More Findings at the Serpent Mounds Site, Rice Lake, Ontario RICHARD B. JOHNSTON, Indiana University

In a previous paper (1) the Serpent Mounds Site in Peterborough County, Ontario, was briefly described, mention was made of known previous work there and the results of investigations of the site by the Royal Ontario Museum between 1955 and 1957 outlined. During that period, excavation was concentrated in and around the eastern end of the 194 foot long Serpent Mound and in initial examination of adjacent Mound I. An exploratory excavation was also reported in shell midden deposits near the mound group on the shore of Rice Lake. These investigations revealed a dozen burials in the Serpent Mound, most without grave goods, and a mass burial area containing seventeen individuals in the central portion of partially excavated Mound I. Testing in the shell midden had indicated that more extensive excavation should be done in that feature.

In 1958 and 1959 seventy-five additional 5-foot squares were excavated in the Serpent Mound, excavation of Mound I completed and 112 squares excavated in the shell midden, while new work in other features has contributed to a more complete understanding of this site.

In 1958 (2) and 1959, work in the Serpent Mound has revealed thirteen additional undisturbed burials, several with grave goods of a sort and in quantities not previously encountered. Included among this number was Burial No. 28, fully excavated in 1958 after discovery late the previous year and one of the most important in terms of grave accompaniments. This was a flexed adult male in an oval pit dug in the original ground surface prior to mound construction. Arranged around the skull were unmodified mammal phalanges, fish bones and scales, fossils, concretions, five shell disc beads, the beak of the Common Loon (Gavia immer) and other objects. A carved stone effigy beneath the skull may represent a bird although this identification is speculative. Burial No. 60, a juvenile, was likewise interred in a sub-floor pit where traces of ash or wood remains were found over the flexed burial itself and along the pit sides. A trianguloid projectile point was recovered from amongst the ribs. Grave goods had also been placed with flexed Burial No. 56 which, together with Burial No. 55, had been placed on the old ground surface and covered with mound fill. A turtle carapace (the Painted Turtle Chrysemys), a fossil coral, a fragmentary mink skull (Mustela vison), a portion of the beak of a Loon (Gavia immer) and forty-one shell disc beads were found immediately around the skull.

Two additional burials were discovered in 1958 in sub-floor pits (Burial Nos. 34 and 41) but both lacked grave goods. Other burials, two primary and two secondary, occurred in the fill of the mound, but none had accompanying artifacts.

The bones labeled Burial No. 31 were the disturbed remains of at least three adults redeposited in the bottom of a recent intrusion. Throughout the mound, especially in the upper levels, extensive disturbances have been encountered and, in fact, during the 1958 season, only about 25% of the area forming the crest of the mound was found to be

undisturbed. For this reason it has been difficult if not impossible at times to find evidence relating, for instance, to the question of whether the mound was built in a relatively short span of time or accretionally over a longer period.

In 1959, the certain prospect of continued excavation in disturbed fill, if work was resumed in the eastern portion of the Serpent Mound, led to a shift of attention to the western end of the Mound, the so-called tail. Here, also, it was disappointing to find several old diggings, the backfill of one of which contained a broken glass bottle and a large quantity of jumbled bones representing an unknown number of burials, but the present investigation did discover four burials in situ, three of which contained definite grave inclusions.

Burial No. 61 was found in the carried earth of the mound only eight inches below the surface. This was a partial cremation of a child near which three copper beads had been deposited. Burial No. 62, an infant, was also a partial cremation in the fill of the mound. Three hundred and seventy whole shell beads, of the disc and barrel variety, were uncovered in the vicinity of the neck, in juxtaposition in the ground as if strung on a necklace. In fact, a few small carbonized fragments of cordage were found running through the perforations of the beads. Burial No. 62, largely but not entirely disarticulated, occurred in mound fill without definite association with artifacts. One and a half teet below, flexed Burial No. 64, illustrated in Figure 1, was found in a sub-floor pit. This individual, a young adult male, had been partially covered with wood which extended over a considerable portion of the pit. Most notable of the grave goods was a polished stone object, plano-convex in outline and some twelve inches in length, found in the knee region. This might be called a double-bitted adze or a "pick."

Thus, in 1958 and 1959, excavation in the Serpent Mound has revealed thirteen undisturbed burials, five interred in sub-mound pits, two on the old ground surface and six at various levels in the mound fill. Grave goods accompanied three of the pit burials, one of those on the old sod level and two of those encountered in the carried earth of the mound. All total, the current work, after excavation of slightly more than half of the Serpent Mound, has produced twenty-five undisturbed burials and approximately twice as many disturbed burials as represented by jumbled bone in the backfill of intrusions.

Radiocarbon analysis has been made by the University of Michigan Memorial-Phoenix Radiocarbon Laboratory on two small carbonized logs associated with partial cremation No. 4 from the Serpent Mound. The date derived (M-850) was 1830 ± 200 (BP 1958) or a date of 128 A. D. (3). The wood which composed the sample has been identified as a member of the white pine group, most likely *Pinus strobus*.

In 1957 a trench was extended through shallow Mound I. In the central portion of the mound a mass grave was encountered which, as exposed in the limited excavation of that year, contained seventeen individuals. In 1958, further examination of this feature resulted in a final count of twenty-nine burials. Six were primary interments in the lower portions of the long common grave around and over which were placed twenty-three secondary burials in ossuary fashion. One total



Figure 1. Burial No. 64 partially covered with wood remains. Note "pick" in knee region. Six inch arrow points north.

cremation is included, also apparently secondary judging from the absence of ash and other evidence of firing among the calcined fragments. None of the burials had been furnished with grave goods although some refuse, including pottery fragments, was recovered from the fill of the mound, only about a foot and a half deep at the high point at the center of the structure. What little cultural material was found would associate Mound I with the Serpent Mound.

Major excavation was undertaken in 1958 and 1959 in the shell deposits along the shore of the lake below the mound group, with the result that a considerable quantity of material, notably pottery, has been recovered. No burials have been encountered in the shell deposits. Only a few projectile points have been recovered but a number of ground stone objects, chiefly adzes or adze fragments, have been taken from the shell layer. Bone pins and awls, one of which was fashioned from a bear radius, have been relatively abundant in the midden which contains large quantities of animal and fish bone. Two bear canines, one drilled at the tip of the root, one unilaterally and one bilaterally barbed bone harpoon have come from the shell deposit. Perhaps the most important refuse from this former habitation area is pottery, which has been found in increased amounts in the most recent season of work. It is expected that eventual statistical analysis of the enlarged ceramic sample will confirm previous tentative placement of the bulk of the ware in the Middle Woodland horizon. Some sherds can be assigned to later periods, up to and including the Iroquois. The only whole vessel recovered was a toy perhaps an inch and a half in height, complete with dentate impressions. A charcoal sample adequate for C14 analysis was collected from the lower level of the midden but its age has not yet been determined. Another charcoal sample, as yet undated, has also been secured from the Serpent Mound.

Two hundred and forty feet of exploratory trench south of the Serpent Mound has shown this area to be virtually sterile but excavation in two small depressions about a hundred and seventy feet north of the mound group has proven them to be burial pits. Depression No. 1, excavated in 1958, contained eight skulls and some post-cranial elements but not enough for eight individuals. A side notched projectile point was found in the pit fill but cannot, beyond this fact, be associated with the burials. Another depression, No. 2, was investigated in 1959 and found to contain twenty-four individuals, as reckoned by a count of the skulls. As in Depression No. 1, no articulation of the bone content was noted. Depression No. 2 measured approximately four by five feet in plan and two feet deep. The twenty-four bundle-like burials, occurring along the pit sides and bottom, appeared to line the pit in a complex overlapping fashion. A damaged polished stone adze was found in the pit fill as were a few sherds. At least one of these tenuously associated sherds, a rim, is of Late Woodland origin. However, present evidence does not allow a clear statement as to the cultural provenience of these burials in pits north of the mound group.

The pottery, especially, and other materials recovered at this site indicate an initial occupation by a Middle Woodland people. The sherd sample, recovered primarily from the shell midden, seems generally

parallel to that taken by Ritchie from a comparable midden on nearby East Sugar Island (4). Both collections contain types included by Ritchie and MacNeish (5) in the general category of Vinette 2 wares. The occurrence of this ceramic complex and other materials at Serpent Mounds site, in association with a carbon 14 date of 128 A. D., would suggest Point Peninsula 2 affinities. Subsequent occupation is demonstrated by the finding of Glen Meyer and Owasco-like wares and a few Iroquois sherds. It is hoped that final analysis of the findings at the Serpent Mounds site and its placement in proper prehistoric context will form a substantial contribution to the archaeology of the region. What is needed in the Northeast to further clarify and expand knowledge of the now imperfectly known Woodland stage is careful excavation of new and undisturbed sites.

Literature Cited

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