CHAPTER 6

PLATEAU BURIAL ASSEMBLAGES

This chapter presents detailed site descriptions and analysis. The emphasis is on assemblages containing at least ten undisturbed burials with secure grave associations, but many sites not meeting this criteria are also discussed in a qualitative fashion, particularly from the Canadian Plateau, for which there are far fewer assemblages meeting even this size criterion. While much of the information could have been summarised in table form, it was felt necessary to discuss aspects of each site that are not conducive to this kind of presentation. Discussion of sites proceeds roughly from the lower Middle Columbia northwards to the Fraser and Thompson areas of the Canadian Plateau. The locations of sites mentioned in the text are shown in Figures 6.1 and 6.2. Data on age, sex, and the number of artifact types found in individual burials at each of the sites for which at least some quantitative analysis is provided are listed in Appendix A (Tables A.1 and A.2).

The Lower Middle Columbia

The Dalles-Deschutes

Archaeological research in The Dalles-Deschutes region began in the 1920s (W. Strong *et al.* 1930), unfortunately without the benefit of the many advances in field techniques that have occurred since. Further excavations were undertaken in the 1950s (Butler 1957, 1959, 1963; Caldwell 1956), but by this time the entire area had been heavily looted by collectors. Direct radiocarbon dates on human bone or associated grave inclusions are, as far as I have been able to determine, totally nonexistent, making it difficult to deal with temporal change. The end result is that only a fairly qualitative overview of the mortuary data can be given for this important region. Some of the burials discussed below likely fall within the early to middle historic period of the area, ca. 1850 or even later, and are thus outside of the target populations of study as defined here. The rationale for including them here is simply that few more suitable data exist from the area.

Three basic disposal regimes are seen archaeologically in The Dalles-Deschutes region investigated by W. Strong *et al.* (1930): pit inhumation, talus slope burial, and cremation. Although the evidence is more difficult to detect archaeologically, the mortuary sheds noted by Lewis and Clark in 1805-06 may have prehistoric precedents as well. (As detailed further in the section on the Middle Columbia, some researchers have in fact proposed a relationship between the sheds and the cremation pits [Garth 1952], although this may be questioned [W. Strong *et al.* 1930:48].) Although there seems to be an aspect of chronological change in these disposal alternatives, there is evidence that all three overlapped for a unknown period of time (W. Strong *et al.* 1930:50).

During W. Strong *et al.*'s work, it was found that all talus burials were located in the vicinity of Spedis rather than on Miller's Island (see Figure 6.2). This distinction is not solely due to topography, as Miller's Island has suitable slopes. An estimated six talus burials were noted at Site 12 along the southern rim-rock slope in Spedis Valley, but were not systematically investigated by W. Strong *et al.* (1930). The slopes seem to have been in use in "very recent times", although this is not to say that they were not in use earlier.

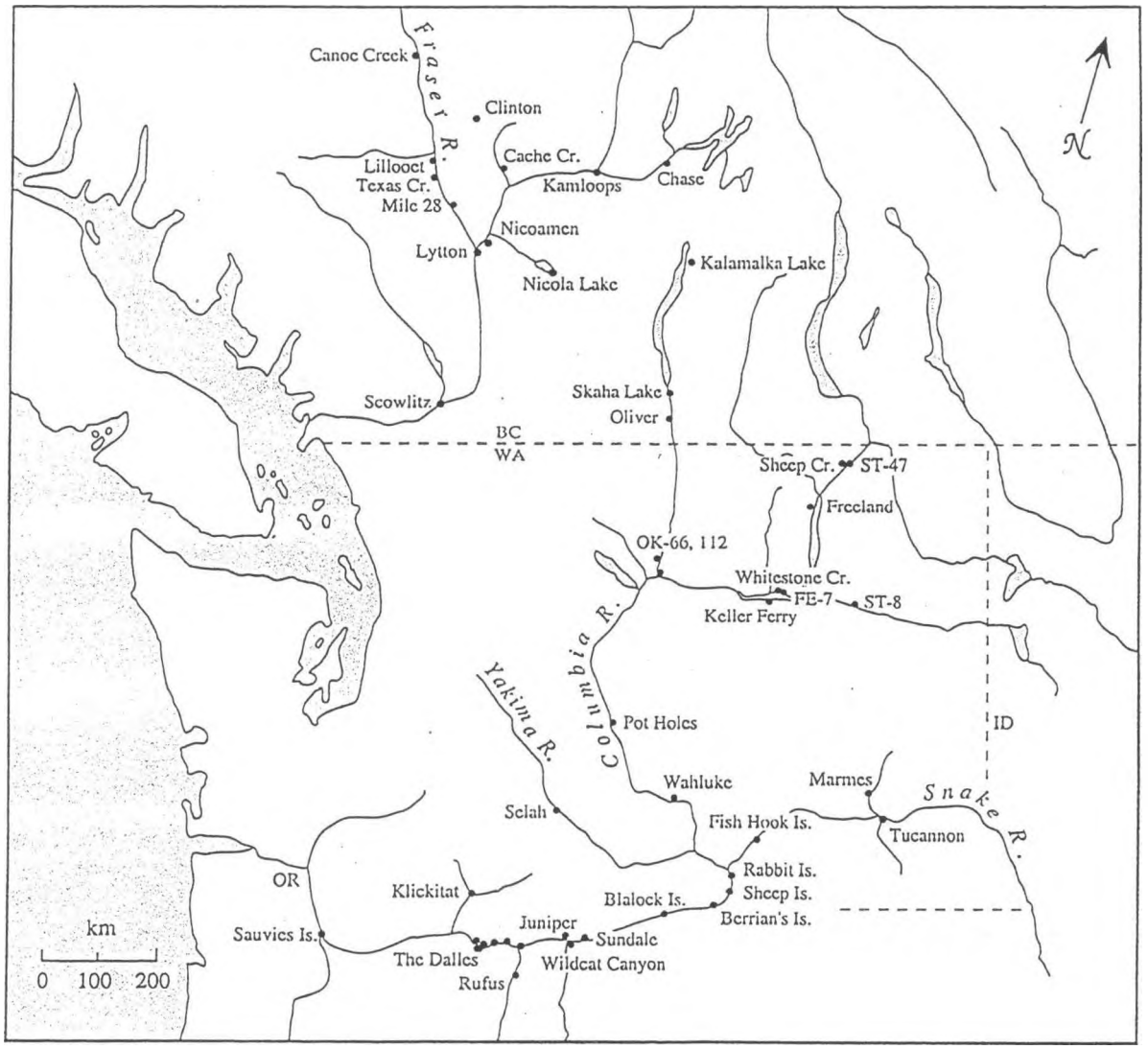
Only five talus burials (Burials 5, 6, 7, 8, and 9) were actually excavated by W. Strong *et al.*; these were from what were labelled as four separate sites along the northern rim-rock slopes of the same small valley, behind the large village site of Wakemap Mound (see W. Strong *et al.* 1930:10, Figure 1). Three of these burials (7, 8, and 9) contained no artifacts, while one (Burial 6) had a flint point and a basalt knife, and one (Burial 5) had a flint point, a short dentalia bead, and five tubular copper beads.

W. Strong *et al.* certainly felt that socioeconomic status differences could be invoked to help account for the position of talus graves in the area:

> Most of the graves observed in the slopes... were those of infants. This fact and their recency, coupled with the fact that the Wishram Indians are at the present time depositing part of their dead in the sheds on Upper Memaloose island, suggest that these rock-slide burials, at least, were for bodies not considered worthy the time and trouble of a burial on the island. The paucity of artifacts, the lack of elaboration, the scanty covering of the graves, and their comparative isolation (i.e., not in regular cemeteries) also suggests that such burials were for the inferior ranks of society or were at least exceptions to the regular practice of the Wishram. (W. Strong *et al.* 1930:44-45)

The above passage highlights a number of important points. Infants reportedly predominate in the talus slope burials, suggesting that they were likely being spatially segregated. But it is not clear, given the fact that most graves were not excavated, how this conclusion was reached.

Figure 6.1: Map of Plateau Showing Locations of Sites Discussed in Text



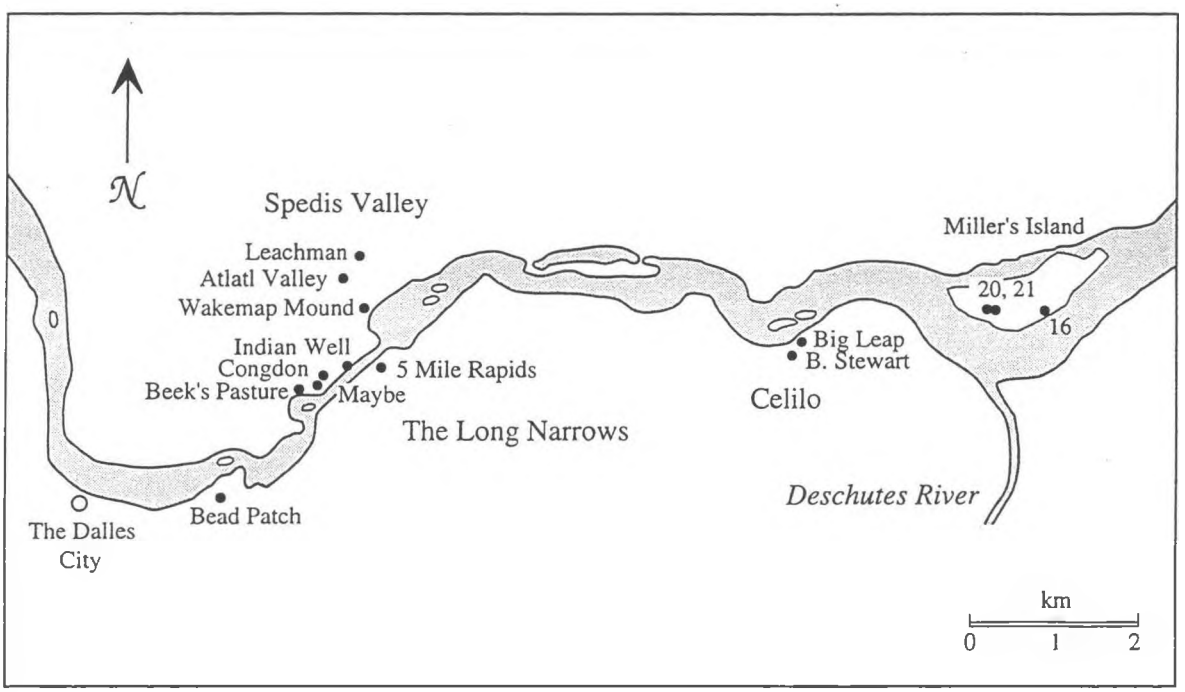
The same area was subsequently investigated by Caldwell, who excavated a total of ten talus or near-talus burials from the vicinity of W. Strong *et al.*'s Site 12 (Caldwell 1956:283). No age estimates are provided, partly due to very poor bone preservation, and so it is not possible to evaluate W. Strong *et al.*'s statements concerning the representation of infants. Of the ten burials, between three and five contained no artifacts (Burials 2, 3, 8, 9a, and 9b); the range being due to the uncertain association of some iron and tin scraps with Burials 9a and 9b. Many of the remaining burials do not exhibit the paucity of grave inclusions reported by W. Strong *et al.* Burials 1 and 5 in particular contained numerous Euroamerican trade items, including many glass beads, copper beads and pendants, several dentalia, an iron ring, a clay pipe, a steel file, and the mechanism of a cap or flintlock gun. Burials 6 and 7 contained fragments of china and glass in addition to modern cloth, making at least these burials very recent.

The simple form of the burial facility in comparison to the apparently contemporaneous elaborate mortuary sheds on nearby islands and the relative lack of grave inclusions both appear to associate talus burial with lower socioeconomic status. The addition of Caldwell's data obscures this picture somewhat, although the relative abundance and types of trade articles could suggest an even later date for this material, making comparisons to W. Strong *et al.*'s data of questionable validity. Of course, many different ethnolinguistic groups made seasonal use of The Dalles for fishing and for trade. It is also possible, then, that the talus burials represent the burial practices of another cultural group for which the mortuary sheds would be inaccessible.

A total of 19 pit graves from four sites were excavated by W. Strong *et al.* (1930). Four burials (Burials 1, 2, 3 and 4) were located in two caves (Sites 1 and 2) at the base of the same northern rim-rock slope that held the talus burials previously discussed. Only Burial 1 had a non-perishable artifact in direct association, this being a bone awl. Fragments of sticks, boards, and tule matting were also found in these burials. Site 16, located at the base of low cliffs on Miller's Island, provided evidence of seven burials. Two of these (Burials 11 and 15) contained no artifacts, one (Burial 10) a chert drill, one (Burial 14) a chert point, and the remaining three (Burials 12, 13, and 16) one or two notched sinkers. All of these burials are impoverished compared to those of the last site, discussed below.

Site 20 is located on the southwestern end of Miller's Island, out from the base of a talus slope and about 500 m behind the large housepit village of Site 18. Eight graves were recorded from this site, but these represent an unknown number of individuals, since with only two exceptions (Burials 23 and 24) they seem to have contained multiple individuals. Four of the burials are very similar to those that have been discussed thus far in terms of their grave inclusions; two adults (Burials 23 and 24) contained no artifacts,

Figure 6.2: Burial sites in The Dalles-Deschutes area

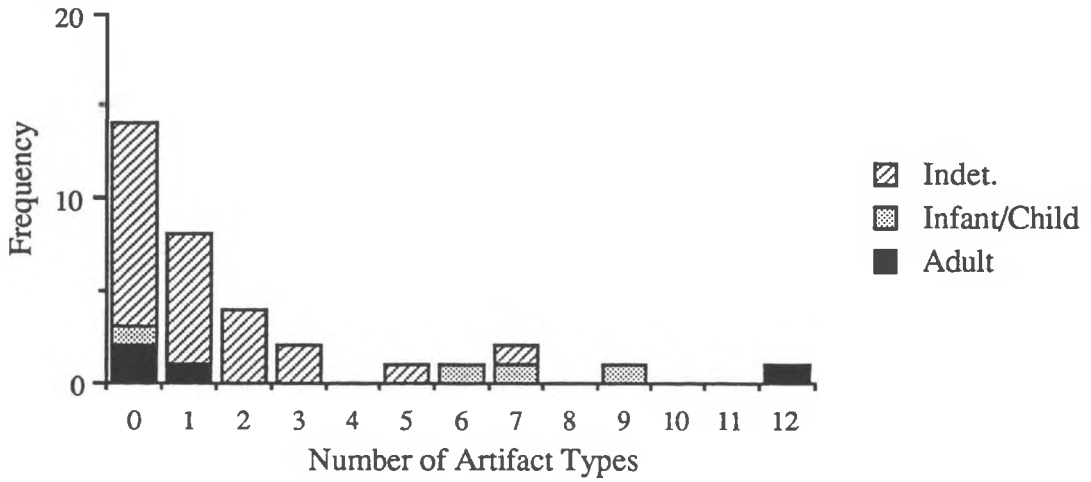


while the other two (Burials 18 and 19) contained a polished stone sinker and a "flint" blade, respectively. The remaining four burials, all containing multiple individuals, present a far greater number and variety of items. Burial 17 contained the bodies of three or possibly four individuals—an adult, one or two children, and a neonate. Associated grave goods include bone harpoon parts, perforated bear claw cores, an incised sea mammal canine pendant, over 100 copper beads, a copper pendant, two copper rings, many glass beads, an iron bracelet, 25 dentalia beads, 36 *Olivella* beads, and three abalone shell pendants. Preservation at the remaining three multiple burials at the site, 20, 21, and 22, was very poor, such that W. Strong *et al.* (1930) do not even attempt to estimate the number of individuals represented. Burial 20 contained bronze buttons, numerous copper beads and pendants, "many" glass beads, dentalia beads, a "flint" point, and an iron axe. Burial 21 contained 120 copper beads and pendants, 100 glass beads, 40 dentalia beads, three clam shell disc beads, a single *Olivella* bead, and a number of "flint" points. Burial 22 again included a number of copper beads, buttons, and pendants, 100 glass beads, 16 dentalia beads, five clam shell disc beads, the fragments of an abalone pendant, and a lead sinker.

The unusual position of Burials 17, 20, 21, and 22 should be clear. Most other talus and pit burials in the study area contained either nothing (other than tule matting) or only one or two items. Moreover, these items were frequently utilitarian (bone awls, flint points and knives) rather than sociotechnic in nature, although Burial 5 and a number of the late burials reported by Caldwell contained sociotechnic items. Greater energy expenditure can also be seen in the form of the mortuary facility in the multiple burials of Site 20 on Miller's Island (Burials 17, 20, 21, and 22). In these, the pit had been elaborately lined and covered with boards. W. Strong *et al.* (1930:45) note that, although a few other burials (such as Burials 3 and 7, as well as Caldwell's Burial 1) also had evidence for the use of boards in the grave preparation, the effect was much less elaborate than that seen in Burials 17, 20, 21, and 22. Thus the coincidence of the two lines of evidence strengthens the interpretation of higher status initially suggested by the grave inclusions alone.

While it is questionable whether all of the burials date to the same time period, the preservation of organic materials in both talus and pit inhumations suggests no great difference in antiquity. Phoenix buttons in Burials 20 and 22 suggest a post-A.D. 1830 date (W. Strong *et al.* 1930) for at least part of Site 20. Many of the talus and pit burials investigated, including Burials 17, 20, and 21, retain evidence of wood, textiles, and basketry. All of this suggests that the majority of these burials date from the protohistoric to early historic period. Many of Caldwell's burials, containing remnants of "modern" cloth and abundant trade items, seem even later. Grouping the burials from both reports (Caldwell 1956; W. Strong *et al.* 1930) for analysis provides a sample of $n = 34$ (Figure 6.3); this includes the four individuals of Burial 17 but not 20, 21, or 22, since the number of individuals in the latter are not even estimated. It

Figure 6.3: Artifact Diversity Distribution at The Dalles-Deschutes



also treats Burials 18 and 19 as if they were single interments, which may not be valid. Insufficient information is provided on age and sex (only a single skeleton is sexed) to permit even tentative statements regarding quantitative differences in treatment along biological lines. It was also necessary to "guestimate" the number of artifact types associated with each of the four individuals in Burial 17. The majority of the artifact types were assumed to be associated with the adult, and the least with the infant.

Keeping in mind, then, the tentative nature of the quantitative analysis, the average number of artifact types in the 34 burials is 2.00. The average number of utilitarian types is 0.62, while the average number of sociotechnic types is 1.38. The coefficient of variation is, as might be expected, higher for sociotechnic types (0.67 vs. 0.53 for utilitarian types), reflecting the occurrence of many sociotechnic types with the four individuals of Burial 17 compared to the more homogeneous distribution of utilitarian artifact types. This provides some quantitative support for the more highly differentiated distribution of sociotechnic types over utilitarian types.

But it is the cremation pits that constitute by far the most elaborate form of mortuary treatment found in The Dalles-Deschutes area. Their investigation is, however, very frustrating. This can partly be attributed to the early date of the excavations; for example, W. Strong *et al.* (1930) do not provide any estimate of the number of individuals present (beyond "many"), nor do they present even a qualitative assessment of the age classes present in the excavated cremation pits. Thus it is not known whether all age groups are represented. To make matters worse, these pits were quite visible, and thus by the time of even the earliest excavations had already been subjected to considerable looting, which was to intensify in subsequent years. Despite this, sufficient evidence remained at the cremation sites discussed below to make apparent their unique status in terms of the quantity and variety of prestige items present.

W. Strong *et al.* (1930) were able to infer the elaborate cremation of many bodies in the ten pits of Site 15 and in the single pit of Site 21, both sites being located on Miller's Island. The Site 15 cremations had all been largely looted by collectors; nevertheless W. Strong *et al.* were able to find evidence for an impressive range of artifacts, including steatite and dentalia beads, decorated tubular stone pipe fragments, carved bone/antler fragments bearing the "grinning face" motif (see Chapter 4), whalebone club fragments, and projectile points. Half of a steatite spindle whorl (?) was found near one of the disturbed cremations.

The single cremation pit found at Site 21 is if anything even more impressive. A pit 3.0 m x 2.4 m revealed a layer of charred human bone fragments approximately 0.15 m thick. Fragments of basalt had been placed over the bones, which rested upon an apparently levelled soil floor. W. Strong *et al.* report that the burning had been so intense that "...it had melted the sand, and possibly some of the articles cremated, so that a sort of slag or matrix was formed enclosing bones and artifact fragments" (1930:25). Artifacts in the pit included bone awls, projectile points, a mortar and pestle, unidentifiable copper and iron fragments, bone gaming pieces, an estimated 13 bone "labrets" (more likely ear spools), bone/antler carvings bearing the "grinning face" motif, whalebone club fragments, animal claw cores, a tubular stone bead, a small stone decorated bowl, pieces of an estimated ten tubular stone pipes, and red ochre. Some of the pipes were made of steatite, while others were of a fine-grained micaceous sandstone.

A number of other elaborate burial sites, both cremation and non-cremation, are known from The Dalles-Deschutes region. As with the sites on Miller's Island, data are incomplete and provide only hints of the complexity that existed in this area. Several of these important sites are described in qualitative terms below. That more detailed information might still be available in the notes of amateur collectors is hinted at by the documentation accompanying the Bergen Collection, recently donated by Dr. (M.D.) H. Bergen to the Burke Museum at the University of Washington. Bergen's notes on a number of sites in the lower Middle Columbia area are invaluable, preserving individual grave associations and spatial relationships between burials. Access to this information enables a more detailed analysis of the sites discussed below.

Leachman

Colowesh Bottom, before being flooded by The Dalles Dam, was a large, flat sand and gravel plain located directly behind Wakemap Mound (45-KL-26). It was used extensively as a burial, cremation, and burial vault site (E. Strong 1959a, b, 1960a). Most of the sites on the plain had been looted even before the floodwaters covered the area, but one undisturbed large cremation pit, known as the Leachman site (45-KL-68), was discovered in the centre of the plain in the 1950s. Excavations revealed a pit approximately 18 feet in diameter and some five and a half feet deep, the top half of this being sterile wind-blown sand. Remnants of wood planks suggest that the pit was lined; it may have been a burial vault (E. Strong 1959b). The bottom layers contained sand, ash, and both burned and calcined bone. No estimate of the number of individuals represented is available, although the size of the pit suggests a considerable number.

A wide range of artifacts were found, including a number of fine stone carvings, two stone "slave-killers", some 20 tubular pipes, two complete carved whalebone clubs, a large number of chipped stone artifacts, and several bone and antler carvings. The majority of these can only be considered as prestige items. The pipes were highly carved, and some of their iconography can be related to images seen on other ceremonial equipment as well as in petroglyphs. One pipe shares a very distinctive recurving bird beak motif with a small decorated stone mortar found at nearby Wakemap Mound, interpreted by Emory Strong (1960a) as a shaman's ritual bowl. Another has carved into the stem two human figures holding hands, in what is known as the "brothers", or "twins" motif (McClure 1981), seen in both petroglyphs and pictographs in the Vantage area, and yet another depicts an incised stylised bird that Strong calls almost an exact copy of one of the petroglyphs along the Long Narrows (E. Strong 1959a:27-29). Many of the small bone and antler carvings bear the distinctive "grinning face" motif (see illustrations in E. Strong 1959b; see also Chapter 4). The cremation pit appears to date to the late prehistoric rather than the protohistoricperiod; a single piece of copper was the only possible trade good found in the pit, and its thickness suggests that it may be native metal (E. Strong 1959b).

Congdon, 45-KL-41

The Congdon site (45-KL-41) is located near the lower centre of the Long Narrows (Figure 6.2; Figure B.1). It consists of a long, low mound (see Butler 1963:19-20, Figures 1 and 2) containing two major burial components, designated Congdon II and III, superimposed on an older village site, Congdon I (Butler 1959, 1963; E. Strong 1960a). Congdon II consists of a large cremation pit, noted as being especially rich in stone beads, carved stone amulets, steatite rings, and atlatl weights (Bergen 1989; Butler 1959; Butler and Osborne 1959; E. Strong 1960a). Some of the stone beads were geometrically incised (Butler 1959) and coated with red ochre (Weld 1959). Chipped obsidian crescents frequently referred to as "nose pieces" were also found (E. Strong 1960a). The pit seems to have been capped with a mound of basalt boulders. Skeletal preservation seems to have been practically non-existent in this component. Butler (1963), based on artifact typology, suggests a tentative date of 3500-3000 B.P. for Congdon II.

Butler (1963:16) describes Congdon III as "...a series of multiple mass burials which appeared to have been intrusive into one end of the Congdon II cap and which were of unknown antiquity". Based on crania, an MNI of 51 is reported by Garner (Appendix 1 in Butler 1963). With the exceptions of one child (cranium 28) and one infant (cranium 46), all the individuals were classified as either adolescent (four crania) or adult (45 crania). None of the crania exhibited cultural modification (Garner in Butler 1963). This is one of the few large older sites in The Dalles area in which bone preservation is relatively good. Based on the occurrence of similar atlatl weights with the burials, Congdon III could date to roughly the same period as Atlatl Valley, discussed below, where bone preservation was practically non-existent (Bergen 1989). Unfortunately, however, recovery was very poor at Congdon, with the single trained archaeologist present trying to salvage some information on the skeletal material while a group of collectors dug the site (Butler 1963). Still, even making allowances for this, it seems clear that infants and children are grossly underrepresented (2/51 or 3.9%; binomial p = 3.2E-06). Fewer artifacts, and of lesser quality, were found with this component, although it still includes many of the same types seen in Congdon II. In addition, bucket-shaped stone mortars were found inverted over five crania, and an antler-tine digging stick handle with incised geometric designs was also found (Butler 1959, 1963). Both Butler (1963) and E. Strong (1959a) mention a local account relating that the Congdon III burials were the remains of strangers who were victims of an epidemic. Butler's (1963:16) informants state that they may have been Great Basin Paiute. But the considerable antiquity of the assemblage makes it extremely unlikely that oral traditions or local histories could have any bearing on the ethnicity of the burials.

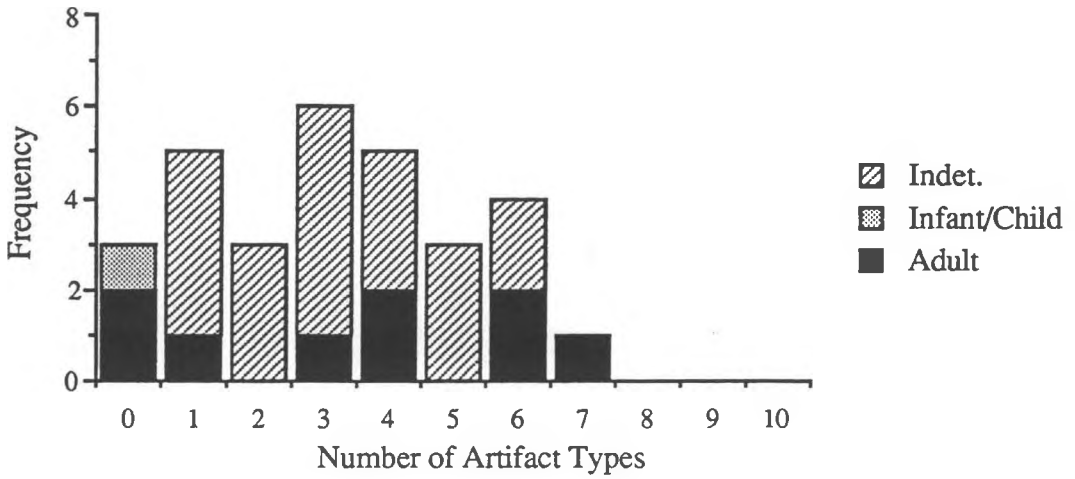
In 1960, after the work supervised by Butler, Bergen (1989) revisited the site and found undisturbed areas that had been overlooked, often below backdirt piles. He also dug deeper than Butler, finding intact burials below the level at which Butler and his crew stopped. In this way, Bergen recovered a total of 29 burials. In some cases the presence of a burial was inferred from the close grouping of artifacts typically limited to graves, but in most instances bone preservation was sufficient to at least make out the outline of the skeleton.

Preservation was apparently sufficient to provide age estimates for only ten out of the total of 29 individuals, nine adults and a single child (Bergen 1989). Unlike the remains reported by Butler, there is no evidence that subadults (1/10 or 10%) are underrepresented (binomial p = 0.1493); in addition, it is likely that there is a preservation bias against subadults. The remains of the child were found as part of a double burial with the remains of an adult, possibly female (Bergen 1989). Based largely on the overall size and

robusticity of the skeleton rather than specific morphological criteria, Bergen (1989) tentatively identified five of the adults as male and the remaining four as female. Based on this small sample size there is no evidence for differential representation or treatment by either age or sex.

The average number of artifact types found in the Congdon burials collected by Bergen is 3.17. Utilitarian artifact types ($\overline{X}$ = 2.17) are somewhat more numerous than sociotechnic types ($\overline{X}$ = 1.00).

Figure 6.4: Artifact Diversity Distribution at Congdon



Utilitarian artifacts recovered with the burials include stone knives, points, scrapers, drills, abraders, whetstones, choppers, atlatl weights, mortars, a maul or pestle, a bone awl, a bone needle, and a bone wedge. While a few bone objects were recovered, it is likely that the bone and shell artifact assemblages are underrepresented. Bergen (1989) interprets an unusual flat piece of bone approximately 18 cm long and 3.5 cm wide found with two atlatl weights in Burial 15 as a fragment of an atlatl, although this seems doubtful. Interestingly, the atlatl weights were usually found in pairs (Bergen 1989), often together with what Bergen calls a "chopper". No explanation for this association is offered at this time, which is not statistically significant (based on the information provided) in any case. Sociotechnic artifacts include *Dentalium* and shell disc beads, a variety of stone beads, fragments of bone carvings, large zoomorphic stone carvings, red and white pigments, and small so-called "paint pots" (small, often decorated, mortars). A stone celt and a carved maul may also have functioned as prestige objects. Stone beads, made of steatite and sandstone or siltstone, were found in a variety of sizes and shapes, including large symmetrically contracting cylindrical beads up to 6.5 cm in length. A number of the stone knives and points are made of exotic materials such as obsidian and are exceptional in their length and manufacture—these might have functioned at least partly as prestige objects as well.

Artifact richness in the Congdon assemblage is relatively low. The assemblage is overwhelmingly dominated by a variety of stone points and stone beads. Furthermore, the artifacts are fairly evenly distributed amongst the burials (Figure 6.4). Sociotechnic types are particularly evenly distributed, with most having 0, 1, or 2 types, the only exception being Burial 3, which included 3 types.

The temporal integrity of the Congdon assemblage is certainly open to question. It is definitely wholly prehistoric. No Euroamerican trade items were found with any of the burials reported from this site, by Bergen or anyone else. An examination of photographs of the points in the Bergen collection (catalogued to individual burials) reveals a variety of point styles, including: Barbed Triangular with Expanding Stem, Rabbit Island Stemmed, Mahkin Shouldered Lanceolate, Elko Corner-Notched, Elko Eared, and Large Side-Notched (see Cole 1993 and Lohse 1985 for descriptions and illustrations of these point types). All of these types could be accommodated within the range of approximately 3500 to 2000 B.P. This fits well with the use of the atlatl as inferred from the presence of what are widely accepted as atlatl weights among the grave inclusions. It is also stratigraphically consistent with the proposed date of 3500 to 3000 B.P. suggested for Congdon II. At best, then, the assemblage can be used to characterise this broad period. The majority of the burials at the site may well fall within a shorter interval. It is recognised that differences in the numbers of types of grave inclusions in burials discussed here may partially reflect

temporal factors, but, without a more exact projectile point typology than currently exists for the area and in the absence of radiocarbon dating it is simply not possible to address this possibility in any more satisfactory way.

Indian Well

The Indian Well (45-KL-42) site is located (or rather was located, before being covered by the waters of Lake Celilo) on a largely silted-in talus slope bordering the Long Narrows. At least two components are present: Indian Well I, representing a very early occupation (ca. 7500-8500 B.P.), and Indian Well II, the burial component (Butler 1959). There appears to be some confusion over this component: Butler (1959:13-14) describes Indian Well II as a cremation, while E. Strong (1959a, 1960a:58-60) interprets it as consisting primarily of talus burials, with only superficial evidence of burning in the form of charcoal and calcined bits of bone. The poor preservation of bone and disturbed context of the site (largely through its situation on a talus slope) make it unlikely that this issue can be resolved, but in either case there is some evidence for burning.

Indian Well II was saturated with large quantities of small disc-shaped felsite beads, likely numbering in the 100,000's (E. Strong 1959a, 1960a). Red ochre was also abundant, colouring the soil throughout the deposits (Butler 1959). Other artifacts included relatively crude stone points and knives, zoomorphic steatite rings similar to those from Congdon II, large sandstone and vesicular lava pipes of the type known as "cloud-blowers", and a single "nostril pipe". The last is apparently similar to pipes commonly found in the Great Basin as well as in the Southwest (E. Strong 1960a, 1969). There were also a few stone mortars and pestles, although fewer than typically encountered in sites in the area generally (E. Strong 1960a). Butler (1959:14), in addition to the numerous beads and other artifact types noted by E. Strong, mentions the presence of elbow pipes, atlatl weights, stone "gorgets", stone bowls, small nephrite celts, and an "incipient slave killer". It should be noted that the elbow pipes are prehistoric and bear no resemblance to the catlinite pipe of the historic period. Indian Well II, whether interpreted primarily as a cremation or talus burial site, may still be described as relatively elaborate in terms of its structure and the number and type of artifacts present, although perhaps less so than other burial sites in the area. Also, preservation of bone was very poor, which presents a bias in comparing the assemblage to those from other sites in the area in which bone and antler artifacts are preserved. Butler (1959:15) believes that the burial component may date to approximately 1900 to 1400 B.P., making it later than Congdon II, Big Leap, and Maybe (the last two mentioned sites to be discussed below).

Atlatl Valley

Another important site in the Long Narrows is the Atlatl Valley site, located just to the west of Wakemap Mound. Emory Strong (1959a:31) describes this site as an old burial ground, some 150 feet in diameter, that was "...the richest in artifacts of any place along the Columbia". As seems to be the prevailing pattern, a low mound of local basalt slabs was built up over the burials (see also Bergen 1989). Three main components seem to have been present, the first (here designated Atlatl Valley I) consisting of at least four (E. Strong 1959a) or five (E. Strong 1960a:55) cremation pits directly over the cap rock, making them the most recent burial form at the site; the pits had been looted but a few glass beads of an early type were noted, indicating a terminal date of about A.D. 1800 (E. Strong 1959a:36). Artifacts still attributable to the cremations after the looting included two atlatl weights and fragments of stone pipes. There is apparently at least one reference in the early historic literature commenting on the actual use of the throwing board in Oregon (Spaulding 1953:41). Thus it cannot be ruled out that atlatls were in use on the southern Plateau even at this late date. If this were the case, on the other hand, both more historical accounts and more archaeological evidence might reasonably be expected. Given the mixing involved in the aboriginal digging of cremation pits and the way in which the site was excavated, together with the presence of an older underlying burial component known to contain atlatl weights, it may be more likely that either the artifacts in question do not belong to this component or that they are not atlatl weights. A third possibility is that they are indeed early atlatl weights found by later inhabitants and incorporated into their material culture, although not as atlatl weights (cf. Hall 1977).

The next, non-cremation, component (Atlatl Valley II) occurred just beneath the cap rock and consisted of very poorly preserved skeletal material accompanied mainly by stone points and knives. The lowest level of burials (Atlatl Valley III), also non-cremation, varied from two to six feet in depth, with practically no skeletal preservation beyond the occasional fragment. E. Strong (1959a), based largely on the approximately 1000 knives found, estimates as many as 5000 burials for the non-cremation component of

the Atlatl Valley site. Based on an higher estimate of 1500 knives and the fact that most but not all burials included knives, Bergen (1989) suggests that over 2000 burials were present. Regardless of the actual number, the general impression is of a great many individuals present at this site.

There was apparently considerable mixing in the remains, though whether this was caused by initial multiple burials or subsequent disturbance by intrusive later burials is not clear, although E. Strong (1959a:34) favours the latter view. Artifacts include, as the name of the site implies, atlatl weights,knives, points, and various pigments. Stone beads also occur in smaller numbers, as do pestles, hand mauls, and zoomorphic stone mortars. There was no preservation of bone or shell artifacts. Provenienced by Strong (1959a:36) only to "... the lower deposits, beneath the cremations..." were several pieces of very corroded copper, including bead forms. Two copper beads were found in apparent association with two atlatl weights, one of stone and the other of galena (E. Strong 1958). Spectrographic and metallurgic analyses suggest that this copper is hand-wrought native metal (E. Strong 1959a:36).

Cole (1993), based on the frequency of temporally diagnostic projectile points in the Bergen Collection, places the majority of the Atlatl Valley assemblage in the Cayuse Phase of approximately 2000 to 150 B.P. He also recognises, however, that earlier phases are represented by, among others, the occurrence of 15 Cascade-type points, not seen later than about 4000 B.P. With a few exceptions, none of these points were found in identifiable burials, nor does Bergen provide much information on vertical provenience. Presumably these early point types are associated with the lowest burials of Atlatl Valley III.

Maybe

The Maybe site is located a short distance to the west of Congdon. The site was repeatedly dug by a number of amateur collectors over many years. Again, the site consisted of a low rock mound capping at least two components, a midden component (Maybe I) and an overlying cremation component (Maybe II). Most of the cremated bone was scattered, although concentrations of charcoal, bone, burned fibre, and artifacts were also present (McLeod 1958). The rather small amount of cremated bone suggested to the collectors who dug the site that the remains were secondary interments of partial cremations (McLeod 1958). Bergen (1989) visited the site in 1957 after much of it had already been destroyed. Bergen reports finding two intact burials and one partially disturbed burial, each underlying large, subsurface boulder cairns. The burials could be identified only by a powdery outline—no mention is made of cremation.

The so-called cremation component Maybe II contained stone knives, points, pestles, nephrite celts, and the occasional thick-walled sandstone tubular pipe. A lower layer (presumably still included in the Maybe II component?) included numerous large tubular stone beads made of green soapstone, as well as red ochre. Also mentioned, but not specified as to layer, are atlatl weights, heavy stone carvings including zoomorphic stone bowls and stone bowls with geometric designs, a maul with a bird effigy handle, and small, chipped stone crescents—possibly "nose pieces" (Seaman 1946; E. Strong 1959a, 1960a) or simply gorges (Butler 1959). The Maybe assemblage appears typologically very similar to that of Congdon II (Butler 1959; E. Strong 1959a).

Bergen (1989) distinguishes what he refers to as the Lower Maybe site, or Pipe Cove, from the Maybe site proper. Pipe Cove is located just east of the Maybe site, but remains clearly separated by a low bluff. Although little information is available on the context of the material, which was disturbed by previous collectors, the assemblage appears very similar to that of the adjacent Maybe site. It includes numerous well made projectile points and knives, mauls, pestles, zoomorphic "baboon head" stone carvings, stone pendants, tubular pipes, obsidian "nose-pieces", large steatite rings, and a variety of stone beads, including large ones up to 7.0 cm long. It is possible that the similarity of the two assemblages is simply because other published sources do not distinguish between the two sites, thereby including the Pipe Cove material with the Maybe assemblage.

Beek's Pasture

The Beek's Pasture site is also located on the north side of the Columbia River near the lower end of the Long Narrows. Both cremation and talus burials were present, with some of the latter also exhibiting evidence of burning (Bergen 1989). Just to the east of the site are a series of petroglyphs on a basalt outcrop extending out into the river (its position with regard to the river prior to the completion of The Dalles Dam is unclear) (Figure B.2). The site, as assessed by Bergen (1989) in 1961, comprised four cremation pits and 18 largely undisturbed talus burials. An additional estimated three to five talus burials had been disturbed by bull-dozer operations leading to the initial discovery of the site. Three components seem to be represented: prehistoric, protohistoric, and historic.

Cremation Pit 1 (CP 1) measured approximately ten by six feet, and contained a layer of charcoal and calcined bone with a maximum thickness of 9-10 inches. It lacked the low boulder walls often seen in cremation pits in the area. Bergen estimates that the remains of six to eight individuals are represented. Artifacts were found scattered throughout the pit, and many appear to have been "killed". Interestingly, all of the points, most very finely made, were found on the east side of the pit (Bergen 1989). The utilitarian artifact assemblage includes chipped stone points, knives, drills, shaft smoothers, small stone celts, a pestle, a maul, a bone awl, a bone needle (?), and unidentified fragments of worked bone. The sociotechnic assemblage includes both plain and decorated small stone mortars ("paint pots") stained with red ochre, unidentified shell fragments (presumably *Dentalium* and/or *Olivella*?), copper fragments, complete and fragmented tubular pipes, and what may be part of a carved bone comb.

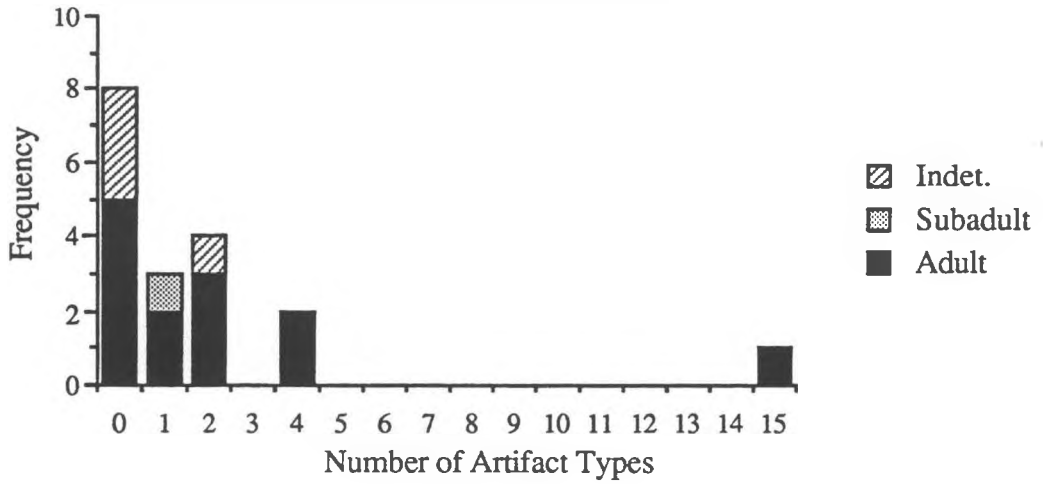
CP 2 was located within the talus slope. A pit measuring only five by three feet was formed by piling rock on the downslope side, and subsequently filled in to make a low mound. A few unburned bone fragments were found in this cremation; Bergen estimates the burning to be approximately 80% complete. An estimated three to five individuals are represented, including one large adult and two or three smaller individuals. The artifact assemblage includes chipped stone points, knives, drills, abraders, worked bone fragments, *Olivella* shells, a single *Dentalium* shell, a tubular pipe, a catlinite elbow pipe, a copper bead, copper buttons, and 15 to 20 iron bracelets. Presumably shell and bone artifacts are underrepresented here, as in the other cremations. No glass beads were found.

CP 3 was located near CP 2, and was of roughly the same dimensions. The burning in this case, however, was complete. The surviving bone fragments were consistent with the cremation of two adults (Bergen 1989). The artifact assemblage in CP 3 includes abundant marine shell—*Dentalium*, *Olivella*, and clam (?) shell beads, and unidentified shell pendants. Other artifacts are limited to bone beads and copper pendants.

The fourth cremation pit, CP 4, was closest in size to CP 1, and may have been even larger. Its contents had already been largely looted by the time Bergen arrived. Artifacts found in screening the backdirt included elk teeth, a bone bead, *Olivella* shells, a "metal pendant" (presumably copper), and "odd" obsidian pieces, concerning which no further information is provided.

Of the 18 talus burials investigated, Bergen (1989) provides rough age estimates for 14 individuals, including twelve adults, one adolescent, and one infant (Figure 6.5). This does suggest that subadults (1/14 or 7.1%) are significantly underrepresented (binomial $p = 0.0475$), but differential preservation may be a factor. Five of the adults are tentatively identified as male, and four as female. Two burials contained the

Figure 6.5: Artifact Diversity Distribution at Beek's Pasture



remains of more than a single individual. Burial 2 contained an estimated four or five individuals; because the grave inclusions could not be associated with specific individuals in this group, it was excluded from the calculations. Burial 9 contained two individuals, an old adult (9a), possibly female, and an infant (9b). The numerous shell beads found as grave inclusions appear to have been associated with both, and they are therefore retained in the calculations.

The locations of most or all of the burials were marked by low boulder cairns on the talus slope. Many of the graves were lined with cedar, some of which exhibited charring on the outside only, suggesting ceremonial burning of goods and/or food over the grave. The overwhelming majority of burials were flexed on the right side and oriented with the head to the west, or downriver.

The artifact assemblage for the talus burials includes, with the single exception of the catlinite pipe, all of the types present in the cremations, as well as bone points, antler digging stick handles, a nephrite celt, iron knife blades, stone beads, glass beads, copper and brass bangles and a copper bracelet.

By far the richest single burial is Burial 15, an adult, with a total of 16 artifact types, equally divided between utilitarian and sociotechnic types. Many Euroamerican trade goods are present, including copper beads, buttons, bangles, nine iron bracelets, and glass beads. This burial likely dates to the early nineteenth century and may be slightly later than the majority of the remaining burials. While Bergen includes it as a talus burial, Burial 15 exhibits heavy burning and thus could presumably also be classified as a partial cremation (Bergen's criteria for identification of one as opposed to the other are not made explicit). The next richest burials include only five artifact types.

The assemblages in all four cremations include Euroamerican trade items, the only possible exception being CP 1, which includes only copper fragments that potentially could be native, but are more likely Euroamerican in origin. The catlinite pipe found in CP 2 also likely dates to the protohistoric period. None of the cremations include glass beads, suggesting that they predate A.D. 1790. Four of the talus burials, Burials 1, 2, 12, and 15, contain Euroamerican trade items. Thus, the cremation and talus assemblages do not appear to differ significantly, and it may be supposed for the purposes of analysis that they are approximately contemporaneous.

The average number of artifact types for the three undisturbed cremations is 11.00; the number of utilitarian types ($\overline{X}$ = 5.00) is slightly lower than the number of sociotechnic types ($\overline{X}$ = 6.00). The average number of artifact types for the 18 talus burials is 2.06; again, utilitarian types ($\overline{X}$ = 0.94) are slightly less well represented than sociotechnic types ($\overline{X}$ = 1.11), although the difference is not significant. As a first approximation, it appears as though the cremations have a far higher average number of artifact types than the talus burials, as would be expected if the former represent a higher status form of burial and are roughly contemporaneous with the latter. The three cremations, however, represent, by Bergen's account, a total of approximately 13 individuals. Dividing this number by the total number of artifact types in the cremations yields an overall average of only 2.54 (utilitarian $\overline{X}$ = 1.15; sociotechnic $\overline{X}$ = 1.38), which is not significantly higher than the talus burial average of 2.06. But such an adjustment is not without its own problems. To illustrate the point, if individual grave good associations in the cremations could be determined, it is likely that the number of artifact types represented would increase substantially, simply as a result of the way in which this variable is calculated. *Dentalium*, for example, is counted as a single type when it occurs in a cremation. But if the shells were associated with each of the five individuals represented, then five types in total would be represented rather than one. While it is in fact impossible to calculate individual artifact associations in this way, the number of items of the same types present in the cremations make it highly likely that the results would again equal, if not exceed, the original difference between cremations as features and talus burials (i.e. $\overline{X}$ = 11.00 vs. $\overline{X}$ = 2.06). Thus this site provides some evidence in support of the hypothesis that cremations on average represent a high status form of burial.

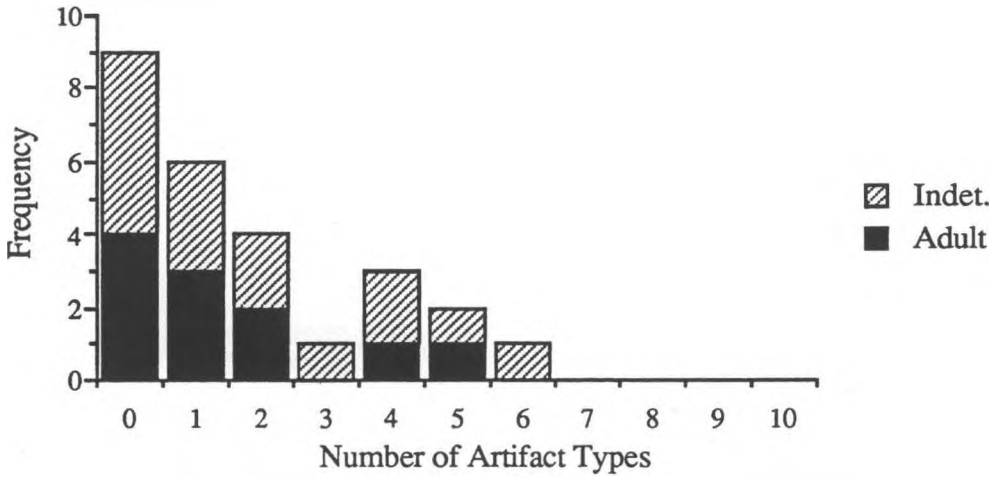
Sundale

The last site to be discussed from the north side of the Columbia River is Sundale (Site 17 in Bergen 1989). Sundale is located above the Long Narrows, some four miles upriver from Beek's Pasture. Garth (1952) reports looted historic wooden cist burials containing evidence of abundant Euroamerican trade material at Sundale, although whether these belong to the same site as that investigated by Bergen is unknown. Bergen (1989) lists 31 burials from the site, although some of these refer to composite collections from disturbed areas and not to individual burials. Bergen also notes that some of his "burials" may represent caches. Most of the burials at Sundale are from a single large talus slope a short distance

behind an occupation site on the banks of the Columbia (Figure B.3). The assemblage includes numerous Euroamerican trade goods, although it is likely, based on the occurrence of stone beads together with the absence of trade items in three burials, that a prehistoric component is also represented.

A total of 25 burials, all from the talus slopes, are considered sufficiently secure to be included in the present analysis. Bone preservation was poor in many of the burials, but it appears as though all of the 11 burials for which an estimate was possible were adult. It is probably not valid to place much emphasis on the significance of this because of the potential for differential preservation of immature bone at the site. The distribution of artifact types for the adults is consistent with that seen for the indeterminate group (Figure 6.6). All of the burials appear to have been flexed, and all of those for which orientation could be determined (ten) lay with their heads to the east. "Cedar" fragments were present in approximately half of the burials, and many exhibited signs of "ceremonial" burning. Only one, Burial 7, appeared burned enough to be classified by Bergen as a cremation.

Figure 6.6: Artifact Diversity Distribution at Sundale



The utilitarian artifact assemblage is limited, consisting of only chipped stone points, knives, scrapers, unmodified flakes, pestles, and bone awls. A greater variety of sociotechnic items is present, including *Dentalium*, *Olivella*, and clamshell beads, copper and brass beads, bracelets, bangles, and buttons, glass beads, and steatite pipes, beads, and carvings. Only Burials 9, 10, 11, 15, and 30 contained Euroamerican trade items. Without exception, burials with steatite beads and/or pipes do not contain trade goods, suggesting that they date to the late prehistoric period, and that two components may be present.

The average number of artifact types is 1.72. The number of utilitarian types ($\overline{X}$ = 0.64) is somewhat lower than the number of sociotechnic types ($\overline{X}$ = 1.08). Two burials warrant particular attention. Burial 17, of unknown age and sex, included three broken projectile points, a flake, 14 white river pebbles, some 40 small steatite beads and two small steatite carvings, one representing a bear and the other an unidentified quadruped. Burial 23, though disturbed and thus not included in quantitative analysis, is of interest because of its possible association with a galena atlatl weight. Both galena and the more common stone weights were also found at the Atlatl Valley, Congdon, and Maybe sites.

Bergen (1989) recounts a discussion with two amateurs who made considerable collections from this site after Bergen had left it. They dug a four foot-wide trench starting at the bottom of the talus and extending upslope, finding a layer of burials underlying those reported by Bergen. While burials in the upper layer frequently included numerous Euroamerican articles, those in the lower layer, completely unnoticeable from the surface, contained only aboriginal artifacts. Many of the lower burials exhibited considerable burning, leading the collectors to call them partial cremations. The assemblage from the lower layer included many small stone beads and a few larger ones, large stone rings, finely made points, "an odd finely worked stone knife", and the occasional pestle. Many of the lower burials, however, reportedly lacked artifacts of any kind. The density of burials in the section of the slope investigated led the collectors to estimate that the entire slope may have contained up to 200 burials (Bergen 1989).

Bead Patch

Turning to the south shore of the Columbia River, the Bead Patch site, located near the present city of The Dalles, Oregon, was again well-known to local collectors from a very early date. By 1946, reportedly over 1,000 lineal feet of stone beads had been removed from the site (Seaman 1946). Seaman (1946) notes the presence of steatite beads, pendants, tubular pipes, chipped stone "nose ornaments", atlatl weights, "salmon clubs", stone bowls, zoomorphic "paint pots", red ochre, and a large number of stone points. Many of the latter, including points of obsidian and agate, are up to six or seven inches long and exceptionally well made. Seaman does not report the presence of human bone, but the artifact inventory and the concentration of items make it highly probable, if not certain, that at least part of the site functioned primarily as a cemetery. The artifact inventory suggests affinity with Congdon.

Five Mile Locks

The Five Mile Locks site is also found on the south or Oregon side of the Long Narrows. Again the assemblage is comprised of a variety of prestige items, including a highly polished small zoomorphic bowl in the shape of an owl, a zoomorphic pestle or maul, a stone bird carving, geometrically decorated mortars, and a human figure holding a bowl with traces of red ochre. The latter bears some, if slight, resemblance to the seated human figure bowls of the Fraser River (E. Strong 1959a). A series of extremely finely made distinctive points known as "dagger points" were also found at this site (E. Strong 1960a). This site is presumably the same as the Five Mile Rapids site mentioned by Butler (1965:4) and attributed by him to the late protohistoric period.

Big Leap

The Big Leap site is located near Celilo Falls, on the south bank of the Columbia upriver from the Long Narrows. The site was found by collectors when it began eroding out of a broad, dune-covered gravel bar, revealing a series of five or six large cairns of river cobbles (Butler 1959). Apparently both burials and partial cremations were found in these cairns (Butler 1959:11), although whether together or separately is not stated. The degree of burning on some of the skeletons seems to have been slight; in other cases the small quantities of burned bone may indicate secondary interment of more fully cremated remains (Butler 1959; McLeod 1958). Estimates of 60-80 burials per cairn have been made by the collectors involved at the site (Butler 1959). The artifact assemblage is very similar to those already described for Maybe and Congdon II, suggesting a degree of temporal affinity between the three sites. Big Leap differs in having a greater variety of stone pipes, stone beads, pendants, and zoomorphic sculptures (Butler 1959). The Big Leap assemblage also contains examples of all three types of atlatl weights (E. Strong 1958:Figure 7) identified in Butler and Osborne (1959; see also Butler 1961).

B. Stewart

The B. Stewart cremation site partially overlies the Big Leap site, discussed above. A series of 12 five-foot square pits excavated into aeolian sands by Butler (1959, 1962) revealed two cremations features, each containing an estimated one or two individuals. All indications were that both pits represent primary cremation loci. Artifacts had apparently been placed with the bodies both before and after the burning. The assemblage from Cremation Pit 1 (CP 1) includes five projectile points, a large (18.5 cm) red and black banded lanceolate obsidian biface, a small serpentine celt, a whetstone, a wine-glass steatite pipe, two incised fragments of a steatite pipe bowl, an incised antler tine, a largely complete Nuu-chah-nulth-style whalebone club, and fragments of a copper bracelet. The assemblage from Cremation Pit 2 includes a projectile point, a large obsidian biface (9.7 cm), a whetstone, a tubular steatite pipe and the bowl fragment of another, a calcined antler carving, a fragment of a sculptured stone "palette", a large stone bowl stained with red ochre, an incised stone bead or pendant, and two charred fragments of presumably a single whalebone club (Butler 1959, 1962). Both the steatite pipe bowl fragment and the small antler carving depict the "grinning face" motif (Butler 1959, 1962; McClure 1979). The incisions on the pipe bowl had been rubbed with red ochre. Butler (1957, 1962, 1965) assigns the site to the Late Period (terminal prehistoric/protohistoric) in The Dalles local sequence, ca. A.D. 1750-1800. The striking similarity in the types of artifacts found as grave inclusions in the two cremations suggests the interesting possibility that they represent a set of objects seen as being associated with a specific, and clearly high, status position.

Rufus and Badger Creek

Two additional protohistoric cremation sites are located outside of The Dalles-Deschutes area, but

display such close affinity to the sites discussed above that they are included here.

Rufus, Oregon is located on the Columbia approximately ten miles upriver of the Deschutes confluence. The site, excavated by E. Strong (1959c), comprised a single undisturbed cremation pit, some 20 feet in diameter and ringed with basalt cobbles. The rocks were clearly in place during the burning since many were heat shattered. The deposits, a mixture of calcined bone, charcoal, sand, and fire-cracked rock, extended down some 14 inches. Artifacts made of shell include 18 clamshell disc beads, three *Olivella* beads, six *Glycymeris* shells, and 15 fragments of abalone. The badly deteriorated condition of the shell items suggest that many more were originally present but were destroyed in the fire. Bone artifacts include awls, small carvings, beads, and gaming pieces. Three fragmentary bone carvings may depict the "grinning face" motif. Stone items found include four finely made slate clubs, a scoria mortar, a maul fragment, at least one tubular stone pipe bowl, two small nephrite adzes, and several shaft smoothers. The fragmented slate clubs appear to copy the general form of whalebone clubs, though they lack carved handles. Trade items were also relatively abundant, including two copper buttons, 22 bangles, four beads, and four wrought iron bracelets. No glass beads were found, possibly suggesting that the site predates A.D. 1790 (E. Strong 1959c), although this is a tentative criterion at best.

The second site, also in Oregon, occurs at a considerable distance away from the Columbia, specifically, 35 miles south of The Dalles. The site is located south of Mount Hood on Badger Creek some three miles west of the modern town of Tygh Valley. A single cremation pit was found at the base of a prominent and unusually shaped, almost anthropomorphic, pinnacle. The rock faces above the cremation were smeared with red ochre, apparently covering earlier geometric designs and what is described as a large Tsagiglálal-like image (Gerity 1964) (see Chapter 4). Numerous other pictographs occur in the immediate vicinity (Gerity 1964).

A surprising array of artifacts was found, especially when one considers that the site had already been dug by another collector many years earlier (Gerity 1964). The artifacts described below thus represent only what was missed at that time. Many smaller items apparently slipped between the boulders at the bottom of the pit and so escaped the effects of the intense heat as well as the activities of the previous collector. Utilitarian items include many projectile points, chipped knives, scrapers, a drill, numerous unmodified flakes, bone harpoon parts, awls, and needles. Many of the points were very finely made and should probably be classed as prestige items. These include over 60 gem-quality Columbia River "dagger points", and fragments of large finely worked agate and banded obsidian knives. Sociotechnic items in stone include stone beads, an incised tubular steatite pipe and the fragments of at least 12 other pipes of micaceous sandstone or siltstone, fragments of mica, fragments of a paint mortar, and several fragments of at least two large stone (possibly basalt), paddle-shaped clubs. Sociotechnic items in materials other than stone are undoubtedly underrepresented, but still include antler carvings, bone gaming pieces, bone beads, a possible whalebone club fragment, the carved handle of a miniature bone club, both whole and cut *Dentalium*, *Olivella* and *Glycymeris* beads, abalone pendants, and several copper pendants. Many of the bone and shell beads are finely incised. A number of carved antler fragments bear the unmistakable "grinning face" motif (see Gerity 1964: Figure 7).

High temperatures must have been reached by the cremation fire. Gerity (1964) describes all of the surviving bone as calcined and highly fragmented; obsidian artifacts "... in general had melted to a blob"; and agate and chert pieces were shattered and burned to a chalky white. The fragmentation of skeletal elements made it impossible to estimate the number of bodies represented, but Gerity (1964) infers that there must have been "a considerable number". The presence of charcoal and numerous fragments of burned pine could indicate a primary cremation. Gerity suggests, on the basis of the presence what is presumably Euroamerican trade copper but absence of trade beads, that the site dates to the late eighteenth century.

Little Klickitat River

Bergen (1989) provides information on a partially disturbed cremation pit from what I have called the Little Klickitat River site, located at the confluence of the Little Klickitat and the Klickitat River. There are a number of reasons for including a description of the site here. It represents some of the only available data from the region traditionally occupied by the Sahaptian-speaking Klickitat. This group, during ethnographic times, maintained close ties with the Wishram. Furthermore, the information presented below has never been published or made otherwise accessible in the literature.

The cremation pit consisted of a rectangular arrangement of boulders, measuring approximately six by eight feet, with the long axis oriented north-south. It is unique in that it preserves evidence of a wooden superstructure. Bergen (1989) reports three postholes, still containing fragments of burned wood,

immediately within the boulder walls: two in the corners of the north end and one in the southeast corner. Only the missing posthole from the southwest corner prevents the completion of a rectangular pattern paralleling that of the pit. This could suggest a scaffold-like arrangement on which the deceased was laid and then burned. Such a scenario gains some support from the fact that the amount of bone found in the pit was compatible with the cremation of a single adult individual (Bergen 1989). It should be noted that the cremation was partially disturbed prior to Bergen's arrival, although this consisted only of potholing the centre of the structure. Nevertheless, in the absence of more thorough documentation, I do not wish to place too much emphasis on the interpretation presented here.

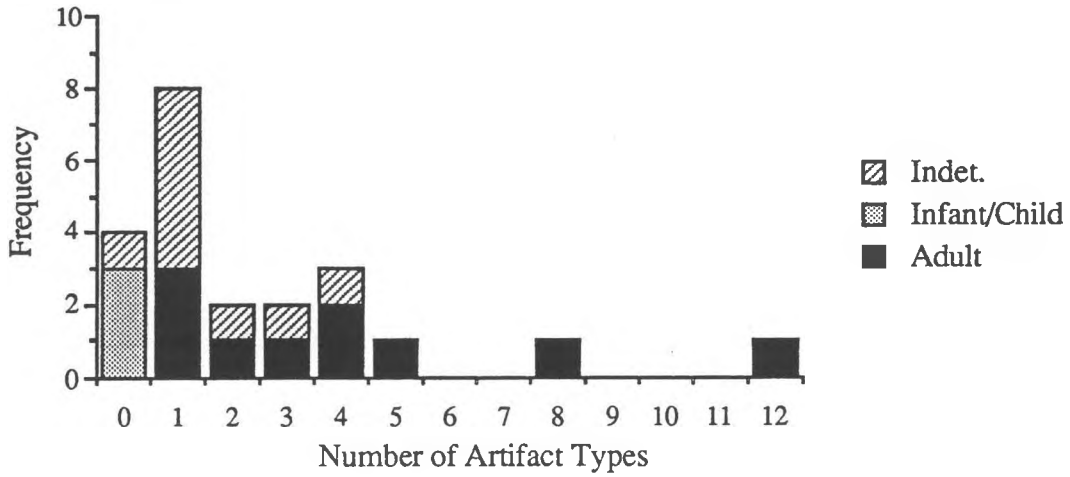
The artifact assemblage found in the cremation pit includes a small, elaborately incised stone bowl coated with red ochre, carved stone bowl fragments, a steatite ring, *Dentalium*, "turquoise" pendants, possible pipe fragments, possible fragments of a "slave killer" stone club, red ochre, chipped stone projectile points, knives, and drills, a shaft smoother, a pestle fragment, and unidentified worked bone. The extent of the burning suggests that any additional shell, bone, or antler artifacts that might have been present were destroyed. As noted above, it is likely that only a single adult is represented in this cremation. The richness of artifact types (13) and the kinds of prestige objects represented suggest that this individual was of high status.

Juniper

Some 60 miles upriver from The Dalles, on the north side of the Columbia River, directly opposite the mouth of the John Day River, is a site informally known as the Juniper site (Bergen 1989: Site 8 in Bergen's system). Bergen's activities at this site revealed a number of talus burials and inhumations, as well as at least one multiple cremation pit (Figure B.4). The assemblage includes numerous copper and brass artifacts, a few iron tinklers, a Hudson's Bay trade axe, and glass beads, together with a variety of traditional Native-manufactured items, dating the majority of the site to the protohistoric or early historic period. It is possible that a late prehistoric component (none of the points in the burials discussed here suggest that any period earlier than the Cayuse Phase, ca. 2000-150 B.P. is represented) is also present. Thus, the temporal integrity of the assemblage leaves much to be desired; this should be kept in mind throughout the following discussion.

Bergen lists 29 burials from the Juniper site. A number of these were partially disturbed through the activities of earlier collectors and are not considered here. Talus burials, inhumations, and partial cremations are all represented at the site, as are both single and multiple burials. Of the undisturbed single graves, 16 are talus burials and six are inhumations. The average number of artifact types for both burial

Figure 6.7: Artifact Diversity Distribution at Juniper



types combined (n = 22) is 2.50. Very few utilitarian items were found ($\overline{X}$ = 0.41), compared to sociotechnic items ($\overline{X}$ = 2.09). This appears to be typical of protohistoric and historic burial assemblages. Preservation of human bone at the site was inconsistent. A rough age can be obtained from Bergen's notes for 13 of the 22 more or less undisturbed burials. These include the remains of one infant, two children, and 10 adults. Subadult representation of the aged burials is thus 23.1% (3/13), which, given the sample size, does not differ significantly from Weiss's 30% minimum (binomial p = 0.4206). However, none of the three subadults were associated with any grave inclusions, while all of the tentatively identified adults included at least one artifact type (Figure 6.7). The difference in the number of artifact types between the two age groups is significant at the .10 level (t = 1.94, p = 0.0779). A few other individuals also lacked grave inclusions but Bergen provides no information on their age.

Burial 15, a multiple burial pit, exhibits quite a different age distribution compared to that seen in the single burials. Situated in a low mound also containing disturbed cremation pits, it contained the non-cremated remains of an estimated eight individuals, including two adults, five children, and one infant. The floors, walls and top of the pit were lined with cedar planks. The burial dates to the historic period, and included among the grave offerings are copper kettles, iron fragments, brass rings, a Hudson's Bay axe, and numerous trade beads. Articles of probable aboriginal origin include bear and elk tooth pendants, shell pendants, *Olivella* beads, and a stone elbow pipe. Burial 15 may reflect the result of an epidemic.

There is no evidence to suggest that one burial form is associated with higher status than the other, or that they represent substantially different time periods. Some of both the talus and the inhumation graves contained abundant Euroamerican trade items. While the average number of artifact types is somewhat lower for the talus burials ($\overline{X}$ = 2.31) compared to the inhumations ($\overline{X}$ = 3.00), the difference does not approach statistical significance (p > 0.30). The richest single burial from the site is Burial 8, a talus burial, with 12 artifact types, many of which are Euroamerican trade items and all of which are classed as sociotechnic. The second richest burial is Burial 23, an inhumation, with eight artifact types, many of which again are Euroamerican trade items. The single undisturbed cremation pit (Burial 20), even though undoubtedly comprising multiple individuals, contains fewer sociotechnic artifact types (7) than do the single individuals of either Burial 8 or 23. It is not possible to compare absolute numbers of artifacts as these are not provided, but it is unlikely, taking into account the difference in number of individuals represented, that Burial 20 exceeds either of Burials 8 or 23 in this regard.

Utilitarian items from the Juniper site include stone knives, points, drills, scrapers, adzes, abraders, net sinkers, shaft smoothers, mauls, pestles, hammerstones, bone awls, and digging stick handles. A great variety of decorative items were found. Marine shells include *Dentalium*, *Olivella*, *Aletes*, and *Haliotis* beads and pendants, and shell disc beads. Euroamerican trade items include copper beads, bangles, and rings, brass buttons, thimbles, and bracelets, iron tinklers, tubes, rings, and a fishhook, Hudson's Bay trade axes, and glass beads. Two unusual trade items are an incised copper club and a large copper sword-like object. The Hudson's Bay axes were likely objects of considerable prestige rather than purely utilitarian. The remaining sociotechnic items include bear and elk tooth pendants, bone beads, carved bone, stone beads and other stone ornaments, and carved stone. Also from this site is a large "salmon packer", which most likely functioned as a club or ceremonial object.

Burial 8 is unusual and warrants a detailed description. Located at the outer edge of the talus slope comprising the majority of the site, it contained the remains of a large adult (thus probably male) flexed on its right side. Two of the most interesting artifacts from this site were found in this burial (see Bergen 1959 for illustrations). The first of these is a copper war club, measuring 15 3/4 inches long by 3 3/4 inches wide at its widest point. A face is incised on each side, one grinning and the other frowning, and a series of incised lines continue down from the faces towards the handle. An almost identical copper club was found by Teit in a burial at Spuzzum on the Thompson River (Smith 1899:150, Figure 82). The second object is a large copper "spear" or sword, measuring 43 1/4" long by 3 7/8" at its widest. It has a narrow handgrip approximately in the middle, and one end divides into two "tails". It almost certainly functioned as a prestige object. Historical accounts provide references to the use of copper war clubs and swords by groups along the Lower Columbia during the last decade of the eighteenth century (Ruby and Brown 1976). Ruby and Brown (1976) illustrate a copper sword from a burial site on the Lower Columbia; in both its form and size (44 1/2" long) it is nearly identical to the one found in Burial 8 (see discussion in Chapter 4).

Other artifacts found in Burial 8 include cut dentalia beads, clamshell beads and/or pendants, copper bangles, a brass or copper ring, iron rings, an iron tube, a Hudson's Bay trade axe, a large number of glass beads, and abundant red ochre. The large quantity of Euroamerican trade goods obviously indicates an early

historic or possible protohistoric burial. All of the trade beads were blue, the earliest variety to arrive on the Columbia. Thus the burial could still predate 1805. The types of items, especially the unusual club and sword, suggests an individual of high status. This is further supported by the presence of horse bones scattered over and among the rocks containing the burial. Given the inferred relatively early date, the sacrifice of a horse would have had even greater symbolic significance regarding wealth and status than it had later in the full historic period (see accounts in Chapter 5).

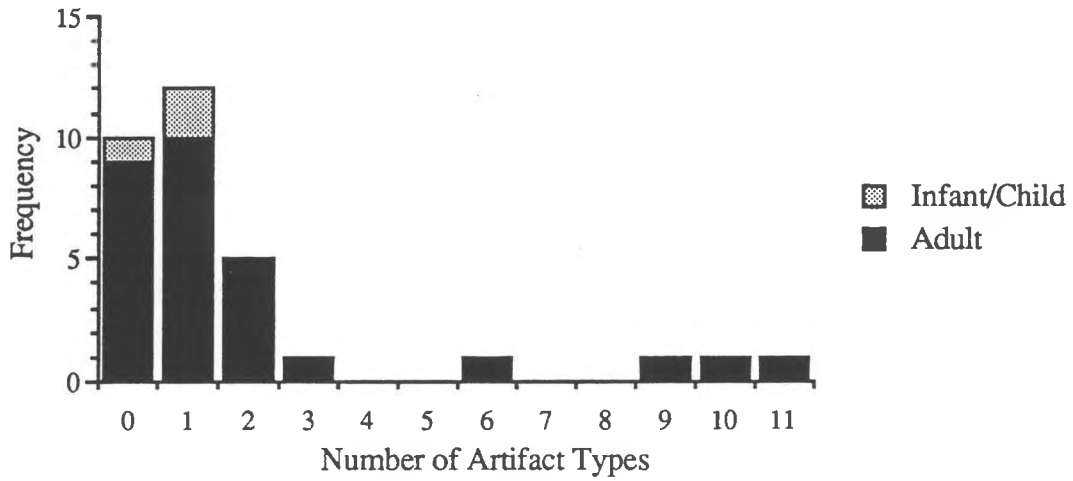
The remains of Burial 10, a child, were severely burned and scattered among the rocks of a talus burial at the foot of the slope. This burial may have originally included artifacts that were destroyed in the fire. The absence of any mention of charcoal or ash suggests that the burial may be secondary. Burials 11 (an infant) and 24 (child) present no evidence for burning and were undisturbed primary flexed graves.

Evidence for various degrees of burning was found in a number of the adult burials. Burials 16, 17, and 18 are single talus burials, the entire contents of which were compressed in a layer only three inches thick, composed of charcoal and small burned bone fragments. Only one or two dentalia shells were found in each grave. Bergen is uncertain whether these burials represent intentional cremations or exhibit heavy ceremonial burning. Burial 19 presents a disturbed non-talus grave again showing evidence of burning but not to the extent seen in a true cremation pit typical of the area. Numerous copper and glass beads were found in the backdirt. The burial presumably held a number of bodies. Burial 20 represents what Bergen calls a "true cremation pit" from the same mound that contained Burial 15. It measured some ten feet across, as defined by a surrounding rim of basalt boulders still 20 to 24 inches in height. The central portion of the pit had been previously disturbed. Excavation to bedrock revealed a layer of packed burned sand underlying a layer of charcoal, burned bone fragments, and burned artifacts, from two to six inches thick, and in places fused into a slag. Little or no unburned bone was observed, leading Bergen to infer that the cremation event involved the *in situ* burning of bone and artifacts rather than fleshed bodies. The majority of artifacts found were trade beads and copper bangles. A carved broken pestle, *Dentalium* and *Olivella* shell beads, a flake knife, a chipped stone drill, a broken stone pipe, and red ochre were also found. The assemblage suggests a protohistoric date.

Wildcat Canyon, 35-GM-9

The Wildcat Canyon site (35-GM-9), located on the south side of the Columbia River near the mouth of the John Day River, provides one of the larger and better documented late prehistoric burial collections on the Plateau. The majority of the burials were recovered from a definite bounded cemetery area, designated Area 3. At least 81 individuals from the site are represented, of which 63 could be assigned a rough age estimate. Of these, only 32 are here considered sufficiently undisturbed to make their artifact associations reasonably secure. The cemetery seems to have been in use for a relatively short period of time, on the order of perhaps a century or two (Dumond and Minor 1983). There are no items suggesting European contact in the assemblage.

Figure 6.8: Artifact Diversity Distribution at Wildcat Canyon



The following summary information is taken from Dumond and Minor (1983:56, Table 3.2). The majority of the 58 burials for which burial type could be inferred were flexed or semi-flexed (32 or 55.2%). Skull burials account for most of the remainder (20 or 34.5%); one burial was characterised as semi-extended (1.7%), and five as reburials (8.6%). Body position could be determined in 49 instances, and was most commonly on the left side (35 or 71.4%); the right side position accounted for most of the remainder (8 or 16.3%), with backlying and sitting (?) positions being infrequent. Favoured orientation was with the head to the northeast or east (upstream) (31 or 72.1%), with all other orientations being roughly equally represented at approximately 5%. Neither body position nor orientation appear to be associated with socioeconomic status.

Dumond and Minor (1983:63) state that the artifact distributions provide no evidence of consistent association of any particular artifact class with either of the sexes or with any major age class. Further, they report no statistically significant difference either between the sexes or between adults and subadults in the proportion of burials accompanied by grave goods (chi-square = 0.0 and 1.38, respectively). My own examination of the distribution of grave inclusions (number of types, utilitarian types, and sociotechnic types) over age and sex classes using *t*-tests also indicates no significant associations based on these subordinate dimensions. Subadults do appear to have fewer grave inclusions than adults (Figure 6.8), but this difference is not statistically significant.

While the above information seems to indicate little differential treatment of infants and children, some interesting differences do emerge in the demographic profile at this site. As stated above, at least 81 individuals are represented in Area 3, of which 63 could be assigned an age. This is a sufficient sample size that, if all individuals who died were being buried in the cemetery, we could expect to see a roughly normal mortality profile for pre-industrial societies. This is not the case. Individuals age 15 and under are significantly underrepresented (binomial $p = 0.0078$), comprising only 15.9% (10/63) of the burial population (Dumond and Minor erroneously report this as 19% in their Table 3.3, page 57): this figure should be on the order of 30-70% based on model life tables for pre-industrial societies constructed by Weiss (1973:27). The majority of the expected deaths should take place in the 0-5 age class; only 6.3% (4/63) of deaths occurred during this age interval at Wildcat Canyon, with infants less than one year of age being completely absent. From Weiss' model life tables, somewhere between 10% and 40% mortality can be expected during this period of life alone; from these figures, one would expect from roughly six to 25 infants less than one year of age in the burial population at Wildcat Canyon. While their absence may conceivably reflect differential preservation, Dumond and Minor are confident, given the fair preservation of only slightly older infants, that there is a real behavioural pattern evident. This strongly suggests that infants in particular were being perceived differently from adults in the mortuary ritual, and were either often being buried elsewhere, or not being buried at all.

Estimations of sex are provided for 21 of the adult skeletons, in a ratio of nine males to 12 females (Dumond and Minor 1983). This does not depart significantly from what might be expected given an underlying 50:50 male:female ratio (binomial $p = .3318$). The identified sexed individuals cannot be statistically distinguished in terms of number of artifact types, number of utilitarian types, or number of sociotechnic types.

Burial 65, an adult of undetermined sex, was interred with a total of 503 grave items, including 21 projectile points, two flake knives, 378 flat shell beads, an estimated 15 perforated elk teeth, an incised antler tine, an antler needle, incised flat sections of bone, seven tubular stone beads, two decorated stone hemispheric beads, and a piece of graphite. The elk teeth are highly fragmented (this is accounted for by Dumond and Minor in the estimate of 15 whole teeth) and burned. The antler tine and many of the incised bone fragments are also burned, and many of the flat shell beads show signs of mild scorching. This burial is certainly exceptional: items in the burial with the next most abundant grave goods total only 54 (Burial 74, a skull burial, again an adult of unknown sex); furthermore, the majority of these items were utilitarian rather than sociotechnic as in Burial 65. In addition to its high absolute numbers, the grave inclusions in Burial 65 are also quite varied, representing the second highest number of artifact types in the assemblage after Burial 74 (11 compared to 14), and an equal number of sociotechnic types (5). Burial 65 and to a lesser extent Burial 74 may represent statuses unavailable to subadults at this location, although this is necessarily a very tentative statement based as it is on only two individuals.

A few additional burials also exhibit evidence of burning. In most cases this evidence is limited to grave inclusions rather than the skeleton itself. Signs of burning or scorching on some of the artifacts accompanying Burial 65 has already been mentioned. Offerings in other burials exhibiting similar signs include worked bone items in Burial 57, and dentalia in Burials 19 and 40. Burned human bone is found in

Burial 57 and Burial 63. This latter burial, that of an adult female, had no grave inclusions, suggesting that there is no unambiguous relationship between burning and the abundance of grave inclusions at this site.

Summary of Burial Forms and Status in The Dalles-Deschutes Region

The most marked contrast in disposal types in The Dalles-Deschutes region is between cremation on the one hand, and talus slope burial and pit inhumation on the other. The artifacts from the cremation pits, at least those reported, are clearly largely interpretable as high status wealth and prestige items. Such items include shell and stone beads and other ornaments, stone pipes and carvings, elaborate antler carvings, and stone and bone clubs. Many of the materials involved are exotic, perhaps the best example being the whalebone clubs frequently found in Late Period cremations in The Dalles area. During the protohistoric and historic periods, Euroamerican trade items are also abundant in cremations. The use of cremations seems to have been discontinued in the very early historic period (see Chapter 5); thus, while copper is abundant, glass beads are rarely present.

In addition to the many sociotechnic artifacts invariably associated with cremation pits, there is some cross-cultural evidence suggesting that cremation in general is often reserved for individuals of high social standing (e.g. Hodson 1977; McGuire 1992b; Teit in Sprague 1967), though this would only apply in those cultures where cremation was one of a number of disposal alternatives, and not the sole method. Given the largely treeless nature of the environment in The Dalles-Deschutes area (see Ross 1969 and Thwaites 1904-05), the labour involved in the collection of sufficient wood for cremation must have been considerable. Thus the cremation fires would also have been a very conspicuous statement about the resources of the group involved. The fires burned very hot and probably for a considerable length of time, such that artifacts were sometimes embedded in lumps of melted sand at cremation sites (Gerity 1964; W. Strong *et al.* 1930; see also Garth 1952 regarding a similar phenomenon in the Middle Columbia area).

The talus burials investigated by W. Strong *et al.* (1930) offer some archaeological corroboration for such a dichotomy in mortuary treatment. But given the existence of elaborate prehistoric cremation pits, and postulating a similar social structure, one may ask where the corresponding "impoverished" prehistoric talus and simple pit inhumations are located. Presumably there should be many more of these, given a pyramidal social structure. The talus and pit inhumations investigated by W. Strong *et al.* (1930) seem to date mainly to the protohistoric and early historic periods, and those investigated by Caldwell (1956) even later. The apparent absence of such burials in the prehistoric period may be due to poorer archaeological visibility and preservation biases. While preservation of wood and other plant remains is quite good in many of these burials, bone preservation is generally not. Talus burials are generally highly disturbed by rodents, and the skeleton itself is often crushed by the weight of the overlying rock. Lastly, the unstable nature of the talus slope environment greatly decreases the visibility of older burials.

Cremation in the Lower Columbia, and particularly The Dalles-Deschutes, exhibits considerable antiquity. Many of the large cremation pits contain no evidence of Euroamerican trade goods, while a number of others contain only very limited amounts of copper and iron. Butler (1959:19), based on stratigraphy and point styles, has suggested that cremation in the vicinity of The Dalles may have begun as early as 3500-3000 B.P. Congdon II, Maybe II, and Big Leap may date to this early period (Butler 1959:15). Later sites, with their elaborate bone, antler, and stone carvings, including the "grinning face" motif (see Chapter 4), are ascribed to the Late Columbia Valley Cremation Complex, ca. A.D. 1600 or slightly earlier to A.D. 1850 (Butler 1959:16). Thus there appears to be a considerable time-depth for the occurrence of elaborate cremations in The Dalles-Deschutes area. The nature of the evidence, however, leaves much to be desired. The sites named were all excavated with less than rigorous methods, and no radiocarbon dates are available.

Little information is available regarding the number of individuals typically found within a cremation pit in The Dalles-Deschutes region. The number of individuals seems to have varied from as few as one or two to "many". Elaborate single or at the most double cremations are known from the B. Stewart, Beek's Pasture, and Little Klickitat River sites. The number of individuals represented in other cremation pits at Beek's Pasture varies between four and eight (Bergen 1989). Beyond this, most excavators simply limit themselves to some statement regarding their impression of a "great many bodies" in each cremation pit. Since the size of these pits is generally not much greater than about 12 feet by 8 feet, which is comparable to the size of the larger pits at Beek's Pasture, it is unlikely that this refers to more than a maximum of 10 to 30 individuals per pit.

In most of the cremations, and in all of the large multiple cremation pits, the concentration of ash,

charcoal, and burned bone appear to indicate primary cremation loci. It seems likely that the majority of the cremations in the region were of defleshed remains (Butler 1959; E. Strong 1960a:85). Excellent evidence for this is found at two sites, Sheep Island (45-BN-55) and Rabbit Island (45-BN-15), located further up the Columbia near its confluence with the Snake (these sites are discussed in detail later in this chapter). Here, Garth (1952:41-43) reported finding baked clay mud dauber wasp nests in cremation pits, some of which preserved the impressions of bones and others those of split planks. As recognised by Garth (1952), this implies a complex, multi-phase mortuary ritual probably incorporating the initial exposure of bodies in mortuary sheds, as seen in the early historic period, followed periodically by their collection and burning in large cremation pits. Property in the forms of goods, slaves, and, in the protohistoric period, horses could have been expended on both occasions. At least some of the pits appear to contain evidence of multiple burning events (cf. Butler 1963). It is tempting to relate the cremation pits and the hypothesised prehistoric burial sheds with lineages—certainly among the Wishram in the early historic period burial sheds were owned by families or groups of families (Spier & Sapir 1930)—but there is really no way to prove this with the available data, especially given the lack of even basic biological information on the mortuary populations involved. It does, however, seem to be a reasonable proposition. There also appear to be many examples of the secondary burial of cremated and charred remains, usually involving individuals (Caldwell 1956).

Most investigators provide no information on the range of ages represented by the osteological remains in cremations. From the fieldnotes of Dr. Bergen, who was fortunately far more observant than most collectors (or at least more committed to writing down his observations), the remains of infants and children in protohistoric and historic period multiple cremations were not infrequent. It is not possible to comment on the representation of subadults in earlier cremations. Nor, given the poor preservational conditions and mixing of elements and artifacts typical of cremation pits, it is usually possible to provide individual artifact associations. Thus the artifact data, such as it is, cannot be related to the primary population referents of age and sex. The possible disproportionate frequency of infant remains in talus slope burials noted by W. Strong *et al.* (1930) for Miller's Island could suggest that infants were being denied full access to the mortuary regime involving cremation. However, as noted earlier, it is not clear what evidence W. Strong *et al.* base this observation on, since the data they provide are minimal and inadequate to this conclusion. Furthermore, none of the evidence available in the material collected by Bergen (1989) supports the hypothesis that non-cremation forms of burial include a disproportionate number of subadult remains.

Cole (1958) provides some interesting and relevant observations on a large disinterment project on two historic burial islands made necessary by the completion of The Dalles Dam. The remains of an estimated 500 and 2500 individuals were removed, under Native observation, from Grave Island and Upper Memaloose Island, respectively. Artifact associations were numerous on both islands, and included many Euroamerican trade items. Grave Island (which also may have had a prehistoric component) was abandoned in 1894, while Memaloose Island continued to be used past 1934, with three milled lumber mortuary structures still standing. Native observers noted family burial boxes containing multiple individuals within the more recent buildings, in which the deceased were wrapped in hide robes. On Grave Island, the remains of infants were rare, while children and adolescents were well represented (estimated 30%). On Memaloose Island, the majority of the remains were of adults, with few infants, children, or adolescents (Cole 1958:13). This suggests that infants, at least during the historic period, were indeed largely buried elsewhere, as suggested by W. Strong *et al.* (1930) for earlier cremations. It is noteworthy that attainment of a certain age appears to be required in order to gain full access to even a "family" mortuary programme (see discussion in Chapter 2).

In addition to cremations, there are a number of large non-cremation sites containing multiple individuals together with relatively elaborate artifact assemblages. Estimates of 60-80 individuals per cairn were noted, for example, for the Big Leap site. Burning at this site seems to have been minimal and incidental. The use of the word "cairn" in this context, however, is misleading, as it likely refers to a low, boulder-capped mound containing many burials, for which it is neither necessary nor advisable to assume contemporaneity. These sites are similar to cremation sites in that only very rarely is it possible to associate grave inclusions with individuals. The human skeletal material is often found in a highly scattered state; this much is clear despite the haphazard way in which the majority of these sites were excavated. This may indicate secondary interment, or, alternatively, aboriginal disturbance through continued use of a spatially constrained area (see discussion of Old Umatilla in next section). That primary inhumations can also be recognised, however, is clear from the better fieldnotes of collectors such as Bergen

(1989). The generally very poor preservation of skeletal material typical of these sites further complicates the issue; it is even possible that many disintegrated primary interments are in fact represented, although this seems unlikely. The little information available on the chronology of these sites suggests that they encompass a broad time period. It seems likely that the earliest cremations of ca. 3500 B.P. were contemporaneous with inhumation burials. Inhumation also preceded cremation in The Dalles region, as evidenced by the frequent occurrence of what have been widely identified as disintegrated burials directly below early cremation components.

Emphasis throughout this long period, particularly with cremations, can be seen on groups rather than individuals. Both the treatment of the body and the artifact assemblages in the case of cremations are elaborate and suggestive of high status, but grave inclusions cannot be associated with specific individuals. This parallels historic Wasco-Wishram burial practices involving the use of mortuary sheds on *memaloose* islands in the Columbia, mentioned in Chapter 5. It is not clear, however, whether the distinctions between chiefs and others during the earlier phases of the mortuary ritual were preserved in the final disposal of the body in the mortuary shed. Rather, it seems that bodies once in the shed were treated indiscriminately. As noted below, location within the structure was apparently related primarily to the length of time the remains had been in the shed. Thus, the final archaeological result reflects the status of the family or lineage maintaining the structure rather than that of any specific individual deposited there. This can lead to reduced differentiation not only within but also between mortuary houses. It is in different forms of disposal that clear status differences can be expected to emerge. Individuals not participating at some minimum level in the corporate group will not have access to the mortuary sheds. Thus Curtis (1911a:99) notes, as I have mentioned elsewhere, that during ethnographic times slaves and others of the lowest class in Wishram society would be deposited in talus slopes at the base of bluffs, and Cole (1958) remarks on the absence of infant remains from historic mortuary sheds.

Their high visibility and surficial nature led to the disturbance of the majority of mortuary sheds on the Columbia River during the early historic period; in some cases whites purposely set fire to the structures (E. Strong 1960a), while in other cases they were apparently burned in interfamily rivalries (Spier and Sapir 1930). Lewis and Clark's 1806 descriptions of undisturbed burial sheds therefore assume some importance. One such structure on Blalock Island (45-BN-64) (Thwaites 1904-5, vol. 3:139-140) is described as being constructed of broad split planks and pieces of canoes, and measuring some 60 by 12 feet. The more recent dead, wrapped in skin robes, were placed at the west end of the structure, while at the east end was an arrangement of 21 skulls forming a circle on matting. Placed over and hung on poles around the vault were several fishing nets, baskets, wooden dishes, robes, skins, and various kinds of unspecified ornaments. The skeletons of several horses lay around the vault. Interestingly, the separation of skulls and postcranial elements, in this case to opposite ends of mass burial boxes, has remained a part of the funerary ceremony that is still practised by Middle Columbia Native peoples today, as has been observed in a number of burial relocation projects made necessary by looting and by flooding due to dam construction (Rice 1978b; Cole 1958).

This scenario displays intriguing parallels with early Neolithic Britain. I mention this rather unlikely connection because the interpretations of symbolic behaviour that have been made regarding distributions of human skeletal elements in long barrows may be of relevance in interpreting the Lower Columbia mortuary evidence. Specifically, Shanks and Tilley (1982; see also Bradley 1984) invoke a process in which the deceased individual is progressively transformed, both physically and symbolically, into the collective, undifferentiated ancestors. This idea of the transformation of the dead into ancestral beings is in fact at the core of the rituals surrounding death in many different societies (Metcalf and Huntington 1991). Often, as in the Neolithic barrows, this process involves the disarticulation, disassociation, and rearrangement of skeletal elements, akin to what was observed in the Blalock Island mortuary shed.

The Middle Columbia

Old Umatilla, 35-UM-35B

In 1971 a large prehistoric burial site was discovered at Old Umatilla (35-UM-35B) and partially excavated by the Mid-Columbia Archaeological Society, yielding 130 graves holding the remains of some 144 individuals. Subsequent excavations were undertaken in 1975 by the University of Idaho, yielding 100 graves containing the remains of some 120 individuals (Rice 1978a). The combined total of 230 graves, representing an estimated 264 individuals, makes this site by far the largest prehistoric burial site on the Plateau in which individual artifact associations are preserved. The available analysis of the site is limited

because of time constraints caused by the expeditious reburial of the human remains together with their associated artifacts (Rice 1978b). Despite this, important information was recovered, including data on age, sex, and pathologies (Lynch 1978).

The site is unusual and interesting in a number of respects. The total size of the cemetery was found to be approximately 60 by 90 feet, with the heaviest concentration of burials within an area of only 50 by 60 feet (Rice 1978a). This presents the impression of a very crowded cemetery, yet there seem to be no obvious topographical reason for such spatial circumscription of the site. As might be expected, this great concentration of burials led to considerable aboriginal disturbance, as evidenced by the high proportion of secondary burials and scattered human remains. For the purposes of the statistical analysis of grave associations, the sample was reduced to 105 individual primary and secondary burials. No multiple burials were included, since individual artifact associations could not be confidently made in these cases. A number of secondary burials and scattered human remains near the surface are inferred to indicate the presence of a burial shed or charnel house, although no structural evidence was found (Rice 1978a). Rice (1978a) postulates a strong Chinook influence towards the end of the burial sequence at the site, which may date to the late prehistoric/protohistoric period transition.

The site is also unusual in its clear association with a housepit village (35-UM-35), within the confines of which the cemetery was located. Some nine graves were intrusive into two housepits towards the edge of the cemetery (see Rice 1978a:41, Figure 27).

Some 77 graves (out of a total of some 230) were marked by stone cairns of varying size, ranging from only one or two boulders to a substantial cairn. There appears to be no correlation between graves marked by stone cairns and the occurrence of grave inclusions (compare Figures 27 and 34 in Rice 1978a). Nor does there appear to be a non-random spatial patterning with regards to the placement of burials with and without grave inclusions (see Rice 1978:52, Figure 34).

All burials at the site are inhumations. Table 3 in Rice (1978a:39) summarises data on burial form, position, and orientation. Seventy-six primary graves account for 41% of the total, with 109 secondary graves making up the remaining 59%. Orientation, where it could be determined, was primarily to the east (63 of 88 cases or 72%). As Rice (1978a) observes, this easterly orientation conflicts with Sprague's (1967) suggestion that prehistoric burials on the Plateau are generally oriented to the west, while historic burials are oriented to the east.

There is evidence for the significant underrepresentation of subadults. Lynch (1978) identifies 170 adults and only 23 (or 11.9%) subadults. This represents a statistically significant departure from Weiss' (1973) 30% minimum (binomial $p = 2.3E\text{-}9$). Neither differential preservation nor poor recovery appear to be contributing factors, and, as also argued by Lynch (1978:73), it is more likely that the majority of the remains of subadults were either buried elsewhere or were disposed of by some means other than inhumation. Only four subadult burials were judged sufficiently undisturbed for inclusion in the quantitative analysis. The group shows no significance difference in its artifact richness.

The site is particularly unusual in terms of its male:female representation. Lynch (1978) reports 87 females, 46 males, and 37 indeterminate adults. This difference is highly statistically significant (binomial $p = 0.0002$), with females outnumbering males by almost 2:1. Lynch (1978:74) suggests that this could reflect greater male participation in relatively risky activities outside of the vicinity of the community, such as hunting, trading, and warfare. This idea is similar to that proposed by Hofman (1986), discussed in some detail in Chapter 2. If this were the case, and assuming that occasionally the bodies of those who died away from the village would be returned for burial after a period of exposure, it might be expected that males would present an higher proportion of the secondary burials at the site. However, this is not the case (Table 6.1).

Table 6.1: Relationship Between Sex and Burial Form at Old Umatilla

Sex	*Burial Form*		*Totals*
	Primary	Secondary	
Female	32	43	75
Male	20	20	40
Totals	52	63	115

Chi-square = 0.566, $p = 0.4517$

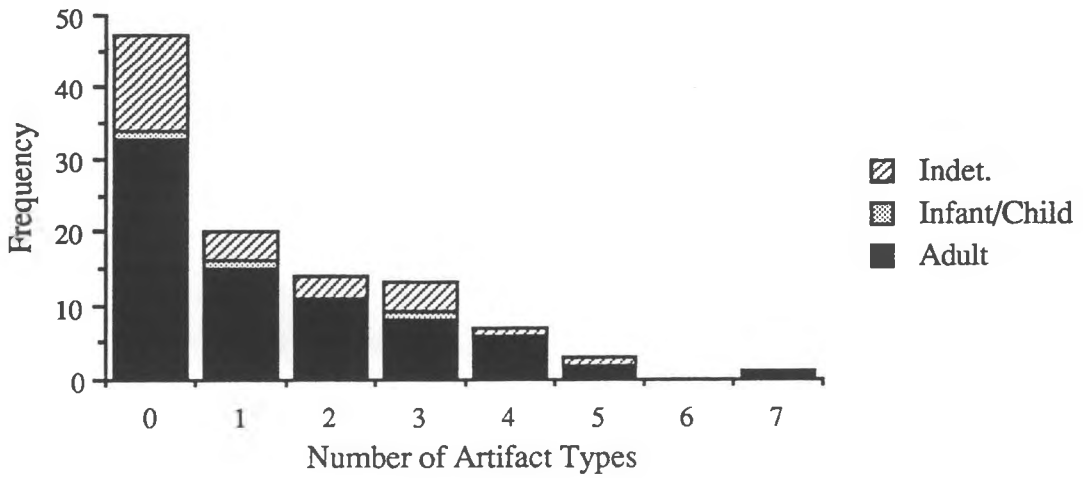
The high degree of aboriginal disturbance at this site may confound the results of the test for a relationship between sex and burial form, but presumably disturbance would be random with regards to sex, and so a pattern, if present, should remain. Thus the explanation must lie elsewhere. Given the extent of the excavations, it is unlikely that a significant part of the site was missed. Nevertheless, the possibility that males were often buried elsewhere remains. Males have slightly higher average artifact richness (male $\overline{X} = 1.62$; female $\overline{X} = 1.26$), including both utilitarian and sociotechnic types, but the differences do not reach statistical significance. Interestingly, there is a significant difference in grave inclusions between the primary and secondary group (disregarding sex). The average number of artifact types for the 61 primary burials is 1.62, while that for 41 secondary burials judged to be relatively undisturbed is 0.90 ($t = 2.33$; $p = 0.0217$). Possible reasons for this difference are discussed in Chapter 7.

Lynch (1978) notes the presence of 13 culturally modified crania in the total of 104 crania (37 males, 65 females and 2 infants) available for observation. Ten of these are adult females, two are adult males, and one is an unsexed infant. The difference in the proportions of female and male crania exhibiting cultural modification does not reach statistical significance (Fisher's $p = .2026$); despite this, Lynch (1978) suggests that the pattern may reflect female marriage into the group from the area further downriver (i.e. with the Chinookan-speaking Wasco-Wishram).

The artifact assemblage from Old Umatilla, given the very large number of burials recovered, is relatively simple in terms of richness and even more so in terms of diversity. Sociotechnic artifact types include *Dentalium*, *Haliotis*, shell disc beads, bone beads, elk tooth pendants, bear claw core pendants, bone whistles, carved bone, steatite beads, an effigy bowl and a "paint pot", "nose pieces", and war clubs. Evidence of copper was found in four burials: four copper rings were found in one burial, an undescribed copper fragment in another, and copper staining on human bone in the remaining two. Utilitarian artifact types include projectile points, stone knives and bifaces, scrapers, drills, gravers, utilised flakes, cores, a slate adze, choppers, abraders, shaft smoothers, atlatl weights, bola stones, pestles, mauls, mortars, grinding slabs, hammerstones, net sinkers, bone awls, harpoons, bone and antler wedges, digging stick handles, and beaver teeth.

None of the burials appear to be outstanding in terms of their associated wealth (Figure 6.9). Absolute numbers of items are not provided in Rice (1978) and greater inequality, particularly in *Dentalium* shell and elk tooth pendants, might be visible were this information available. The greatest artifact richness is found in Burial 142, an adult female associated with seven types, six of which are utilitarian. No burial has more than three sociotechnic types (Burial 80, a child, contains *Dentalium*, abalone, and carved bone). The only grave with a copper artifact (see below) considered sufficiently undisturbed for inclusion in the analysis was that of an adult female (Burial 192), which contained a total of four artifact types (the remaining three being utilitarian).

Figure 6.9: Artifact Diversity Distribution at Old Umatilla



One of the more interesting burials is Burial 177, a young adult male, found with a stone club embedded in the left side of its cranium (Rice 1978a:50, Figure 33). Additional evidence of violence is seen in Burial 42, an adult female, in the form of a large point found embedded in a lumbar vertebra. A total of nine crania exhibited cranial fractures possibly due to interpersonal violence (Lynch 1978). Interestingly, only one of these was male.

Bergt (1978) analysed four copper artifacts from Old Umatilla using X-ray fluorescence. He interprets the results to indicate the possibility that the metal is of native origin, based primarily on relatively low silver counts. However, the study is inadequate in a number of respects (for example, no native ore samples were analysed, and only a very limited number of Euroamerican samples formed the control), and these results should be seen as highly tentative.

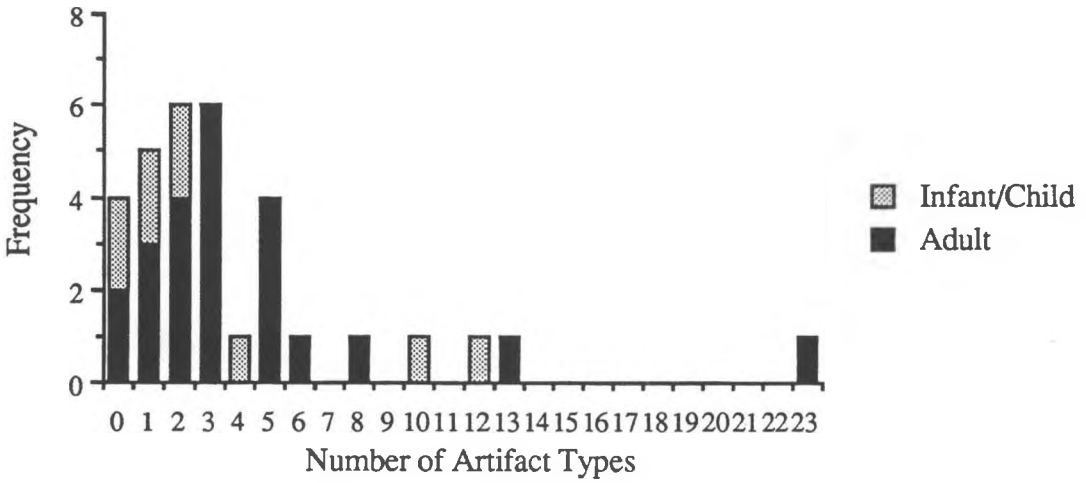
Dating of the site is based largely on projectile point typology. Most points from the site are large triangular forms with basal or corner notches. These have been assigned to the early Harder phase and the Quilomene Bar phase in the Lower Snake River and Vantage area sequences, respectively, and date from approximately 2500 to 700 B.P. (Rice 1978a). Rice (1978a) also infers the existence of a small, more recent component based on the possible presence of a Wishram-derived mortuary shed or charnel house.

Berrian's Island, 45-BN-3

Site 45-BN-3, located on Berrian's Island in the Columbia River near its great northward bend, provides another relatively large sample of burials (Osborne 1951, 1957). Unfortunately, the site experienced both considerable looting and natural disturbance through flooding before controlled excavations began. The remains of an estimated 57 individuals, many incomplete, were recovered from the site (Newman in Osborne 1957:207); of these only 33 are here considered sufficiently undisturbed for their artifact associations to be secure. Osborne (1951:130-131), based on trade buttons, places the assemblage within the period ca. A.D. 1750-1800. It appears that only a single burial complex is represented (Osborne 1951:226). Objects of copper and iron are fairly common; glass beads are present but not in large quantities. Preservation seems to have been very good, such that textiles and fragments of basketry are found with many of the burials.

Of the total 57 individuals from the site, 40 were classified by Newman (in Osborne 1957:207) as adults with the remaining 17 grouped together here as subadults (infant/child). Subadult representation at 29.8% is thus not significantly below the 30% minimum suggested by Weiss (1973). Considering only the 33 burials with secure artifact associations (Figure 6.10), the average number of artifact types in the adult group (n = 24) is 4.67 compared to 3.56 for the subadult group (n = 9); this difference is not statistically significant (t = 0.569; p = 0.5734). Differences in both the number of utilitarian ($\overline{X}$ = 1.58 vs. 1.33) and sociotechnic ($\overline{X}$ = 3.08 vs. 2.22) types again favour the adults but not significantly. One

Figure 6.10: Artifact Diversity Distribution at Berrian's Island



difference between adult and infant/child graves that is seen involves the presence of cedar plank cists; these were found to be common with adults but rare with infants and children (Osborne 1951). The tops of the planks were often charred, and in at least one case (Burial 25), it was possible to suggest the presence of a burned food offering of salmon (Osborne 1957:33).

Since the Berrian's Island site provides one of the larger data sets for which the sex of individuals skeletons is reported, it is worthwhile to investigate in some detail possible differences in treatment along these lines. Newman (in Osborne 1957:207) estimates sex for 37 individuals, in a ratio of 14 males to 23 females; this differs significantly at a .10 level from equal representation (binomial $p = 0.0939$), suggesting that some males were perhaps being buried in another part of the cemetery, at an entirely different location, or by a method that preserves less well in the archaeological record.

Cultural modification of the cranium was present in all of the adults to some degree (Newman in Osborne 1957). Fifty percent of the male crania exhibited only unintentional occipital flattening, or "cradleboard" flattening, while 91.7 percent of the female series exhibited clearly intentional modification. Pronounced modification was observed in six female crania but only one male cranium. It was not possible to correlate grave wealth with the presence or degree of cranial modification. Given that the site is protohistoric in age, this distribution could indicate that more females than males were originally from outside of the Berrian's Island area, specifically from downriver. This parallels what was hinted at in the Old Umatilla assemblage (recall that the difference was not statistically significant).

Only 22 sexed adults, nine males and 13 females, were considered sufficiently undisturbed to permit meaningful comparisons of artifact associations. In overall number of artifact types females average 5.08 while males average 4.89 ($t = 0.08$, $p = 0.9369$); in utilitarian types females average 1.62 compared to males 1.89 ($t = -0.35$, $p = 0.7280$); and in sociotechnic types females average 3.46 compared to males 3.00 ($t = 0.25$, $p = 0.8053$). None of these differences approach statistical significance at the .10 level given the low sample size and high variability within the two groups. But, as discussed further in Chapter 7, the fact that the female group exhibits an higher average number of sociotechnic types at all may be somewhat unusual compared to most other burial sites on the Plateau.

The artifact assemblage from Berrian's Island is the most diverse observed among the sites gathered together for this study. Utilitarian artifact types include stone knives, points, drills, scrapers, flakes, pestles, abraders, shaft smoothers, hammerstones, bone awls, antler wedges, bone fleshers, bone pins, antler digging stick handles, and unidentified worked bone and antler. Sociotechnic types include *Dentalium*, *Olivella*, *Glycymeris*, *Haliotis*, shell disc beads, juniper (*Juniperus occidentalis*) seed beads, copper beads and pendants, brass buttons, glass beads, iron bracelets and tubes, a silver pendant, bone beads, bone combs, carnivore canines, bear claw cores, bird beaks, raptor talons, bird beaks, bone whistles, beaver teeth, red ochre, stone beads and pendants, tubular stone pipes, a carved steatite spoon, incised stone "effigies" daubed with red ochre, "charmstones", and groundstone celts.

Chi-square tests were used to test for associations between sex and artifact types. Since the artifact assemblage is so varied, and since many of the types occur only once or twice, a reduced typology of 16 artifact types was used (for example, *Dentalium*, *Olivella*, *Glycymeris*, and *Haliotis* artifacts were combined into a generic "marine shell" type). No statistically significant association between sex and any artifact class is found at the .05 level, although one occurs at the .10 level. Iron ornaments, including bracelets and "tubes" (the latter are only presumed to be ornamental), occur in 5/19 female burials but in none of the 15 male burials (c^2 with continuity correction = 2.77, $p = 0.096$).

Stapp (1984) has suggested, albeit in an impressionistic sense, that the majority of copper artifacts at 45-BN-3 are found with female and subadult burials. Including disturbed burials (for which, it should be noted, both positive as well as negative associations may be uncertain), females do display a higher incidence of copper artifacts (8/21) when compared to males (2/15) in terms of presence/absence, but the difference is still not significant at a .10 level given the sample size (c^2 with continuity correction = 2.1, $p = 0.15$). Even so, this is a somewhat different pattern from that seen in most other areas of the Plateau, where the occurrence of copper artifacts is generally more evenly distributed between male and female adult burials, while there is a slight tendency for subadults in the protohistoric period throughout the Plateau as a whole to more frequently be interred with copper artifacts (see Chapter 7). Interestingly, in contrast to most other sites on the Plateau, most of the copper from 45-BN-3 was *not* found in burials (only 9/152 beads and 11/42 pendants came from graves), but in the general midden. This may suggest that copper here did not, for whatever reasons, have the same wealth and status connotations usually attributed to it on the Plateau. One might be tempted to relate this to a late date for the site, but the large amounts of chipped stone and bone tools that also occur in the graves suggest that the assemblage is fully protohistoric in date.

Furthermore, even in early historic contexts the vast majority of copper beads and pendants are usually found in burials. A more concise explanation of this rather striking anomaly cannot be offered at this point.

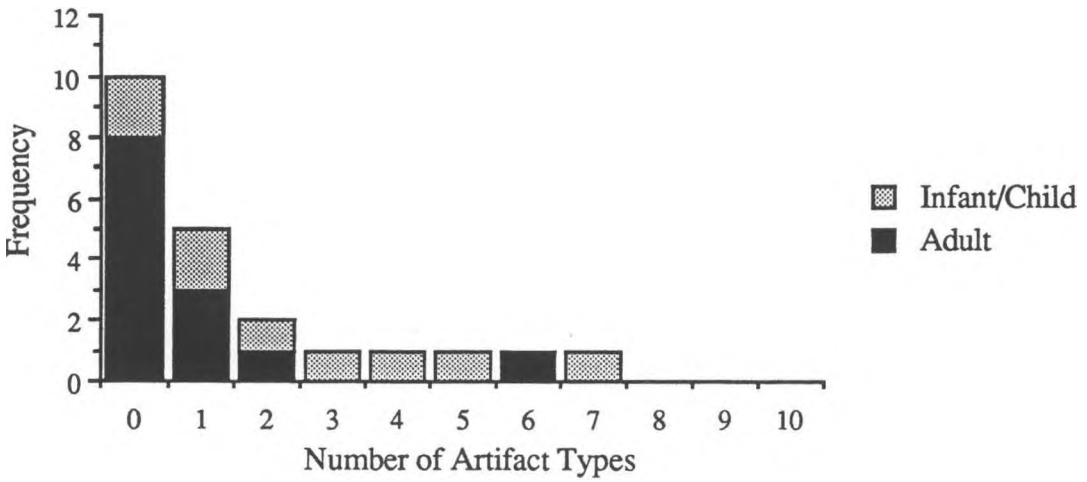
By far the richest burial at Berrian's Island is Burial 25. The grave of this individual, identified as an adult female, contained 23 artifact types, including many of the more elaborate types found in the assemblage. It is also noteworthy that this individual was buried with a steatite tubular pipe, one of only two such associations (i.e. a female with a pipe) found on the Plateau to my knowledge (see Chapter 7). The unusual associations of this burial were noted by Osborne (1957:33), who offered the following: "Perhaps burial 25 was a transvestite shaman...". I reserve judgement on this interpretation.

The Yakima Valley

Smith (1910) investigated 38 graves from two areas in the Yakima Valley: North Yakima and Ellensburg. Unfortunately, nearly one-third of even this small number had either been partially disturbed or entirely looted prior to Smith's arrival. To complicate matters further, few burials came from any one site; rather, small groups of graves were scattered over the landscape. Some of the burials are likely prehistoric, some protohistoric, with two or three dating to the full historic period. As a result of these problems, the following review of the Yakima area will be largely qualitative, although a tentative quantitative analysis is presented with a composite assemblage constructed from relatively undisturbed burials recovered by Smith (1910) and with a small assemblage from Selah (Bergen 1989).

Three burial types were recorded by Smith (1910) for the Yakima Valley: inhumation, talus, and cremation. The majority of the 27 inhumation/talus graves contained single individuals, though in total a minimum of some 38 individuals are represented. Disturbance through the activities of collectors as well as the nature of talus burials make it uncertain whether some of the burials were secondary. The practice of secondary burial is suggested by the incomplete nature of some apparently undisturbed graves, bleaching of elements, and charring of elements. There is no detectable correlation between any of these variables and the abundance of grave inclusions.

Figure 6.11: Artifact Diversity Distribution at Yakima Valley



The following information on age and sex of the Yakima Valley human remains is based both on Smith's (1910) original monograph and my own re-examination of the material curated at the American Museum of Natural History; in some cases Smith's identifications are made more precise, and in a few they are contradicted (see Schulting 1993b for details). Eleven of the 34 individuals were identified as subadults and 23 as adults (including three adolescents). Subadult representation is thus 32.4% (11/34). It cannot be said on this basis, however, that subadults were not being differentiated by location, since there are an insufficient number of burials from any one site, and there is no control over contemporaneity.

Subadult burials on average include a greater number of artifact types than adults (subadult $\overline{X}$ = 2.56 vs. adult $\overline{X}$ = 0.85) (Figure 6.11); the difference results from the higher number of sociotechnic types—invariably ornamental items such as *Dentalium* beads, shell pendants, and copper beads and pendants—found in subadult burials ($\overline{X}$ = 2.33 vs. $\overline{X}$ = 0.46). The difference is statistically significant in both overall number of types and number of sociotechnic types. Adults, on the other hand, contain a marginally greater average number of utilitarian artifact types (adult $\overline{X}$ = 0.38 vs subadult $\overline{X}$ = 0.22), but the difference does not approach statistical significance. Indeed, the Yakima artifact assemblage as a whole is almost entirely restricted to ornamental items, including *Dentalium*, *Olivella*, shell pendants, copper beads and pendants, and glass beads. Despite the exotic origin of all of these items, the overall effect is still one of impoverishment compared to other areas of the Lower and Middle Columbia. It is also noteworthy that the graves containing these objects appear largely protohistoric and early historic. There is little indication of the presence of richly furnished, entirely prehistoric graves such as are found in the surrounding area.

Sex was not provided for any of Smith's (1910) Yakima material, although it was implied for the adult individual of Burial 32a by its association with a newborn infant. The assignment (as female) turned out to be mistaken in any case (Schulting 1993b). The sex of 14 individuals (none from the cremations) could be estimated, comprising six males and eight females (Schulting 1993b). The majority of these were either disturbed or had no grave associations. Thus it is not possible to investigate potential differences in treatment along this dimension.

One-half of the 20 largely undisturbed burials contained no grave inclusions. Those that did generally contained relatively few items. The most notable exceptions are Graves 1, 10 and 43, all of which include fairly abundant Euroamerican trade items, mostly copper beads and pendants, together with *Dentalium* and other shell ornaments. Charring of both skeletal elements and grave inclusions is apparent in two of the talus burials (Grave 1 and an unnumbered grave). An additional six graves contained charred cedar or charcoal, but with no evidence for burning of either the skeleton or any of the grave inclusions. It is possible that Grave 1 represents secondary interment of partially cremated remains. The degree of disturbance commonly associated with talus burials, however, renders this conclusion tentative.

One of the most interesting burials from the Yakima area is that of a child, designated Burial 25, excavated by Smith (1904, 1910) near the town of Tampico. A stone cairn some eight feet in diameter marked the location of the grave on what Smith refers to as a volcanic ash dome. Large angular basalt slabs not found in the surrounding matrix were encountered through to a depth of three feet, at which point a stone slab cist was found containing the burial. Here, the single primary interment of a child of approximately six years of age was found flexed on its left side with the head oriented west. The skull may have been artificially shaped through occipital pressure (Smith 1910:161). Grave inclusions consisted of 18 *Dentalium* shells, ten of which were incised, and an antler carving of a human figure in elaborate costume (see Chapter 4).

Smith (1910) also investigated a total of nine cremation pits from the Yakima Valley. All were found within a relatively confined area on a terrace above the mouth of the Naches River. Four of the talus burials discussed above (Graves 1, 2, 10, and 11) were located relatively nearby, from one-half to one mile above the Naches River mouth. The degree of burning in the "cremations" seems to have varied, but it no case does Smith (1910) state that the bones were more than charred.

Grave 16, despite being a relatively large pit (13 x 14 ft. outside diameter; 5 x 7 ft. inside diameter) reportedly contained only the charred remains of a 10 year old child with no grave inclusions. Grave 13, "resembling a small underground house" (Smith 1910:157), may have also contained only the remains of a single cremated child; again no mention is made of grave inclusions. The remaining cremation pits appear to have all contained the remains of multiple individuals. Graves 17 and 21 are estimated to have each held the remains of four individuals, including both adults and children. Grave 14 contained the remains of six or seven individuals. Grave 15, interpreted by Smith (1910:158) as a communal or family repository, included the remains of a minimum 12 individuals. Grave 18 is described as similar to Grave 15, except that it may contain fewer individuals. No information whatsoever is provided concerning Graves 19 and 20, except that they are "identical" to the other cremation features (which are in fact quite varied). Neither seems to have contained any grave inclusions.

Unlike those in The Dalles area, the Yakima cremations contain relatively few artifacts. Differential preservation does not seem to be a factor accounting for the discrepancy, since shell and bone are preserved, if not particularly well. The only artifact types occurring in the cremations are *Dentalium*, *Olivella*, abalone, unidentified shell ornaments, copper, iron, and a single beaver tooth fragment.

Dentalium shells were reported as being particularly abundant in Grave 15, and included finely incised segments. Several fragments of shell ornaments were found, as well as a single piece of copper. Two incised *Dentalium* shells were also found in Grave 18. Grave 17 contained three shell ornaments and two *Dentalium* shells, and again, a single piece of copper.

Extrapolating from Smith's somewhat sparse data, a minimum of some 38 individuals is suggested for the cremations, ranging from only single individuals in Graves 13 and 16, to 12 individuals in Grave 15. Large quantities of charcoal and ash in most of the cremations suggests that they represent primary loci. Intrusive non-cremation burials seem to have been added into the cremation pits of Graves 14 and 15, and may represent an attempt at appropriation of the presumably higher status cremation loci.

Interpretation of the Yakima Valley material is greatly hampered by the nature of the sample. Smith (1910) did not discern any differences in the three different burial types that would suggest a time sequence. All burial types include some graves with Euroamerican articles, with the possible exception of the cremation circles. Single pieces of copper were found in two of these, and there is the possibility that these are native in origin. Some of the talus slope burials may be more recent than any of the other burial forms, and there is some indication that these contain a greater number of grave inclusions. Both child and adult remains are found in all types of graves, and neither number nor type of artifact inclusions in the two age groups can be interpreted as significantly different given the problems with the sample.

The average number of types of grave inclusions associated with the seven cremation features for which data are provided is slightly, though insignificantly, greater than that calculated for the undisturbed inhumation and talus graves ($\overline{X}$ = 2.00 compared to 1.55). Substituting the estimated number of individuals represented (n = 38) for the number of cremations (k = 7) reverses this relationship ($\overline{X}$ = 0.37 compared to 1.55). The same results are seen with sociotechnic artifact types. Utilitarian types are infrequent in both cremated and non-cremated burial forms, though they are more common in the latter no matter how the cremation average is calculated. It might be argued, despite the minimal presence of copper, that the cremations are late prehistoric and that the protohistoric/early historic inhumation/talus burials should be removed from the calculations. This considerably lessens the gap between the inhumation/talus and the cremation individuals in terms of combined artifact types ($\overline{X}$ = 0.37 compared to 0.63) and reverses it once again in sociotechnic types ($\overline{X}$ = 0.34 compared to 0.25). In any case, all of these differences remain statistically insignificant given the high variances involved. Thus, despite theoretical expectations, there appears to be little independent support in this case for the hypothesis that cremation burials represent a higher status mortuary treatment. Of course, only cremation data from one small part of the Yakima Valley have been considered here, and the sample is inadequate in many other respects as well.

Selah

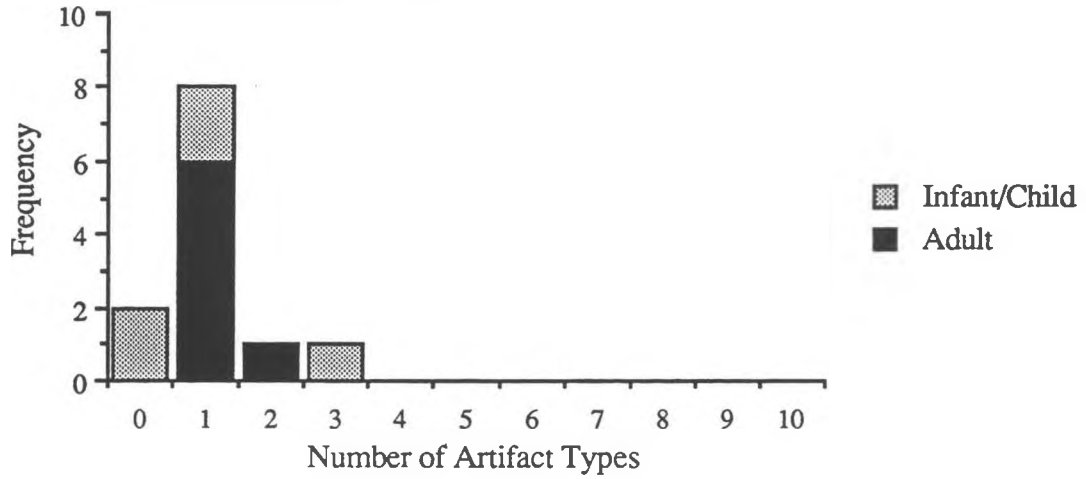
Bergen (1989) investigated three clusters of cairn burials at the foot of a talus slope near Selah (Figure B.5)). Investigation of 12 cairns, some in each group, showed they were similar in construction and contents. Ten individuals, including seven adults and two children, were flexed. Orientation varied, but favoured the west. Burning was evident in only one case. The other two cairns contained no remains and are inferred to be infant graves . Adults and sub adults show a similar artifact distribution (Figure 6:12).

The artifact assemblage is relatively impoverished, iand includes only projectile points, unidentified shell beads, shell pendants, *Dentalium*, one copper pendant (?), a number of stone beads, and an incised steatite tubular pipe. Shell pendants were found with six of the 12 individuals, and constitute the most common artifact class (although not in absolute numbers). Bergen suggests that the single piece of copper found may be native. Regardless, the assemblage as a whole most likely dates to the late prehistoric/early protohistoric period. The Selah assemblage is noteworthy for the relative lack of inequality in the distribution of grave inclusions. With the exception of the two possible infants, all individuals include at least one artifact type, the most common being a shell pendant. Only two individuals include more than one artifact type. Burial 8, a child, had dentalia beads, a square piece of copper, and an incised steatite tubular pipe, while Burial 10 had a collection of numerous shell and stone beads. This is one of the very few cases in which a pipe was found with a subadult on the Plateau (see Chapter 7). It should be noted that Bergen (1989) states that it could be either a "small child or a very young adult".

Sheep Island, 45-BN-55

Sheep Island (45-BN-55) is located approximately 13 miles downriver from the modern town of Wallula, Washington. The site was excavated by Garth (1952) and subsequently by Osborne *et al.* (1961). Garth's excavations revealed two cremation pits and ten pit inhumations, nine of which predated the

Figure 6.12: Artifact Diversity Distribution at Yakima, Selah



cremations. Osborne *et al.*'s work resulted in the addition of 16 burials for a combined sample of 25 (the remaining burial recovered by Garth dates to the historic period and will not be discussed here). In order to distinguish the two contributing collections I will label the burials as G1 to G10 and O1 to O17 (the designation Burial O5 was not used) for Garth and Osborne, respectively. Garth (1952) excavated two cremation pits on Sheep Island. Cremation Pit 1 (CP 1) is described as a shallow depression 6 to 8 ft. across and a foot or less deep. The pit was surrounded with a wide circular ring of stones some 14 ft. in diameter with an inner diameter of only 6 ft; two additional rings of rock were found, one at the 10-inch level and another at the 18-inch level. The upper face of one stone on the southwest side of the middle ring was painted with red ochre; this is interesting in light of the dominant orientation of the pit burials at the site, which was also to the southwest. Calcined human bone occurred throughout the sequence, and suggested to Garth (1952:40) that at least three separate cremation events took place. The heat of the fires was sufficiently intense to fuse the sand into a slag containing bones and artifacts.

CP 2, located only 10 ft. to the east of CP 1, was very similar, except that the feature was rectangular. The outer diameter of the topmost stone ring was 15.5 ft., with an additional one or possibly two rings underneath (Garth 1952:40). Garth's description becomes somewhat confusing at this point, as he mentions an highly compacted "occupation floor" surrounding the cremation pits, but then seems to imply that "cremation floor" is an equivalent term. Since the occupation floor (outside of the cremation pits) contained fragments of calcined bone, it may be presumed, as indeed Garth himself does (1952:40), that the actual cremation events took place over a larger area than that delimited by the pit and ring features, with the remains being swept up and deposited into the pits and then surrounded by stone rings. Garth states (1952:41) that some of the best finds came from the occupation floor; elsewhere he attributes these same finds to the cremations. It is assumed here that artifacts found on the so-called "occupation floor" are associated with the cremation events.

A relatively limited artifact inventory is associated with the cremation pits. The assemblage seems to have been dominated by basalt (?) projectile points and knives. Typologically the points are identical to those recovered with the underlying burials, indicating no great period of time separating the two mortuary regimes. Ten pestle fragments, at least two of which could be fitted together, came from CP 1. All were undecorated but finely finished. Other utilitarian items include a sandstone abrader, unidentified worked bone and antler fragments, a bone flesher, a number of bone points, and bear baculae awls. Sociotechnic objects include 14 cut *Dentalium* beads, two *Olivella* beads, three *Glycymeris* beads, an incised slate pendant, an incised sandstone bead, a sandstone ring, a perforated elk tooth, 12 bird bone beads, a bone gaming piece, two flat incised bone pendants, and red ochre. It is likely that shell and bone objects are underrepresented due to the heat of the cremation fires. Two fragmentary tubular steatite pipes were also found, as well as a bowl fragment of a micaceous sandstone pipe decorated with three incised lines.

Garth provides no indication of how many individuals may have been involved, or of the possible

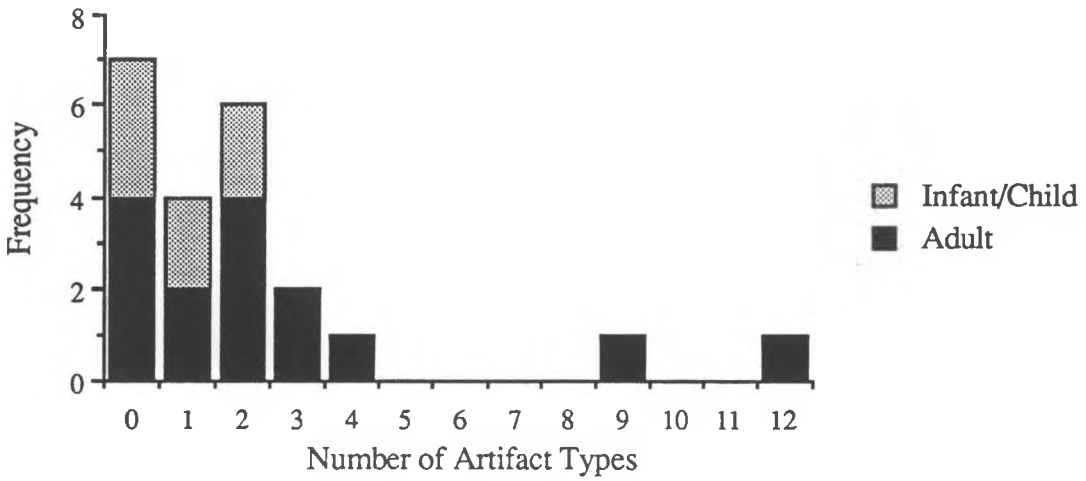
range of ages represented in the cremation pits. Evidence for repeated cremation events and the size of the pits indicates that many individuals are likely represented. Garth (1952:41) notes that some of the human skeletal elements were covered with a thin coating of red ochre, inferring that this must have occurred after the bodies had been exposed. This does not necessarily follow, since the ochre could have come into contact with the bones after the soft tissue decayed, as is commonly seen elsewhere on the Plateau. However, another line of evidence strongly supports surface exposure prior to cremation. A number of fragments of mud dauber wasp nests were found in the cremation pits, "... some showing the imprint of split planks or the curvature of bones on which they had been attached in the depository sheds or exposure platforms" (Garth 1952:41). The nests had clearly been caught in the fire, since they were baked to a "pottery-like consistency".

After reviewing the evidence, Garth (1952:45) suggests that Middle Columbia cremation pits are the result of the intentional firing of mortuary sheds, such as used by the Wishram historically. Apparently these sheds were in fact erected over shallow pits (Spier and Sapir 1930:271) and rocks would be placed around their bases to support their plank walls. Osborne *et al.* (1961), while supporting this idea in principle, find the available evidence insufficient to decide the issue.

Turning now to the inhumation component, the combined assemblage (Garth 1952; Osborne *et al.* 1961) of 25 individuals is comprised of 18 adults, two children, and five infants. It seems strange that the two children were identified by Garth, while Osborne *et al.* identified the five infants. The criteria used for age identifications are not provided in either report. In any case, the infants and children are combined into a subadult group of seven individuals for the purposes of this analysis (Figure 6.13). The nine burials included from Garth's (1952) report were all found underneath the "occupation floor" associated with the cremations discussed above. Only one burial recovered by Osborne *et al.* (1961) is said to have come from beneath a cremation level. Presumably the others date to roughly the same period, but simply occurred outside of the cremation area.

All individuals but one lay either semi-flexed or flexed on the back or side. The exception, an infant (Burial O12), lay extended on its back. Body orientation in the majority of burials ranged between west and south/southwest. Only three individuals were outside of this range. There seem to be no significant correlations between body position and orientation and any other variables tested (age, sex, number of artifact types in association).

Figure 6.13: Artifact Diversity Distribution at Sheep Island



Subadult representation at 28.0% is not significantly lower than Weiss' suggested minimum of 30%. The adult and subadult groups do not differ significantly in frequency of combined artifact types (t = 1.41, p = 0.17) or in sociotechnic types (t = 0.33, p = 0.74), but they do differ at a .10 level in terms of utilitarian inclusions (t = 1.77, p = 0.09). The majority of the shell ornaments, consisting of *Dentalium*

and abalone pendants, in the assemblage were found with subadults. Both types also occurred in adult burials: two *Dentalium* with a male (Burial O15), a shell pendant with another male (Burial G7), and a shell pendant with a female (Burial G4). Interestingly, the two burials (Burials G10 and O7, both adult males) with the most varied grave inclusions at the site contained neither shell ornaments, nor indeed ornaments of any kind.

Eleven of the adults are identified as male while five are identified as female, with the remaining two adults being of indeterminate sex. Most, though not all, of the crania of both sexes for which the observation was possible displayed fronto-occipital deformation. The predominance of males (11/16 or 68.8%) in the assemblage approaches statistical significance at the .10 level (binomial $p = .1051$). Two burials (Burials O2 and O3) at the site had been looted, reducing the number of sexed individuals with secure grave associations to ten males and four females. There is no statistical evidence for different treatment of the sexes in terms of their grave inclusions. However, the two burials (Burials G10 and O7) with the most varied associations are both male. Overall the artifact assemblage found with the Sheep Island burials appears impoverished relative to other sites in the area. Sociotechnic items are particularly poorly represented, including *Dentalium*, abalone ornaments, bone gaming pieces, a bone whistle, steatite and sandstone tubular pipes, and a very large decorated pestle. With the exception of the shell items, all of the remaining sociotechnic types occur only with two adult male individuals (Burials G10 and O7). Evidence of burning is found with at least three of the burials in the form of overlying charcoal and charred cedar planks. There is no correlation between the evidence of burning and the quantity of grave inclusions.

Burial G10 contained the largest and most varied inclusions in the Sheep Island assemblage. Included in the total of 55 artifacts are some 30 stone points and knives, utilised flakes, two abraders, a shouldered maul, six bone points, an antler wedge and a bone wedge, a notched bird bone (whistle?), a large decorated "pestle-like" object, two bone gaming pieces, and five tubular stone pipes. Garth (1952:49) notes that some of the points and knives are exceptionally well made, one having a thickness under 5 mm. One of the points is of the type commonly referred to as a Columbia River "dagger point", usually made of gem quality stone and most commonly found in elaborate Late Period cremation sites in The Dalles area. Four of the pipes are made of steatite, while the fifth is made of sandstone, and is decorated. The large "pestle-like" object is of some interest. It measures approximately 40 cm in length, and one end is decorated in small concentric steps. Garth (1952:49) notes its resemblance to what local collectors in the Columbia River area refer to as a "salmon packer" and interprets it as a ceremonial object. Such an interpretation may be plausible in this case (see also discussion of this artifact class in Chapter 4).

The burial with the next most varied associations, Burial O7, contained four projectile points, a biface, a scraper, two bone points, a bone needle, three antler wedges, bone harpoon fragments, and a steatite tubular pipe fragment. The emphasis is clearly on utilitarian implements rather than sociotechnic items. In terms of absolute numbers of items, Burial O7 is surpassed by Burial O14, an infant; provided that one counts each of the latter's 48 *Dentalium* beads as a separate item (from their positions, the beads were actually clearly used for two bracelets and a necklace).

Evidence for violence is seen in Burial O17, an adult male, in which a projectile point was found embedded in a vertebrae. This point was not included in the artifact totals, but other points in the burial were. It is possible that all were shot into the body rather than being intentional grave inclusions. This does not substantially affect the conclusions presented here, since the only grave inclusions were the stone points and a single bone point.

Based on projectile point styles and the complete absence of Euroamerican trade articles, both cremations and inhumations date to the late prehistoric period. It also seems clear from the typological similarities and close stratigraphic association that no great period of time separates the two forms. Nor do there appear to be any substantial differences in the artifact assemblages of the two groups. Most of the artifact types found in the cremations are also found in the burials. The small differences that do appear in this regard (such as the absence of *Glycymeris* in the burials, for example) are probably attributable to sampling error.

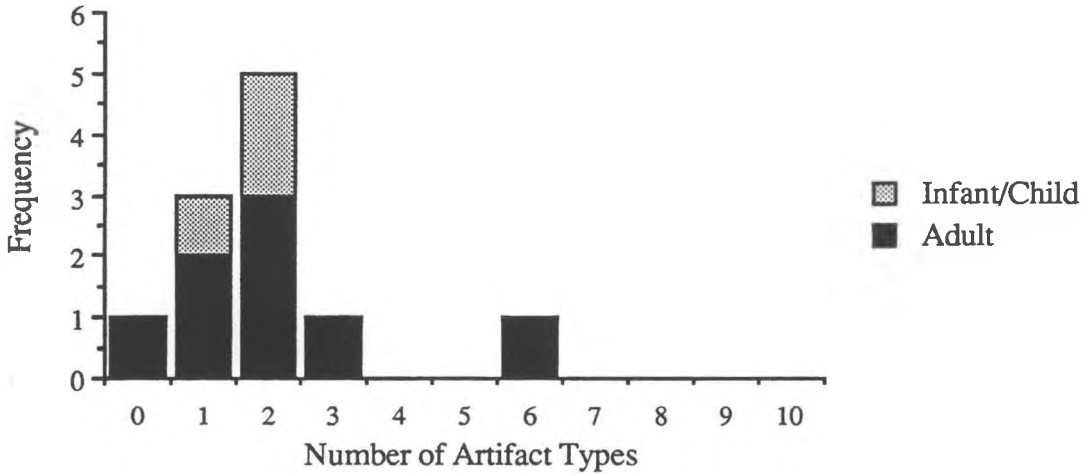
The juxtaposition of cremation pits and pit inhumations at Sheep Island is interesting. Unfortunately, as was the case with most of the sites in The Dalles-Deschutes region, it is difficult, if not impossible, to directly compare the two mortuary regimes in any quantifiable sense, at least not with the available data. Without an indication of how many individuals are represented in the cremations, it is impossible to compare their artifact associations with those of the burials. The differential preservation of bone and shell artifacts in cremations and inhumations further complicates attempts at direct comparison. This being said, it is felt that the effort is still worthwhile. From Garth's report, the two cremation pits

yielded a total of 20 artifact types, including eight utilitarian types and 12 sociotechnic types. (It is likely that utilitarian types, particularly stone tools, are underreported, but this may be of little consequence for the analysis of socioeconomic status.) This total must be divided not only between the two cremation pits, but also between the different cremation events represented in each pit, as well as the unknown number of individuals represented in each event. Even taking into account the effects of artifact type redundancy (discussed in Chapter 3), it seems unlikely that the cremations would significantly surpass the average number of artifact types found in the pit inhumations.

Rabbit Island, 45-BN-15

Rabbit Island (45-BN-15) is located approximately three miles downriver of the Columbia and Snake River confluence. Excavations were carried out by Crabtree in 1951 and 1952 and reported in his 1957 M.A. thesis. The site was exclusively a cemetery, with no evidence of habitation, although there is evidence for extensive habitation elsewhere on the island (Garth 1952:43). Two burial components were identified, termed by Crabtree Rabbit Island I and II. Rabbit Island I is comprised of nine burials containing 11 individuals, while Rabbit Island II is comprised of ten burials containing 15 individuals. A significant temporal separation exists, based solely on typological differences, since no radiocarbon dates are available from the site. In addition to the burial components, Garth (1952) also reports a single cremation pit from Rabbit Island (mistakenly identified as 45-WW-15; Garth also reports the island as lying only one mile south (downriver) of the Snake River confluence, compared to Crabtree's three miles—despite these discrepancies, it is clear that the same island is being referred to).

Figure 6.14: Artifact Diversity Distribution at Rabbit Island I



Rabbit Island I is assumed on typological grounds (i.e. the presence of "Rabbit Island Stemmed" projectile points) to date within the range 3500-1500 B.P. (Crabtree 1957:63). Sprague (1967:134), citing more recent work on point typologies by Nelson and Daugherty (see also Lohse 1985), has subsequently suggested a date of ca. 3000 B.P., making Rabbit Island I one of the earliest known burial assemblages on the Plateau after Marmes Rockshelter (45-FR-50). It thus assumes some importance in outlining the development of mortuary practices and in potentially providing evidence of changes in socioeconomic organisation (see Chapter 7). The nine burials of Rabbit Island I contain 11 individuals, including seven adults, one adolescent, one child, and two infants. Four of the adults were identified by Crabtree as male, two as female, and one as indeterminate. Combining the adults with the adolescent, and the child with the infants, subadult representation is 27.3% (3/11), providing no indication of a significant departure from Weiss' 30% minimum estimate. One of the things that partially distinguishes this component from the later Rabbit Island II is that all of the burials in Rabbit Island I are in an extended position (although three individuals in Rabbit Island II are also extended). This in itself is quite unusual on the Plateau, where burials are overwhelmingly in flexed or semi-flexed position until historic times, when Christian-style

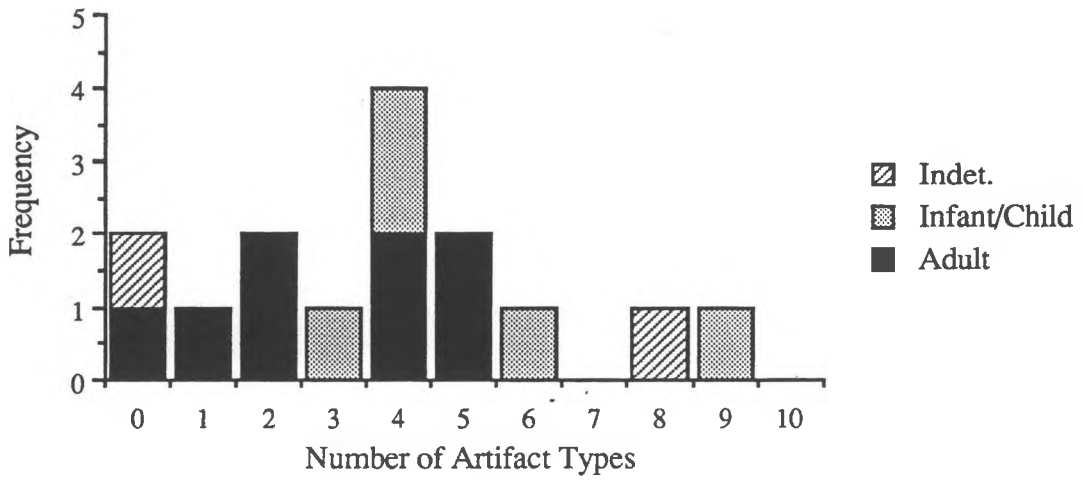
burial is adopted. Occasionally infants and children will be found in an extended position, but in Rabbit Island I all age groups are extended, including the seven adults present. The orientation of the Rabbit Island I burials is also far more homogeneous; all are northeast or north/northeast. Of course, it is probably just these differences that went into defining the two components in the first place. The diagnostic Rabbit Island Stemmed points themselves are found in only six of the 11 individuals assigned to the component.

The artifact assemblage in Rabbit Island I can be considered impoverished compared to that of Rabbit Island II, especially as regards the richness of sociotechnic items. This in itself may prove to be a potentially useful measure of differentiation and inequality. Only three or possibly four types of sociotechnic items are recognised for the earlier component: shell disc beads, a single bone comb, red ochre, and an incised slate object. Utilitarian items are more diverse, including points, knives, drills, unworked flakes, choppers, pestles, antler wedges, bone awls, and worked river mussel shell.

Subjectively, none of the individuals in the Rabbit Island I component stand out in terms of the richness of their grave inclusions. Crabtree (1957:8) also states that neither sex nor age group received preferential treatment; this is confirmed here (Figure 6.14). Burial 9-51, a middle adult male, has the most diverse inclusions with six types, but five of these are simple utilitarian types (stemmed points, a chopper, flake blades, unworked flakes, and antler wedges) while the single sociotechnic type is an incised slate object. The greatest differences are seen in the quantity of shell disc beads. These are presumably of marine origin (probably clam), since Crabtree (1957:43) explicitly states that all shell beads from the site were manufactured from marine species. Five of the eleven individuals had shell disc beads (Burials 11-51, 4-52, 6-52, 7-52, and 13-52); the greatest quantity, 1216 beads, were found with the infant of Burial 13-52. The others all contained substantially fewer than this, ranging from 52 beads in Burial 7-52 to only one in Burial 6-52. Based on their other associations, there is little else to attribute high status to these burials. Still, the beads themselves would seem to constitute a significant investment, one not available to everyone buried at the site.

Burial 10-52, an adult female, provides dramatic evidence of violence even at this relatively early period on the Plateau: a Rabbit Island Stemmed point was found embedded in the first lumbar vertebrae. This was, incidentally, not included in the calculation of the number of grave inclusions for this burial, which consisted of two pestles and red ochre. Crabtree (1957) notes that the cranium may exhibit fronto-lambdoidal deformation, presenting the possibility that this individual was not native to the area but was from further down the Columbia River where such deformation is more frequently seen.

Figure 6.15: Artifact Diversity Distribution at Rabbit Island II



Rabbit Island II consists of ten primary burials containing 15 individuals. These include eight adults, three children, two infants, and two of undetermined age. Males and females are equally represented with four each. Regarding body position, three individuals were extended, two flexed, and eight semi-flexed. The remaining interment was disturbed and body position could not be determined. This component

includes a far greater variety of sociotechnic items than seen in Rabbit Island I. There are a number of species of marine shell represented: *Dentalium*, *Olivella*, *Glycymeris*, *Aletes*, *Haliotis*, and shell disc beads. Also found were steatite beads, perforated stone discs, tubular pipes, nephrite celts, red ochre, beaver incisor gaming pieces, tooth and claw pendants, bird beaks, bone tubes, and incised bone objects.

There is no evidence for subadult underrepresentation (5/13 or 38.5% of the aged individuals). The subadult average of 5.20 artifact types is nearly twice that of the adult average of 2.88. The difference is statistically significant at the .10 level even given the small sample size ($t = 1.96$, $p = 0.08$). The richest burial is also that of a child (Figure 6.15). However, a multiple burial containing five of the eight identified adults renders this result essentially meaningless; seven artifact types were found associated with the feature (discussed further below) that could not be assigned to specific individuals. When these are added (simply distributed as evenly as possible amongst the five adults) the difference becomes considerably less and statistically insignificant ($t = 1.27$, $p = 0.23$).

Both age groups include sociotechnic as well as utilitarian items. The difference in utilitarian grave inclusions between adults and subadults is not significant. Subadults do average significantly more sociotechnic artifact types than adults ($t = 2.14$, $p = 0.056$). This difference remains statistically valid at the .10 level even when the adult multiple burial is taken into account ($t = 2.07$, $p = 0.063$), since only a single possibly sociotechnic item, a large nephrite celt, was among the artifacts that could not be assigned to a particular individual. The sociotechnic items found in subadult graves include mainly shell beads, but also an abalone pendant, gaming pieces, steatite beads, a bone tube, raptor claw pendants, and *Merganser* beaks. The number of sociotechnic types ranges from two to five in subadult graves. All subadult graves but one, an infant (Burial 7-51), also include at least one utilitarian artifact type.

The single tubular (?) steatite pipe from the site was found with Burial 1-52, an adult female. This is only the second occurrence of a female with a pipe observed in the entire sample collected here (see Chapter 7). The grave of this individual also contained six cut dentalia beads, a tooth pendant, a perforated stone disc, and an incised slate object. Among the adults, only Burial 8-52 had an equal number of artifact types. However, a number of the adult burials contained a far greater absolute number of items, invariably in the form of shell beads of one kind or another. The four female individuals averaged 3.75 artifact types compared to only 2.0 for the four males, but the difference is insignificant given the sample size ($t = 1.4$, $p = 0.21$). It would probably become even less if the unknown associations of the multiple pit burial could be taken into account, since three of the adults are identified as male and only two as female. Separating artifact types into utilitarian and sociotechnic types shows a greater difference in the latter category (female utilitarian $\overline{X} = 1.75$, male utilitarian $\overline{X} = 1.25$; female sociotechnic $\overline{X} = 2.00$, male sociotechnic $\overline{X} = 0.75$), but these are even less significant than for overall types.

Possibly the most interesting aspect of this site is the multiple burial designated Feature 1. This pit contained the remains of six individuals, designated Burials 1a-51 to 5-51. The five individuals for which an estimate of age is provided are all adults; three are male and two are female. The bodies appear to have been arranged into a circle, although head orientation is not consistent. The torso, right arm, and skull of Burial 5-51 were apparently "missing"; Crabtree mentions no indications of disturbance to account for this. While it is conceivable that this accurately reflects the condition of the body at inhumation, it may be equally likely that the aboriginal excavation of the burial pit disturbed an earlier interment. With the exception of Burial 1a, for which no age estimate is provided, all of the burials are associated with grave inclusions, both utilitarian and sociotechnic items. The average number of types is only 1.8; this is substantially lower than that seen in either the remaining adults at the site ($n = 3$; $\overline{X} = 4.67$) or in the remaining burials as a whole ($\overline{X} = 5.33$). There are, however, a number of artifacts that were associated with the feature as a whole and could not be assigned to specific individuals. These include three side-notched points, three knives, a scraper, 28 unmodified flakes, a large nephrite celt, a nephrite chisel, a bone point, and a beaver mandible.

With the preponderance of projectile points and knives it is tempting to interpret the deaths of these individuals as homicides, but Crabtree mentions no evidence of violence on the skeletons. The other artifact inclusions, such as the large celt and the *Olivella* beads associated with Burial 3-51, might also argue against such an interpretation. When these general feature associations are taken into account, there is no evidence for the burials of this feature being impoverished relative to the remaining burials in the component. But it still seems probable that the burial represents an unusual event. Crabtree's excavations indicate that the burials in the cemetery, or at least the part investigated, were neither closely packed nor extensive. This suggests that the group making use of the site was not large. It is very unlikely, then, that five adults, three of which were specifically identified as young adults, would die of natural causes at

the same time.

There are, as far as I am aware, no similar features involving human burials anywhere on the Plateau. A feature with intriguing parallels is found, however, at the Wildcat Canyon site (35-GM-9) discussed earlier, located approximately 200 km downriver from Rabbit Island. Feature 42 at Wildcat consisted of a circular pit containing six dog burials; at least three of these were placed in a circle running counterclockwise around the circumference of the pit. Another dog was placed in the centre of the circle. The dogs were clearly sacrificed; two were found with point fragments embedded in the thorax, at least one dog had been decapitated, and all apparently had had their backs broken (Cole and Cressman 1962:21). The relationship of this feature to the cemetery at Wildcat is not known. Its resemblance to Feature 1 at Rabbit Island consists in the placement of multiple bodies around the circumference of a large circular pit with an additional centrally placed body. It is, of course, entirely possible that the proposed similarities are exaggerated or entirely fortuitous. But if they are not, it could perhaps suggest a sacrificial origin for the Rabbit Island II multiple burial. A more detailed examination of the human skeletal remains from Feature 1 could help resolve this issue.

A single cremation pit was found to the east of the burials excavated by Crabtree (Garth 1952). The pit was apparently very similar to those previously described for Sheep Island, some ten miles further downriver. It was surrounded by an indefinite stone ring measuring approximately 16 feet across. Upon excavation, the pit proved to be rectangular (like Cremation Pit 2 at Sheep Island), measuring 7.5 ft. long by 4.42 ft. wide and 1.67 ft. deep. It had been disturbed, presumably by local collectors, so that the only intact deposits occurred sporadically near the bottom of the feature. This makes it impossible to compare with the inhumations from the island. Garth (1952) reports that mixed with the scattered bone were pieces of charcoal, fragments of two charred baskets, charred willow rods twined together, and fragments of cordage. The only other artifact found was the tip of an antler wedge. The intrusive non-cremation burial of a child, covered with red ochre and a charred plank, was also found at the southwest corner of the pit. The recovery of a baked mud dauber nest suggests that, as at Sheep Island, the remains had been exposed prior to cremation. There is nothing at this site, however, to suggest a direct connection between the cremation and the burials recovered by Crabtree. It is highly probable that both burial components predate the cremation pit by a significant length of time.

Fish Hook Island, 45-FR-42

Fish Hook Island (45-FR-42), located some 13 miles downriver from the confluence of the Snake and the Columbia, was investigated in the 1960s by John D. Combes prior to the area being flooded by the construction of the Ice Harbour Dam (Combes 1968). Prior to this the Columbia Archaeological Society had partially excavated the site.

Early "excavations" by the Columbia Archaeological Society recovered 26 burials from Fish Hook Island. What little information is available from these excavations has been summarised by Sprague (1967). Both a protohistoric/early historic and a later historic component are present, distinguished largely on the basis of body position—the former semi-flexed or flexed and the latter fully extended (Sprague 1967:116, 117). Only the protohistoric/early historic component, consisting of 18 burials surrounded by cedar stakes or cists, will be considered here. All but one of these burials were semi-flexed, the exception being fully flexed. Sixteen burials were placed on the back while two lay on the left side. Orientation was generally to the north (13/18 or 72.2%). Only seven of this group contained historic artifacts (7/18 or 38.9%), which were limited to iron blades and bracelets (Sprague 1967:117). The apparent absence of copper artifacts is interesting, since during this period copper is typically found in large quantities. Perhaps by the early historic period in this area iron had assumed the prestige connotations usually attributed to copper. Alternatively, in some areas iron rather than copper might have been adopted very early by the elite as the preferred metal. Whatever the explanation, the Fish Hook Island situation presents interesting parallels with the Berrian's Island protohistoric/early historic assemblage discussed previously.

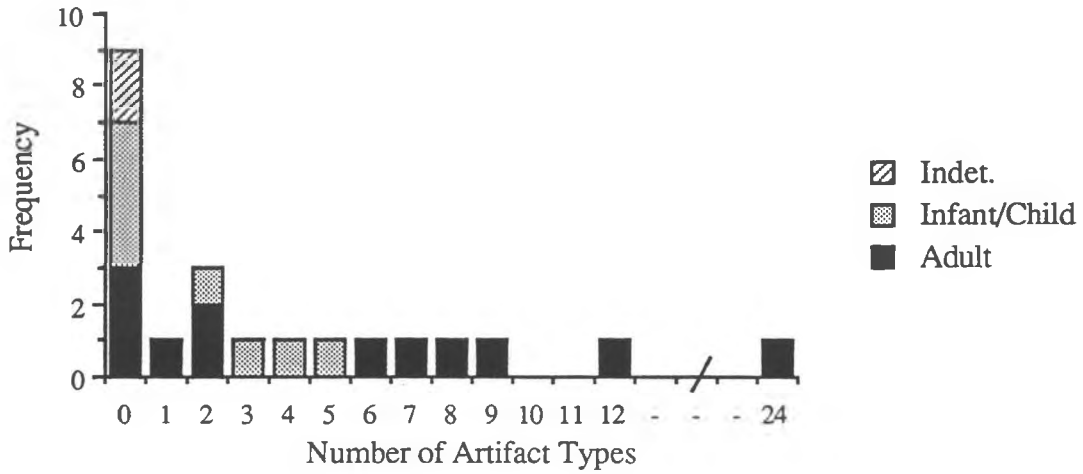
Subsequent excavations by Combes (1968) on Fish Hook Island yielded the remains of 23 individuals, and form the basis of the following analysis. The study of this assemblage is made particularly difficult by the likelihood that two distinct components are represented, with ten of the burials being late prehistoric and the remaining 13 protohistoric in date. Combes (1968) assigned the burials to one of these two periods based on artifact associations and burial facility, apparently relying more on the latter, since all of the graves designated "transitional" (protohistoric) are associated with charred cedar cists, while those assigned to the late prehistoric lack such cists. Many of the cist burials also had surface stone cairns marking their locations. Unfortunately no radiocarbon dates were obtained from the site. While the

two lines of evidence—artifacts and grave facility—partially support one another and do most likely indicate the presence of two components, it is also possible that the differences in treatment reflect status within a relatively contemporaneous mortuary population. In contrast to the group of early historic burials collected by the Columbia Archaeological Society, none of the "transitional" component burials identified by Combes (1968) contained any iron artifacts. The only possible Euroamerican trade items were four copper pendants and a copper armband.

Some of the copper from the site may be of native origin. Combes (1968:32-33) states: "A copper armband, found with burial 3... was analyzed spectrochemically" and "... from the results... it was quite possible that it was made from native copper". But contradicting himself, Combes (1968:125) later states that the same copper armband "... was probably of European origin". Combes places Burial 3 in the protohistoric group. If the copper is in fact native, it calls into question the separation of the late prehistoric and protohistoric components made by Combes. On the other hand, there is little evidence elsewhere on the Plateau that would indicate that cedar cist burial would be used solely for high status individuals; rather, it seems to have been more of a normative practice in certain areas at particular times (although the possibility merits further research). The following analysis will attempt to take both possibilities into account, since treating the burials as a single group substantially increases the sample size and is useful for some purposes.

Twenty-one of the 23 excavated burials could be assigned to basic adult/subadult age groups. Of these 21 individuals, 13 were assigned to the adult group and eight to the subadult (infant/child) group. Subadult representation at 38.1% is within Weiss' range, providing no evidence for their separation from the adult mortuary space. Dividing the sample into its two components does not significantly alter these results; three of nine aged prehistoric burials (33.3%) and five of the 12 aged protohistoric burials (41.7%) are subadults.

Figure 6.16: Artifact Diversity Distribution at Fish Hook Island



The overall average number of artifact types for both time periods and both age groups ($n = 23$, including the two burials for which no age estimate was given) is 3.78; for utilitarian artifact types it is 2.17; and for sociotechnic types it is 1.61. Treating the assemblage as a single component yields the following results for the analysis of adult ($n = 13$) and subadult ($n = 8$) age groups: number of artifact types (adults $\overline{X} = 5.69$; subadults $\overline{X} = 1.75$; $t = 1.54$, $p = 0.14$); utilitarian types (adults $\overline{X} = 3.38$; subadults $\overline{X} = 0.75$; $t = 1.83$, $p = 0.08$); and sociotechnic types (adults $\overline{X} = 2.31$; subadults $\overline{X} = 1.00$; $t = 0.99$, $p = 0.34$). At a .10 level, the only statistically significant difference between the age groups is seen in the occurrence of utilitarian artifacts, which are more frequent in adult burials. The difference in overall number of types, despite appearing quite large (5.69 compared to 1.75), fails to reach the .10 significance level because of the extremely high variance in the adult group. This in turn can be related to the presence of a small number of very rich adult burials, discussed further below (see also Figure 6.16).

Sex was reported for too few of the burials to make any meaningful quantitative statements concerning differences along these lines. However, some qualitative statements can be made. Of the 13 adults, three individuals were identified as male and three as female. Two of the males (Burials 3 and 13a) are the two richest burials at the site, while the third (Burial 20) is among the poorest, having no grave inclusions. Of the three females, one (Burial 22) can be considered moderately rich in terms of its grave inclusions, while the other two (Burials 6 and 13b) are roughly average.

Burial 3, an adult male, is by far the richest interment at the site, with a total of 25 artifact types as defined here. This includes both utilitarian items such as points, knives, scrapers, drills, antler wedges, bone harpoon parts, a net gauge, pestle, chopper, maul, shaft smoothers, bone awls, and beaver incisor chisels, and, more importantly, sociotechnic items such as *Dentalium* and *Olivella* beads, elk tooth pendants, two carved bone or antler combs, an incised bone tube, pigments, two ground stone celts, calcite crystals, an abalone dish, a "jade" pendant, and a copper armband and pendant. At least one of the "utilitarian" flaked stone knives may be better considered a prestige item; it is very finely made and measures 18.3 cm in length. These items represent a considerable concentration of wealth. The wide range of exotic materials may indicate privileged access to a number of different areas through trade contacts (see Chapters 4 and 5).

A number of other burials display idiosyncrasies that are worth noting. Burial 11, an adult, appears to have been a secondary interment; the remains were found disarticulated with the skull reversed on the neck. No grave inclusions accompanied the burial, thus it would not seem that the effort of secondary burial was associated with high status in this case. More likely it can be related to circumstances and/or location of death. Combes states that the adult male of Burial 20 had been forced into a pit obviously too small; again there were no artifacts in association. Burials 13a and 13b, an adult male and female respectively, were found in side by side in identical flexed positions in a single grave. Burial 13a, the second richest at the site, contains 12 types of artifacts, including two tubular stone pipes, three ground stone celts, *Olivella* beads, a stone club, and a copper pendant, as well as a number of utilitarian items. Burial 13b was associated with six types of artifacts, but five of these were simple utilitarian items. The single sociotechnic artifact type consisted of locally available elk tooth pendants. Combes notes that the artifacts were clearly spatially separated in the double grave, so that the individual associations are secure. In this particular case, the male appears to exhibit higher status than the female.

As noted above, all of the supposedly protohistoric burials were associated with charred cedar cists. This clearly indicates burning as part of the mortuary ritual (evidence for this is fairly widespread over the Plateau as a whole). Despite this, in only one instance did Combes (1968) note any signs of burning in the grave contents. The skeletal elements of Burial 9, an individual of unknown sex and age, were described as all partially burned and somewhat scattered. No grave inclusions accompanied the body. The abundance of wealth and prestige items in some other burials at the site suggests that, if indeed Burial 9 does represent a partial cremation, there were no high status connotations involved with the practice. But Combes does not clearly describe the extent and degree of the burning; the burial was associated with a charred cist, and it is possible that the burning of the bones may have been unintentional—perhaps the body was placed in a particularly shallow grave when the above-ground portion of the cist was fired.

Tucannon, 45-CO-1B

The Tucannon site (45-CO-1B) is located at the confluence of the Tucannon and Snake Rivers in southeastern Washington. Investigated by Iverson (1977), the site showed evidence of 134 burials, of which 129 were looted by the time the researchers arrived, leaving a total of only five undisturbed burials. One of these consists of the remains of a disarticulated child (i.e. a secondary burial). A number of incised *Dentalium* and plain *Olivella* shells had been placed deeply inside the eye orbits and up into the nasal passages (Iverson 1977:69, Figures 48 and 49). The fact that the dentalia were complete and incised is of interest, since Spier and Sapir (1930) state that among the Wishram these were the most valuable shells. The disarticulation and placement of the shells deep inside the orbits both suggest that the remains were completely skeletonised when the event took place. This burial suggests relatively elaborate postmortem treatment of the dead, and, in this case, specifically of a child.

Marmes Rockshelter, 45-FR-50

Marmes Rockshelter (45-FR-50), located at the confluence of the Palouse with the Snake River in southeastern Washington, is an important site in that it contains some of the earliest human remains found to date in the Pacific Northwest. The earliest human remains from the site were found in levels dating from

10,000 to 9,000 B.P. (Rice 1972:153). The charred bone fragments of at least five individuals, including two adults and three juveniles, were found in a "cremation hearth complex" that seems to be contemporaneous with the charred remains of another three individuals, including two adults and one juvenile, found in deeply stratified alluvial deposits just outside the shelter (Rice 1972:152). Krantz's (1969:52) suggestion of cannibalism has not found wide acceptance (Rice 1972:154-155); Rice (1972:156) proposes instead that cremation may have been a common practice in the southern Plateau and Great Basin at this time period, citing evidence from two additional sites in Montana and Utah.

In addition to the cremation complex, Rice (1969) reports the recovery of evidence for 22 burials from Marmes Rockshelter. While no marine shells were found in association with the early cremation feature, *Olivella* beads were found with subsequent burials throughout much of a long sequence extending from ca. 8000 to 1000 B.P. An infant dating to ca. 7700 B.P. (Fryxell 1962:16-17) was found with five projectile points. The scattered remains of two adults, both apparently associated with *Olivella*, were found in levels dating to between 7000 and 6600 B.P. (Rice 1969), but Sprague (1967:108) suggests these may not represent intentional burials. But in any case, *Olivella* beads were common grave inclusions, being found with many of the burials (Rice 1969). Other grave inclusions present throughout most of the post-8000 B.P. sequence include red ochre and projectile points; also represented in lower frequencies are bifaces, drills, scrapers, atlatl weights, bone awls, animal tooth pendants, and bone pendants.

The occurrence of *Olivella* in the early levels at Marmes is particularly interesting. The considerable distance to the coast could indicate well established long distance trade networks even at ca. 8000 B.P. The importance of this site here, then, lies in its ability to provide information on the development of trade in exotic materials and their use in mortuary contexts. This relationship is explored further in Chapter 7.

Wahluke, 45-GR-306

The site of Wahluke (45-GR-306) is located on the west bank of the Columbia River in Grant County. It consists of the remains of some 30 housepit depressions and a nearby, possibly associated, cemetery. Both the housepits and the burials were investigated by Herbert W. Krieger of the Smithsonian Institution in 1926 and 1927. While extensive collections were made, only very brief preliminary reports have been made available (Krieger 1927, 1928a, 1928b) and these repeat one another almost verbatim. An inquiry sent by the author to the National Museum of Natural History, Smithsonian Institution elicited the response that "... among the accession records and Krieger's papers there are no detailed field notes, catalogs or maps related to the work at the Wahluke site.... If originally there was more information, it was misplaced long ago" (letter dated November 5, 1991, on file with author). Thus little information is available on the Wahluke burials; despite this, Krieger's meagre reports do contain important data on what was obviously a major habitation and cemetery site with evidence of complex mortuary treatment. For this reason the information that is available is summarised below.

The majority of the Wahluke burials excavated by Krieger were described by him as cremations. They were usually three or more feet below the surface when undisturbed, with a layer of flat stones invariably placed in an oblong or circular ring as a "protective cover" (1928a:9, see also 1928b:197, Figure 194). The cremations were apparently arranged in irregular rows along the river beach terrace upstream from the village proper (Krieger had no reservations concerning the contemporaneity of the village and the cemetery). Krieger reports that many of the skeletons were only charred, and that sections of driftwood logs were found intact in some of the graves. This implies primary cremation, possibly of fleshed bodies. No evidence was noted for the use of mortuary sheds such as were used at The Dalles and on the lower part of the Middle Columbia.

In some graves the skeletal remains were found in a state suggesting secondary burial of multiple individuals. Krieger hypothesised that such burials had been initially exposed on burial islands before being gathered together for "... the ceremonial cremation burial in the village cemetery" (1928a:10). These multiple secondary cremations were "... accompanied by veritable storehouses of burial offerings" (1928a:10). Individual cremations, on the other hand, were usually primary, the body being flexed and lain on the side. Incineration was reportedly "... so complete as to prevent the recovery of any one entire skeleton" (Krieger 1928a:10). Material collected resulted in the reconstruction of eight "skulls" in the laboratory back at the Smithsonian; since it is not stated otherwise, it may be assumed that these all belonged to adults or at least adolescents. All crania exhibited some degree of fronto-occipital deformation. No information is supplied on the relative quantity and richness of grave inclusions found in the individual as compared to the multiple cremations.

A large and varied artifact assemblage was recovered from Wahluke, supplemented by information Krieger was able to obtain from local collectors, many of whom had in their possession extensive collections from the area. Again, Krieger provides lists of artifacts with hardly any accompanying provenience data. Since both the cemetery and the housepit depressions were partially excavated, some of the artifacts may be associated with the latter rather than with the burials. Material was also surface collected from disturbed portions of the cemetery, but this most likely would have been originally associated with the burial component, since Krieger does not mention habitation debris at the cemetery.

Preservation, whether because of charring involved with cremation or the climate, or both, was apparently excellent at the site. Normally perishable materials reported for Wahluke include abundant hemp cordage, cedar bark basketry and matting, tule matting, various woven grasses, elderberry whistles, birch-bark rolls, ash bow staves, porcupine quills, eagle and hawk feathers, and abundant textiles woven from mountain goat, dog, and human hair. The identifications of some of these materials, such as the dog-hair fibres, may be questionable (Schulting 1994). Finally, numerous food and medicinal plants were reportedly also found, including kinnikinnick (*Valeriana edulis*). Given the remarkable richness of faunal and floral remains and the specificity of their identification, especially at such an early date, it seems probable that Krieger embellished his identifications with data acquired through ethnographic sources. The detail reported by Krieger is even more remarkable in that the assemblage appears to be almost entirely prehistoric in date.

Simple utilitarian artifacts made of stone include numerous chipped points, knives, scrapers, drills, undecorated stone bowls, pestles, mauls, hammerstones, net sinkers, shaft smoothers, abraders, and small nephrite adzes and chisels. Bone and antler technology is well represented, including points, harpoon parts, fleshers, weaving implements, flakers, wedges, awls, needles, digging stick handles, and mountain goat horn spoons. The variety of sociotechnic artifacts is even more impressive, including steatite beads, pendants, ear ornaments, spindle whorls and pipes, argillite beads, large polished nephrite celts, schist pendants and beads, mammal and bird tooth and claw pendants, beaver tooth dice and bone gaming pieces, incised bone beads, drinking tubes and whistles, perforated salmon vertebrae beads, *Dentalium*, *Olivella*, *Haliotis*, and *Glycymeris* beads and pendants, and copper tubular beads, pendants, bangles, and bracelets. A number of complete incised *Dentalium* shells were also found in the Wahluke graves (Krieger 1928b:137, Figure 162). Again, one must wonder to what degree Krieger exaggerated his findings at this site, or supplemented them with material found by local collectors, a number of whom are mentioned in his acknowledgements.

Some of the projectile points and knives were of exceptional quality and probably functioned as display items rather than purely utilitarian objects. The single obsidian artifact (no obsidian debitage was found) consisted of a diamond-shaped, eight-inch long mottled black and red knife found in a burial; it can be interpreted as an high prestige ceremonial object with a certain amount of confidence, as Krieger does (1928a:13).

The apparent abundance and variety of copper ornaments is highly unusual, to say the least, if we accept Krieger's statement that the metal is all of native origin (1928a:13). Unfortunately, only a single copper artifact is actually included in a photograph (1928a:7, Plate 5); this appears to depict a native copper ore nugget, which had apparently been worn as a pendant, since a portion of the hemp fibre cordage used to suspend it was recovered *in situ* among the offerings in Grave 1, one of the rare burials for which an association was actually reported. Krieger describes the remaining ornaments as "... hammered and rolled from nuggets of native copper brought from the Cascades or obtained by barter from the coast tribes" (1928a:13), although elsewhere in the same article he attributes the origin of the copper to the interior of British Columbia (1928a:12). Some of the bone and tooth beads found in the cremations were copper stained.

Not all the burials at the site were cremations; a child's grave located on the elevated rim of a housepit depression and several uncremated burials were also found in the cemetery but outside of the cremation row(s) (1928a:10). Krieger writes: "The significance of these uncremated burials is not clear" (1928a:10). Unfortunately there is no information on the relative frequency of cremated and uncremated burials, the age/sex characteristics of the burials, or possible differences in grave inclusions. The two forms of burial might belong to different time periods, but the inclusion of both in what seems to have been a fairly well defined cemetery would seem to argue against this interpretation. Nor does it seem likely that an age difference can be invoked, with cremation reserved for adults or vice versa. From the earlier quote it is clear that Krieger did consider the issue of the co-occurrence of the two burial forms, and had the explanation been such an obvious one he certainly would have made use of it himself.

Thus it is possible that status differences may account for the presence of the different burial

forms. Cremation is, on the basis of the energy expenditure model (Tainter 1975, 1978), likely to be a higher status form of burial than simple inhumation, particularly in areas where wood is rare and requires considerable effort to gather. By the same argument, secondary cremation should be associated with higher status than primary cremation, all other things being equal. More detailed data on the biological characteristics of the burials and their associated grave inclusions would enable the testing of this hypothesis; unfortunately this information no longer seems to exist. But even the little that can be gleaned from Krieger's accounts seems to offer some support for this interpretation. As was noted above, it was the multiple secondary cremations that elicited Krieger's comment on the "veritable storehouses of burial offerings". The spatial separation of the cremation rows and the peripheral non-cremation interments is also suggestive but could be, in the absence of more detailed information, accounted for equally well by invoking either temporal or status differences. There seems to be a direct positive relationship between the potential importance of a site and the likelihood that it is either largely destroyed or poorly documented, or both.

The dating of either the Wahluke cemetery or the housepits is, as might be expected given the paucity of available information, highly problematic. Despite what seem to have been fairly extensive excavations over two field seasons (1926, 1927), no indications of Euroamerican trade items were found (accepting for the moment that all of the copper is indeed native). One possible protohistoric/historic period item may be a catlinite elbow pipe. The pipe is similar to ones made on the Plains and undoubtedly originated there, since catlinite does not occur in the Pacific Northwest. In one report (1928a:12), Krieger mentions the pipe and attributes it to Wahluke; in a separate report (1927:198, Figure 196) he shows a catlinite pipe with lead inlay around the mouthpiece but proveniences it only to the Columbia River Valley. If both references are indeed to the same pipe, then a minimal protohistoric component at the site may be indicated. The complete absence of horse and bison remains in the otherwise extensive faunal assemblage (1928a:15-16) supports, albeit from negative evidence, a largely prehistoric use of the site. Only two points could be associated with specific graves at Wahluke from Krieger's reports. One of these is a red jasper "mule-ear" knife (Grave 3, 1928a:8, Plate 2) widely distributed throughout region during the late prehistoric period; the other is a finely made, narrow corner-notched agate point (Grave 4, 1928a:9, Plate 2), also attributable to the late prehistoric. The most common types of projectile points from Wahluke (1928a:9, 23, 24, Plates 2 and 3) are typical of the late prehistoric period on the Columbia Plateau. No points or other artifacts diagnostic of earlier periods are illustrated in any of Krieger's reports, although this is not to say that none were found, since the reports include only minimal artifact descriptions and photographic plates. In summary, the Wahluke burial assemblage seems to date predominantly to the late prehistoric period/early protohistoric of ca. 1000-150 B.P.; without more detailed information on individual grave associations it is impossible to speculate on the contemporaneity of the burials, i.e. on whether or not an earlier component is represented.

Pot Holes, 45-GR-131

The Pot Holes burial site is located on the east bank of the Columbia River, some two to three miles south of Trinidad, Washington. The site appears to have been a large and important one, but unfortunately it was largely destroyed by local collectors before any systematic recovery was attempted. Dr. F. S. Hall of the Washington State Museum (Burke Memorial Washington State Museum) conducted what can only be called partially controlled excavations in 1920 and 1921, at Pot Holes and a number of other nearby sites. The majority of Hall's crew consisted of overly enthusiastic local collectors, which may help explain what happened to the excavation notes and artifacts recovered from the 1920 season, concerning which no information is apparently available: approximately 77 burials were recovered in the two seasons, but artifacts currently curated at the Burke Museum are associated only with the 28 burials of the 1921 season (Stapp 1984:13). Crabtree (1957) provides a summary of some of the information available from Hall's earlier excavations (see also Greengo 1986). There is some confusion as to the number of burials recovered from the site. Hall's notes apparently state that six out of 27 graves lacked goods, while the Burke Museum's catalogue states that seven out of 35 graves lacked artifact inclusions. I assume that the majority of the information to be discussed below relates to the 28 burials recovered in the 1921 season as noted by Stapp (1984). Stapp (1984:13) notes that some individual burial/artifact associations are preserved in Hall's notes, but that Crabtree chose to only summarise the artifact assemblage as a whole rather than avail himself of this data. My own brief re-examination of the Pot Holes collection, including both artifacts and notes, as it is currently curated in the Burke Museum, suggests that while artifact associations are available for some of the burials, the number of discrepancies between the fieldnotes and the catalogued

artifacts makes the use of this information highly problematic with any but a very few burials (see also Brennan 1981).

All of the burials recovered from the Pot Holes site for which information is available were what Crabtree (1957) refers to as partial cremations. There is no information available on either age or sex of the remains. All seem to have been single interments, or at least it is not stated otherwise. A photograph of one burial from the site reproduced in Crabtree (1957) suggests single primary interment. However, there are no indications of burning evident in the photograph, which also shows preservation of plant fibre cordage. This could suggest that even partial burning was not universal at the site. In fact, Crabtree (1957) does not mention that any of the bone or shell artifacts in the assemblage exhibit signs of burning. My re-examination revealed evidence of burning, but only on relatively few artifacts. Possibly "partial cremation" here refers in some cases only to ritual burning of property over shallow or unfilled graves. Hall's accession notes (Brennan 1981) unequivocally record evidence of burning for only four burials (Burials 24, 64, 73, and 74). In Burial 73, in addition to the burned human remains, associated glass trade beads were melted, and bone beads and faunal remains were burnt. In Burial 64, which included a copper headband (discussed below), burnt shell, ash, and charred bones were all noted. Given the state of the site records, it is not possible to comment on the status of this "cremated" group relative to the remaining burials.

The site yielded an elaborate artifact assemblage (some of the items discussed below are illustrated in Crabtree [1957]). The utilitarian items recovered from the site include projectile points, knives, scrapers, drills, unmodified flakes, bone points, awls, harpoon barbs, antler tine flakers, antler wedges, and antler digging stick handles. Some of the "knives" are unusually large and finely made, and may have functioned as prestige rather than utilitarian items.

Sociotechnic items include *Dentalium*, *Olivella*, and *Aletes* beads, abalone pendants, copper beads and pendants, iron, glass beads, mica, red ochre, tubular steatite pipes, carved mauls, nephrite celts, carved and incised slate anthropomorphic figures, bone gaming pieces, bone and/or antler combs and other carvings, bone whistles, tooth pendants, carved antler tines, and a canid skull (referred to by Hall as "coyote?"). Preservation seems to have been excellent at this site, with abundant evidence for fragile organics surviving even the excavation techniques of Hall's crew. One of the nine steatite pipes recovered has an elaborate zoomorphically carved mouthpiece with cut dentalia shell inlay. An owl is carved onto the bowl of another pipe, and a number of others are decorated with incised lines. Some of the incised slate figurines are rubbed with red ochre (Crabtree 1957). Hall's accession notes (Brennan 1981) refer to fragments of "small totemic figures" with Burial 62, which is also noteworthy for its variety of grave inclusions. Bone and/or antler combs seen to be particularly plentiful in burial sites in this area, and a number of them were found at other nearby sites also investigated by Hall and his crew. Three combs from the Pot Holes site illustrated in Crabtree (1957:84, Plate XXIV) certainly do not appear to have been "combs" in the functional sense, but rather hair ornaments (see Chapter 4).

Marine shell ornaments are abundant in the Pot Holes assemblage, although there are some minor discrepancies between the totals reported in Crabtree (1957) and the inventory of Hall's not infrequently inconsistent accession notes compiled by Brennan (1981). Crabtree (1957) reports a minimum of 2280 *Dentalium* shell artifacts, with 1565 whole unaltered shells occurring in 11 graves. One burial had 19 evenly matched pairs of *Dentalium* strung on fibre cordage placed across the brow of an adult skeleton. Four graves contained all of the 632 cut *Dentalium* beads. Crabtree (1957) reports at least 83 *Dentalium* incised with various different patterns; Brennan (1981) documents only 65 carved shells, all found in one grave, Burial 10. Crabtree (1957) states that all of the 57 *Olivella* beads from the site were found with a single burial. This is difficult to reconcile with Brennan's (1981) inventory, in which three burials containing some 154 Olivella shells and shell fragments are noted. Crabtree (1957) reports that all of the 18 unmodified *Aletes* shells were found in a singe grave—this is partially corroborated in Brennan (1981), who records 15 shells with Burial 10. Crabtree's (1957) reported total of 53 pieces of abalone fairly closely matches the 21 complete pendants and some 35 fragments noted in Brennan's (1981) inventory. Lastly, *Pecten* shells were reportedly found with two burials (Brennan 1981).

Euroamerican trade items include 21 copper pendants, 13 tubular beads, two bands or rings, two headbands, three iron fragments, an iron spear point (?), some 300 small blue and white glass beads, a two piaster coin, and a small silver "Turkish" coin (Crabtree 1957; Brennan 1981). Metallurgical analysis of a subsample of six specimens confirms a Euroamerican origin for at least some, and probably all, of the copper at the site (Crabtree 1957). Copper artifacts were reportedly found with 13 of the 28 burials that contained artifacts (this again does not match other figures Crabtree provides elsewhere regarding the number of burials with and without artifact associations). The most unusual copper item is an headband bent to

conform to the shape of the adult cranium of Burial 64 on which it lay. Twelve copper fragments, apparently from another similar headband, were found with Burial 3 (Brennan 1981).

The presence of Euroamerican trade copper and early glass bead forms in an assemblage otherwise dominated by aboriginal items indicates a transitional early protohistoric date for the Pot Holes site, although an earlier entirely prehistoric component may also be, and likely is, present. Indeed, the absence of glass beads in all but two of 77 burials suggests only a minimal late protohistoric/early historic component.

Summary of Burial Forms and Status in the Middle Columbia Region

The Middle Columbia comprises a large region, and its mortuary practices exhibit considerable variability. As with The Dalles-Deschutes region, three burial forms are represented archaeologically: cremation, inhumation, and talus burial. Cremations in the Middle Columbia area, however, appear for the most part to be considerably less elaborate than those found further downriver. A possible exception is the Wahluke site (Krieger 1927, 1928a, 1928b), where cremations may have contained many prestige items, but the site is too poorly reported to permit any firm conclusions.

With the possible exception of Wahluke, cremations in this area do not appear to exhibit significantly greater grave wealth than other burial forms. Nor can inhumations and talus burials be differentiated in this regard. A number of assemblages from the Middle Columbia region appear relatively impoverished. Old Umatilla, in particular, given its large sample size, has an extremely limited artifact assemblage. The Yakima sites, including the Selah talus burials, also contain relatively few artifact types. The Yakima cremations bear very little resemblance to the rich cremations of The Dalles-Deschutes region. The number of individuals found in cremation pits investigated by Smith (1910) varied from one to as many as 12 or more in one case. Yet artifact assemblages in all were largely restricted to *Dentalium* beads, abalone ornaments, and the occasional copper fragment. A number of cremations contained no artifacts, a situation not encountered in The Dalles-Deschutes region. As mentioned in The Dalles-Deschutes summary section, a number of disturbed cremations at Sheep Island (Garth 1952) provide evidence for multiple cremation events and for prior surface exposure.

Berrian's Island presents as exception to the above trend, presenting an extremely varied artifact assemblage, including many prestige items. The site is protohistoric; thus it may be that there was a considerable increase in the wealth available to the groups along this stretch of the Columbia River as a result of the acquisition of the horse and the effects of the fur trade. This may also hold true of the Yakima Valley (see ethnographic accounts presented in Chapter 5 and discussion in Chapter 7), although archaeological evidence for increased richness and diversity of material culture is far less evident there. Further upriver, both Wahluke and Pot Holes exhibit far more elaborate artifact assemblages. But it is difficult to quantify the comparison due to the poor reporting of these sites.

Possible downriver connections to what were historically Chinookan-speaking peoples, specifically the Wasco-Wishram, may be indicated in a number of cases. Rice (1978a) argues for the presence of a Wishram-style mortuary shed at the late prehistoric Old Umatilla site, based on the concentration of scattered human remains within a very circumscribed area. Further evidence from this site appears in the form of the greater proportion of female crania exhibiting cultural modification more typical of the Chinook (Lynch 1978). Nearby, the protohistoric Berrian's Island site presents similar evidence for the upriver movement of women (Newman in Osborne 1957). A single female from Rabbit Island I, dated ca. 3000 B.P., also exhibits fronto-lambdoidal deformation (Crabtree 1957), and may extend this practice considerably back in time. The securing of marriage alliances with the wealthy occupants of the Long Narrows would have provided a definite asset to an Umatilla family (or any upriver group), presumably giving them, if the marriage was between elites, trading privileges and access to its great fisheries. While this scenario seems reasonable, it should be emphasised that the currently available evidence supporting it is highly tentative.

The Upper Columbia

The (American) Okanogan, 45-OK-66 and OK-112

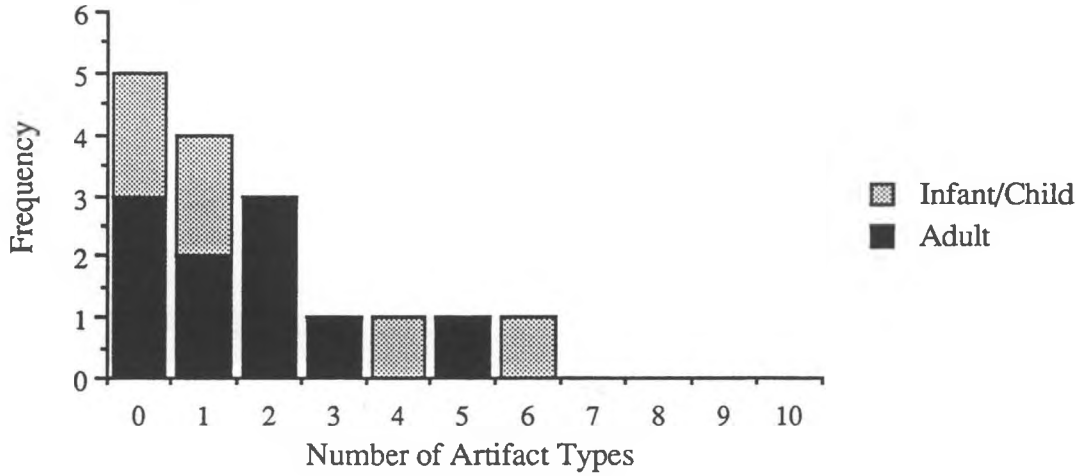
Grabert (1968, 1970) investigated a series of burial and habitation sites in the Okanogan area. Two sites, 45-OK-66 and 45-OK-112, yielded the largest numbers of burials, 13 and eight, respectively. Most of the burial sites investigated by Grabert had been exposed to prior looting, and these two are no exception. Nine of the burials from OK-66 and seven of those from OK-112, for a combined total of 16

burials, were sufficiently undisturbed to permit the recording of artifact associations with some confidence.

Site 45-OK-66 is located along the south slope of a dune paralleling the Columbia River, some 400 metres from the mouth of the Okanogan River (Grabert 1968). Grabert (1968) believes that burial site OK-66 may be contemporaneous with the housepit village of 45-OK-52, some 300 metres downstream. The village site OK-52 also yielded disturbed human remains (six burials), at least some, and possibly all, of which seem to have been protohistoric and/or early historic in date. These were apparently intrusive in and around the earlier housepits (Grabert 1968:140). Site 45-OK-112 is located on an alluvial fan at the mouth of Chiliwist Canyon on the Okanogan River, approximately 12 miles upstream from OK-66.

All of the burials at OK-66 for which the observation could be made were oriented parallel to the Columbia. Burials 66-12 and 66-13 had clearly defined cedar cists together with stone cairns (Grabert 1968). Further traces of wood suggestive of cists were found with Burials 66-1, 4, 9, 10, and 11. Numerous bits of charred wood and charcoal found with these burials suggest what Grabert (1968:138) refers to as "... the common Plateau practice of burning off the uppermost ends of cyst planks after the burial had been partially covered with earth". Burials 112-5b and 9 were also enclosed by cedar cists. Burial 5a was associated with a subsurface curved rock wall in addition to a surface cairn.

Figure 6.17: Artifact Diversity Distribution at OK-66 and OK-112



Grabert (1968:138), based on the very low number of Euroamerican trade items, places the OK-66 assemblage as slightly predating the turn of the nineteenth century. The OK-112 assemblage appears very similar, and thus probably dates from roughly the same time period. On the other hand, Grabert (1968:143) believes that two burial periods are present at OK-112 based on the clear stratification of burials. If so, they do not differ greatly either in number or types of grave inclusions, and so for the purpose of this analysis they are considered, together with the undisturbed burials of OK-66, as a single group.

Artifact types from the combined sites include *Dentalium*, abalone, and copper ornaments, red and yellow ochre, a tubular pipe, bone beads, bone gaming pieces, projectile points, large bifaces, scrapers, a graver, flakes, an antler point, an antler wedge, a bone flesher, and a whetstone. With the exception of the abalone and copper ornaments, and the points, scrapers, and flakes, all types occur only once. The size, craftsmanship, and placement of the two large bifaces behind the head of Burial OK-66 suggests that they did not serve a simple utilitarian function and may have been ceremonial (see Grabert 1968:Plates 22 and 40f, i). The copper ornament found with the adult female Burial 66-9 is not illustrated, but the pair found with the infant Burial 112-6 are (Grabert 1968:Plate 40c). They form spirals descending from a central loop, and bear some resemblance to two spiral copper ornaments found in a grave at the main burial place at Lytton, British Columbia (Smith 1899:150, Figure 84) (this form is also seen on the Northwest Coast).

The composite sample of 16 individuals includes the remains of ten adults, two children, and fourinfants. Four males and four females are reported for site OK-66, but this includes one child (66-7) sexed as male. Given the difficulty of assessing the sex of immature remains even with modern techniques, this should be seen as suspect, and indeed could call into question all of the other estimations of sex as well

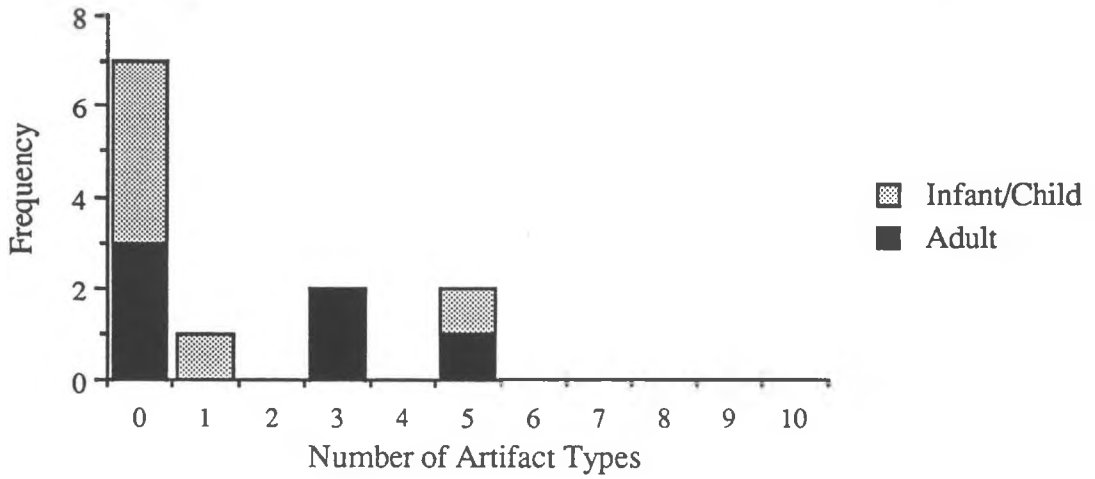
(Grabert also records the sex of an infant in a disturbed burial [66-2] as female). Sex was not reported for any of the OK-112 individuals. There is no indication of differential treatment along the dimensions of either age or sex (although too few sexed burials occur to make this observation meaningful in any case). The average number of artifact types found in adult graves is 1.60 compared to 2.00 in subadult graves (infants and children combined). It should be noted that not all grave inclusions appear to have been reported by Grabert (1968) for Burial 66-4, an adult male. The presence of only four additional types with this burial would negate the small (statistically insignificant) difference that does appear between the adult and subadult averages. Figure 6.17 shows the distribution of artifact classes among age groups

One of the more unusual features at OK-66 is that six of the burials had either one or both hands missing. Grabert (1968:140) emphasises: "It was not merely a matter of missing bones; rather all trace of the hand or hands had vanished". Both hands were missing from Burials 66-4, 9, and 10; the left hand was absent in Burial 6, and the right from Burials 66-7 and 12. There is no discernible pattern involving either age or sex. Grabert (1968:140) cites a personal communication from David Sanger to the effect that "... a similar practice has been observed in burials in south-central British Columbia". I am not aware of the sites that Sanger might be referring to. In any case, I suspect that the explanation lies in factors other than the intentional "post-mortem ceremonial amputation" posited by Grabert. For one thing, Burials 66-7 and 10 were disturbed. As Grabert (1968:141) notes on the very next page, Burial 66-7 was in fact missing much of its right side, the same side from which it is noted that no trace of the hand remains! Other bones besides the hands were also absent in some of the apparently less disturbed burials: Burial 66-9 was missing some of its ribs in addition to both hands, and Burial 66-6 was missing its sternum. An examination of the skeletal remains for evidence of cut-marks would help to resolve this issue.

Keller Ferry, 45LI-27

This designation (Sprague and Mulinski 1980) was given to Collier *et al.*'s Site 2 situated on the south bank of the Columbia opposite the Sanpoil. Twelve individuals from 11 burials were excavated from sand along the riverbank. Stone circles and/or cedar planks marked 6 graves. Two female and one male adult, three adolescents, five children, and one infant (Collier *et al.* 1942) were recovered based on Mulinski's (n.d.) age estimates. Burial 13 contained the remains of a child (13a) and an adult female (13b). Subadults, at 50% (6/12), are relatively high. Adults do not differ from subadults in artifact richness or grave lot value (number of types:adult $\bar{X}$=1.00; utilitarian $\bar{X}$=1.33 and 0.50; sociotechnic $\bar{X}$=0.50 and 0.50).

Figure 6.18: Artifact Diversity Distribution at Keller Ferry



The artifact assemblage, with one important exception, is relatively simple, including projectile points, stone knives, gravers, unworked flakes, pestles, a maul, a hammerstone, a bone awl, dentalia beads, abalone pendants, a copper bead and a copper fragment, and a whalebone club. Seven individuals lack artifact associations of any kind. While no burials at Keller Ferry are outstanding in terms of their artifact richness, the most elaborate inclusions are found with Burial 12, a child, and include a "cache of unworked flints", a projectile point, a copper bead, five dentalia beads, and a carved whalebone club. The whalebone

club, as discussed in Chapter 4, is likely an important object indicative of high prestige. Its association with a child, as far as I am aware the only known example of such an association on the Plateau, is therefore interesting. It is also worth noting that Burial 12 is one of the five graves at the site lackingeither a stone circle or cedar planks. Here, as elsewhere in the Upper Columbia, there appears to be no correlation between grave elaboration and grave inclusions. The temporal integrity of the site is difficult to ascertain. A protohistoric component is suggested by the two occurrences of copper. Overall, the impression is again that of a transitional late prehistoric/protohistoric assemblage.

Whitestone Creek, 45-FE-24

Collier *et al.*'s (1942) Site 24 (45-FE-24), referred to here as Whitestone Creek, provides a total of 38 individuals, including ten infants, five children, two adolescents, and 21 adults. Three graves hold double interments, in two cases an infant and a child, and in one case an infant and an adult of unknown sex. The site is within the area traditionally occupied by the Sanpoil division of the Okanagan Interior Salish. The Whitestone Creek cemetery/village midden site may in fact correlate with Ray's (1932) Site 16, the largest winter village of the Sanpoil (Collier *et al.* 1942:127). The overall artifact assemblage appears to be mainly protohistoric/early historic in date, with copper artifacts found in 11 burials, glass beads in seven, and iron objects in four. The glass trade beads are the most temporally sensitive artifacts in the assemblage. The vast majority of the total of 8548 beads found with burials are of the blue and white variety that represent the earliest forms seen on the Plateau—these colours were noted by Lewis and Clark in the first decade of the nineteenth century (Thwaites 1904-05). A few green, red, coral, and black beads of roughly the same shape are also present. These date slightly later (Pullen 1970). All of the beads were of a size suitable for use as necklaces or were found in positions directly indicating their use as necklaces (Collier *et al.* 1942:105). The use of beads for necklaces precedes their use as decoration sewn onto clothing (Sprague cited in Pullen 1970). Thus, while Collier *et al.* (1942:26) place the site as post-1820, all of the bead types could be accommodated within the period 1810-1820.

The site plan provided by Collier *et al.* for the Whitestone Creek site indicates a non-random distribution of burials (Figure B.6). While the assemblage will be treated as a single analytical unit, the clustering of burials at datum stake D should be kept in mind, since this group contains the majority of the burials lacking grave inclusions at the site, as well as an unusual burial with grave inclusions (discussed below). On the other hand, neither preservation nor burial practices seem to differ between the two areas, with both having cedar plank cists and/or stone circles associated with most of the burials. At least two possible interpretations come to mind: 1) area D is a spatially segregated area that was peripheral to the remainder of the burial site and was used mainly for individuals of lower socioeconomic standing, or 2) a significant temporal difference is involved, so that most of area D represents an earlier time period. Even radiocarbon dating is unlikely to have the necessary resolution to differentiate these burials into distinguishable time periods. Removing those stake D burials lacking grave inclusions as well as one unusual burial with grave inclusions reduces the Whitestone Creek sample to 28 individuals.

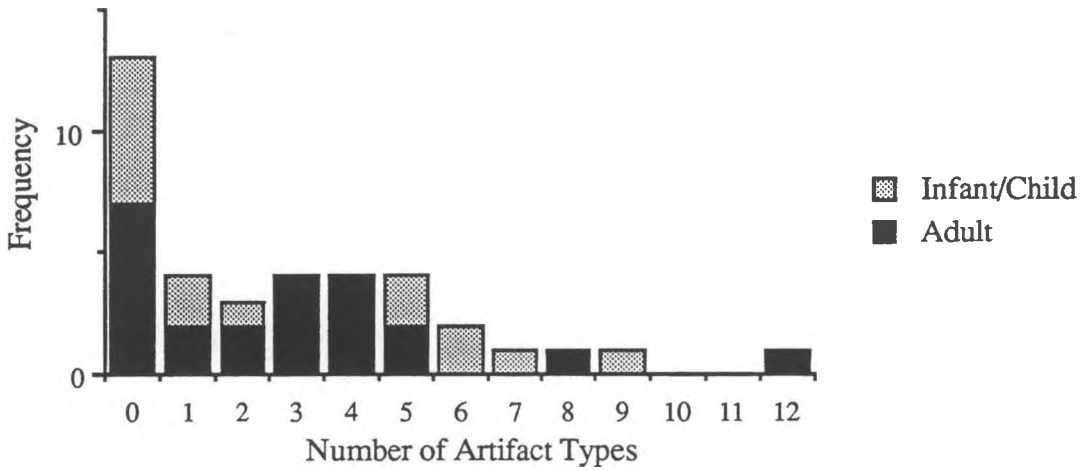
Only four broad unsexed age categories—infant, child, adolescent and adult—could be addressed, since finer age distinctions were not made and sex was not reported for any of the burials in published form. Additional information has since been made available through Thomas J. Mulinski's (n.d.) re-analysis of what skeletal material is available from Collier *et al.*'s collection. Nevertheless, for most purposes it is necessary to collapse even the four age classes into two in order to have sufficient sample sizes in the subgroups for statistical tests. At Whitestone Creek, the infant/child group comprises 16/38 (42%) of the total assemblage and thus there is no evidence for its being underrepresented. No statistically significant differences in treatment of subadults are indicated in either body position or orientation.

Mulinski provides estimates of sex for 21 of the 23 adolescents/adults present in the assemblage, including seven males and 14 females. This ratio, 2:1 in favour of females, represents a significant (.10 level) departure from the expected 1:1 ratio (binomial $p = .0946$). There are no significant differences in number of artifact types between the sexes, but Whitestone Creek does provide one of the few instances in which a statistically significant association was found between sex and artifact type. Three of the seven males are found with projectile points, compared to none of the 14 females (Fisher's $p = 0.0472$). Discussion and interpretation of this is left for the next chapter, in which artifact type associations with age and sex are examined more thoroughly.

The Whitestone Creek assemblage reflects a mixing of traditional and Euroamerican items. Utilitarian artifact types include projectile points, knives, scrapers, mauls, notched sinkers, hammerstones, bone points, bone awls, needles, digging stick handles, and beaver teeth. Objects assumed to function more

in the sociotechnic sphere include *Dentalium* and *Olivella* beads, abalone pendants, incised and plain bone beads, bear claw cores, elk teeth, copper beads and pendants, a copper bracelet, glass beads, woodpecker beaks, a dog skull, bear baculae, anthophyllite celts, and beaver tooth dice. Included as principally sociotechnic items are an iron sword blade and a musket barrel. Given the assumed status connotations of early metals, the few unidentified iron fragments present are also interpreted as sociotechnic items.

Figure 6.19: Artifact Diversity Distribution at Whitestone Creek



Many burials at Whitestone Creek contain abundant grave inclusions. This is especially true when the stake D cluster is removed. In absolute numbers, some of the burials contain the highest of all those cited in this study, due to the presence of thousands of trade beads. *Dentalium* is found in 16 graves, making it by far the most common artifact type, while copper beads occur in eight. The addition of other copper artifact types—pendants, bells, buttons, and bracelets—increases this total to 11. *Dentalium* and copper beads are strongly correlated with one another, almost certainly reflecting their use in composite necklaces and/or "copper rod armour". In no instance does a copper item of any kind occur without *Dentalium* being present in the same grave. Glass beads, found in seven burials, are moderately correlated with both *Dentalium* and copper. They sometimes occur in large numbers (e.g. 6187 beads with Burial 21), but also singly (Burial 3). Interestingly *Olivella* beads, the second most common marine genus, are actually negatively correlated, though only weakly ($r = -0.508$), with *Dentalium*. The significance of this is not clear, but it may be that the two marine species were acquired through different trade networks maintained by different individuals or families. However, the five burials with *Olivella* beads (Burials 13, 19, 22, 23, and 30) do not cluster spatially (nor is this pattern seen more generally on the Plateau).

The "unusual" grave near stake D alluded to earlier is Burial 35. The burial is that of an adult male, flexed on the left side, and surrounded by cedar planks. The position and grave facility are typical for the site. What is unusual are its grave inclusions. These—including a projectile point, a graver, an end scraper, a knife, shaft smoothers, an antler wedge, bone points, awls, unidentified worked bone, and a bear baculum—are far more reminiscent of late prehistoric assemblages seen elsewhere along the Upper Columbia (e.g. Sheep Creek, 45-ST-46, discussed below), suggesting that it may date to this period rather than to the protohistoric period.

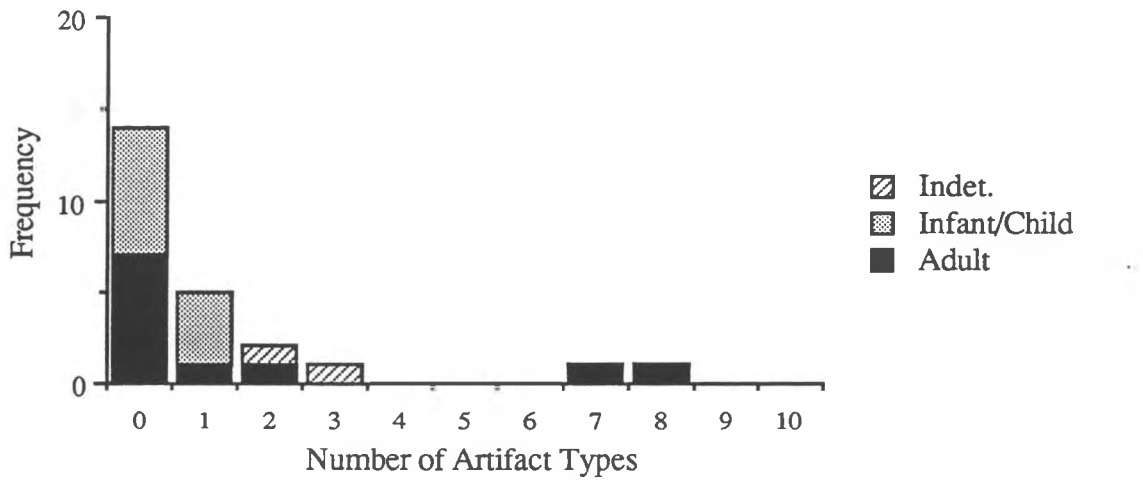
The average number of artifact types is 2.63 for the infant/child group and 2.86 for the adolescent/adult group. This becomes 3.26 for the infant/child group and 3.40 for the adult group if the stake D cluster is removed. In neither case is the difference between the two age groups statistically significant. The subadult group in fact displays a distribution of grave inclusions very similar to that of the adults (Figure 6.19). Infant and child burials were also treated separately and compared to each other and to adults without significant results. The combined infant/child group has, when trade beads are counted individually, a far higher average number of artifacts per burial than the adult group, on the order of 561 to 160 (or 691 to 232 if the stake D cluster is removed), but even these differences are not statistically

meaningful given the extremely high associated variances and the small sample sizes. The large values are caused by the presence of only one or two extremely rich graves, at least in terms of glass beads, in each group

45-FE-7

Site 45-FE-7 is located just across Whitestone Creek from site 45-FE-24. It extends along the north bank of the Columbia from the east side of Whitestone Creek to the beginning of a small talus slope (45-FE-5), also containing looted burials. Collier *et al.*'s sites 7A and 7B were consolidated by Chance (1967) into a single continuous site, 45-FE-7. Thus the burial numbers used by Mulinski (n.d.) and adopted here do not match those in Collier *et al.* (1942); they are the same for Site 7A, but the burials in 7B are numbered consecutively from the last burial in 7A rather than starting over with Burial 1 (thus burials 1 to 13 from Collier *et al.*'s site 7B become 10 to 22 from 45-FE-7). This results in a total of 22 graves containing 24 individuals, including ten adults (two males and five females), one adolescent, eight children, and three infants. Again there are discrepancies between identifications made in Collier *et al.* (1942) and the re-analysis by Mulinski. In all cases in which the skeletal material was saved and thus available for re-analysis, Mulinski's identifications are given priority. All graves were simple pit interments. While Collier *et al.* (1942) give the impression that each grave contained only a single individual, Mulinski notes one triple (Burial 1) and one double (Burial 11) interment. Both multiple interments lack grave inclusions, and so there is no problem with attempting to assign artifacts to specific individuals, and they are retained in the analysis.

Figure 6.20: Artifact Diversity Distribution at 45-FE-7



The utilitarian artifact assemblage from 45-FE-7 is extremely limited, including only scrapers, hammerstones, bone awls, and bone points. The sociotechnic group is more diverse, including *Dentalium*, *Olivella*, and shell disc beads, a shell pendant, elk tooth pendants, beaver tooth dice, a bone pendant, red ochre, glass beads, copper beads and pendants, a copper bracelet, and unidentified iron fragments.

There is no indication of subadult underrepresentation (11/24 or 45.8%). The adult/adolescent group contains on average more artifact types than the infant/child group ($\overline{X}$ = 1.64 vs. $\overline{X}$ = 0.36; utilitarian $\overline{X}$ = 0.18 and 0.18; sociotechnic $\overline{X}$ = 1.45 and 0.18), but not significantly so. In fact, the difference can be attributed to the presence of two relatively rich burials, Burial 3 and Burial 4, containing eight and seven artifact types, respectively (Figure 6.20). Burial 3 is an adolescent, while Burial 4 is an adult male. In terms of absolute number of artifacts, Burial 4 is by far the richer, containing a total of 521 items, including 454 dentalia beads. Burial 3 contains a total of only 20 items, and in this respect it is exceeded by Burial 20, an adult of unknown sex containing 50 glass beads, although the artifact richness in the latter is limited to the one type. The three males at the site, skewed by Burial 4, contain on

average more types than the five females ($\overline{X}$ = 2.33 vs. $\overline{X}$ = 0.40), but given the small sample and high variances involved this difference fails to reach statistical significance.

The occurrence of Euroamerican trade items places at least part of the assemblage in the protohistoric/early historic period. No details are provided concerning the colour or form of the glass beads, found in three burials, but Collier *et al.* (1942:104) state that most of the beads recovered from burials during the project as a whole were tubular with slightly rounded edges, and were either blue or white. These, as discussed elsewhere, are typically considered the earliest bead types found on the Plateau. This suggests that use of 45-FE-7 may overlap or be contemporaneous with that of 45-FE-24, although of course this is difficult to demonstrate. Some separation, presumably temporal rather than social or economic, is likely indicated by the observation that none of the graves from 45-FE-7 had stone circles or cedar planks, whereas these features, although not universal, were very common at 45-FE-24.

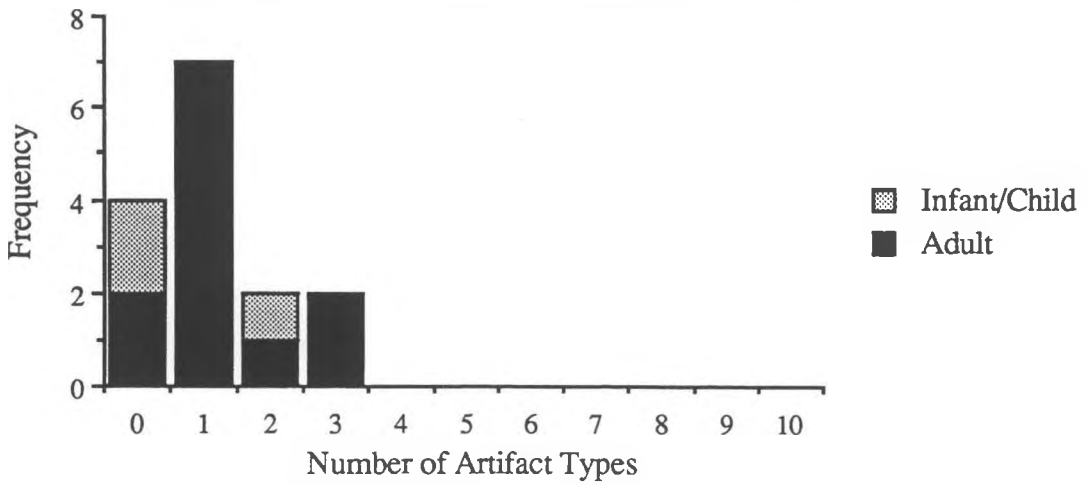
45-ST-8

Collier *et al.*'s (1942) site 8 (45-ST-8) is located in a large talus slope on the north bank of the Spokane River approximately eight miles above its confluence with the Columbia. An estimated 30 burials may have originally been present, but most had been disturbed by local collectors, and Collier *et al.* (1942) recovered only 12. Mulinski's (n.d.) re-analysis of the material provides a total of 15 individuals. Again, although not recognised by Collier *et al.*, there were two multiple interments, Burial 1 containing the presumably partial remains of one adult male and two adult females, and Burial 7 containing the remains of an adult female and an adolescent (?). Since a number of grave inclusions were found in Burial 1, the association of artifacts with specific individuals is problematic (although photographs may exist that would make this possible). This is less of a problem with Burial 7, in which only a single artifact, a worked bone fragment, was found.

The total of 15 individuals represented includes eleven adults (including two males and three females), one adolescent (?), and three children. Subadult representation is low (3/15 or 20%), but not significantly so given the sample size. There are no significant differences at the .10 level between adults and subadults in overall number of artifact types, number of utilitarian types, or number of sociotechnic types (Figure 6.21). Nor are any significant differences seen between males and females.

The artifact assemblage at ST-8 is relatively impoverished, consisting of a projectile point, a pestle, a bone awl, a bone "bodkin", a bone "arrow wrench", unidentified worked bone, *Olivella* beads, elk tooth pendants, a catlinite elbow pipe, red ochre, copper beads, and iron fragments. The copper beads, iron fragments, and catlinite pipe place at least part of the group into the protohistoric/early historic period. The absence of glass beads in an assemblage has been used on the Plateau as evidence of a relatively early protohistoric date, although this may be questionable. Nevertheless, the overall late prehistoric/protohistoric character of the assemblage is once again clear.

Figure 6.21: Artifact Diversity Distribution at 45-ST-8



Freeland, 45-FE-1

The Freeland site (45-FE-1) is located on an eroding bank above Lake Roosevelt near the Kettle Falls bridge. Sprague and Birkby (1970) excavated nine graves containing an estimated 17 individuals (mostly incomplete), while prior erosion produced the remains of an additional ten individuals out of context. Mulinski (in Chance *et al.* 1977) subsequently reported a single grave containing two individuals to bring the total from the site to an estimated 29 individuals. It is likely that many more have eroded out without being detected and that many graves remain (Sprague and Birkby 1970:16). All the material appears to date to the early historic period. Copper is especially common at the site, and an iron point was found with one burial and glass seed beads with another. Stapp's (1984) trace element analysis of protohistoric copper included samples from the Freeland site. As expected, the results indicate that the copper is Euroamerican in origin.

Demographically, the sample includes three adult males, seven adult females, one adult of indeterminate sex, six children, and 11 infants (Mulinski in Chance *et al.* 1977; Sprague & Birkby 1970). Out of a total of 29 individuals, then, 18 (62.1%) are the remains of infants and children. This is an extremely high proportion, although within the upper limits of the range (30-70%) proposed by Weiss (1973). It is also of interest to note that four of the ten excavated graves were double infant or infant/child burials, with the second individual usually only partially represented. Three of the ten graves contained double interments representing an adult with an infant. A natural interpretation for such an occurrence might be that the infant was buried along with its mother when she died, as no one would be able to look after it (cf. Teit 1900:329). Two of the adults in this case, however, were male. In contrast, there were no cases of two adults being buried together.

Most of the Freeland burials are either very incomplete or recovered out of context. Still, we again appear to see a protohistoric pattern of greater inclusion of infants and children within the adult mortuary space, similar to that seen at Whitestone Creek (45-FE-24). Sprague and Birkby state that the high proportion of subadults, shallow burial, the disturbed and crowded burial distribution, and the frequency of multiple interments all combine to strongly suggest that this site may have been an "...epidemic burial ground of greater extent than indicated by the excavations..." (1970:16).

Sprague and Birkby (1970) report two males and seven females. This represents a significant departure at the .10 level from a model assuming equal representation of the sexes (binomial $p = 0.0898$). The inclusion of an additional adult male found subsequently (Mulinski in Chance *et al.* 1977), however, renders this difference insignificant (binomial $p = 0.1719$). This argues eloquently for caution in the interpretation of even "statistically significant" results based on very small samples. The burials are too disturbed to permit an investigation of other dimensions of variability and sex.

The most common artifact type by far is the tubular copper bead. Copper beads and/or pendants were found in seven of the ten excavated graves, and evidence of copper staining on bone is found on 17 of the 29 individuals represented. Some graves contained no copper artifacts, yet the skeletons were copper stained. Even this figure likely underestimates the true proportion of burials interred with copper, since many skeletons are incomplete, some being represented by only two or three elements. *Dentalium* occurs with five of the ten excavated graves, ranging from two carved segments in Grave 7 (an old adult female) to 408 whole and segmented shells in Grave 8 (Burials 8A and 8B, a neonate and infant, respectively). The remaining artifact types include copper and brass bracelets, copper pendants, glass seed beads (all with Grave 8), shell disc beads, shell and bone pendants, a carved bone tube (interpreted by Sprague and Birkby as a gaming piece), and bear claw cores. The only possible utilitarian item found was an iron point with Grave 3. The near complete absence of aboriginal artifact types and materials would be unusual in a protohistoric site, suggesting, as Sprague and Birkby do (1970:15-16), an early historic date for the assemblage.

Grave inclusions were found with all the excavated graves except Grave 4, and even then the infant Burial 4B was copper stained, indicating that copper artifacts were present at one time. Burials at the Freeland site are far too disturbed to attempt any kind of quantitative analysis. The relative richness of the artifact assemblage associated with the burials may suggest that this site was a discrete burial ground reserved for the wealthier members of a village. Such an interpretation may receive further support from the fact that the preservation at the site was sufficient to show that at least five of the ten excavated burials (each designated grave seemed to contain one primary individual) had been wrapped in deerskin; Sprague and Birkby (1970:15) suggest that originally all the burials may have been wrapped in skins. As discussed in Chapter 4, such treatment was often reserved for the rich in many areas of the Plateau during the ethnographic period, including the Sanpoil-Nespelem (Ray 1932), with the poor being wrapped only in tule or bark mats. If such discrete burial places were used, however, one might expect them to have been

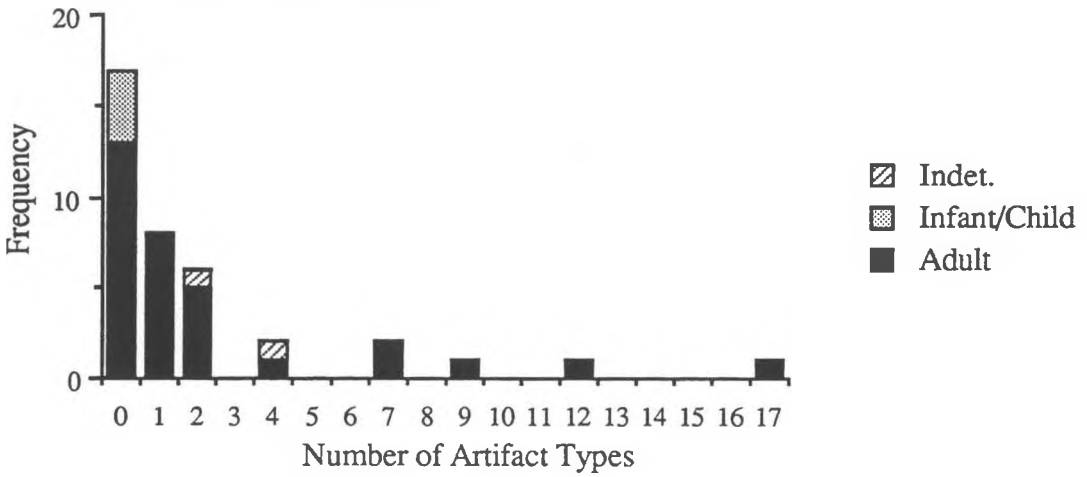
mentioned in the same ethnographies, and they are not. Lacking more information there is little that can be said beyond this that is not simply speculation.

Sheep Creek, 45-ST-46

Moving further up the Columbia, Collier *et al.*'s (1942) Site 46 (45-ST-46), referred to here as Sheep Creek, provides a sample of 38 single interments. Basic age classification can be provided for 36 individuals, with two remaining indeterminate. Combining data from Collier *et al.* and Mulinski, four children, one adolescent, and 31 adults are identified. The site falls into the territory traditionally attributed to the Lakes division of the Okanagan. While there are few diagnostic artifacts, the grave inclusions appear consistently late prehistoric (ca. 1000-200 B.P.) in age, with only a single copper item, a pendant, present in the assemblage. Stapp's (1984) trace element analysis suggests that this item is most likely of Euroamerican origin. Thus at least one burial could belong to the early protohistoric period, but it is in any case retained in the following calculations.

Unlike Whitestone Creek (45-FE-24), the distribution of burials at the late prehistoric Sheep Creek site does not exhibit any obvious spatial clustering, forming a more typical linear array along the river bank (Figure B.7). Also in sharp contrast to Whitestone Creek, Sheep Creek contains only 4/34 (12%) child burials (there were no infants), and none of these contained any grave inclusions (Figure 6.22). This indicates significantly lower subadult representation than expected given Weiss' 30% minimum (binomial p = .0117). The site map shows that the child burials appear to cluster in two loosely defined pairs. The pairs are themselves separated, one at the east end of the site and the other just west of the centre of the overall burial distribution. However, a comparison of the average distance between each burial and its nearest neighbour and the distance between each child burial and its nearest neighbour suggests that the impression of clustering does not significantly depart from random placement ($p = 0.2174$).

Figure 6.22: Artifact Diversity Distribution at Sheep Creek



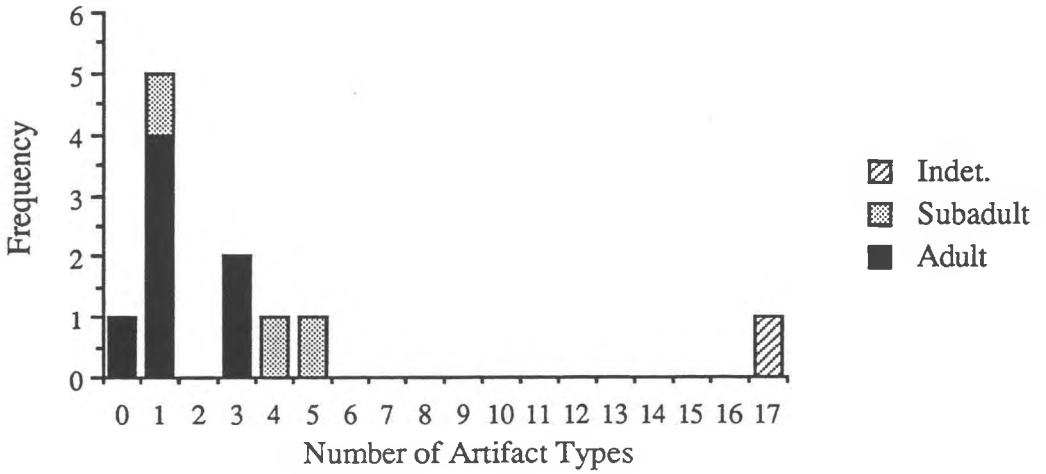
The utilitarian assemblage at Sheep Creek includes projectile points, knives, scrapers, gravers, shaft smoothers, bone points, harpoon parts, awls, fleshers, antler flakers, antler wedges, beaver teeth, and digging stick handles. Rather unusual are what Collier *et al.* (1942) refer to as slate "needles" found in Burials 22 and 24. The absence of any perforation calls into question this identification—they may be awls or whetstones, or they may be intended as pendants since both are notched near one end as if for suspension (see Collier *et al.* 1942:163, Plate XVg and h). Sociotechnic objects include *Dentalium* beads, tubular stone pipes, an anthophyllite celt, bear baculae, a bear tooth, a shell pendant, a slate pendant, bone tubes, bone beads, and pigments. The only Euroamerican trade item is a copper pendant found with Burial 2 (identified by Stapp [1984] as Euroamerican in origin). By itself it does not significantly alter the overall late prehistoric nature of the assemblage. The copper pendant could have been one of the very earliest to have reached the Upper Columbia. In this case one would expect that it would be found in one of "richer"

burials. While Burial 2 does have an higher than average number of artifact types (5 compared to the site average of 2.13), all of these with the exception of the pendant itself are simple utilitarian items, thus its grave lot value (GLV) is relatively low. Alternatively, Burial 2 could be slightly more recent than the rest of the burials.

The average number of artifact types contained in Sheep Creek adult burials is 2.13 while the average number of total artifacts is 4.60. Given the extreme variability in the adult group, the differences in both the number of types of artifacts and the absolute number of artifacts between the child and adult age groups is not significant in statistical terms, this despite the fact that none of the four child burials contained any artifacts. The difference between the proportion of child and adult burials with any artifacts whatsoever is, however, significant at the .05 level ($t = 2.21$; $p = 0.034$). Although sex was not reported by Collier *et al.*, Mulinski's (n.d.) re-analysis of the Sheep Creek material provides estimates of sex for 18 individuals, comprising eight males and ten females. Sheep Creek presents the only assemblage in which significant differences between the sexes are seen in number of artifact types. Number of artifact types (male $\overline{X} = 5.38$, female $\overline{X} = 1.30$; $p = 0.0808$), number of utilitarian types (male $\overline{X} = 4.25$, female $\overline{X} = 1.20$; $p = 0.0972$), and number of sociotechnic types (male $\overline{X} = 1.13$, female $\overline{X} = 0.10$; $p = 0.0825$) are all significantly different at the .10 level. The observed difference would be more extreme were it not for Burial 17, an adolescent female, with a total of nine artifact types, including the only sociotechnic types found with any female. No other female has more than a single artifact type.

Burials 23 and 24 are by far the richest at the site, with 12 and 17 artifact types, respectively. Burial 23, a male, is the only grave associated with a cairn-like feature; in this case a circle of rocks some eight inches above the skull. Burial 24, a probable male, contains the only dentalia beads (six) and the only shell pendant found at Sheep Creek. Both burials include tubular pipes. The only other tubular pipe was found with Burial 7, an adult of unknown sex—beside the pipe, the only grave inclusion in this burial was a quartzite scraper.

Figure 6.23: Artifact Diversity Distribution at 45-ST-47



45-ST-47

Collier *et al.*'s Site 47 (45-ST-47) is located on an island across from Sheep Creek (45-ST-46). Collier *et al.* (1942) report ten individual primary interments, but Mulinski's (n.d.) re-analysis provides a total of eleven individuals, with Burial 5 being a double interment containing an adult male and an adult female. No special features are associated with any of the burials at this site.

Combining data from Collier *et al.* (1942) and Mulinski (letter on file), there are six adults (two males, one female, and two probable females), one adolescent, one child, and two infants. Subadult representation is 30.0% (3/10), not significantly below Weiss' minimum.

Utilitarian items in the assemblage include projectile points, a flaked stone knife, a graver, shaft smoothers, bone points, bone harpoon points, a bone "arrow wrench", and beaver teeth. This inventory is

impoverished compared to the richness of sociotechnic items at the site, which include *Dentalium* beads, *Olivella* beads, shell pendants, copper beads and pendants, a copper bracelet, glass beads, a bone comb, a carved bone ornament, bird bone whistles, cougar claw cores, a turquoise pendant, and an anthophyllite celt. A "steel" knife found in Burial 1 is also interpreted here as a sociotechnic item. The celt, approximately 17 cm long, is the sole grave inclusion in the adult Burial 4. The turquoise pendant is rather unusual, though not unique ("turquoise" pendants have also been described from burials near The Dalles, the Middle Columbia, and the Canadian Okanagan—see Chapter 4).

Burial 1 is the richest at the site, with a total of over 790 individual items representing 17 artifact types, the majority of them sociotechnic. Unfortunately, it is the single burial from the site for which no age information is provided (Figure 6.23). By comparison, Burial 3, an adult male, includes 94 items representing three types of marine shell. Burial 10, a child, had five artifact types, including an undisclosed number, presumably quite high, of whole and segmented *Dentalium*, as well as the "turquoise" pendant.

Despite its close proximity to Sheep Creek ST-46, ST-47 displays a demographic and artifact distribution appearing far more similar to that of a protohistoric site such as Whitestone Creek. The assemblage, including copper beads, pendants, and bracelet, glass beads, and a "steel" knife, clearly indicates the presence of a protohistoric or early historic component. Collier *et al.* (1942) date the site to about 1810, but the grave inclusions with Burial 1 are as late as anything seen at Whitestone Creek, which Collier *et al.* suggest dates post-1820. Regardless, both sites likely date to the early nineteenth century. It is also important to note that the above Euroamerican trade items occur with only two of the burials at ST-47; the remaining eight contain only objects of aboriginal manufacture. Thus the temporal integrity of the assemblage may be questioned. As with Whitestone Creek, there is really no way to resolve this issue, and any interpretations made concerning ST-47 must be considered as essentially tentative.

Summary of Burial Forms and Status in the Upper Columbia

The entire area around the Whitestone-Columbia confluence, also referred to as Hellgate Flat, presents an intensively utilised landscape. It may be to some extent arbitrary to divide this landscape into separate and distinct sites. Site 45-FE-24 dominates both the burial sites and occupation middens in terms of size. But Collier *et al.* (1942) report three other campsites in the immediate vicinity (45-FE-11, FE-12, and FE-25), and, in addition to the two burial sites discussed above (45-FE-7 and FE-24), there are two talus burial sites, 45-FE-5 and FE-13, in slopes located at the east and west ends of Hellgate Flat, respectively. Collier *et al.* (1942) recovered two undisturbed burials with no grave inclusions from FE-5, and observed evidence for at least four looted graves. All but one of the burials at FE-13 had apparently been looted, the single undisturbed adolescent burial found contained six elk teeth and the remains of a large coiled basket.

Collier *et al.*'s (1942) investigation in the Upper Columbia reveal two general types of burial that have survived archaeologically: pit inhumations and talus slope burials. There is no indication that cremation ever took place (Collier *et al.* 1942:42), although more recently Chatters (1986) has found evidence for cremation at one site in the Okanogan area (45-OK-561). The relatively close proximity, both spatially and apparently temporally, of the two forms of burial—pit inhumation and talus burial—presents the opportunity to test the hypothesis that talus burials were associated with poorer, low status members of the community in the Upper Columbia region. With one or two exceptions, both artifact quantity and richness are low at the talus burial site 45-ST-8. A comparison of overall number of artifact types between ST-8 ($\overline{X}$ = 1.13) and FE-24 (2.79) does result in a significant difference ($t = 2.09$, $p = .0415$), suggesting that the talus burials at ST-8 are indeed poorer on average than the pit inhumations at Whitestone Creek, 45-FE-24. But the picture is not that simple.

First of all, the exceptions at ST-8 are important. Burial 11, an adult, was buried with 198 copper beads, 14 *Olivella* beads, and an iron object. Because of the copper, a deer hide fragment was also preserved. This does not appear to indicate a poor individual. Burial 9, a child, included red ochre and 23 perforated elk canines. Six elk teeth were also found with the single undisturbed talus burial at 45-FE-13. Elk teeth, as discussed in Chapter 4, may have wealth connotations. While exceptions to the general trend can be anticipated, there seem to be too many here given the small number of talus burials excavated. More importantly, 45-ST-8 has basically an identical average number of artifact types as the non-talus (i.e. pit inhumation) burial site 45-FE-7 near Whitestone Creek ($\overline{X}$ = 1.13). And Whitestone Creek (45-FE-24) thus also exceeds the immediately adjacent site FE-7 ($t = 2.37$, $p = .0210$) in average number of artifact types per individual.

The interpretation of the observed pattern is unclear given the difficulties in demonstrating

contemporaneity. While the presence of similar Euroamerican trade articles at all three sites suggests broad contemporaneity for their most recent use, the presence of an earlier component at one site but not the others (for example) could at least partially account for the observed differences. Furthermore, the protohistoric and early historic periods saw such dramatic increase in the availability of trade goods that a matter of a few years difference between the sites could result in marked changes in quantities of grave inclusions. This ties in with the discussion of possible responses to inflation presented in Chapter 2. A final possibility is that there actually were socioeconomic differences between the individuals buried at FE-24 and those at FE-7 and ST-8. This could suggest the use of spatial separation to emphasise status distinctions, although not simply along the lines of talus/non-talus burial forms. Even if space was being used in this fashion, there were many exceptions, most notably the stake D cluster at FE-24, which lacks any grave inclusions whatsoever. This suggests that meaningful socioeconomic inequalities may be distinguishable both within and between cemeteries within regions.

The Okanagan/Similkameen

The Canadian Okanagan/Similkameen area has received relatively little archaeological attention. This being the case, the following section provides only a brief qualitative review of the available evidence, such as it is. The information is considered worth relating as it constitutes the only data from this important area, forming the boundary between the Columbia Plateau and the Canadian Plateau. The two main sources for burial information in the Okanagan area are Atkinson (1937, 1952) and Caldwell (1954a, b). Both provide summary data on a number of burial sites from the Okanagan and Similkameen Valleys. Indeed it seems possible, given their nearly identical descriptions of sites, that Caldwell was either largely summarising or building upon Atkinson's earlier work, although this is not acknowledged. Additional information on burial sites in the Similkameen can be found in Barlee (1969a, b).

Atkinson (1952) estimates that over 40 graves were disturbed at a site above Osoyoos Lake, south of the town of Oliver, during the construction of a subdivision. Caldwell's (1954a) site CO-61, possibly a remnant of the site described by Atkinson, consists of a series of evenly spaced interments on a low gravel terrace above Osoyoos Lake. Caldwell (1954a:16) states that "all" (referring to an undisclosed number) bodies were found to be tightly flexed. (It is not entirely clear whether this statement is based on Caldwell's own excavations of a remnant of the site or the reports of, or discussions with, Atkinson.) Occasionally interments were enclosed in cedar plank cists. Grave inclusions reported by Caldwell include a single set of copper earrings, abalone ornaments, a series of large obsidian and chert blades, and abundant red ochre.

Site CO-47 (Atkinson's [1937] Site 3) presents a similar series of burials overlooking Skaha Lake (previously known as Dog Lake), near Penticton. Caldwell (1954a:16) states that at this site the "... physical remains were burned". Atkinson (1937, 1952) also mentions cedar-lined cists containing "charred" human remains from Skaha Lake, interpreting these as partial cremations. In other cases remains are described as "well burnt" (Atkinson 1937). All individuals investigated by Atkinson (1937) were oriented with their heads towards the lake. Atkinson (1937) also records instances of one burial overlying another, though in separate graves. Grave inclusions were reportedly abundant, including prestige items such as large nephrite celts, perforated elk teeth, *Dentalium*, serrated agate and obsidian points and/or eccentrics, and a "turquoise" pendant (Atkinson 1937; Caldwell 1954a, b). Other artifact types include fine agate points, whetstones, chipped knives and other stone implements, bone awls, wedges, barbed bone points, an incised digging stick handle, beaver teeth, red ochre, and bear tooth pendants (Atkinson 1937). In one burial, the skeletons of a beaver and a small dog were reportedly found; some of the bones in this burial were discoloured by copper salts (Atkinson 1937, 1952). Atkinson (1952:10) adds that this site produced many of the finest artifacts found in the southern Okanagan.

Just south of Skaha Lake, on the west side of Vaseaux Lake, five crania (out of an undisclosed number of burials disturbed during railway construction) were reportedly found showing cranial deformation (type not reported), which Atkinson (1952:9) interprets as evidence of a raiding party from the coast. At Gallagher Lake, near Oliver, Atkinson (1952) reports the presence of a series of seven graves covered with large cairns, all aligned along a rocky ridge. Shell ornaments and a metal dagger are noted as coming from these graves. Caldwell's site CO-84 consists of a group of stone cist burials near Hedley. Large flat slabs were arranged in a rectilinear from. The majority of these graves apparently produced no artifacts (Caldwell 1954a:17). Caldwell also reports a single cairn burial near Oroville, Washington, found to contain tubular copper beads strung on buckskin, a copper "plate", a large nephrite celt, and an undisclosed number of dentalia beads.

Further north in the Okanagan Valley, Caldwell (1954b) defines what he refers to as the "Oyama" burial pattern, typified by a series of graves near Kalamalka Lake. These consist of simple shallow interments, often containing extensive grave inclusions. Artifacts listed include polished pestles, steatite pipes, and serpentine or nephrite celts (Caldwell 1954b:36). Although no burials were reported, a small housepit village overlooking Sawmill Creek near Kelowna is worth mentioning in that excavations uncovered a copper war club, which, although not illustrated, one can assume is similar to those reported from the Lower Columbia, The Dalles, and Spences Bridge (see discussion in Chapter 4).

In the absence of statements to the contrary, it is reasonable to assume that all those burials investigated contained single primary interments. Graves seem to have been frequently located on bluffs overlooking water. No information on age or sex is provided for any of the burials from these sites. If either Atkinson or Caldwell kept notes preserving individual grave associations, I have been unable to find them. With the notable exception of the Skaha Lake assemblage, the limited number of artifact types reported is likely misleading; almost undoubtedly both Atkinson and Caldwell failed to report the full artifact inventory in their brief articles, concentrating instead on the more unique and spectacular objects. In interpreting the assemblages, Caldwell (1954a:18) notes an apparent chronological trend from the use of cairn and stone circles in the prehistoric period to the use of cairns and cists in the protohistoric and early historic periods. Those cist burials investigated apparently all contained evidence of Euroamerican contact, supporting Sprague's (1967) chronology of burial forms.

Both Atkinson and Caldwell accept the evidence for burning seen on some of the Skaha Lake burials as indicative of the practice of cremation. Some of the supposedly cremated human remains were for some time housed in the Penticton City Museum, where Atkinson was curator, but have been since returned for reburial. Thus it is not possible to directly assess the presence of cremations in the Okanagan. However, at least two lines of evidence suggest that these burials may not represent true cremations: 1) the "charred remains" were associated with cedar cist burials, and cedar cist burials elsewhere on the Plateau appear to typically show evidence of ceremonial burning rather than intentional cremation, 2) cedar cist burials appear, at least in the Okanagan, largely protohistoric in date, and Teit's informants specifically state that the Okanagan did not practice cremation (see Chapter 5).

Despite the incomplete and purely descriptive, indeed almost anecdotal, nature of the body of material presented above, the information is important in that it provides evidence for the presence of a variety of wealth and prestige items in the Canadian Okanagan/Similkameen. This in turn at least suggests that the area, despite being somewhat "marginal" in terms of its access to salmon, did participate to some extent in the larger regional trade network, likely forming an important trade corridor between the Upper Columbia and the remainder of the Canadian Plateau (cf. Vivian 1992). Given the absence of radiocarbon dates on burials or even relative dates based on projectile point typologies, it is impossible to provide any time depth to such a scenario. Ethnographically, however, the Okanagan as a group appear to have become much more powerful with the introduction of the horse in the protohistoric period than was the case in earlier times (as witnessed by their expansion into the Similkameen and Nicola Valleys). Thus it may be that the importance of the Okanagan area and the ability of its elite to participate in the trade network of prestige goods first appeared or at least was greatly enhanced only after these developments took place. The mortuary data are not inconsistent with this interpretation, with most of the prestige items apparently associated with large quantities of Euroamerican trade copper artifacts (cf. Caldwell 1954a).

The Fraser River

Lytton

The modern town of Lytton is located at the confluence of the Thompson and Fraser Rivers. These are the two largest rivers draining the south-central interior of British Columbia, and contain the most important salmon runs. Thus it is not surprising that the locality was densely populated prehistorically. George Dawson and Harlan I. Smith conducted the earliest investigations in the area, revealing glimpses of a rich and complex material culture. Unfortunately their work, if adequate by the standards of the time, was not superseded by more rigorous investigations in subsequent decades. In fact, it was not until the late 1960s that serious archaeological work was again undertaken, and even this involved mainly survey rather than excavation. As might be expected, by this time land development and amateur collectors had both taken their tolls, such that innumerable burial and habitation sites were destroyed. Over the last two decades considerable work has been undertaken in the interior, but even it has largely been mitigative, resulting in small and scattered samples, often from disturbed contexts.

Canadian Geological Survey member George Dawson (1891) conducted the first reported

"archaeological" investigations at Lytton, which he seems to mistakenly refer to as being occupied by the "Shuswap" (Lytton is practically the centre of Thompson traditional territory). He noted a large cemetery, containing an estimated several hundred graves, in eroding sand dunes at the confluence of the Fraser and the Thompson Rivers. Dawson states that many of the bodies had been buried in the "usual upright sitting posture" (1891:11). This is not at all a common position for burials on the Plateau, and in fact Smith (1899:159) was equally puzzled by Dawson's statement, noting that he (Smith) did not find any skeletons at Lytton exhibiting such a position. However, local inhabitants of the area have also commented on observing upright seated burials during more recent roadbuilding and other earthmoving activities (Stryd and Hills 1972:196). Dawson also reported evidence for several instances of reburial, where the bones had been gathered up and lain closely together out of anatomical position. Smith (1899:159-160) may have found corroborative evidence for this practice in at least one instance.

Together, Dawson (1891) and Smith (1899) provide a list of artifact types from the large burial site at Lytton that includes many items interpretable as indicators of wealth and prestige. Artifact types attributed to the site include *Dentalium*, perforated scallop (*Pecten caurinus*) shells, abalone (*Haliotis* sp.) pendants, quartz crystals, chipped stone eccentrics, copper pendants and beads, incised and carved tubular steatite pipes, small and large nephrite celts, perforated stone discs, carved antler tine clubs, bone daggers, bone and antler zoomorphic carvings, bone and tooth pendants, and beaver tooth dice. Utilitarian items noted include projectile points, chipped knives, scrapers, drills, mauls, shaft smoothers, bone points, awls, fleshers, needles, antler wedges, harpoons, beaver tooth knives, and digging stick handles.

Smith (1899) excavated an unknown number of intact burials and a large series of disturbed human remains from Lytton. He provides relatively detailed information on only seven burials. All of these seem to have been single adult interments, flexed on the side. At least some grave inclusions were present with all of these burials. Since they were apparently selected for illustrative purposes, however (Smith 1899:159), it is quite conceivable that this was one of the criteria employed. In any case, five of the seven burials for which associations are reported contain quite elaborate inventories, often including such items as dentalia, abalone, copper beads and pendants, nephrite celts, eccentrics, steatite pipes, and numerous bone and antler objects. Burial 4 (my own designation, taking Smith's descriptions in the order in which they appear) includes two zoomorphic antler carvings executed in a strong Northwest Coast artistic style (Smith 1899:158, Figures 114, 115). No Euroamerican trade items were found in this grave.

The majority of the human skeletal material itself seems to have been found and collected from disturbed surface contexts. Thus, with the aforementioned exceptions, it is not possible to assign specific grave inclusions with particular individuals. Indeed for the most part it is not possible to identify individual skeletons. The basic unit of analysis in this case becomes the individual skeletal element. A brief examination of such surface-collected material curated in the American Museum of Natural History in New York revealed an assemblage dominated by adults, although the cranial remains of children and infants were also present (Schulting 1993b). The partial remains of a large number of individuals are represented; a specific MNI was not calculated, but is, at rough estimate, on the order of 50 or more, based on an impression derived from the cranial remains. A number of crania and mandibles were copper stained; unfortunately time did not permit an estimate of the percentage of these elements affected.

The occurrence of copper staining was recorded for all of the radii present in the Lytton material curated at the American Museum of Natural History. It was felt that this could provide at least a rough quantitative estimate of the abundance of copper artifacts in burials at this site. The radii were chosen on the basis that the forearm would be the logical location for copper bracelets, a fairly common use for this material during the protohistoric period, to which at least part of the site dates. Also, radii far outnumbered ulnae. A total of 24 left radii were observed, with copper staining present on only one (4.2%); 17 right radii were observed, with copper staining again noted on one specimen (5.9%). In fact, the two copper-stained elements closely match in size and may belong to the same individual. Thus the percentage of radii in the collection exhibiting copper staining ranges between 2.4% (1/41) and 4.9% (2/41). Only one immature radius is present in the collection, and even it is adolescent. Presumably this reflects a collection bias on the part of Smith, since immature individuals are more frequently represented among the cranial remains (no exact figures are available). Another bias is apparent in that only fairly complete elements are present in the collection.

Admittedly this measure of the occurrence of copper is extremely crude. Copper pendants are more common than bracelets, especially from prehistoric contexts. In fact, it is not clear that there are any copper bracelets known from a secure prehistoric context, from either the Northwest Coast or the Plateau. Since part of the site is undoubtedly prehistoric, the incidence of copper artifacts is probably

underrepresented. Even during the protohistoric and early historic periods, both pendants and tubular beads were more popular than bracelets.

In terms of dating the use of the site, Dawson proposed that the cemetery had been abandoned shortly after Euroamericans reached the area. Interestingly, it was the supposedly older graves that were "better provided" in terms of grave inclusions than the more recent. The projectile point styles shown in Smith (1899:136, Figures 6, 8-10, and 15-18) are all diagnostic of the Kamloops horizon of ca. 1200-200 B.P., but many of these points are provenienced only to "Lytton or Kamloops". Furthermore, with the exception of Smith's Figure 5, the points appear to have been selected to highlight knapping skills, concentrating on elaborate late Kamloops horizon multi-notched points as well as eccentrics. Thus, while there remains some question about an earlier component at the site, the late prehistoric Kamloops horizon seems well-represented. A minimal protohistoric component is also indicated by the occurrence of copper, an iron pendant, and a single glass bead. At least some of the copper depicted by Smith (1899:151, 160, Figures 87-89, 116) may be prehistoric (i.e. native), while some (1899:150, Figure 84) is most likely protohistoric (i.e. Euroamerican trade copper).

Mile 28 Ranch, EdRk 3

The Mile 28 Ranch site (EdRk 3) is (or rather, was) located on a terrace overlooking the east bank of the Fraser River approximately midway between the modern towns of Lytton and Lillooet. The site was largely disturbed through landscaping for cultivation before being excavated by Sanger and Borden in 1968 as part of Sanger's study of the Lochnore-Nesikep locality (Sanger 1968a, b, 1970). Two undisturbed burials were recovered, together with the disturbed remains of a third. The landowner estimated that seven or eight additional burials had been disturbed prior to the arrival of the archaeologists. This brings the total for the site to an estimated 10 to 11 individuals, but, based on the number of scattered elements, Sanger (1970:13) believes that this may be too conservative. In any case, no further burials appear to have been present beyond this, making the site a fairly small one.

Burial 1 was that of an adult male, lying flexed on its left side and oriented with the head to the north. A projectile point was found embedded in a thoracic vertebrae. A total of 14 artifacts were found with Burial 1. Burial 2, an infant, was found beside Burial 1, and lay tightly flexed on its right side and oriented with the head to the east. The only grave inclusion consisted of a projectile point lying between the ribs and the left radius. Whether or not it represents evidence of a violent death is uncertain, but this seems possible given the embedded point in Burial 1 and the close spatial association between the two burials.

Artifacts found by the landowner during the bulldozing activities and those found lying scattered around the site can be attributed to the burial component with a high degree of certainty, since there appears to be little evidence for any other use of the site. The utilitarian assemblage includes some 20 projectile points, knives, a ground slate blade, two well-formed hand mauls, abraders, a fragment of a sandstone shaft smoother, antler wedges, a beaver incisor, a marmot incisor still intact in a split mandible, and five antler hafts. The sociotechnic assemblage includes two dentalia beads, seven perforated scallop (*Pecten caurinus*) shells, two copper pendants, five copper beads, nine nephrite celts (ranging from 6.5 to 27.0 cm in length), two undecorated steatite discs with central perforations (interpreted by Sanger [1970:75, Fig 32a] as spindle whorls), an unperforated steatite disc, two steatite tubular pipes, (see Sanger 1970:75, Figures 32d and e), two chipped basalt "pendants", fragments of incised bone, and three undecorated antler pendants.

Of particular interest are the seven *Pecten* shells, which, according to the landowner, were found lying nested with their perforations in alignment. As noted by Sanger (1970:101), this strongly recalls the scallop-shell rattles used ethnographically by the Coast Salish during the performance of family-owned cleansing rites (see Suttles 1987). Also of interest are the copper artifacts, which Sanger (1970:101) infers to be native, although he does not provide a basis for this claim. The two pendants are small squares (2.5 cm to a side), but the beads range from 2.5 to 8.5 cm in length—the upper end of this range may be too large for native copper beads on the Plateau, suggesting that at least some of the metal may be Euroamerican in origin. This in turn suggests the possibility of at least a minimal protohistoric component. The 20 projectile points include forms typical of both the Plateau (ca. 2400-1200 B.P.) and Kamloops (ca. 1200-200 B.P.) horizons (as outlined in Richards and Rousseau 1987), in approximately equal representation. This suggests either little temporal integrity to the burial component, or the presence of earlier occupation debris not mentioned by Sanger (1970). Alternatively, it may be that it is the transition period of ca. 1200 B.P. that is represented.

Texas Creek, EdRk 1

The Texas Creek site (EdRk 1) is located on the west bank of the Fraser River, approximately 12 miles downriver from the modern town of Lillooet. The site itself is actually at the mouth of a smaller drainage called Spray Creek, but it has taken the name of the larger creek found just over one mile to the south (Sanger 1968b). The site was severely impacted by logging operations followed by looting before any systematic investigation could be conducted. As a result no intact burials are known from the site, nor is it even possible to estimate the site's dimensions or the number of burials it may have held (Sanger 1968b:1). Only a very limited collection of human skeletal material was made, including a single element, a femur, that appeared scorched.

The assemblage collected from the disturbed surface of the site comprises 168 artifacts. Utilitarian artifact types include projectile points, bifaces, a drill, large scrapers, abraders, a sandstone shaft smoother, hand mauls, bone awls, "mat creasers" (bull roarers?), needles, bone points, unidentified worked bone, antler wedges, flakers, an harpoon head, a fragment of an antler digging stick handle, and a number of worked rodent incisors. Sociotechnic artifact types (see illustrations in Sanger 1968b) include an unusually large and diverse number of steatite artifacts, consisting of four tubular pipe fragments, three decorated pendants, a small incised "maul", an incised ring, a three-dimensional zoomorphic carving of a lizard, and two spindle whorls, one of which is decorated with the nucleated circle, or circle and dot, motif. Other types include bone beads and incised bone tubes (possibly drinking tubes as identified for the ethnographic period), a bone whistle, two incised bone pins, two perforated deer incisors, two decorated marmot tooth dice, four pierced scallop shells, three finished nephrite celts (ranging from 15.0 to 22.4 cm in length) and three "blanks", and two stone "clubs". The absence of shell beads is somewhat unusual, but may reflect the disturbed context of the site. The four pierced scallop shells (*Pecten caurinus*) suggest an obvious connection to those just discussed for the Mile 28 Ranch site.

The complete absence of Euroamerican trade items together with the presence of many temporally diagnostic small side-notched projectile points indicates a Kamloops horizon date for the burial assemblage; Sanger (1968b:15) is somewhat more specific, suggesting a date in the range 500 to 300 B.P. Hayden and Ryder (1991) informally suggest that the assemblage may be earlier than this, on the order of ca. 1000 B.P.

Lillooet

Hayden (Hayden *et al.* 1985) has argued that Lillooet cultural complexity may have been greater in the past than seen during the ethnographic period. This idea was first articulated by Stryd (1971, 1973), based on his work on large housepit villages in the Lillooet area. Hayden's work at the large prehistoric housepit village of Keatley Creek (EkRl 7) has since provided support for this hypothesis (1990a, Hayden and Spafford 1993; Spafford 1991). Resources, including lithic raw materials, faunal remains, and botanical remains, are unequally distributed between large and small housepits, with the former exhibiting greater richness. The extreme variation in both village and individual housepit size seen in a number of sites near Lillooet (and also in the Kamloops/Chase area of the South Thompson) is entirely unknown from the ethnographic period. Keatley Creek seems to have been largely abandoned by ca. 1200 B.P., possibly as a result of a catastrophic landslide that blocked the Fraser at this time (Hayden and Ryder 1991). The other large housepit villages in the area that have been dated also seem to have been abandoned at this time (Hayden and Ryder 1991; Stryd 1973).

Unfortunately the large cemeteries that must have been associated with these sites have not yet been identified, nor has any systematic attempt been made to do so. Even the single burial found during housepit excavations at the Bell site (EeRk 4), a large housepit village near Lillooet, offers some unique insights into the richness of this period. This burial will be discussed in some detail below. A large series of burials would be invaluable in understanding the cultural developments that took place during the centuries preceding 1200 B.P. The area surrounding Lillooet once held numerous other burial sites (Sanger 1961, 1968a, b), but most or possibly all have been destroyed by amateur collectors, mining and agricultural activities, and residential development. As it is, the burial evidence is so scant and poorly documented that it can add relatively little to our current understanding of this important area, and thus only a very subjective discussion of the mortuary evidence can at present be given for the Lillooet region.

One of the larger burial sites from the Lillooet area is the Murray site (EeRl 18). The site, located on a sandy terrace just outside of the town of Lillooet, is estimated to have once contained approximately 40 individuals (Stryd and Baker 1968). Concerning the human skeletal material collected by Stryd and Baker (1968), Beattie (in Stryd 1980:10) reports the presence of a minimum of 12 individuals, including five males, four females, and three individuals of indeterminate sex. Apparently this total does not include

the three intact burials discussed below (Beattie in Stryd 1980:10).

The majority of the burials were looted, such that information is available on only three undisturbed burials. These include the remains of two infants and one adult female (Stryd and Baker 1968). One of the infants, Burial 1, was interred with a strung necklace of dentalia, tubular copper, and glass trade beads. A copper thimble was also attached to the leather thong. Preservation was sufficient to also permit the recovery of a fragment of sagebark basketry, in which the infant may have been placed. Burial 2, also an infant, contained no grave inclusions. Burial 3, an adult female, was covered first with a sagebark mat and then with four metal plates, presumably made from flattened kettles. Artifacts included the remnants of a hafted iron knife, and a deerskin pouch containing three copper bracelets and an unidentified circular iron object (Stryd and Baker 1968).

Artifacts found scattered through the disturbed cemetery include various chipped basalt implements, bone needles, incised bone tubes and whistles, a zoomorphic antler club (see Baker 1970:52, Figure 12), red ochre, dentalia beads, tubular copper beads, copper pendants, a copper needle, and some 150 glass beads, of which 148 were various shades of blue (Stryd and Baker 1968). The assemblage appears mainly protohistoric in age, although an earlier prehistoric component may of course have been present as well. Stryd and Baker (1968) suggest that the Murray site dates to the 1840's. But, considering that the vast majority of the trade beads are of the earliest blue variety, the assemblage could also easily be accommodated within the first two decades of the nineteenth century.

Wigen (1984) provides a brief report on another disturbed burial site (EeRl 192) near Lillooet. An MNI of 22 was calculated for the remains recovered from the site (Lazenby and McKendry 1984), comprising 13 adults and nine subadults. Evidence suggests that most or all of the burials were flexed (Wigen 1984). Orientation could be determined for only two individuals, both of which lay with the head to the north. No individual artifact associations could be determined, but artifacts found near the burials include diagnostic Kamloops horizon projectile points, bifaces, both utilised and unmodified flakes, quartzite implements, an abrader, a bone awl, a large nephrite celt, bird bone beads, and a steatite tubular pipe. Some of these artifacts may have been associated with the occupation component also present at the site, although it is highly probable that the celt, beads, and pipe were grave inclusions. The assemblage is dated by the presence of Kamloops points and absence of earlier forms together with the absence of Euroamerican trade items.

Fountain, EeRl 19

The Fountain site (EeRl 19) was a large pithouse village (it has since been largely destroyed by agricultural activities) located some eight kilometres northeast of Lillooet. As noted in Chapter 5, Fountain was one of the most important trading sites in the Fraser Canyon area, and possibly on the entire Canadian Plateau. In addition to conducting test excavations in a number of housepits at the site, Arnoud Stryd (1973) recovered the remains of two individuals (not within a housepit). Burial 1 was flexed on its right side, oriented with the head to the west, and covered by a sagebark mat and Douglas fir bark. Stryd (1973) identifies the skeletal remains as adult but does not provide any information on sex. Items found with or attributed to this individual (there was some disturbance caused by a bulldozer) include a birchbark container holding a chalcedony drill, a quartzite crystal, gypsum crystals and pendants, and mica flakes. Other items include a basalt biface, basalt and chalcedony flakes, red ochre, and a carved whalebone club (see Chapter 4 for a discussion of the importance of whalebone clubs). The club was found broken into three pieces, and Stryd (1983:175) suggests that at least one of the breaks was intentional. One end is simply incised with a zoomorphic image, possibly that of a fish (Stryd 1983:174-175, Figure 9:10b). Burial 2 was found directly underlying Burial 1, separated by some 20 cm of fill (Stryd 1973). It lay flexed on its left side, with the head oriented to the southeast. Douglas fir bark was again found over the body, but other than this there was no evidence of any grave inclusions. (Fish vertebrae seem to have been found throughout the fill deposits, and may not be associated with either individual, or, conversely, they may be associated with a ritual offering accompanying both. In any case they do not enter into the present discussion.) It is interesting to speculate that Burial 2 might represent a slave killed and interred in the bottom of his or her owner's grave, and then covered with some fill before Burial 1, suggested here to be the primary individual, was interred (see Skwaam Bay site on Adams Lake below for what may be a similar situation).

Stryd (1973, 1983) suggests that the burials date to the Kamloops horizon of ca. 1200 to 200 B.P. on the basis on the extensive Kamloops phase occupation of the site. However, the only two available radiocarbon dates (uncorrected) from the site, taken from an hearth (1490 ± 70 B.P.; S-583) and an oven

(1505 ± 70 B.P.; S-584) (Stryd 1980), place it in the late Plateau horizon.

Bell, EeRk 4

Perhaps one of the most interesting burials on the Canadian Plateau is that of an infant found at the Bell site (EeRk 4), also to the northeast of Lillooet, excavated by Stryd (1973). Extensive excavations at this large pithouse village site yielded only a single interment. This immediately suggests the exceptional nature of this burial, since it does not represent the normal mortuary practice. (Indeed, no cemeteries have been found associated with the large prehistoric pithouse villages of the Lillooet region, so just what the normative practice was is largely unknown.) The burial is that of an infant, approximately 1.5 years of age, found in the floor of Housepit 19 as a flexed primary interment, lying on its left side and back. Organic staining around the infant may indicate a basket (Stryd 1973). The remarkable feature of this burial—other than its location inside a pithouse, relatively uncommon on the Plateau —is the richness of its grave inclusions. These include a carved antler figurine, a carved steatite pendant, five steatite pipe fragment pendants, an incised antler comb, a quartz crystal, a siltstone bear figurine, 246 *Dentalium* beads, a number of basalt flakes, and abundant red ochre.

Of further interest is the fact that Housepit 19 was one of the largest at the site (out of 23 present). Stryd (1971, 1973:87) has long argued that differences in pithouse size within larger villages might reflect socioeconomic inequality. More recently, investigations by Hayden (1990a; Spafford 1991) at the Keatley Creek site (EkRl 7) have lent some support to this hypothesis. The presence of so many elaborately decorated pieces and the abundance of *Dentalium* in a prehistoric burial on the order of 1000 years old or more further testify to the uniqueness of this burial. Both the location of the burial inside the pithouse and the richness of the grave inclusions suggest that this was very unusual and special mortuary treatment. Whether the treatment reflects the ascribed status of the infant, that of the family or corporate group to which it belonged, or, perhaps, some combination of the two, is unknown.

Canoe Creek, EiRn 15

The site of Canoe Creek is located 50 miles northwest of Clinton, on the south side of Canoe Creek approximately one kilometre east of its confluence with the Fraser. Seven highly disturbed burials were recorded from the site, and the presence of five stone circles suggests that additional individuals are present (Rousseau 1978). Copper trade beads and pendants were present in all but one of the burials, indicating a protohistoric or early historic date for the assemblage. The sample is too small and disturbed to apply quantitative methods, so that only a brief overview will be provided.

A high proportion of subadults are represented. The seven individuals recorded include two adults (one male and one female), an adolescent, two infants, one young child (age 2-3) and one older child (age 8-10). One of the graves contained three individuals while another contained two; only two single interments were found. The high incidence of infants and children together with the occurrence of multiple burials suggest to Rousseau (1978:31-32) that the Canoe Creek burials represent the victims of an epidemic.

Considering the large quantities of copper and dentalia present, the artifact assemblage is surprisingly limited. Indeed, the only other artifact types present are perforated elk incisors and canines, a large hafted iron point, and red ochre. The excellent preservation conditions resulting from the large quantities of copper (see Schulting 1992) also made it possible to record the presence of a leather pouch, a bundle of sticks, and three feathers, all with Burial 6, a newborn. In most cases, however, due to the disturbance caused by the landscaping activities leading to the discovery of the site, individual artifact associations could not be determined.

The Thompson River

Nicoamen, EbRi 7

The Nicoamen site is located on the north side of the Nicoamen River near its confluence with the Thompson, some 17 km north of the modern town of Lytton. Skinner and Copp (1986) estimate a minimum number of 22 individuals from the site, many of which were disturbed by the construction activities leading to the site's discovery. This estimate includes eight adults, four adolescents, three children, and seven infants (the majority of which appear to have been neonates). (This differs from the four children and six infants/neonates reported in Skinner and Copp due to my definition of "infant" as less than 2 years of age.) Three of the adults were identified as male and four as female, the remaining adult being indeterminate. Skinner and Copp (1986:86) also estimate the sex of three of the adolescents as female, one infant as possibly female, and one neonate as possibly male. One of the adolescent (age 16) skeletons,

Burial 14, reportedly exhibits pregnancy scars. Adolescent (age 18) Burial 3 was also identified as female on the basis of morphological criteria. The remaining adolescent (Burial 4) and the two infants, on the other hand, were assigned a tentative sex largely on the basis of their grave inclusions in conjunction with ethnographic information. As discussed in Chapter 7, there appears to be little validity to this type of exercise on the Plateau (see also Schulting 1993b).

The burials for which the observation could be made all appear to have been flexed, either to one side or on the back. Orientation in ten of the 13 relatively undisturbed burials was with the head roughly to the east, paralleling the direction of the slope in which the graves were placed. As has been the case in many of the other protohistoric sites discussed, many of these burials are multiple interments, either of adult and infant/child, or of two infants or children. Double adult burials are not seen. As was noted earlier with the Freeland site (45-FE-1), the tendency is to interpret this type of pattern using ethnographic sources stating that breast-feeding infants were interred with their mothers when these died (Teit 1900:329), but again in at least two instances the adult was male. Skinner and Copp (1986) interpret the high proportion of infants and double burials in the protohistoric component as representing an epidemic.

The Nicoamen artifact assemblage is fairly elaborate. Utilitarian artifact types include chipped stone projectile points, knives, scrapers, gravers, utilised flakes, bone points, awls, needles, antler wedges, and abraders. Sociotechnic types include dentalia beads, an abalone pendant, unidentified shell beads, copper pendants and fragments, a brass thimble, iron fragments, glass beads, bone beads and tubes (possibly whistles), an incised bone plaque, perforated wolf canines, bone "tally" sticks, ochre, a tubular steatite pipe, nephrite celts, incised rodent mandibles, and a loon beak. The steatite pipe, found with the adult male Burial 1, is somewhat unusual in that it is unpolished. The glass trade beads were all found with one infant, Burial 12, and are all robin's egg blue, one of the earliest bead forms on the Plateau (ca. 1780-1820) (Skinner and Copp 1986:24).

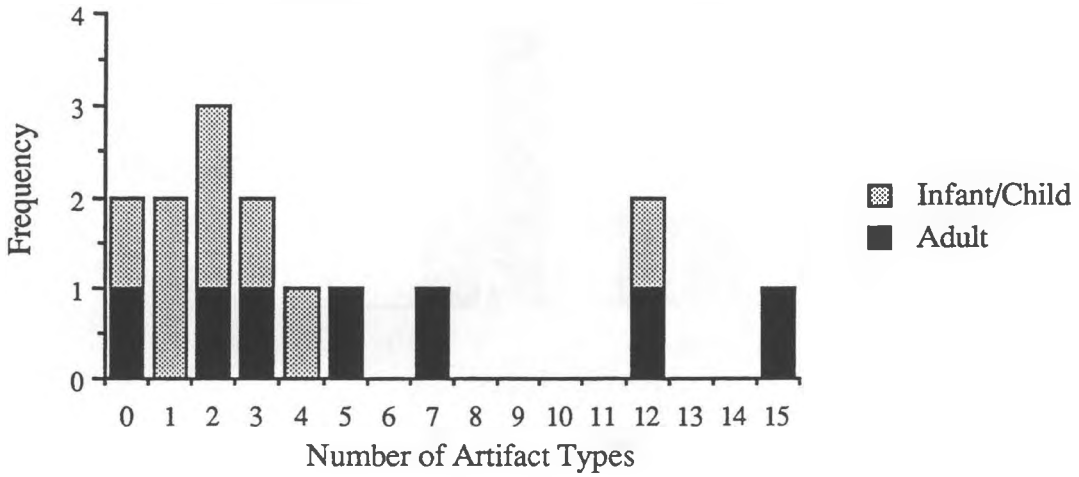
Also of note are three flat lengths of perforated bone or antler; Skinner and Copp (1986) suggest that these may be either "mat creasers" or bull roarers. Their identification as "mat creasers" is presumably based on the similarity of these artifacts to an object Sanger (1968b:9, Figure 4d) identified as a "mat creaser", found at the Texas Creek burial site, discussed earlier. The basis for his identification is unknown, however, since as far as I am aware no comparable objects have been identified in the ethnographic literature for the Plateau. Furthermore, they bear absolutely no resemblance to the fully documented mat creasers of the Northwest Coast, and could not possibly function in an analogous manner. Their alternative identification as "bull roarers" is also not without problems. For one thing, there seems to be no indication in the ethnographic literature that bull roarers were ever used on the Plateau. But the objects at least do bear a resemblance to bone bull roarers in the Southwest, although at ca. 18 cm the Plateau specimens are slightly larger (R. Carlson, pers. comm. 1993). The Plateau specimens are perforated distally, and at least some are highly decorated. Both of these characteristics could be seen as more consistent with an identification as bull roarers rather than mat creasers. The distinction has, of course, important implications for what category the artifacts are placed into. For purposes of this analysis the items have been designated as "utilitarian" (whether they are "mat creasers" or not), but this is certainly open to revision. The class occurs too infrequently to substantially affect the results of the quantitative study in any case.

The burials apparently fall into two spatially and possibly temporally defined clusters, a late prehistoric group and a protohistoric group. A single burial, Burial 6, containing two copper ear ornaments was radiocarbon dated to 740 ± 130 B.P. (S-2696; uncorrected), but the late prehistoric group to which it supposedly belongs contains copper or iron artifacts with five out of 12 burials. This, in fact, represents all but one of the occurrences of copper or iron at the site. It is possible that either the spatially defined groups are not valid, or that the date itself is in error, since this seems too early for such quantities of metal at one site. Skinner and Copp (1986:28) also question the validity of the date. Dr. Wayman of the University of Alberta is currently conducting tests on the copper ornaments from Burial 6 in an attempt to identify the source of the copper as native or Euroamerican.

Assuming for the moment that the single radiocarbon date is correct, and that the two groups identified on the basis of the date together with the apparent spatial separation are valid, the age profiles for the two groups are as follows: 25% (3/12) of the late prehistoric group are children (ages 5, 6, and 11), while 80% (8/10) of the protohistoric group are infants. Treating the sample as a whole results in 50% (11/22) subadult representation. If the late prehistoric burials have been correctly assigned, it is interesting to note the absence of infants, even given the small sample size. The protohistoric group, on the other hand, has no shortage of infants; five of the group are described as neonates by Skinner and Copp. Grave inclusions are found with some individuals in each age class (Figure 6.24).

The quantitative analysis of the Nicoamen assemblage is based on 15 relatively undisturbed burials with fairly secure grave associations. All but three burials of this group were observed and excavated *in situ*. These three, Burials 1, 3, and 18, are included as what are most likely reliable observations were made by the landowner at the time of disturbance. The 15 include six adults (four females and two males), one adolescent (possibly female), four children, and four infants. Grouping the adults with the single adolescent and the children with the infants, we find that the adult group contained twice the average number of artifact types as did the subadult group, but the difference is not statistically significant at the .10 level due to the small sample and high variances involved in both groups ($\overline{X}$ = 6.29 vs. $\overline{X}$ = 3.13; t = 1.315, p = 0.2112). The differences between adults and subadults in the average number of utilitarian and sociotechnic artifact types, while again favouring the adult group, also fails to approach the .10 significance level (utilitarian $\overline{X}$ = 3.57 vs. $\overline{X}$ = 1.38; t = 1.34, p = 0.2019; sociotechnic $\overline{X}$ = 2.71 vs. $\overline{X}$ = 1.75; t = 0.941, p = 0.3637).

Figure 6.24: Artifact Diversity Distribution at Nicoamen



It is not possible to address differences in treatment based on gender given the low number of sexed individuals. It is worth noting, however, that the single antler digging stick handle recovered from the site appears to have been associated with Burial 13, an adult male. Ethnographically these implements and the activity they supposedly represent, root digging, are invariably associated with women. This apparent discrepancy is discussed further in Chapter 7.

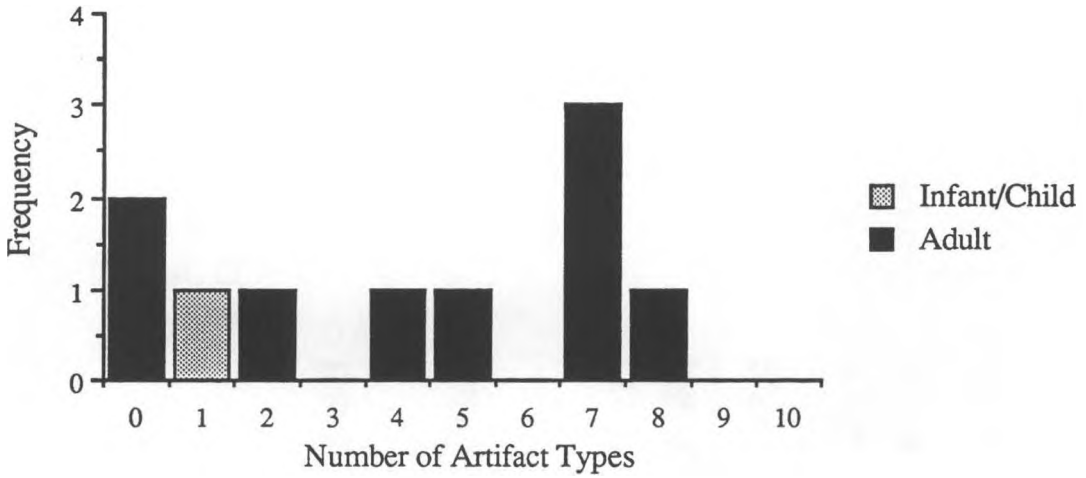
The Nicola Valley

The Nicola Valley, like the Yakima Valley on the Columbia Plateau, is considered one of the poorer "backwaters" of the Canadian Plateau, with limited salmon resources (Wyatt 1972). The Nicola proper are an isolated group of Athapaskan-speaking people, though during the protohistoric and early historic they were first reduced through warfare and then assimilated by their more powerful neighbours, the Thompson to the west and the Okanagan to the east (Teit 1900), and are now extinct as a distinct ethnolinguistic group.

Smith (1900) excavated a series of 13 graves from three sites in the Nicola Valley. One of these, from the mouth of Nicola Lake, dates to 1850 or later and will not be considered here. Eleven of the 12 remaining burials were situated in talus slopes, nine at the head of Nicola Lake and two from further down the valley. Two of the burials from the head of Nicola Lake contained large sheet copper ornaments, placing at least part of that site into the protohistoric period, though some of the other burials may be late prehistoric in age. A number of isolated burials recovered since Smith's early work are also discussed in this section. There is no evidence for any burials in the Nicola Valley dating to earlier than the Kamloops horizon (ca. 1200-200 B.P.), although other evidence of occupation extends back much further (Richards and Rousseau 1987; Schulting 1991; Wyatt 1970).

The largest assemblage from a single site in the Nicola Valley comes from a talus slope at the head of Nicola Lake. Nine burials were investigated here by Smith (1900), comprising the remains of eight adults and one child. Seven of these nine burials were available for examination at the American Museum of Natural History (Schulting 1993b). Three of the adults were identified as female and two as male, the remaining adult (Burial 2) being indeterminate. No differential treatment along sex lines could be detected. The low percentage (1/9 or 11%) of subadults may reflect recovery bias. Smith (1900) notes that the graves were difficult to detect on the talus slope, and so it could be expected that a disproportionate number of the larger, more conspicuous, adult graves would be found. In any case, given the small sample size, the representation of subadults does not significantly depart from Weiss' minimum 30% (binomial $p = 0.196$). The only association with the child grave (Burial 1) was yellow ochre (Figure 6.25).

Figure 6.25: Artifact Diversity Distribution at Nicola Valley



Two talus burials from elsewhere in the Nicola Valley, near Spences Bridge, may be added to the above assemblage. Both are adults, one female (Burial NV1—NV to distinguish these from burial numbers at the above site) and one probable male (Burial NV2) (Schulting 1993b). Burial NV1, an adult female, was found underneath a mat-covered pole tent, suggesting relatively recent interment. No grave inclusions were found with this individual. Burial NV2, an adult male, included points, flakes, a unio shell, and a nephrite celt.

Utilitarian objects in the combined Nicola assemblage include projectile points and bifaces, flakes, bone needles and awls, unidentified bone implements, a bone sap-scraper, an antler digging-stick handle, and beaver teeth. Sociotechnic objects include *Dentalium*, copper beads and pendants, large nephrite celts, incised bone drinking tubes, a bear baculum, a perforated bear claw core, and red and yellow ochre. Some of the nephrite celts are among the largest known on the Plateau—one highly polished celt in Burial 2 measures nearly 36 cm. Dog remains were also found with three burials. Burials 2 and 9 included complete skeletons (in Burial 9 the dog skeleton was covered in red ochre), while Burial 5 included only the skull. These are assumed to operate as sociotechnic items.

Obsidian and chalcedony are both relatively rare lithic raw materials in the south-central Canadian Plateau outside of the Okanagan, where assemblages are usually overwhelmingly dominated by various grades of "basalt" (Richards and Rousseau 1987; Sanger 1970). Extensive survey and limited subsurface testing in the Upper Nicola Valley found this to be the pattern there as well (Schulting 1991). Obsidian especially was found to be very rare. The inclusion of an obsidian biface with Burial 2, points with Burials 3 and 4, and five eccentrics with Burial 6 is thus unusual, suggesting that these should perhaps also be viewed as prestige items. Unfortunately, Smith (1900) provides no illustrations or indications of the size of these artifacts that could be used to support such an interpretation. The obsidian point in Burial 3, however, was covered in red ochre, which suggests a non-utilitarian use (cf. Pavesic 1985).

A number of burials from the head of Nicola Lake provide evidence for secondary interment and

possibly for the use of additional human skeletal elements in mortuary ritual. In the talus near Burial 1, Smith observed a human occipital fragment bearing knife marks, "... as though the head had been cut off" (1900:438). Burned human cranial fragments, presumably not belonging to the primary interment, are listed with the grave inclusions for Burial 3. This is the only evidence for cremation in the Nicola Valley as far as I have been able to determine. Burial 4 is said to have included a "stray" human radius in addition to the primary adult female interment (Smith 1900:439). "Burial" 6 is perhaps a misnomer, since it consists only of a single mature fibula. Yet associated with it were a nephrite celt, five obsidian eccentrics, and some chalcedony flakes.

Almost all of the known or suspected burials from the Nicola Valley are situated in talus slopes (Oliver 1991), although there is clearly a visibility bias here. It seems unlikely that pit inhumation was as infrequent as the available evidence would seem to indicate, but for now it is not possible to compare the two different forms of interment. A number of the talus burials at the head of Nicola Lake were associated with abundant grave offerings, including many exotic prestige items. Such a pattern does not agree with the hypothesis that talus slopes were generally reserved for the poor (although to be sure of this statement one would need to be aware of the full range of mortuary alternatives in the area—perhaps other burial forms contained even greater wealth). The use of talus slopes for the poor may be valid in certain areas, but it cannot be generalised to encompass the entire Plateau without empirical evidence, even given some theoretical support for it in terms of the *probable* lower energy expenditure involved in this form of burial. It should be noted that the large talus features, all or some of which may have been burials, seen in the Nicola Valley during an extensive survey in 1991 (personal observation) could represent more than the equivalent labour required for even a deep grave in a typical sandy terrace.

Kamloops/Chase

Some of the most significant excavated burial assemblages on the Canadian Plateau are those of the Kamloops/Chase area, on the South Thompson River. These include mainly data from three sites in the vicinity of Kamloops excavated by Harlan I. Smith (1900) at the turn of the century, and from the Chase burial site (EeQw 1) excavated by Sanger (1968a).

The largest assemblage from a single location in the Kamloops area comes from the "Large" site. Here, Smith recovered the remains of 13 individuals, all primary single interments. The site seems to have been substantially larger than this, but many burials had apparently been disturbed through erosion. It is also unlikely that Smith excavated the entire site. Regarding preservation of skeletal remains at the site, Smith (1900:435) states: "In some cases it was even impossible to distinguish a single bone, as the whole skeleton was decomposed to a mass resembling sawdust". However, the numerous bone and antler implements identified and collected from these very burials seem inconsistent with this observation. The human skeletal remains from the Large site could not be found by the author in either the American Museum of Natural History or the Canadian Museum of Civilization, the two institutions that Harlan I. Smith was associated with at the time.

Age and sex of the burials are very poorly reported. For the first 11 burials there is no information whatsoever regarding the skeletal remains, other than that all appeared to have been flexed on the side. The most detailed information is provided for Burial 12, an adult male approximately 50 years of age, flexed on the left side. Burial 13, a child, is the only subadult reported for the assemblage. If it is assumed that those burials not specified as to age are all adult, and there is no way to ensure the validity of such an assumption, then subadult representation is only 7.7% (1/13). Even given the small sample size, this is significantly (.10 level) below Weiss' minimum 30% expectation (binomial $p = 0.0637$), suggesting that subadults may have been partially excluded from the adult mortuary space. Differential preservation could also explain the observation. Grave inclusions associated with Burial 13 consist of *Dentalium*, unidentified pieces of shell, and what Smith (1900:436) simply terms "refuse" with no further explanation. These associations are less varied than the grave inclusions seen with the adult burials. The absence of any utilitarian artifact types is unique to the child burial, but in terms of sociotechnic types, Burial 13 does not markedly differ from some of the adults.

The artifact assemblage from the Large site is extensive and varied. Utilitarian objects include projectile points, chipped knives, scrapers, hammerstones, shaft smoothers, abraders, unmodified flakes, a slate fish knife, antler wedges, an antler harpoon point, beaver teeth, bone points, awls, scrapers, needles, and other unidentified bone implements. Sociotechnic items include *Dentalium*, *Pecten*, a whalebone object, carved bone, carved bear baculae, a bear canine, claw cores, yellow and red ochre, mica, "copper clay", copper pendants, galena, tubular stone pipes, and polished nephrite celts. Some of the *Dentalium*.

shells are finely incised, as is at least one stone pipe. The unidentified whalebone object is assumed to be sociotechnic in nature on the basis of the scarcity of the material in interior sites, its special context when it does occur, and its affinity to high status whalebone clubs. Copper artifacts occurred in Burials 6 and 11, with copper staining on a piece of carved antler in Burial 5. Pieces of the enigmatic "copper clay" were found with Burials 3, 5, 9, 11, and 12.

Artifacts found on the disturbed surface of the site included projectile points, knives, drills, mauls, nephrite celts, abraders, bone points, composite harpoon parts, and presumably numerous other types. Of particular interest is a fine stone carving similar to the seated human figurine bowls of the Fraser Valley, Lower Mainland, and Gulf of Georgia area (Smith 1900:431; see also Duff 1956, 1975). While it can with some confidence be attributed to the Large site, the figure may have been found in a disturbed context (Smith 1900), and so its association with a burial is somewhat uncertain; however, other seated human figure bowls have been found in mortuary contexts in the interior of British Columbia (Duff 1975:52; see also Chapter 4).

Two carved whalebone clubs were recovered from the Large site (Smith 1900:422, Figures 359a, b). Smith states that these clubs were definitely associated with graves, but that, due to disturbance, he could not identify the specific individuals they were associated with. The handles of these clubs are carved to represent human heads surmounted by bird heads/headdresses. Smith (1900:422) reports a third whalebone club found at the Large site, but it is not clear whether he is referring to the "piece of object made of bone of whale" associated with Burial 9 or another object altogether. Smith also mentions a fourth, uncarved whalebone club provenienced only to Kamloops, collected in 1893 by a Mr. C. G. King. As discussed in Chapter 4, there is excellent evidence for the interpretation of whalebone clubs as objects of great prestige and status.

Two burials exhibit possible evidence of burning as part of the mortuary ritual. Among the inclusions of Burial 9 are a burned bone awl, and what Smith (1900:435) simply reports as "burned bones, some of which are human". It is not clear from this sparse account whether the burned human bones belong to the grave's primary skeleton, or represent elements from another individual. The possible association of additional (unburned) human elements with a primary interment is also seen in Burial 6, although again no details are provided. Similarly, Burial 10 is reported to contain "burned bone", but in this case it is not even clear whether these are human or not.

A number of burials include small side-notched projectile points diagnostic of the Kamloops horizon, ca. 1200-200 B.P. None of the burials appear to include earlier point styles, although this is uncertain, since Smith does not provide illustrations of all the points found. Assuming that the copper is native, there is no evidence of Euroamerican trade goods in the 13 burials excavated. Copper beads were found scattered on the disturbed surface of the site, possibly indicating a protohistoric component, since beads are far more common at that time. However, the wide flat on which the Large site is situated also served as a habitation site well into the historic period, so that the beads could be associated with it rather than with the burials.

The Hill site is located very near the Large site. Smith recovered only two burials from this site, both adult primary interments. Of the three Kamloops sites reported by Smith (1900), only the two individuals of the Hill site were available for study at the American Museum of Natural History in New York. Both were older adolescents or young adults (Schulting 1993b). Smith (1900:437) describes the body in Burial 1 as "... probably that of a woman about twenty years of age...". While Smith's age estimation was supported by my re-examination, the sex appears to be male rather than female. This is supported tenuously by the cranium and more strongly by the pelvis. Smith's interpretation was likely based on the presence of bone needles and an iron awl among the items found in the grave, which he erroneously took to be diagnostic of gender (see Chapter 7). The assessment of the individual of Burial 2 as a young female agrees with Smith's report.

Preservation was excellent at the site, due in part to the apparent recency of the graves. Burial 1 was marked on the surface by a scattering of *Dentalium* shells and an oval of decayed wood which proved to be the remains of a broken canoe made, according to Smith (1900:436), of Alaska cedar. Wooden stakes surrounded this. The skeleton lay slightly flexed on its left side. The body had been wrapped in fabric, presumably of sagebark, and also in pieces of hide daubed with red ochre, the entire bundle being tied with vegetable cord. Strands of dentalia and tubular copper beads were found arranged across the forehead, and additional strands of dentalia and copper together with perforated elk and deer incisors lay at the neck. Other items, found in a fibre bag around the shoulders, included beaver-tooth dice, bone needles, an iron awl in a bone handle, bone tubes, a bone pendant, basalt flakes, and bearberry seeds. Red ochre permeated the bag.

The facility for Burial 2 was similar to that for Burial 1, but less elaborate. Instead of pieces of a canoe, poles had been placed around the body. The tops of these poles had been burned off about a foot below the surface; apparently none of the material in the grave was affected by the fire. The grave contained the flexed remains of a young adult female. Again, the body had been wrapped in a fabric of woven vegetable fibre. Wood fragments, possibly of a spear or bow (Smith 1900:437) lay beside one arm. Other inclusions consisted of a basalt knife retaining evidence of hafting, basalt flakes, an abrader, a beaver tooth, and a bone awl.

The abundant copper tubular beads and the iron awl together with the from of burial and the aboriginal artifacts indicate an early protohistoric date for Burial 1. Burial 2's close proximity and formal similarities suggest that it belongs to roughly the same time period. The simpler facility of Burial 2 and the lack of sociotechnic artifact types suggest that the individual was of lower status than the individual in Burial 1. The association of burning with Burial 2 and not with Burial 1 is perhaps unexpected given this interpretation, but with a sample size of two it is hardly worth pursuing the matter further.

At the Government site, Smith (1900:432, 436) excavated four graves each of which contained the partially burned remains of a single child. Unfortunately Smith provides no detail beyond this concerning the osteological remains, and the material does not seem to be available for study (I have searched the Royal British Columbia Museum, the Canadian Museum of Civilization, and the American Museum of Natural History without finding any trace of the human remains from this site). Thus it is not known either how extensive or how intense the burning was, or whether the interments represent primary cremation loci or secondary disposal.

All four burials were provided with abundant and fairly elaborate grave inclusions, including many flat bone beads, tooth and claw core pendants, *Dentalium* shell beads, nephrite celts, "copper clay", and pieces of mica, in addition to more utilitarian items of stone, bone, and antler. (In fact, the Government site burials surpass the overall Kamloops/Chase area average for number of artifact types and number of sociotechnic types.) Burial 4 is by far the richest at the site, with 17 types, including seven utilitarian and ten sociotechnic types.

The identification of the "copper clay" has been elusive; it is definitely not native copper ore, and it lacks the lustre of turquoise. Smith (1900:436) reports that some of the charred human bone fragments were copper stained, although no actual pieces of copper were recovered. Having examined it, it seems unlikely that the "copper clay" could be responsible for this staining, and so we may infer the presence of native copper in at least one of the burials (Smith does not specify whether all or only some of the four burials contained copper-stained elements).

The burials have been suggested to date to the Thompson phase, the regional manifestation of the Plateau horizon, ca. 2400-1200 B.P., based on the occurrence of a characteristic corner-notched projectile point with one of the burials (Richards and Rousseau 1982, 1987; see also Sanger 1968a:138-139). As a cautionary note, it is possible that older point forms were found and included as burial offerings. That the Natives were well aware of older point forms is clear from Smith (1899), who refers to the Thompson practice of sometimes reworking what they called "Raven's arrows" into smaller points. While the human remains themselves no longer seem to be available (and in any case the fact that they are burned would create problems), a radiocarbon date on one of the accompanying, apparently unburned bone artifacts would resolve the issue.

Although cremation was well-known even in historic times among Athapaskan groups further north in British Columbia, the Government site is possibly unique in the core south-central interior area of the Canadian Plateau. Smith's (1900:436) reference to elements as "burned" and "charred" rather than calcined suggests that no great heat was involved in the ritual, such as seen in The Dalles area on the Columbia Plateau (provided, of course, that Smith was cognisant of the distinction). While Smith does refer to the burials as "cremations", and they have certainly been accepted as such in the literature (see for example Richards and Rousseau 1987 and Sanger 1968a), it should be mentioned that light charring of bone could easily occur with ceremonial burning over a shallow grave, or over a deeper grave before it was filled. In neither of these cases would a burial strictly be interpreted as a cremation. The reported depth of the four burials ranged from one foot to "barely covered with sand". This may be compared to the reported average of three feet for burials from the Large site, two of which exhibited evidence of burning in their associations. Smith (1900:403), however, notes that the loose sand into which the interments at both sites were excavated shifts easily, and thus the depth at which the remains were found may bear little relation to the original depth of the graves. Without the human remains themselves, it is not possible to do more than advise some caution in the interpretation of the Hill burials as intentional cremations, especially in light of

the scarcity of other well-dated *in situ* examples from the south-central Canadian Plateau.

As a final note, while Teit (1909:592) states that the bodies of Shuswap warriors dying while on raiding expeditions in enemy territory would be burned, such an explanation is not satisfactory in this case. It might be argued that young boys could join a war party (Teit 1909), but the artifacts found in the burials—including such items as nephrite celts, antler wedges, bone awls, barbed harpoon points, and antler digging stick handles—are hard to imagine as appropriate equipment.

Sanger (1968a) excavated one of the most important burial assemblages on the Canadian Plateau near Chase (EeQw 1). Unfortunately, much of the site, which may have originally held up to 50 individuals or more, had been destroyed by local collectors by the time Sanger and his crew arrived, and he was able to recover only five burials *in situ* with their associations. These included one infant, two young children, and two adults, both of which were identified as male. All five burials were flexed, the subadults tending to be more tightly flexed than the adults. The two children were lying on their backs, while the infant and two adults lay on their sides.

Utilitarian stone objects from the site include chipped points, bifaces, drills, scrapers, ground slate knives, hammerstones, undecorated mortars, abraders, and shaft smoothers. The utilitarian bone and antler assemblage includes bone points, harpoons, awls, needles, incised digging stick handles, wedges, a sap scraper, tine flakers, "mat creasers"/bull roarers?, beaver teeth, and miscellaneous unidentified implements. Grave inclusions accompanied four of the five burials, and included nephrite celts, ochre, shell ornaments, dentalia shells, bird beaks, worked bone and antler, and flaked stone implements. Burial 2, a child, lacked any grave inclusions. The largest number and variety of artifacts were found with Burial 3, an adult male.

The site produced the largest collection of art work known from the Canadian Plateau, with many objects likely indicative of wealth and prestige. The majority of this material, including a number of elaborately carved objects in stone, bone, and antler, unfortunately fell into the hands of collectors. Wilson Duff and Sanger received permission to record, photograph and sketch some of the material for publication (Sanger 1968a). The sociotechnic assemblage includes *Dentalium* (none of which appear decorated), abalone, pierced *Pecten* shells, copper ornaments, incised tubular steatite pipes, nephrite celts, ochre, quartz crystals, whalebone clubs, three highly decorated zoomorphic antler clubs, incised bear baculae, bird bone drinking tubes or whistles, bird beaks, and miscellaneous carvings in bone and antler, some of which are fully sculptural (see for example Sanger 1968a:116, Figure 8). The steatite industry is quite diverse. It addition to the 11 tubular pipes already referred to, Sanger (1968a) reports a single steatite bead, a carved human face, a carved serpent, two carved bears, a zoomorphic bird bowl, and a seated human figure bowl. Many of the pipes are incised, and one bears a human face carved in bas-relief. Two fragments of whalebone rib clubs were found. One of these (Sanger 1968a:120, Figure 9) has a carved handle very similar to those from Kamloops, discussed above. The Chase assemblage also included a total of 26 nephrite (Sanger 1968a:165, Plate IVa). The average length of this groups of celts is 19.7 cm, while the largest specimen measures 38.0 cm (Sanger 1968a:104), exceeding even the length of those found in the Nicola Valley; it seems likely that the majority of these celts functioned at least in part as prestige items.

The presence of pierced scallop (*Pecten caurinus*) shells is again worth commenting on. Four complete shells were found together with many fragments. The interpretation of these shells offered by Sanger (1968a, b) is that they relate to the historic Coast Salish spirit dancing complex. The exceptional preservation at the Chase site together with the presence of a relatively recent component (although the absence of any mention of trade beads is interesting in this regard) enabled the recovery of evidence supporting this connection. One of the amateur collectors discovered fragments of a wooden mask which appears to bear a strong resemblance to the Coast Salish *Sxwaixwe* mask also used in the spirit dances (Sanger 1968a:124-125 and p. 132, Figure 10).

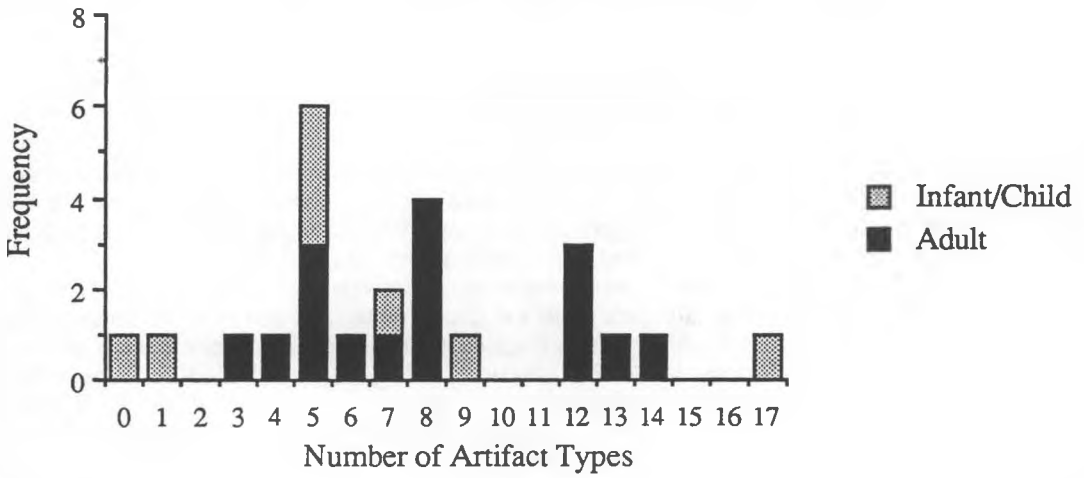
Copper staining was present on some of the human bones disturbed by collectors. Sanger notes that the locations of the staining indicate that bracelets, anklets, amulets, and neck pieces were worn (1968a:125). While the four copper artifacts obtained by Sanger from a collector seem to be Euroamerican trade copper, it is possible that the disintegrated copper represented only by green staining may have been native in origin (Sanger 1968a:125). Sanger assigned the assemblage a terminal date of A.D. 1750, and it became the type site for the Kamloops phase and horizon of ca. 1200 to 200 B.P. However, it should be noted that there are no radiocarbon dates on material from the Chase site although similar components elsewhere have been found to fall within this range. The total absence of glass beads suggests that use of the site did not continue into the nineteenth century.

Because of the importance of the Kamloops/Chase material and the frequency with which it is cited

in discussions of status differentiation on the Canadian Plateau, it will be discussed in some detail. The use of a composite sample is clearly problematic, especially when it is likely that the contributing sites span a considerable period of time. The interpretations offered below should be understood in this context. On the other hand, there is no indication of substantial differences in the variables of interest and in the relationships between them in the sites grouped for analysis. While we can acknowledge the difficulties involved in using a composite sample, there simply are no better burial assemblages available in the interior of British Columbia. Either one deals as best one can with what is available, or avoids the subject entirely. The former option is held to be preferable.

Infant/child burials make up 8/24 (33.3%) of the Kamloops/Chase composite assemblage, thus there is no suggestion that subadults are underrepresented. The infant/child group, while not differing significantly (at a .10 level) from the adult group in overall number of types of artifacts (Figure 6.26) or in numbers of sociotechnic types, does display a significantly lower number of utilitarian items ($\overline{X}$ = 2.88 vs. $\overline{X}$ = 5.06; p = 0.0709).

Figure 6.26: Artifact Diversity Distribution at Kamloops/Chase



The mortuary evidence from Kamloops/Chase is difficult to interpret. There is certainly the impression that some burials are "richer" than others (Sanger 1968a, 1971), but the differences are not nearly of the extent seen in many burial assemblages from the Columbia Plateau. Not only do all adult burials contain grave inclusions, but all have three or more types represented. There is no indication of the pyramidal structure expected in an highly ranked society. The average number of artifact classes in adult burials is 7.3 for the Kamloops/Chase area, the highest of any assemblage reported here. It seems unlikely that all members of "Shuswap" society were as wealthy as the burial evidence would seem to indicate. Even in the absence of the ethnographic information noting lack of burial for the poor in early historic times, I would suggest that a major segment of society is not being represented in the burials recovered. The presence of many relatively "rich" burials at the Kamloops/Chase sites further would suggest that these are special burial places reserved for the more privileged segments of society. Given this information, I disagree with Sanger's (1968a, 1971) statements that the Chase material in itself demonstrates a highly ranked society: it may *imply* this indirectly, however, i.e. by the absence of impoverished burials, but this is not the same thing.

Assuming for the moment that the four Government site burials can be interpreted as cremations (see earlier discussion), there is some tentative evidence for cremation being a higher status burial from. The average number of artifact types in the four cremations is somewhat greater than the non-cremation Kamloops/Chase average ($\overline{X}$ = 9.50 vs. $\overline{X}$ = 7.05). Both the number of utilitarian ($\overline{X}$ = 4.75 vs. $\overline{X}$ = 4.25) and sociotechnic types are also higher ($\overline{X}$ = 4.75 vs. $\overline{X}$ = 2.75). None of these differences are sufficient to reach statistical significance. The difference, such as it is, can be attributed to the presence of

the extremely richly furnished Burial 4 at the Government site, with its 17 artifact types. It should also be recalled that the Government site may substantially predate the other burial sites in the Kamloops/Chase area. If anything, this might be expected to result in the opposite of the observed difference. That is, it has generally been assumed that artifact diversity in burials has on average increased through time on the Plateau (cf. Sprague 1967). This proposition is further examined in the following chapter.

Skwaam Bay, EgQw 1

Site EgQw 1 is located on an overgrown talus slope on Skwaam Bay on the shores of Adams Lake (Hills 1971). The remains of two adults and one child were recovered from the slope (sex was not reported). They were placed one above the other, although apparently not in a single event. Burial 1 was semi-flexed on its back, parallel to the slope contour, with the head oriented to the east. A single large flat rock had been placed over the chest. Hills (1971) notes a depressed fracture on the cranium of this individual, but provides no further details. From an accompanying photograph (Hills 1971:35, Figure 4), the fracture appears to be at least partially healed and so cannot be the direct cause of the individual's death. The photograph also suggests that this individual was male, but this is highly tentative. Burial 2 underlay Burial 1 by about 15 cm of talus. It is represented by the disturbed remains of a child; no further information than this is provided. Burial 3 was found beneath Burial 2, separated by some 60 cm of talus. The individual was again semi-flexed and parallel to the slope, with the head to the west, and also had a large flat rock placed over the chest.

Only Burial 3 had any grave inclusions. These included two abalone (*Haliotis* sp.) shell armbands, eight *Dentalium* beads, 16 *Olivella* beads, a bird bill, and four bone/antler points. The shell beads were all found in the head and neck region, suggesting that they were strung as a necklace. All of the shell items are exotic to the interior, and likely represent considerable wealth and prestige. The bird bill may be related to guardian spirit power. One of the antler points cannot be considered a grave offering, since it was found embedded in the innominate (Hills 1971:33, Figure 2). It is reasonable to assume that this injury, perhaps along with other wounds received at the same time, was directly related to cause of death.

A pine tree growing over Burial 1 was estimated to be between 120-150 years old. The grave associations of Burial 3 exhibit strong similarities to the Chase material excavated by Sanger (1968a) discussed above. Hills (1971), based on these two lines of evidence, attributes the burials to the late prehistoric period just prior to the introduction of Euroamerican trade goods (i.e. to the Kamloops horizon).

The close association of the three burials suggests a relationship between them, yet it does not seem that a single event is represented (Hills 1971). The relative abundance of grave inclusions with Burial 3 and their exotic origins suggests a higher socioeconomic status for this individual than for the other two burials. It is possible that these later burials represent slaves who were killed and buried over an individual of high status as part of later commemorative mortuary rituals. Admittedly this is highly speculative. Still, if the ethnographies are valid, the killing of slaves in mortuary contexts was certainly not unknown on the Plateau (Teit 1900, 1906, 1909).

Cache Creek, EeRh 1

The Cache Creek site is located an a slope near the confluence of Cache Creek with the Bonaparte River. The site was originally excavated by Charles Borden between 1954 and 1956, and briefly reported by Sanger (1968). It was not until 1987, however, that a detailed analysis of the skeletal material and associated artifact assemblage was conducted and made available (Pokotylo *et al.* 1987). Borden (in Pokotylo *et al.* 1987:1) originally reported the presence of "at least" 15 boulder cairns over a relatively confined area measuring some 30 by 50 m. Three cairns containing a total of four individuals were excavated by Borden and crew, and the remains of a fifth individual were acquired from local collectors who had "excavated" an additional four cairns. The site has since been destroyed by residential development.

In addition to the stone cairns, each of the four excavated burials were surrounded by wooden cists, consisting of vertical split stakes and slabs of poplar (Pokotylo *et al.* 1987:2). The identification of the wood as poplar is interesting—wooden cists are almost invariably reported as being of cedar (*Thuja plicata*) on the Plateau. While it seems that often identifications of "cedar" are based entirely on field observation and previous expectations rather than qualified analysis, in a number of cases such identifications have been subsequently corroborated (e.g. Sprague and Mulinski 1980:34). In other cases, however, it is likely that *Juniperus* is the genus represented (Sprague 1971a:188).

Burial 8, a one to two year old infant, had the largest assortment of grave inclusions at the site. These include 21 elk canines found arranged around the cervical vertebrae in three rows. Eight of the teeth

were decorated with incised lines, and the perforation on one of these held a *Dentalium* bead. Approximately 100 cut dentalia beads were also found around the neck. The remaining inclusions consisted of a bone needle and a decorated bird bone tube holding the fibula of a lynx.

The Cache Creek assemblage is very important in that it provides radiocarbon dates for four of the burials. These dates are shown below in Table 6.2.

Table 6.2: Radiocarbon dates for EeRh 1 Burials (Years B.P.)

Burial	Radiocarbon date	Sample No.
1	700 ± 80	SFU 293
6	1330 ± 260	SFU 227
8	760 ± 110	SFU 228
8a	1960 ± 400	SFU 292

(from Pokotylo *et al.* 1987:8, Table 5)

With the exception of Burial 8a, all dates are on associated unburned fragments of the wooden cists. The date for Burial 8a is based on a small amount of bone collagen extracted from unidentifiable skeletal fragments, leading Pokotylo *et al.* (1987:8) to strongly advise caution in accepting the date, since contamination could not be ruled out. Leaving aside this date, the remaining three dates cannot be differentiated at two sigmas, and may thus be considered contemporaneous within the resolution limits of the technique. Sprague (1967, 1971a) has proposed a chronology of burial practices which views wooden cist burials as practically diagnostic of the protohistoric period. Most of Sprague's data came from the Lower Snake River region, but the proposed scheme was intended to have a Plateau-wide applicability. The Cache Creek dates show that this pattern cannot be generalised to the Canadian Plateau, and underline the need for more radiocarbon dating of burials.