

## Chapter 5

# Excavations At DgRw 204-F1

DgRw 204-F1 was first recorded by Ian Wilson during his 1987 survey of the False Narrows bluffs. He assessed the burial site as being “extremely disturbed”, with only a human rib fragment, a scapula fragment, and two possibly human long bone shaft fragments visible. These elements were collected, along with a horse clam shell valve and a cormorant humerus. When the site was revisited in 1989, several additional human bones had been exposed at the eastern end of the feature, indicating the possible presence of sub-surface remains. This was the first feature selected for excavation; it was chosen because its open entrance provided easy access to the chamber and few technical challenges to excavation, and because of the existence of a previous collection of human remains.

### Feature Description

Feature 1 is located in a cluster of large boulders at the toe of the slope beneath the upper bluffs (Figure 5.1). It is formed by a large, tilted sandstone block whose south-east corner is resting on two smaller sandstone boulders. The south edge of the block overhangs its base, creating a shallow rockshelter-like cavity facing south-southwest (Figure 5.2). The back wall of the sheltered space under the overhang is scalloped, creating an internal sub-division into eastern and western sections (Figure 5.3). The western portion measures approximately 3.0 x 2.0 m and is relatively open and unprotected, with a high (2.23 m) ceiling and a level floor (Figure 5.4). The eastern half is narrower (3.0 x 1.5 m) and more enclosed, with a lower ceiling

(0.83 m); its east end forms a short, narrow, low-roofed tunnel between the main block and the two supporting boulders on the southeast (Figures 5.2 and 5.3). Animal faeces were visible inside the “tunnel” indicating previous use as a carnivore’s den.

The floor of the eastern section slopes upward to the southeast, where debris has filtered down through a rubble-filled crevice between the ceiling block and adjacent boulders. This crevice was later discovered to lead to 204-F6, immediately above and to the east of 204-F1 (see Chapter 7). Along the south edge of the rockshelter an accumulation of small sandstone slabs and decaying organic debris has created a shallow sill which corresponds roughly with the drip line from the overhang above (Figure 5.3). This may represent a natural accumulation of forest litter and exfoliated sandstone slabs, but it is also possible that the slabs are the remains of a deliberately constructed wall that formerly closed off the eastern section of the shelter containing the burial remains. From this sill the floor slopes downward towards the back of the shelter to the northeast.

Scattered human remains, including a clavicle, an innominate fragment, a lumbar vertebra, a thoracic vertebra, and a rib fragment, were observed in the east half of the feature. No human remains were apparent in the west half, which contained a recent, partially disarticulated deer skeleton. Shell midden deposits were visible beneath the leaf litter and organic debris covering the floor of the shelter, and extended 2-3 m down slope to the south and west. Sporadic patches of midden were observed for a further 10 m south of the feature.

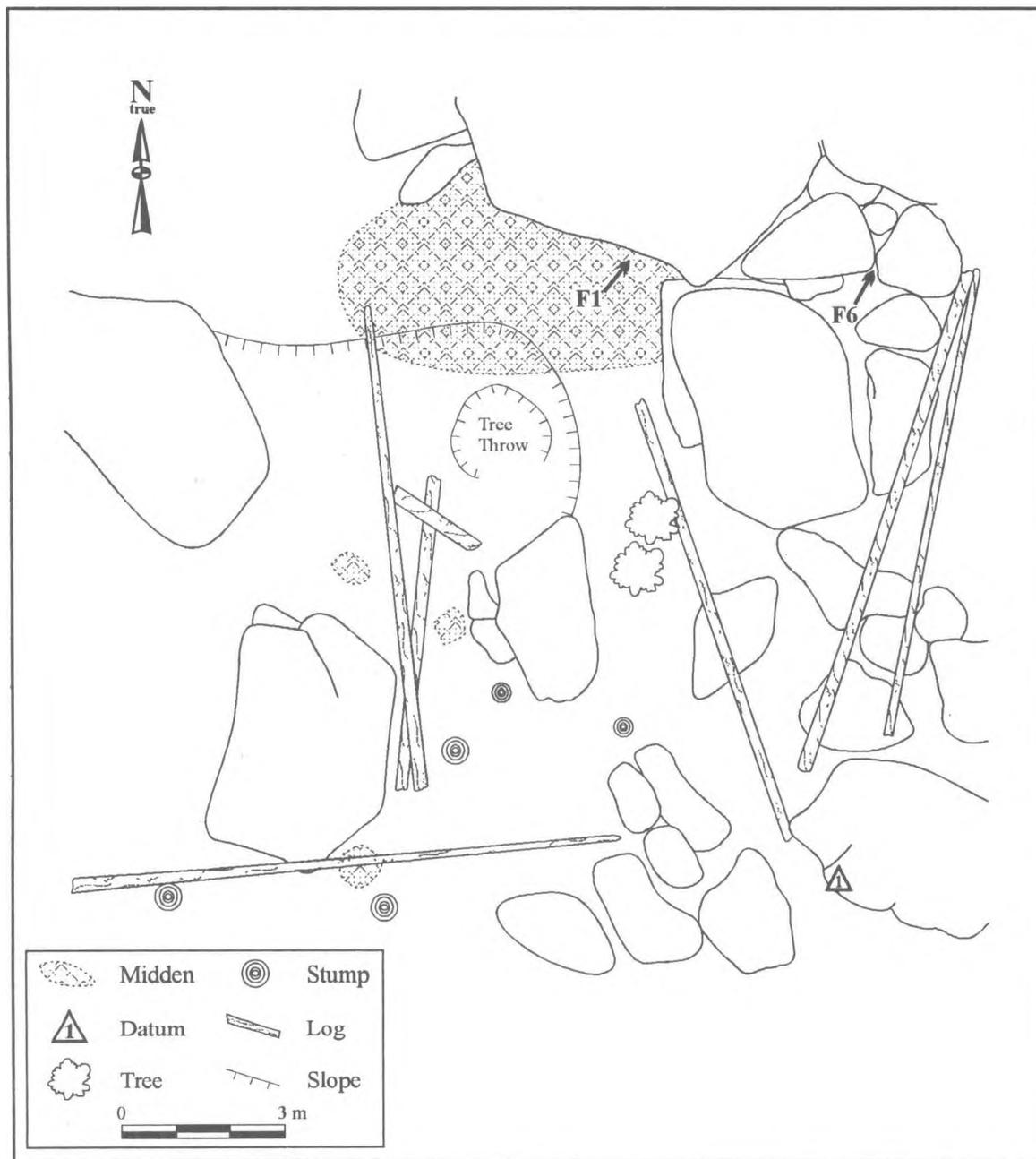


Figure 5.1 DgRw 204-F1 location.

## Excavation Results

Three 1.0 x 1.0 m excavation units (EUs) were laid out on an east-west axis in the eastern half of the shelter where the human remains were located, and unit extensions (EXs) of variable size were excavated to the north (3N, 2N), south (2S, 1S), east (1E), and southeast (1SE) of the units to complete coverage of the entire floor (Figure 5.3). EUs 2 and 3 were excavated to culturally sterile deposits, encountered at 85 cm BS (below surface). The results of these excavations indicated that human remains were restricted to

the top 20 cm of the deposits. The remaining unit (EU 1) and all unit extensions were therefore dug only as far as necessary to recover the human remains, that is to the bottom of level 4, at 20 cm BS.

## Stratigraphy

Six distinct strata were identified in the excavations of EU 2 and 3. Stratigraphic profiles of the north and south walls of these units are presented in Figure 5.5, and the strata are described below.



**Figure 5.2** Entrance to DgRw 204-F-1 (top); inside burial chamber looking east (bottom); scale bars 10 cm.

**Layer A:** shell midden deposits consisting of loose, dry, fine sandy silts ranging in colour from very dark brown (Munsell 10YR 2/2) to dark greyish brown (10YR 4/2), containing abundant shell fragments,

small charcoal flecks, and sparse angular sandstone pebbles, cobbles, and slabs. The matrix is intersected by numerous roots (ca. 10 cm diameter) and rodent burrows; a moderate-sized lens of grey ash was found

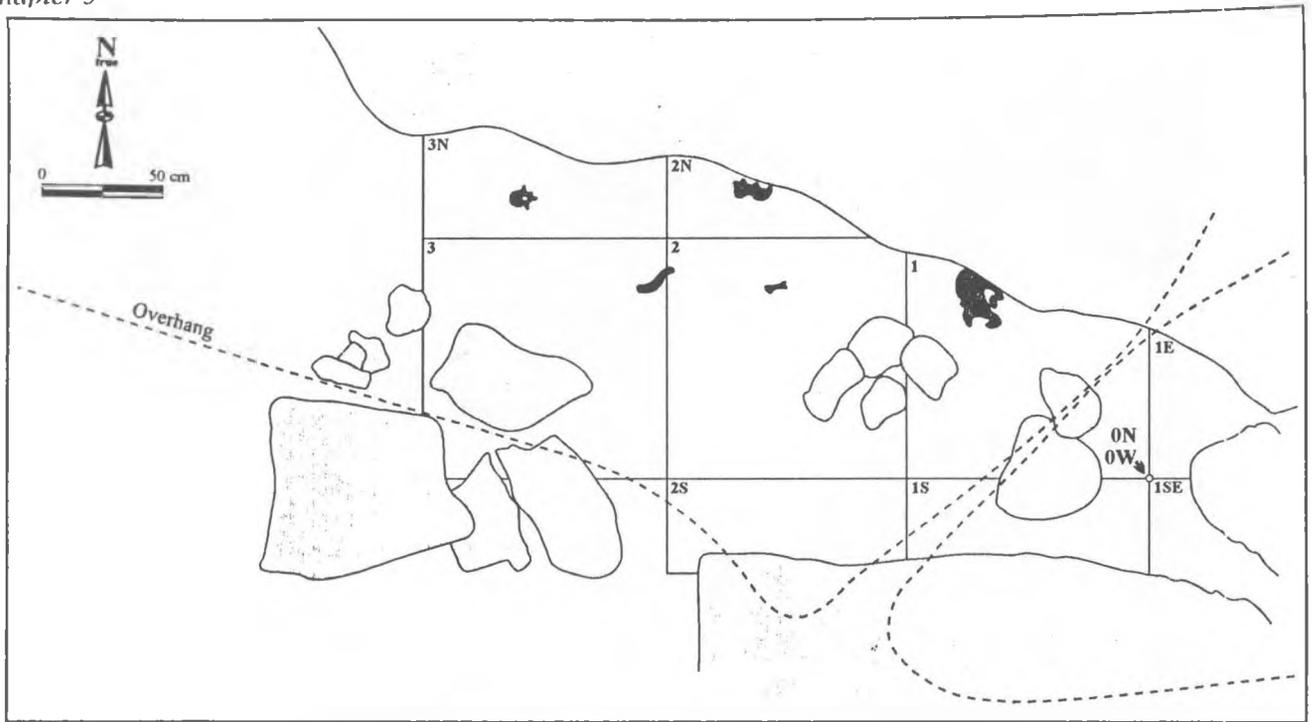


Figure 5.3 DgRw 204-F1: floor plan.

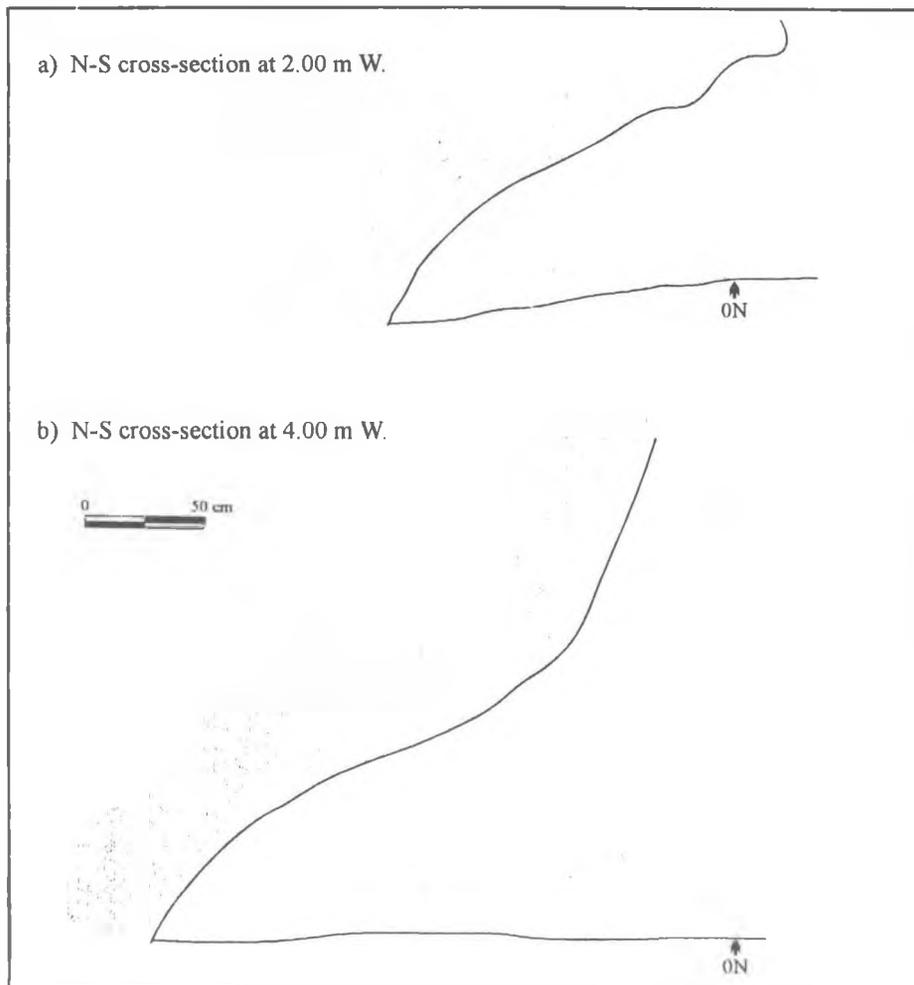


Figure 5.4 DgRw 204-F1: cross-sections of burial chamber.

near the surface of this layer in the NE corner of EU 3. The majority of the recovered faunal remains, particularly the fish and shellfish, came from this stratum, as did all of the human bone and most of the artifact assemblage, including 80% of the formed tools.

**Layer B:** loose, powdery, ash-stained silts, mottled pale brown (10YR 6/3) to grey (10YR 5/1), containing small amounts of sandstone debris but very little sand. Cultural contents include moderate amounts of bone (predominantly herring) and abundant burnt and unburnt shell (mainly mussel) but no artifacts. This layer is restricted to the northeast third of the burial chamber, and caps the pit feature in EU 2 and 3.

**Layer C:** mottled dark grey (10YR 4/1) to very dark brown (10YR 2/2) compact sandy silts with a low proportion of sandstone rubble, and occasional small (ca. 10 cm diameter) ash lenses. Artifacts are limited to lithic detritus. Moderate amounts of fauna were recovered, including fragmented shell (primarily clam and mussel) and mostly unidentified fish and mammal remains. This layer fills a pit feature in the NE corner of EU 3 and the north half of EU 2.

**Layer D:** loosely compacted yellow-brown (10YR 5/4) to brown (10YR 5/3) sandy silts, with a high proportion of angular sandstone rubble. Faunal remains are sparse, with shellfish and unidentified mammal predominating. Of note are a few small pieces of native oyster shell, the only such occurrence at this site. Recovered artifacts include three formed tools in addition to a small amount of lithic detritus.

**Layer E:** compact, carbon-stained, very dark grey (10YR 3/2) to very dark brown (10YR 2/2) sandy silts with a moderate proportion of finely fragmented shell (mainly mussel and clam) but little other fauna. A single flake was recovered from this layer.

**Layer F:** moderately compacted yellowish brown (10YR 5/6) to light yellowish brown (10YR 6/4) silty sand with very sparse fauna and shellfish remains. With increasing depth below surface, matrix colour lightens, compaction increases, proportion and size of rock inclusions increase, and cultural content decreases, until it is completely sterile by 85 cm BS.

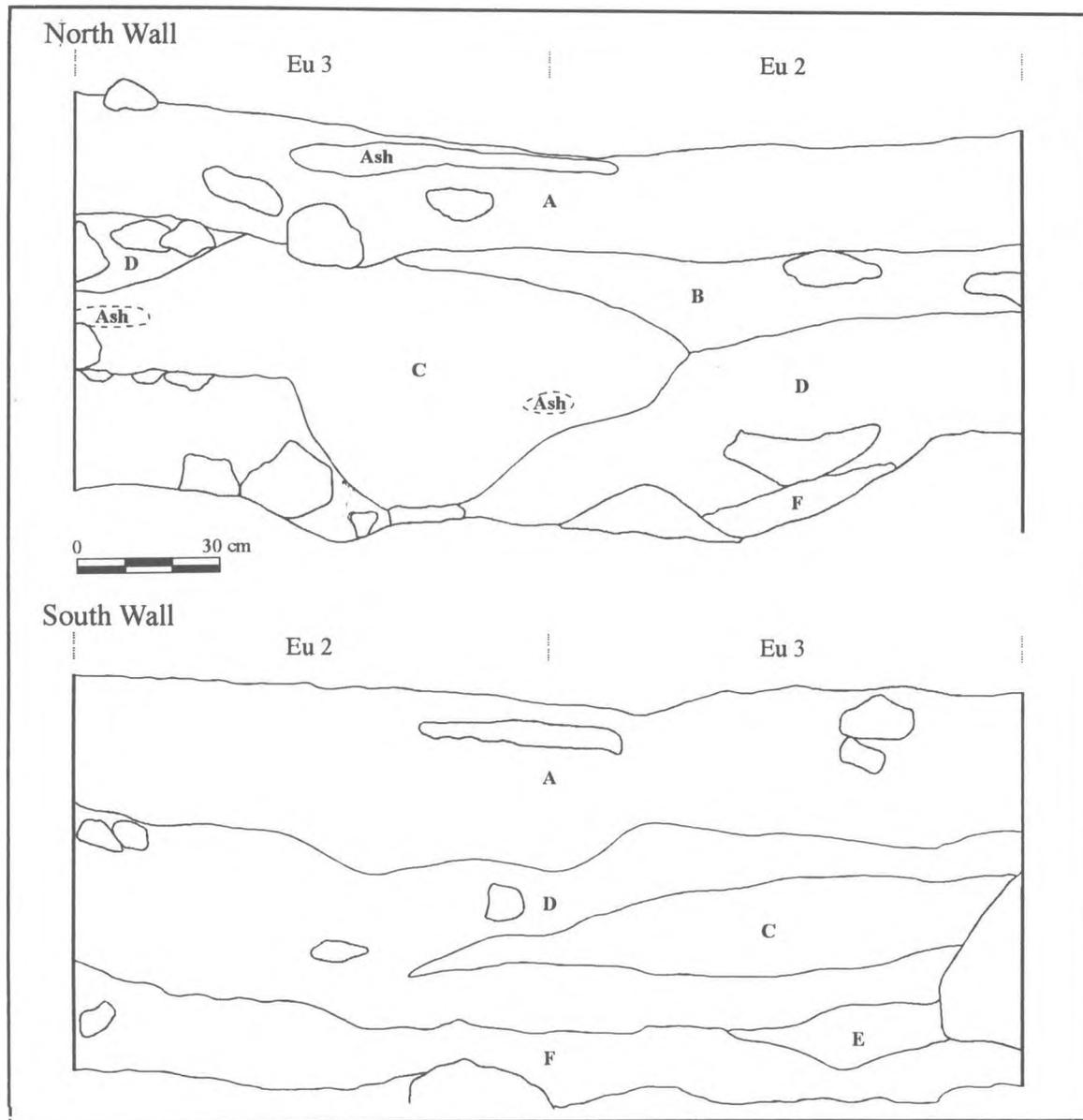
Comparison of the north and south profiles reveals some interesting differences. In the south profile, along the exposed, open face of the rockshelter, three carbon-stained shell midden layers (Layers A, C, and E) are visible, separated by layers of rubbly, yellowish brown sediments (Layer D). In contrast, in the north profile, along the inner wall of the rockshelter, the midden deposits appear to be more-or-less continuous, probably because this area was more protected from those natural forces (wind, rain, erosion) responsible for capping the discrete occupation levels with sterile materials, as was the case along the more exposed southern rim. This pattern, together with the faunal and artifactual data, suggests intermittent utilization of the feature as a temporary shelter where food was prepared and expedient tools manufactured. Some undetermined length of time after the final use of the feature as a shelter, it was re-used as a mortuary chamber. Over time, as a result of the activities of the various rodents and carnivores using the shelter, the surface-deposited human remains became intermixed with the top levels of the underlying shell midden deposits.

## Faunal Remains

The following discussion is a summary of the results of the faunal analyses undertaken by van Gaalen (1991, 1994) and Kusmer (1992). A total of 1795 bones and bone fragments were collected from the excavation units and unit extensions, and an additional 855 fragments were recovered from matrix samples taken from EU 2 (Table 5.1). 911 of the excavated fauna (50.8%) and 288 of the matrix sample fauna (33.7%) could be identified to taxon. Numbers of identified specimens (NISP) are tabulated by excavation unit and by layer in Appendix A, Tables A.1-A.3; these data are summarized below. For the purposes of this analysis, the two north unit extensions were combined into one analytical unit (N.EXT), as were the two south extensions (S.EXT), and the two eastern ones (E.EXT).

**Table 5.1 Summary of vertebrate fauna (NISP), DgRw 204-F1.**

Sample	Fish	%	Bird	%	Mammal	%	Total
Excavation Unit	823	52.9	84	97.7	888	88.1	1,795
Matrix Sample	733	47.1	2	2.3	120	11.9	855
<b>Total</b>	<b>1,556</b>	<b>100.0</b>	<b>86</b>	<b>100.0</b>	<b>1,008</b>	<b>100.0</b>	<b>2,650</b>



**Figure 5.5 DgRw 204-F1: stratigraphic profiles of Eus 2 and 3.**

Fish remains constitute 46% of the excavated fauna and more the 85% of the matrix sample. Herring (*Clupea harengus*) is the dominant species in both collections, comprising more than half of the identified fish remains, with dogfish (*Squalus* sp.), salmon (*Oncorhynchus* sp.), and midshipman (*Porichthys* sp.) present in lesser amounts. Other remains identifiable only to family include rockfish, scorpionfish, greenling/lingcod, sculpin, surfperch, and gunnel/prickleback. With the possible exception of the gunnel/prickleback, which are not typically considered food, the fish bones probably represent food remains left by the people who utilized the rock-shelter. Few skeletal elements other than vertebrae were recovered, suggesting that the fish had been dried or processed before being brought to the site.

Mammals represent nearly half (49.5%) of the excavated fauna but only 14% of the matrix sample. Canid remains (dog/coyote/wolf) are the most common identified mammal taxon (63.5%), followed by deer (*Odocoileus* sp., 17.5%) and voles (*Microtus* sp., 9.5%); small numbers of racoon, squirrel, rat, and mice elements were also recovered. In contrast to the fish remains, the majority of the mammalian fauna, particularly the rodent and canid remains, probably accumulated as a result of natural rather than cultural processes. These remains are concentrated in the innermost, eastern recesses of the burial feature, where faecal remains testify to intermittent use as a carnivore's den. Approximately half of the deer remains are from immature animals, which supports this interpretation.

Bird remains are the least common type of fauna represented in 204-F1, both as recovered elements and as identified taxa. They comprise 4.8% of the excavated fauna, and less than 1% of the matrix sample. Geese, duck, grebe, and grouse remains were identified, as well as members of the waxwing/flycatcher and thrush/blackbird families. Their presence could be the result of either human or scavenger activity.

No cutmarks were observed on any of the faunal remains from 204-F1, but approximately 10% of the recovered elements were burnt.

A variety of shellfish remains were identified in the invertebrate fauna from the EU 2 matrix samples (Table A.4), including bay mussel, native littleneck clam, horse clam, butter clam, cockle, barnacle, limpet, periwinkle, whelk, native oyster, and crab. Shellfish remains were most abundant in Layers A, B, and E; lesser amounts were found in Layers C and D, while Layer F was virtually shell-free. The most common identified species are bay mussel, which dominates in Layers A, B, and D, and varieties of clam, which dominate in Layer C. Clam and mussel occur with similar frequencies in Layer E.

## Artifacts

A total of 57 artifacts were recovered from the excavations in 204-F1. Twenty-six items (45.6%) came from the top 4 levels (0-20 cm BS), which were excavated in all units and unit extensions; the remaining 31 items (54.4%) were recovered from levels 5-17, which were excavated only in units 2 and 3. The most common material utilized in artifact manufacture was stone (50 items, or 87.7% of the assemblage), followed by shell (4 items, 7.0%) and bone (3 items, 5.3%).

Formed tools or tool fragments comprise 26.3% of the assemblage ( $n=15$ ); the rest of the collection consists of 41 pieces of stone flaking detritus and a single small fragment of worked shell. The vertical distribution of formed tools does not reflect that of artifacts in general. Although slightly less than half of the total collection was recovered from the upper 20 cm of midden deposits, fully 80% of the formed tools ( $n=12$ ) came from these levels. Formed tools comprise 46.2% of the artifacts recovered from excavation levels 1-4, but only 9.7% of the artifacts from the lower 13 levels. Since the first four levels also delimit the distribution of human remains in 204-F1, it seems probable that at least some of the formed tools were associated with the burials as deliberate grave inclusions.

Among the formed tools recovered from the burial levels are three ground slate fragments that were successfully reconstructed to form a nearly complete

leaf-shaped projectile point (Figure B.1d). The pieces of this artifact were found at opposite ends of the burial chamber, and it seems to have been broken *in situ*, perhaps deliberately, before being deposited there.

Other tools recovered from the upper four levels of 204-F1 are: one chipped slate knife (Figure B.1h) and two possible ground slate knife fragments (Figure B.1g, j); a basalt *pièce esquillée*; two carefully worked, thin, flat rectangular bone artifacts of unknown function (Figure B.4b, d; see Chapter 7 for a similar artifact from 204-F6); two California mussel shell adze/chisel blades (Figure B.8a, b); and a small abalone shell pendant (Figure B.8g). The remaining three artifacts collected from the lower levels of the midden deposits are a sandstone abrader fragment (Figure B.2f), a cobble chopper, and a bone barb fragment from a fish gorge or leister (Figure B.4j). The artifacts are described in detail in Appendix B.

## Feature Dating

One radiocarbon date was obtained on bone collagen extracted from a sample of human rib and vertebra fragments recovered from the feature. The sample yielded an uncorrected date of  $2150 \pm 70$  years BP; the  $C^{13}$ -adjusted age of the sample is  $2320 \pm 70$  years BP (Beta-37844). Within the cultural chronological framework established for the Gulf of Georgia region, this date is consistent with the early Marpole Culture Type. It must be emphasized, however, that this date is applicable only to the burial component; the underlying shell midden deposits clearly predate the burial episode(s). Unfortunately, no datable carbon samples were recovered from the base of the midden deposits, and none of the artifacts recovered from these deposits is temporally diagnostic, so the age of the earliest utilization of the rockshelter cannot be determined at this time.

## Human Remains

A total of 655 human teeth, bones, and bone fragments were recovered during the excavation of 204-F1, of which 260 (39.7%) were unidentifiable as to element. Long bones and bones of the hands and feet are well represented in the skeletal collection, but large bones of the pelvic girdle are uncommon (Table C.1). Particularly striking is the paucity of cranial elements, especially considering the fact that 39 isolated teeth were recovered, indicating that skulls were present at one time. The openness of the rockshelter, and its easy visibility from a dirt logging road that appears to be a popular local hiking route, together with the lack of surface remains and the virtual absence of

skulls, the most popular trophy for pothunters, suggest that this burial feature was vandalized in the past.

### Condition

The condition of the human skeletal remains from 204-F1 is extremely variable. Some elements are unusually well-preserved, complete, and in excellent condition; the majority, however, are incomplete and fragmented, with cancellous bone eroded or missing, and cortical bone friable and exfoliating. It is possible that the variability in preservation reflects different periods of deposition, with more recent burial(s) being better preserved than earlier ones. Alternatively, these differences may reflect the original site of deposition. The poorly-preserved bones are very similar in condition to those recovered from 204-F6, and may have been redeposited from that feature. Their spatial distribution supports this interpretation, since they tend to come from EU 1 and the unit extensions to the east, south, and southeast, that is, from the portions of the burial chamber nearest the chimney. Most of the well-preserved bones come from EU 2, EU 3, and their northern extensions, that is, the less enclosed west end of the burial area, adjacent to the back wall of the shelter. It is unclear to what extent micro-environmental differences may have affected preservation; perhaps the enclosed, tunnel-like passage in which the poorly-preserved remains were found had a deleterious effect on preservation. Rodent gnaw marks were observed on one element, a left first metatarsal. Three other bone fragments, a cervical vertebra, an ulna shaft and an ulna olecranon process, exhibit carnivore chewing marks. A possible cutmark was observed on the same ulna shaft.

### Spatial distribution

All but three of the human remains were found in the top 20 cm of the midden; an anterior tooth and a foot phalanx were recovered from level 5 (20-25 cm BS) and an infant's vertebral arch was recovered from level 8 (35-40 cm BS). These three elements are all very small, and probably were displaced downward through the deposits as a result of rodent activity. The tooth actually fits in a maxilla fragment recovered from level 2.

The distribution of human remains across the burial chamber is summarized in Table 5.2 by excavation unit/extension and level. Omitted from these calculations are four elements of uncertain provenience. The same data are displayed graphically in Figures 5.6 and 5.7. As the table indicates, very little of the skeletal assemblage was found on the surface of the burial chamber, and the majority (61%) was located between

5 and 15 cm below current ground surface. The densest concentration of human remains was found in the southeast corner of the feature. The SE and SW quads of EU 1, the SE quad of EU 2, the W quad of EX 2S, the S quad of EX 1E, and unit extensions 1S and 1SE, which together cover approximately one-third of the area of the chamber, contained 77.2% of the human remains.

The concentration of human remains in the southeast corner of 204-F1, at the base of a crevice leading down from 204-F6, raises the question of how much of the bone assemblage recovered from F1 was originally deposited in F6 and worked its way through the chimney to be redeposited in F1. Given the demographic similarities between the two collections, it was impossible to determine with certainty which of the remains found in the southeast corner of F1 actually came from F6, except in those rare instances when two articulating fragments of the same bone could be conjoined.

When the two skeletal collections were compared, nine of the bone fragments from F1 were found to articulate with bone fragments from F6: two tibia fragments from EU 1, SE quad; a radius fragment from EX 1E, N quad; one fibula and two tibia fragments from EX 1SE; a tibia fragment and an unidentified long bone fragment from EX 1S, E quad; and a tibia fragment from EX 2N, E quad. The last item is significant in that it was found approximately 2.5 m from the base of the chimney, beyond the area of densest bone concentration. Its location suggests not only that there has been considerable horizontal displacement of remains in this burial feature, but that in theory, all of the bones in F1 could have been redeposited from F6.

### Skeletal Reconstruction

Forty-eight bone fragments from 204-F1 were found to conjoin with other fragments, producing 17 conjoined "sets" of from two to six pieces. Seven of the reconstructed sets are long bone fragments; the remainder are vertebra (n=3), scapula (n=2), skull (n=2), metatarsal (n=2), and innominate (n=1) fragments. The conjoined sets are generally small; most consist of only two (70.6%) or three (23.5%) pieces, and in no case was a complete bone reconstructed. Approximately half of the conjoined sets (n=8) are comprised of fragments from the same provenience unit (TS=2), and two sets contains pieces recovered from adjacent provenience units (TS=3). Members of the remaining eight sets come from relatively scattered locations across the burial feature (TS 4-9), indicating a moderate degree of post-depositional disturbance of

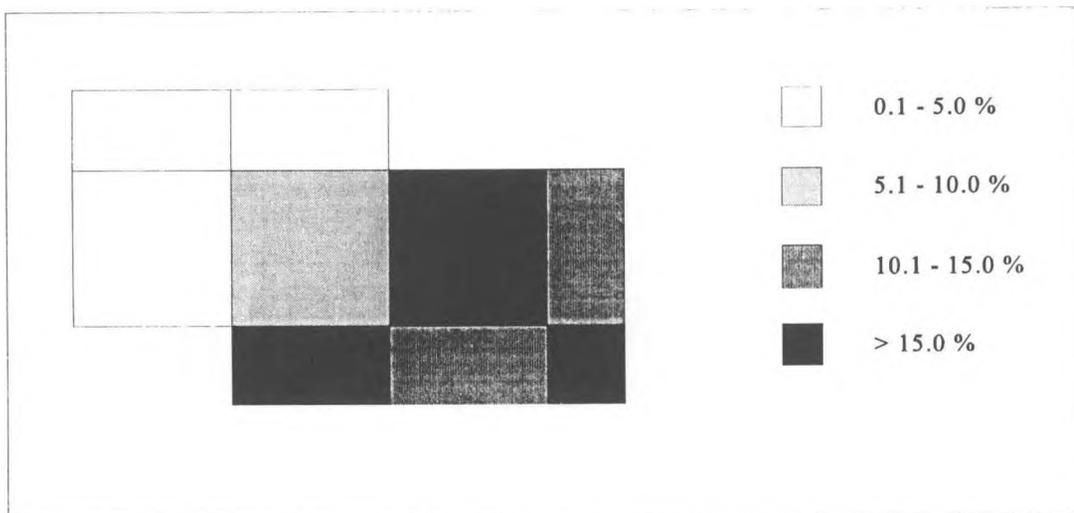


Figure 5.6 Horizontal distribution of human remains, DgRw 204-F1.

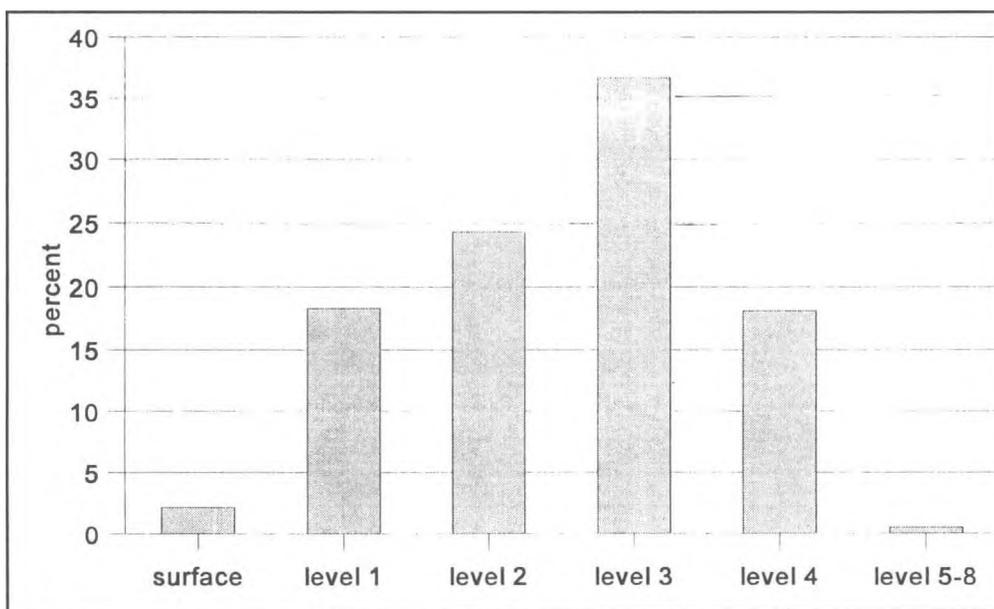


Figure 5.7 Vertical distribution of human remains, DgRw 204-F1.

**Table 5.2 Spatial distribution of human remains, DgRw 204-F1.**

Unit	Surface	Level 1	Level 2	Level 3	Level 4	Level 5-8	Total	%
EU 1	1	38	44	40	43	0	<b>166</b>	25.5
EX 1E	5	16	22	26	15	0	<b>84</b>	12.9
EX 1SE	3	48	20	27	4	0	<b>102</b>	15.7
EX 1S	0	2	5	44	16	0	<b>67</b>	10.3
EU 2	1	6	24	18	2	2	<b>53</b>	8.1
EX 2N	1	2	19	1	3	0	<b>26</b>	4.0
EX 2S	0	2	13	78	30	0	<b>123</b>	18.9
EU 3	1	1	9	3	0	1	<b>15</b>	2.3
EX 3N	2	4	2	2	5	0	<b>15</b>	2.3
<b>Total</b>	<b>14</b>	<b>119</b>	<b>158</b>	<b>239</b>	<b>118</b>	<b>3</b>	<b>651</b>	100
<b>%</b>	2.1	18.3	24.3	36.7	18.1	0.5	100	

the remains. Horizontal dispersal (mean = 2.12) tends to be greater than vertical dispersal (mean = 1.64): 84% of reconstructed fragments came from the same or adjacent excavation levels, while only 65% came from the same or adjacent excavation quadrants (Figure 5.8). Dispersal scores for the five excavated features are compared in Appendix C, Table C.2.

### Burning

Seven elements (1.1%) exhibit evidence of burning: a rib fragment, a metacarpal shaft, a femur distal epiphysis fragment, a tibia shaft fragment, and three small unidentified pieces (see Table C.5 for a comparison of burning patterns in the five excavated features). There is no apparent patterning in the spatial distribution of the burnt fragments: they are scattered across the deposits both vertically and horizontally. Given their rarity and distribution, it seems unlikely that the burning resulted from deliberate cremation; the fragments were probably burnt accidentally, through proximity to a fire built for other reasons, perhaps related to mortuary ritual. Two ash dumps, evidence of such burning, were encountered during the excavation of 204-F1; one of these was located in the upper levels of the midden that are associated with the human remains.

### Demography

Although preliminary examination of this burial feature suggested the presence of a single adult, the results of the excavation indicate that a minimum of

five individuals are represented in the skeletal assemblage. This estimate is based on the presence of four left calcaneus fragments from mature individuals (late adolescent/adult), and a vertebral arch half from a small, probably newborn, infant. It is unlikely that this estimate has been skewed by the introduction of extraneous elements from 204-F6, since all three of the individuals identified in F6 were also represented by the left calcaneus (see Chapter 7).

The five individuals include the newborn infant (represented by a single skeletal element), an adult female, an adult male, an adolescent of unknown sex, and one individual of uncertain sex and age (adolescent/adult). The adult female was identified by left and right innominate fragments exhibiting broad sciatic notches, small acetabula, and the "groove of pregnancy" type of preauricular sulcus (Houghton 1974). Degenerative changes to the auricular surface of the right innominate indicate that this woman was probably between 35-39 years of age at the time of death (Lovejoy et al. 1985). A third innominate fragment exhibits the narrow sciatic notch typical of males, but was too incomplete for an age estimate more precise than "adult". The presence of an unfused femur epiphysis and some relatively unworn teeth indicate that at least one of the individuals was an adolescent.

### Anomalies and Pathologies

There are no skeletal indications of the cause or manner of death of any of the individuals from this burial feature. The most common pathological condi-

tion observed is osteoarthritis, which affects at least 18 skeletal elements, mostly from the hands (n=5) and feet (n=6). Other affected areas include the cervical and thoracic spine, the shoulder (scapula), elbow (distal humerus), and knee (patella and distal femur). Severity of involvement ranges from slight (minor lipping of joint margins and/or minor pitting of articular surfaces) to severe (pronounced lipping or eburnation). Other degenerative changes apparent in the skeletal material are a manubrium with mineralization the first costal cartilage, and a thoracic vertebra with a shallow Schmorl's node on the inferior centrum.

Two examples of skeletal trauma were noted: a middle foot phalanx with a healed fracture of the proximal articular surface; and a lower cervical vertebra with a healed but ununited fracture (pseudoarthrosis) of the spinous process. The cervical lesion is a type of activity-related trauma often referred to as "clay-shoveller's fracture", resulting from "powerful muscle contraction in activities producing hyperextension or hyperflexion of the neck or, more commonly, in those requiring retraction of the scapula toward the spine while elevating the ribs" (Knüsel et al. 1996: 429). Despite the appellation, such fractures have been observed among hunter-gatherers as well as in agricultural and industrialized societies; in all contexts, however, they occur almost exclusively in males (Knüsel et al. 1996: 434).

The only other anomaly observed was a small osteoma (benign bone tumour) on the ventral surface of a right zygoma.

## Mortuary Practices

In view of the generally poor preservation and fragmentary condition of the human remains, the evidence of post-depositional disturbance of the burial chamber by both animals and humans, and the undeterminable degree of commingling with remains from DgRw 204-F6, it is difficult to draw any firm conclusions regarding mortuary practices at this burial feature. It is unclear whether these were primary or secondary interments; however there is very little evidence for secondary treatment of the corpse (dismemberment, cremation), apart from one equivocal cutmark and a few slightly burnt bone fragments that may have resulted from accidental exposure to fire. The distribution of artifacts within the burial chamber suggests that some grave goods, primarily utilitarian items, were deposited along with the bodies, and perhaps deliberately broken at that time. The burial chamber may at one time have been sealed off by a wall of fallen sandstone slabs, although the evidence for this is not abundant.

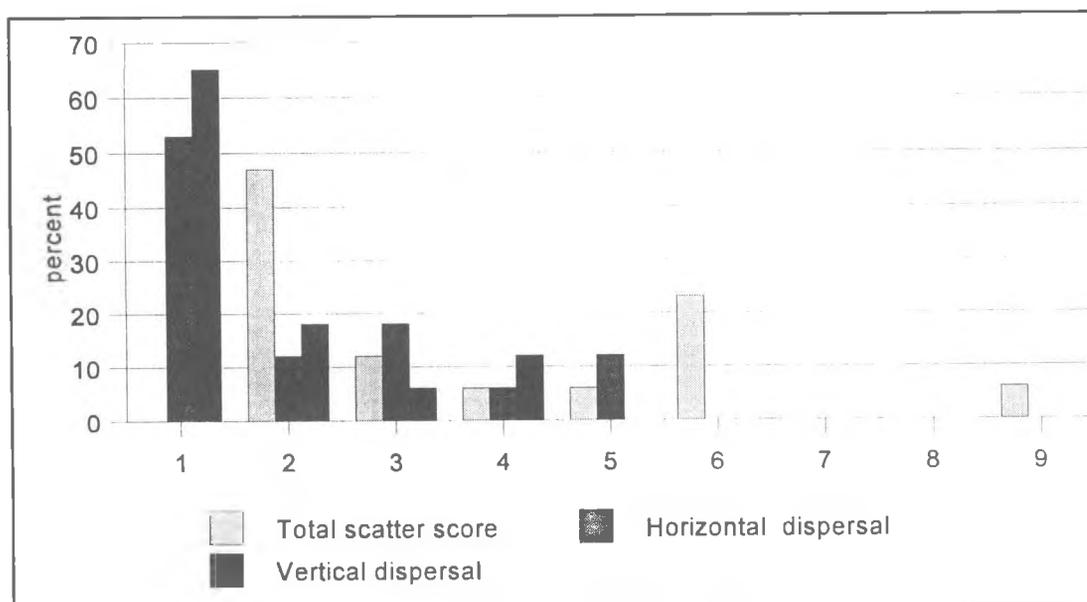


Figure 5.8 Dispersal scores of reconstructed elements, DgRw 204-F1.

