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Prehistoric Pipes from the Olds Ferry Dunes Site (10-WN-557), Western Idaho

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This report discusses five prehistoric pipes recovered from a mortuary assemblage identified in western Idaho. They are described and interpreted within a New World ritual context centered on tobacco, smoke, and pipe function.

THE discovery of prehistoric pipes in association with human skeletal remains at the Olds Ferry Dunes site (10-WN-557, Fig. 1) provided an expanded trait definition of the Western Idaho Archaic Burial Complex (Pavesic 1985). Olds Ferry Dunes is one of several pivotal locations in the reconstruction of Early Archaic burial practices in western Idaho and southeastern Washington. Related mortuary sites include Braden (Butler 1980; Pavesic 1985), DeMoss (Green et al. 1986; Pavesic et al. 1993), Rosenberger (Pavesic 1985; Madsen 1997), and the post-Mt. Mazama tephra age burials at Marmes Rockshelter (Fryxell and Daugherty 1962; Breschini 1979; Rice 1970). The Western Idaho Archaic Burial Complex assemblage, as previously defined (Pavesic 1985; Pavesic et al. 1993), consists of turkey-tail and cache blades, side-notched points, Cascade points, triangular obsidian preforms, domestic dogs, red ochre, pipes, Olivella shell beads, abraders, micaceous schist shaft straighteners, plus a variety of less diagnostic types. The Olds Ferry Dunes site is the only locality in western Idaho where pipes have been recovered. Nevertheless, the site shares many defining characteristics of Idaho Archaic burials (Pavesic 1985:61),

including its relative funerary richness (Pavesic 1992:291).

The Western Idaho Archaic artifact assemblage is associated with semiflexed human interments reflecting multiple burial episodes with individuals ranging in age from neonate to adult. The pattern shares many characteristics of continental Archaic burial patterns, including preferred locations (high sandy knolls overlooking streams in western Idaho), interments segregated from habitations, ritual treatment of the dead, and distinctive, special use artifacts (Penney 1985; Pavesic 1992; Madsen 1997). Radiometric measurements for the Western Idaho Archaic burials range from an earlier mixed bone sample that returned results of 5,790 ± 20 RCYBP (WSU-1487) at the Braden site (Harten 1975), to a recent sample of domestic dog metapodials radiocarbon dated to 6,590 ± 90 RCYBP (Beta-90555) (Yohe and Pavesic 2000) also from Bra-Additional dates include a human bone sample of $5,965\pm60$ (WSU-3426) from the De-Moss site (Green et al. 1986) and the association of a turkey-tail/Cascade point with a radiocarbon date of 6,000 B.P. at the Hetrick encampment in Weiser (Rudolph 1995). All the dates conform to the Late Cascade Phase of the southeastern Columbia Plateau (Leonhardy and Rice 1970).

The Olds Ferry Dunes are located 20 km. northwest of Weiser, Idaho, across the Snake River from Farewell Bend, Oregon (Pavesic 1985:61) (Fig. 2). The dunes are situated at the physiographic contact between the Malheur-Boise-King Hill section of the western Snake River Plain and the Seven Devils section of the Columbia Plateau (Fenneman 1931; Freeman et al. 1945; Ross and Savage 1967). The regional complexity is apparent in the interfacing basalts of western Idaho and the Columbia Plateau (Jones 1970; Malde 1991). On the surface, the

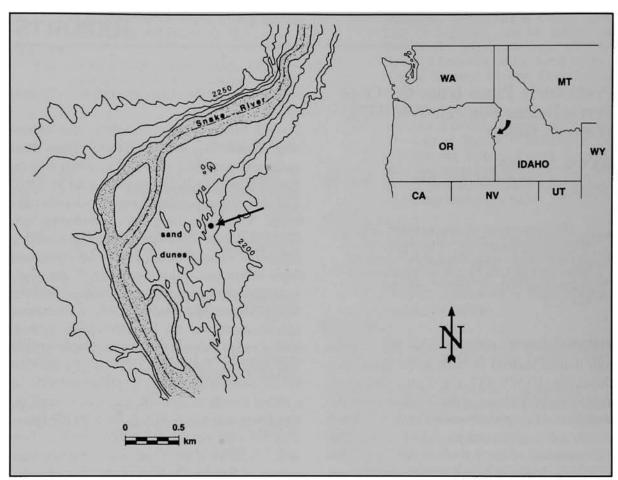


Fig. 1. Location of the Olds Ferry Dunes site (10-WN-557).

ecotonal nature of the locality is seen in the contact between subspecies of Artemisia tridentata (Winward 1970:Fig.7; Winward and Tisdale 1977: Fig. 11), which correlates with contrasting semiarid soils that are dark-colored (chestnut) on the northern boundary and slightly dark-colored (brown) on the southern boundary (Tisdale et al. 1969:Fig. 12). The dunes also abut the southern edge of the Snake River Canyon constriction, which affected the flow of the Bonneville Flood waters into Hells Canyon ca. 14,000 to 15,000 years ago (O'Connor 1993:30). Today, the dunes have a climbing, transverse morphology with a possible sand source originating from backwash deposits of the Bonneville Flood. The picture is further complicated as the dunes are continually refurbished by river sands and sand bar deposits produced by the downstream Brownlee Dam.

The site was discovered when a portion of the dunes was impacted by road construction activity (Pavesic 1985:61). It appears that the original interment occurred on the leeward side of the dune slip where migrating sands form an inactive deposit in a shadow zone that is eventually buried as the dunes advance (Fig. 3). Road construction revealed an approximately 150-cm. vertical exposure. In addition, at approximately 60 cm. below the surface, red staining with a fire burned cap was observed. The redness reflected introduced ochre in the deposit, and the charred cap also appeared to be culturally modified. All of the recovered artifacts and bone fragments

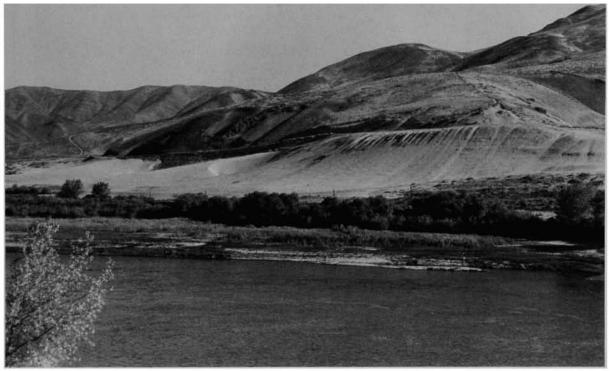


Fig. 2. The Olds Ferry Dunes, view to the east overlooking the Snake River.

were found at the base of the reddened area, which extended about 75 cm. in depth with a circumference of 60 to 90 cm. It was believed that at least two individuals were interred (C. Payton, personal communication 1999), although the original extent of the burial feature is unknown.

THE PIPES

Five prehistoric pipes were recovered at Olds Ferry Dunes (Figs. 4 and 5). They were found at the base of the ochre-stained sand associated with other exposed artifactual materials. The pipes were manufactured from a silicic volcanic tuff that was ground and polished into the final form. The pipes appear to be burial offerings, as they exhibit no obvious smoke stains. The artisan(s) hollowed out the bowls by drilling (Fig. 6). The technical skill involved in the making of

these pipes is reflected in the precision required to penetrate the narrow stems on two of the specimens in creating smoke holes. It is not known if the final configuration included fitted reed or bone smoking stems, since tubular "self pipes" without inserted stems are common in North America. Various researchers, notably Ford (1969:82-82) and Hall (1997:158-159), have argued for a North American origin and southward diffusion of tube pipes.

Specimen 1 (Fig. 4a) exhibits an ovoidshaped body that tapers at the base (also see Fig. 6d). It measures 12.5 x 3.8 x 5.0 cm., weighs 142.4 g., and is round in cross section. Its overall shape is consistent with many western North American tubular pipes. Specimen 2 (Fig. 4b) has an unusually shaped elbow configuration (also see Fig. 6b). It measures 10.7 x 3.9 x 6.9

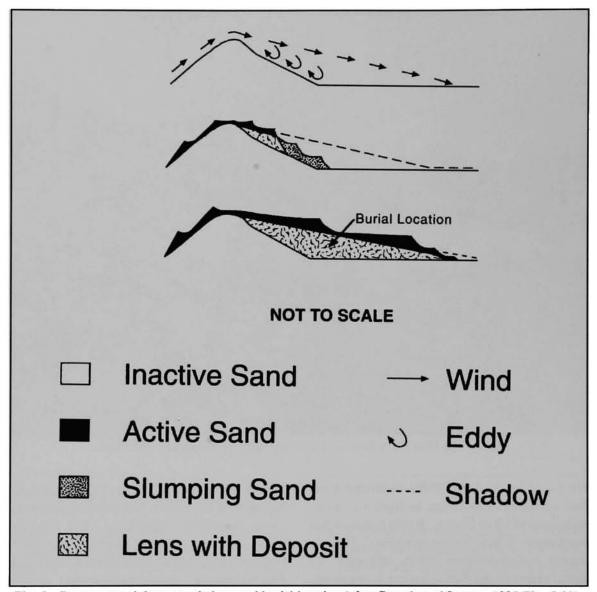


Fig. 3. Reconstructed dune morphology and burial location (after Greenly and Iverson 1985:Fig. 5.23).

cm., weighs 147.3 g., and has a biconvex cross section. This specimen has six possible attachment holes along one edge and a single opposing hole at the bowl collar, suggesting that it could be hung by its user. The piece also exhibits a raised relief "eye" on both faces. The decoration is obliterated by heavy surface heat exfoliation. Specimen 3 (Fig. 4c) is cigar-shaped with the stem at an obtuse angle (elbow) to the body (also see Fig. 6c). It measures 12.4 x 2.3 x 2.3

cm., weighs 49.3 g., and has a round cross section.

Specimen 4 (Fig. 5a) is oval-shaped with a tapering base, measures 12.1 x 4.6 x 2.4 cm., weighs 76.7 g., and is biconvex in cross section (also see Fig. 6a). The piece has been split in half, apparently due to heat. This specimen also has incised lines along the sides and around the bowl lip and is ochre stained. Specimen 5 (Fig. 5b) is cigar-shaped with a peculiar, stout, nipple-

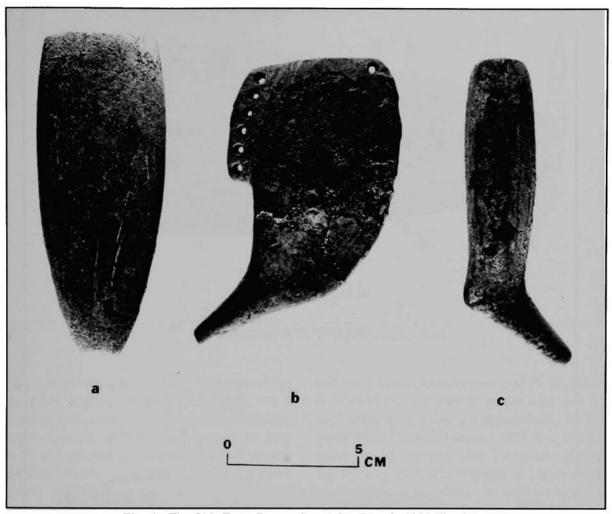


Fig. 4. The Olds Ferry Dunes pipes (after Pavesic 1985:Fig. 3.3).

shaped stem. The bowl exhibits a pot lid heat fracture (Crabtree 1972:84) about 1.5 cm. in diameter. Overall, Specimen 5 measures 8.9 x 2.8 cm. and has a round cross section. Additional attributes are unknown as the specimen was illegally removed from the Idaho Museum of Natural History and is no longer available for study.

The Olds Ferry Dune pipe cache is remarkable in its diversity of forms and manufacturing skill. While two of the specimens (Figs. 4a and 5a) exhibit regional tubular pipe or cloud-blower outlines (e.g., Strong 1959:Fig.14; Madsen 1989: Fig. 24; Pavesic and Studebaker 1993:Fig.

48), the other three specimens (Figs. 4b-c, 5b) are unique in design and configuration, with the only close comparisons being reported from the Lost River region of south-central Oregon (Howe 1968:Fig. 134) and The Dalles (Seaman 1967: 204). It is assumed that these pipes were interred for use in the afterlife (soul journey), for healing or purification. This observation is based on the burial context of the pipes and the lack of smoke staining or interior burning.

RITUAL IMPLICATIONS

The mortuary context of the Olds Ferry Dunes pipes suggests a ritual or magico-religious

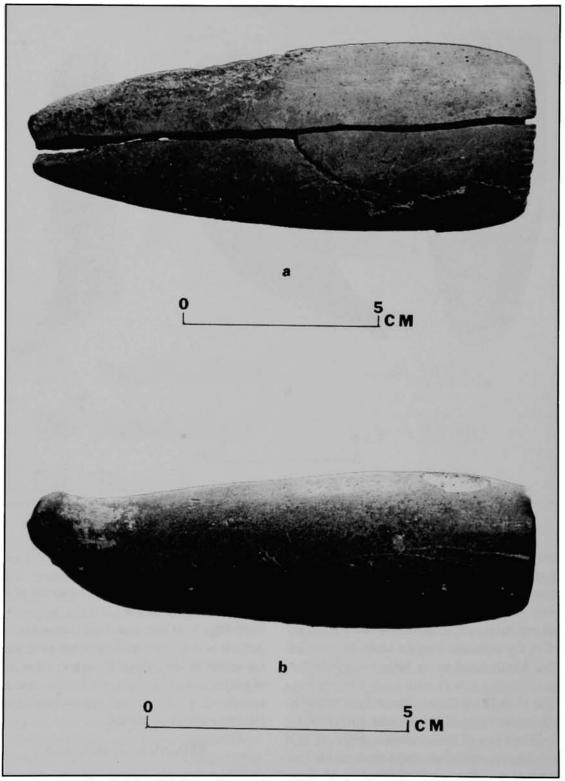


Fig. 5. The Olds Ferry Dunes pipes (5b is missing from the collection).

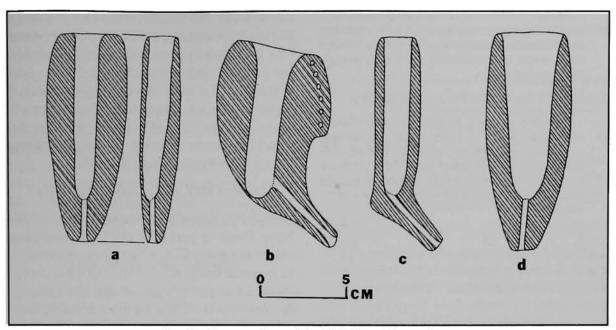


Fig. 6. Cross sections of the Olds Ferry Dunes pipes.

usage rather than a secular one. The presence of the pipes implies smoking or healing, via a cloud-blower, either practically or symbolically. Pipes, tobacco, and smoking have great time depth and utilization in New World ceremonies (McGuire 1899; West 1934), which La Barre (1964) referred to as the "narcotic complex." Tobacco is a basic ingredient in many aboriginal rituals, including use as an instrument of purification, a means of healing, or a pathway to alternate states of consciousness. It can be smoked, inhaled, sniffed, chewed, ingested, drunk, or licked to induce its power (Wilbert 1975). The aboriginal New World universality of tobacco suggests it probably served a greater variety of sacred purposes than any other plant in the New World. Among its most important and virtually universal functions is that of divine sustenance for the gods, mainly in the form of smoke. It also served as an indispensable adjunct of shamanic curing, primarily as a supernaturally charged fumigant but sometimes also as a panacea (Furst 1976:24). In the northern Great Basin and southern Columbia Plateau, the available native tobaccos were Nicotiana attenuata and N. bigelovii (Fowler 1986), although N. quadrivalvis and N. multivalvis were found ethnographically on the Snake River Plain (Goodspeed 1954:453; Winter 1991: Fig. 7). Another plant commonly utilized for smoking in North America is kinnikinnick (Arctostaphylos uva-ursi). Its curative or ceremonial application was also recognized by both Great Basin and Columbia Plateau peoples (Hunn et al. 1998:535-537; Moerman 1998:87-89), and Hall (1997:158) argued that it predates the use of tobacco in the eastern United States.

Beyond smoking ingredients, the aboriginal pipes themselves were important, vital symbols of ritual and social interaction. Pipes were utilized in prayer, healing or curing, and purification (West 1934; Hall 1977). As Turnbaugh (1980:16) reported:

The durability of smoking pipes through the centuries as a major element of native American culture lies in their symbolism and mystical associations. Even apart from the importance of tobacco, the pipes themselves are linked with life forces and other elemental beliefs in many New World societies. Every aspect of pipemaking and

smoking—from the choice of raw materials, their shapes and ornamentation, to the rules governing use, and the substances tamped into their bowls—was a matter of considerable importance in many native societies.

Likewise, Furst (1976:30) commented that:

Simple or complex, however, the manufacture of the pipe never was solely a matter of technology. It was a sacred art, often an elaborate ceremonial lasting over many days, fully commensurate with the divine nature of tobacco and the metaphysical purposes for which the pipe was intended.

Furthermore, pipes, as well as the act of smoking, can be instruments in "sealing or arbitrating disputes, a mechanism of transference and a means of purifying space" (Pavesic and Studebaker 1993:21). In the Olds Ferry Dunes context, we may never fully understand the true meaning or intention of pipe interment, but we can project several possibilities around the themes of transference, offering, and purification. Smoking a pipe constituted an offering to the spirit world and functioned almost like a prayer, a request to spirit powers to attend and witness a religious or social event (Brose et al. 1985:194).

The act of smoking, or the smoke by itself, is also an important ritual variable. Smoke is a sacred conveyance for carrying prayer, purifying space (e.g., the burning of sweet grass in the Sun Dance lodge doorway), and healing. The application of smoke is a powerful force as Wilbert readily (1975:453) conveyed in discussing a South American "light shaman":

Generally speaking, the blowing of tobacco smoke . . . whether over patients and others in different kinds of life-crises situations, or over objects, foodstuffs, gardens, rivers and the forest, invariably has as its principal purpose the purification of what is unclean or contaminated, the reinvigoration of the weak, and the warding off of evil of whatever kind or form.

In the Great Basin, specifically, smoke is correlated with fog and clouds by its physical nature, and is believed to be another image of the soul (Vander 1997:568). The power of tobacco and smoke is seen in aboriginal healing practices where the shaman cures or empowers him or herself via smoking before curing the patient. Dick Mahwee, a Paviotso shaman, reported that "I smoke before going into a trance" for prognostic purposes (Park 1938:54). The Great Basin shaman kit typically included a pipe and tobacco among its inventory (Park 1938:33).

SUMMARY AND CONCLUSIONS

The recovery of five prehistoric pipes at Olds Ferry Dunes is part of a mortuary assemblage unique to western Idaho. The pipes are viewed as an essential component of an aboriginal cosmological kit of great time depth and distribution in the New World. While the pipes in and of themselves are delicate works of art, they also imply meaning and belief in the realm of healing, purification, and prayer. Too often, pipes are archaeologically reported simply as part of a recovered artifact sample with little discussion of ideological implication or function. The above argument attempts to place tobacco, pipes, and smoke in a larger New World ritual framework separating the sacred from the profane (Turner 1969).

The Olds Ferry Dunes finding also supports earlier interpretations of special-use mortuary objects in the Western Idaho Archaic Burial Complex (Pavesic 1985, 1992; Pavesic and Studebaker 1993). For instance, it was initially reported that many of the large chipped stone turkeytail and cache blades appear "as fresh as if made yesterday" (Pavesic 1992:290). This observation was tested in a microwear analysis of 55 nonobsidian flaked stone artifacts from the Rosenberger site. Madsen (1997:122) concluded that "there is no evidence indicating that burial goods recovered . . . were produced for any purpose other than as burial goods." Other examples include Feature J10-1 at the Braden site and the DeMoss site inventory. The Braden cache (J10-1) contained 165 items, including 153 obsidian blanks and preforms, with only four associated side-

notched points manufactured for burial (Butler 1980:123). The reported DeMoss chipped stone inventory totaled 460 artifacts, with over 90% being complete specimens (Green et. al. 1986; Pavesic et al. 1993).

These examples support the burial-specific nature of Western Idaho Archaic Burial Complex artifacts generally. Thus, the Olds Ferry Dunes pipes must be understood as ritually or symbolically laden artifacts interred for later use, possibly as insurance in an after-death journey (soulflight), for healing, or for purification of places unknown.

ACKNOWLEDGEMENTS

I thank Charles Payton of Boise for his interest and cooperation in this project. Mr. Payton is one of the original discoverers of the site and he has graciously allowed access to the collection. He has also donated several specimens to the State of Idaho. I also appreciate the comments of Spencer Wood and Craig White, Boise State University, Department of Geosciences. Jim Woods illustrated the pipe cross sections in Figure 6. Dana Logan and Chuck Sheers prepared Figures 1 and 3.

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Northern Fish Lake Valley and the Volcanic Tablelands of Owens Valley: Two Minor Sources of Obsidian in the Western Great Basin

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Obsidian samples from two locations in the western Great Basin, the northern Fish Lake Valley and the Volcanic Tablelands in northern Owens Valley, were collected and analyzed using Instrumental Neutron Activation Analysis. These locations had not previously been described as sources of obsidian, although they contain small, weathered nodules on the surface. Obsidian from the former provides a chemical signature distinct from all other previously documented sources in the area, while the latter is chemically similar to obsidian from the Mono Glass Mountain area. Variability in Tablelands obsidian sheds light on the distribution and availability of Mono Glass Mountain obsidian and suggests the presence of a distinct subsignature on the Tablelands. The dispersed nature and small