

## Chapter VII

### CRESCENT BEACH HUMAN REMAINS, 1989-1990

Jerome S. Cybulski

A single human burial was encountered during the 1989-1990 excavations. It was located in Unit Fnw, North Trench (Figure III-8). Circumstances of the discovery (Figure III-8) of the burial, that of a juvenile, indicate it dates no later than the Locarno Beach Phase (Tables IV-1,2, Figure IV-3), customarily placed at ca. 3500-2500 years RCYBP in British Columbia prehistory (Fladmark 1986) and possibly earlier. Previously excavated human remains from the Crescent Beach site, numbering 58 individuals (summarized in Cybulski 1992:224-227), have been osteologically described elsewhere by Owen Beattie (1976, 1981), Andrew Trace (1981), and Gerald Conaty and A. Joanne Curtin (1984) (see also Percy 1974 and Chapter X?) of this volume). Details on the archaeological excavations which produced those remains may be found in Percy (1974), Trace (1981), and Conaty and Curtin (1984). It appears that at least three prehistoric culture phases are represented in this collection: St. Mungo Phase = 3 individuals; Locarno Beach Phase = 10; Locarno Beach or later = 22; Marpole Phase = 2; unassigned = 21.

#### Methods of analysis

The 1989-1990 Crescent Beach human remains were labelled in the field as "Burial 1." They were initially examined at the Laboratory of Archaeology, University of British Columbia and then sent to the Canadian Museum of Civilization for detailed inventory and analysis. They were washed with clear water to remove adhering matrix and air-dried, and some skeletal parts that had broken postmortem were repaired. An inventory of the bones was then completed, followed by a detailed record of their stages of development, and a detailed record of tooth development. The bones were also measured and observed for non-metric morphological traits according to prescribed formats (Cybulski 1992) and examined for evidence of gross pathology. The stages of tooth development, critical to age at death determination, were compared with charts published by Douglas Ubelaker (1989) and elements of bone development were evaluated according to standard textbooks of anatomy (e.g., Gray 1973). Because of a young, prepubertal age, it was not possible to determine the sex of Burial 1. Following the analysis, the bones were packaged and returned to the Laboratory of Archaeology, University of British Columbia. In February 1996 they were transferred to the care of the Semiahmoo Band, as specified in the provincial archaeological permits (1989-27 and 1990-67).

#### Results

Burial 1 was represented by a nearly complete, though variably damaged skeleton. On site, it was found articulated and flexed on the right side, heading south and facing east, as shown in Figure VII-1. In the laboratory, the left scapula and a few hand and foot bones appeared to be missing. The cranium was represented by a number of pieces, many of which were slightly misshapen postmortem so that it was not possible to restore the skull to a fully intact state. The vertebrae were extensively fragmented.

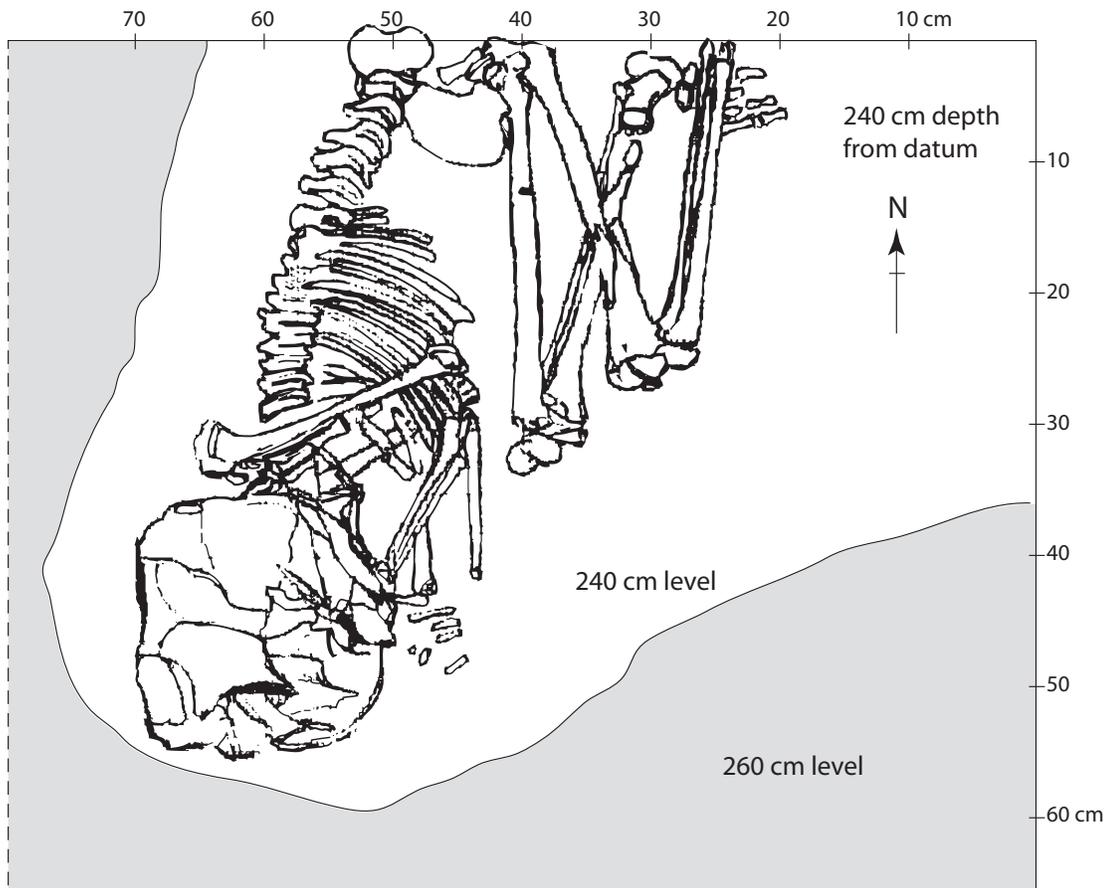


Figure VII-1. Sketch of Burial 1 before removal.

#### Age at death

The dentition was complete, represented by mixed deciduous and permanent teeth. Crown and root development suggested an age at death of 8.5 years  $\pm$  24 months. All four permanent first molars were fully developed, while the root apices of the upper and lower central incisors were still open, and the lateral incisor roots were approximately two-thirds complete in their development. The four deciduous second molars were in place in the jaws, as were three deciduous first molars and the canines. The root of the upper right first premolar was about half developed in terms of its expected length.

Postcranial skeletal development appeared slightly retarded relative to the dentition. For example, the anterior arch of the atlas, which usually joins the rest of the bone between 5 and 9 years of age, was separate, as were the neural arches and centra of a few mid-thoracic vertebrae. Table VII-1 reports diaphyseal length measurements for long bones and a clavicle of Burial 1. These data may be useful for age at death estimations in comparable human remains that lack teeth.

Table VII-1 Long bone and Clavicle diaphyseal lengths (in mm) of Crescent Beach Burial 1

<u>Bone</u>	<u>Right</u>	<u>Left</u>
Clavicle	94	--
Humerus	181	181
Ulna	160	161
Radius	143	144
Femur	246	—
Tibia	208	211
Fibula	199	—

## Pathology

With the possible exception of faint signs of linear enamel hypoplasia in the crowns of the lower permanent incisors, there was no gross evidence for pathology in the skeleton. Hypoplastic enamel defects usually denote episodes of metabolic stress in the growing child, though specific causative factors are difficult to determine without life history data.

## Absence of cranial deformation

The skull of Burial 1 could not be restored in its entirety, but segments of the neurocranium were sufficiently large and normally formed to reveal no evidence for cultural head shape modification. Crescent Beach is within a geographic region of the coast of British Columbia (Strait of Georgia) where cultural head shape modification (artificial cranial deformation) was widely practiced by native peoples known ethnographically (i.e., Coast Salish). Archaeological evidence for the practice in this region extends back into the Marpole culture phase (2400-1000 years RCYBP) but is rare or absent before that time (Beattie, 1985; Cybulski 2006:536-538). Given its presumed chronology, the absence of cranial shape modification in Burial 1 is, therefore, consistent with that finding.

## Morphological variants

Dental morphology included distinct shovel-shaping of the four upper incisors. In the cranium, there was a trace of the metopic suture at nasion, a large accessory bone in the right occipitomastoid suture (the left suture was damaged and unobservable), a large accessory bone at the right parietal notch (none present at the left notch), large dehiscences in both tympanic plates, a single foramen in each superior orbital margin of the frontal bone, complete infraorbital sutures, and an incomplete bridge of extra bone across the right foramen spinosum (= spinobasal spur; the left foramen spinosum was damaged and unobservable). Elsewhere in the cranium, there was no evidence for squamoparietal fusions, parietal processes, tympanic plate thickening or marginal foramina, auditory exostoses, os japonica or traces, frontal grooves, trochlear spurs, multiple or divided infra-orbital foramina, palatine torus or keel, right pterygoid foramen, right pterygospinous bridge or spur, right pterygobasal bridge or spur, divided or partly divided hypoglossal canals, pharyngeal fossa, precondylar tubercle or third condyle, ossified apical ligament, or clinoid bridging anomalies. The right foramen spinosum and foramen ovale were normally disposed, and the groove for the superior sagittal sinus was continuous with that of the right transverse sinus.

In the mandible, there was no evidence for mandibular tori, mylohyoid bridges, or Stafne defects (also known as lingual mandibular bone defects). Each mental foramen was normally disposed.

Each humerus featured a perforated septum at the distal end, though neither featured a supratrochlear spur. Neither clavicle exhibited a costoclavicular tubercle, facet or condyle. There were no third trochanters visible on the femurs. The trait known as Fossa of Allen was represented by a cluster of pores in the anterior neck of the right femur and as an ulcer-like lesion in the left. Neither ilium exhibited an accessory sacral facet.

Generally, the vertebrae were too fragmented to make dependable observations on morphological variants. Overall, the dental, cranial, and postcranial observations reported here may be useful for future assessments of the biological affinities of Crescent Beach Burial 1 (1989-1990), as well as other Crescent Beach and Strait of Georgia human remains (e.g., Curtin 1999).

## Summary

In sum, the 1989-1990 Crescent Beach excavations resulted in the discovery of one human burial, a

variably complete juvenile skeleton aged 8.5 years  $\pm$  24 months. The skeleton was flexed on the right side facing east. Aside from faint signs of linear dental enamel hypoplasia, there was no evidence for paleopathology. Perhaps most significantly, the cranium did not exhibit signs of cultural head shape modification. This is consistent with findings from other skeletal remains associated with the Locarno Beach phase and earlier periods of Strait of Georgia culture history.

