $(30.7)$ | 3.0 | EU 1 level 1 |
| 9 | 35.1 | 11.2 | 2.3 | EU 2 level 3 |

## Shell ornament ( $\mathrm{n}=1$ ) [Figure B.8: g]

This artifact is a small, thin, rectangular piece of iridescent shell (abalone?) with all four margins ground smooth and a 2.4 mm perforation at one end. It is probably too small and light to have served as a pendant, but may have been one element of a composite ornament, such as a headdress, earring, nose ring, or decorated clothing fringe. Dimensions $14.0 \times 8.1 \times$ 0.6 ; from EU 2 level 4.

## Miscellaneous worked shell ( $\mathrm{n}=1$ )

This small amorphous piece of clam shell has no discernible shape or identifiable function, but its margins appear to have been ground smooth rather than broken. Dimensions $27.1 \times 12.7 \times 1.6$; from EU 2 level 5.

## DgRw 204 Feature 6

Only two artifacts were recovered from this burial feature, although it is probable that at least two, and possibly more of the artifacts found in 204-F1 were originally deposited in Feature 6 (see above).

## Bone Artifacts ( $\mathrm{n}=2$ )

Worked rib ( $\mathrm{n}=1$ ) [Figure B.4: c ]
This artifact (\#59) is virtually identical to one (\#5) recovered from DgRw 204-F1, although in much more fragile condition, with exfoliating outer surface. It is a section of mammal rib that has been ground and polished on all margins and surfaces. The cut ends are both blunt. Dimensions $121.1 \times 15.8 \times 4.0$; from EU 4 level 2.

Shaped bone fragment ( $\mathrm{n}=1$ ) [Figure B.4: k ]
A rectangular piece of bone with one cut and polished end and the other end snapped off, this shaped artifact fragment has been ground and polished on all surfaces, and is moderately charred from exposure to fire. The four surfaces are flat to lightly faceted, producing a rectangular to pentagonal cross section. The completed shape and function of the original artifact are unknown. Dimensions (45.7) x $10.0 \times 7.6$; from EU 4 level 4.

## DgRw 204 Miscellaneous

## Antler tine wedge ( $\mathrm{n}=1$ )

Antler wedges are heavy splitting tools used primarily for woodworking. This complete antler tine wedge was collected from a crevice approximately 20 m northwest of DgRw 204-F5, but does not appear to be directly associated with a burial (illustrated in Curtin 1991b: 82, Figure 13). It has a single tapered edge, convex tip with use chipping, and a battered, slightly splintered poll. Dimensions $103.5 \times 29.6 \times 30.4$.

## DgRw 210 Feature 7

Flaked point fragment ( $\mathrm{n}=1$ ) [Figure B.1: b]
Although this burial feature was not excavated, a projectile point fragment was collected from the surface when the site was revisited in 1992. It consists of the tip and medial section of a well-made basalt point with slightly asymmetrical contracting-excurvate blade margins. The proximal end is broken off, obscuring evidence of the hafting mechanism. A small area of cortex is present on one lateral margin near the fractured end, suggesting that the point may have broken during manufacture. Dimensions (48.3) x $22.2 \times 6.5$.

