The Prehistoric Indians of Minnesota

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The Rainy River, flowing westward from Rainy Lake to the Lake of the Woods, for its entire length forms the boundary between the state of Minnesota and the province of Ontario. During the heyday of the fur trade it was one of the chief commercial arteries of North America, linking the heart of the continent with the Great Lakes and the cities of the St. Lawrence River. As a central link in an important system of waterways, it had many advantages to offer the prehistoric Indians, and evidences of their occupation of the area are found on both banks of the river.

The most striking remains are the large mounds. In 1884 George Bryce reported that there were at least twenty-four mounds along the course of the river. On the American side are five mounds at the mouth of the Big Fork River at Laurel. They were named the Smith Mounds by Dr. A. E. Jenks in honor of Mr. Frank Smith of Laurel, who for a number of years had owned the land on which they are located. Mound 1 of this group, known as the Grand Mound, is believed to be the largest in Minnesota.

Most of the Rainy River mounds have been much disturbed by excavations made by many persons. Some have been reported, but many have not. Old settlers of the area say that it was a common practice for excursion steamers to stop at Laurel while the passengers amused themselves by digging into the Grand Mound.

Excavations in some of the mounds made under the auspices of the University of Minnesota have revealed a culture complex distinct from that of other Minnesota complexes. This culture has been named the Rainy

Some Mounds of the Rainy River Aspect

1 See George Bryce, Among the Mound Builders' Remains, 12–33 (Historical and Scientific Society of Manitoba, Transactions, no. 66, Winnipeg, 1904). The present article is the fourth of a series on “The Prehistoric Indians of Minnesota” contributed to this magazine by Dr. Wilford. A general introduction to the series, in which the classification of the cultures of Minnesota's prehistoric peoples is explained, appears in the issue for June, 1944 (25:153–157); “The Mille Lacs Aspect” is discussed in the December, 1944, number (25:329–341); and “The Headwaters Lakes Aspect” is the subject of an article published in December, 1945 (26:322–327). The drawings appearing with this article were made by Mr. J. J. Kammerer of Minneapolis.

River aspect, and it is probable that all the mounds along the river belong to it. The mounds of this aspect are not limited to the Rainy River, however, for a large mound at Pike Bay of Lake Vermilion is also of this culture. Lake Vermilion is in the Rainy River drainage basin, although the distance by water from the lake to the Rainy River proper is more than eighty miles.

In an earlier article on the Headwaters Lakes aspect, the writer mentioned the fact that pottery of that culture, known as the Blackduck type, was found along the Rainy River. Collections made near some of the mounds included many potsherds of the typical Blackduck type. This indicated that peoples of both aspects had lived in the area. Fortunately, the pottery of the two aspects is so distinctive that it has been possible to distinguish the Rainy River component from the Headwaters Lakes component in mounds where they occur together.

Smith Mound 4 was investigated by archaeologists from the University of Minnesota in 1933, and Pike Bay Mound in 1940. Both proved to have been constructed originally by the people of the Rainy River aspect, but there was direct or inferential evidence that people of the Headwaters Lakes aspect had intruded burials into them.

**PIKE BAY MOUND** is near the center of the west half of Section 5, Township 61, Range 16, five miles west of Tower in St. Louis County. It is on the east bank of the Pike River, which at this point flows north to discharge into Pike Bay of Lake Vermilion. A cataract known as Pike River Falls is about half a mile upstream from the mound and the mouth of the river is about an eighth of a mile below it. Directly across the river is a state fish hatchery.

The presence of this mound was reported by Miss Ammy Lemstrom of the Virginia Junior College in 1940. The excavation was conducted that summer with the assistance of the WPA.

The mound had been very much disturbed. For several years workers at the local fish hatchery had taken earth from it to mix with fish eggs, and some earth had been removed for use in gardens. As a consequence the entire top of the mound had been removed at the center, giving it a somewhat crater-like appearance with an entrance on the west side. In the course of the early excavations, human bones and some artifacts had been found. Bleached human bones were present on the surface of the disturbed area in 1940. Mr. Peter Harma of Tower gave the archaeologists pieces of a small mortuary pot he found there in 1936. In spite of the earlier excavations, there was still much undisturbed material in the...
outer ring of the mound. The mound was circular, with an east-west diameter of sixty-three feet, and a north-south diameter of sixty-five feet. The highest part of the mound in July, 1940, was the undisturbed portion immediately east of the large central excavation, with a maximum height of six feet.

Scientific excavation was begun at the south edge of the mound and proceeded northward, maintaining a vertical face across the full width of the mound until the east-west axis was reached. From the number of sherds, flint flakes, and other cultural material in the mound fill it was evident that much of the earth had been taken from a habitation site. The base of the mound itself had been part of that site, as evidenced by three fireplaces. One was uncovered at the level of the original top soil, and the other two were shallowly dug down into the subsoil.

No burials were encountered until the center of the mound was reached. There, in the badly disturbed area within the crater, a skull and several other human bones were found a foot and a half below the surface. The bones belonged to more than one individual, and were in no special order. A complete harpoon and three widely separated portions of a second harpoon were associated with the burial. The bones were believed to have been re-deposited by persons who had dug out the crater, and from the many small bones present the original burials were presumed to have been primary burials, that is burials of bodies in the flesh.

A hundred and seventeen artifacts of chipped stone, largely scrapers, were found. They were notable for the large number (twenty-four) made of jasper, and for the fact that one was made of obsidian, a rare mineral in Minnesota mounds. Of the nine projectile points with unbroken bases, six were stemmed, two were triangular, and one was triangular with side notches. There were two small pieces of sheet copper and a tubular bead of roller sheet copper. A cut beaver incisor and the
two harpoons associated with the human bones were the only objects of bone, antler, teeth, or shell—a very surprising lack in view of the large amount of earth removed. The cut beaver incisor is characteristic of the Rainy River culture. One harpoon was of antler, the other of bone. Both had multiple barbs on one side only, a characteristic Headwaters Lakes type.

Among the 6,147 sherds recovered were 1,442 rim sherds. No complete vessels were found, and none of the sherds was very large, but from them a working description of the pottery of the Rainy River aspect, designated as the Laurel type, may be built up. The sherds indicate that the vessels were rather large jars, with rounded contours, and that the upper bodies contracted to a wide mouth. Some sherds show a slight outward concavity near the rim, suggesting an incipient neck, but it is doubtful that true necks occurred. The paste is grit tempered. Colors are rather consistently of light tints, beige, orange, and buff, but some darker shades appear. The outer surface of the sherds is smoothed, and a few exhibit a slight degree of polish. A few rims are plain, others have a single line of impressions at or near the top, but in most sherds the decorated area extends downward from the rim for varying distances.

Two principal decorative techniques were used—stamping and push-and-pull bands. Stamped impressions occur as horizontal bands of closely spaced parallel lines, which may be horizontal, vertical, or oblique. Those composed of horizontal lines are usually quite broad; bands of vertical or oblique lines are narrower and the lines are made with a short stamp. A narrow linear stamp was used. One type had grooves cut traversely across it to give intaglio impressions of a line of rectangles end to end. A minor variant of this type had notches cut at one edge only to give an impression of a series of triangles in relief. A second type of stamp was notched alternately at both edges to give a continuous wavy line of zigzag depressions. The term "dentate" is used to designate the first and second types of impressions; the third is designated as "wavy line." A short stamp without grooves or notches was sometimes used in a band of vertical or oblique lines.

Push-and-pull bands are similar to those made with short stamps, but they were made by a different technique. Instead of the stamp being pressed in vertically and then withdrawn to leave a single impression, it was pressed in at an angle, and pulled backward and pressed forward again—a process that was continued until the band encircled the vessel. If the stamp used in this process had a straight, unnotched edge, the resulting band is described as a simple push-and-pull band; if the stamp was notched or grooved, the band is called a complex push-and-pull band.
A single row of small bosses or of punctates a short distance below the lip is common on the Laurel type pottery. Sometimes these decorations occur alternately in the same line. Such lines may accompany other types of decoration or may constitute the sole decoration. Although incised lines are present, they are infrequent, and they usually take the form of simple parallel lines.

Laurel Type Sherds, with Wavy Line and Push-and-Pull Decorations

A comparison of Laurel type pottery with that of the Blackduck type shows that they vary greatly in shape, color, surface treatment, and decoration. Punctates are the only form of decoration common to both, but they are less frequent in the Laurel type. The potsherds most like the Laurel type are those of the Malmo Mounds of the Mille Lacs aspect, which are believed to represent one of the oldest mound cultures of Minnesota. They have in common bodies with plain surfaces, dentate markings, push-and-pull bands, and bosses, though the decorative impressions are in quite different proportions. Cord-wrapped stick markings and incised lines are common in Malmo sherds; the former are lacking and the latter infrequent in the Laurel type.

One per cent of the rim sherds from Pike Bay Mound are typical Blackduck sherds, and one and three-tenths per cent of the body sherds have cord-wrapped paddle impressions; probably these also are Blackduck sherds. The small mortuary vessel found near the mound center by Mr. Harma is certainly Blackduck. It has been concluded that this large

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4 For the writer's description of the Blackduck type, see Minnesota History, 26:313–316.

5 Wilford, in Minnesota History, 25:333.
mound was built as a burial mound by people of the Rainy River aspect so long ago that all the skeletons buried by the builders have disappeared. Later people of the Blackduck aspect intruded into the mound center bodies accompanied by at least one mortuary vessel and two harpoons.

Smith Mound 4 was selected for excavation because it was the only undisturbed mound of the Smith group. It was fifty feet in diameter and attained a maximum height of four feet ten inches at the center. The entire mound was excavated and was found to contain bones of about a hundred and twelve individuals. Nine burials were in the outer portions of the mound, but the remainder were all in a congested area roughly fourteen feet square immediately south of the center. The congested area showed that the mound was cumulative, for over a group of bones or bodies placed on the ground and covered with earth, three later groups had been laid upon the mound and in turn covered with earth. As the mound grew by accretion, the apex had been shifted to the north, so most of the burials were in the south half.

Before the mound was built, the earth surface beneath it had been a habitation site. In its earlier stages the mound surface had served also as a place of habitation. Two fireplaces, several deposits of ash, and many potsherds, animal bones, artifacts, and even scattered human bones were found on the original surface. Within the mound fill were three distinct fireplaces, one of which was directly above a skeleton. Most conspicuous among the animal remains were the bones and bony plates of the sturgeon, indicating that this fish formed an important article of diet.

By far the most common form of burial was the bundle burial, in which the long bones of the extremities were piled together parallel to one another, with the skull at one side or at one end of the pile. Occasionally some ribs, vertebrae, or other bones accompanied the bundle. Bundle burials are at best incomplete, as many of the bones of the skeleton are not placed with the bundle. Often bundles contain extra bones, or consist of the bones of two or more individuals. One bundle found in Smith Mound 4 had four lower jaws hanging upon the highest long bone of the bundle. Many of the skeletons were so scattered that the original form of burial could not be ascertained. A few skeletons were definitely the remains of primary burials of bodies in the flesh. The bones, especially those of children, were for the most part very poorly preserved. Of the seventy-two adult skeletons uncovered, fifty-seven were classed as bundle burials, eleven as scattered but probably secondary burials.\(^6\) three

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\(^6\) A bundle burial is one type of secondary burial, which is a burial of the bones only.
as primary burials, and one as probably primary. The forty children's skeletons found were classed as fifteen bundles, seventeen scattered or fragmentary, two primary, and six doubtful, which may represent disturbed primary burials. In addition, the mound contained the charred bones of one individual, apparently cremated elsewhere, and the primary burial of a dog with all bones present.

The bundle burials of the mound differed from those of the Mille Lacs aspect in one important particular, for a portion of the occipital region had been deliberately removed from several skulls. Most of the larger long bones had been mutilated by the use of a blunt implement to crush the wall of the shaft, resulting in a more or less circular opening into the marrow chamber of each. Of the seventy-seven complete adult femora found, all but five had been so treated. The obvious purpose of these mutilations was to remove the brains and the marrow. Burials in mounds of the Mille Lacs aspect followed long periods of exposure of the bodies on scaffolds. After such exposure no brains or marrow would remain. The skeletons found in Smith Mound 4 clearly are the remains of bodies that were disarticulated and from which the brains and marrow were removed immediately after death. Apparently the skulls and long bones were kept until enough had accumulated to add another layer to the mound. No artifacts or grave goods accompanied the secondary burials, but red ochre was frequently present.

The five primary burials proved to be very interesting exceptions to the characteristic bundle type of burial. The remains of two adults, a middle-aged female, and an old male were uncovered near the top of the mound at the center. The female lay on her right side, fully flexed and well provided with funerary furnishings. These included a pocket of red ochre, three crude flint knives, twelve beaver teeth, two clamshells, and a complete pottery vessel of the Blackduck type, which was placed over the leg bones. This was clearly an intrusive burial of the Headwaters Lakes aspect. The old male was buried face down, fully flexed, and accompanied by four clamshells. Probably this also was a Headwaters Lakes burial. In the periphery of the mound, away from the main burial mass, were the remains of two children at the north side and of a male adult at the east side. The children were buried on their backs with legs flexed and with no funerary furnishings. The bones of the adult's trunk were complete and in anatomical position, but the skull and the long bones of both extremities were missing, while those of the hands and feet and the two kneecaps had been placed upon the torso. Accompanying the skeleton was a broken pottery vessel with enough sherds present to permit restoration. The vessel is of the Laurel type, indicating
a Rainy River burial. The missing bones were those commonly present in a bundle burial, another evidence of the practice of disarticulation.

Near the top of the mound, unassociated with any of the burials, were three pottery vessels, two of which were Blackduck. One contained clamshells, a tubular stone pipe, an arrowhead, and a flat piece of green schist. The second contained a tubular stone pipe, a quantity of red and yellow ochre, and a flat triangular green stone. The third was a small mortuary vessel or cup surrounded by red ochre and containing a clamshell. Between the second and third was a pocket or cache containing yellow ochre and an arrow point. A second cache of red ochre, the bones of a human foot, a worked deer's scapula, and some clamshells was only two feet above the floor of the mound and below some bundle burials. The caches would seem to have been made by the Rainy River people, and the offerings in pottery by the Headwaters Lakes people.

In the mound fill were found 1,067 body sherds, 4.1 per cent of which were treated with the cord-wrapped paddle. Included were 353 rim sherds, 1.7 per cent of which were of the Blackduck type. The percentage of presumably Blackduck sherds is therefore much the same as in Pike Bay Mound. In the Laurel type rim sherds of Pike Bay Mound, however, the push-and-pull band is the most common decorative treatment, and the dentate stamp is minor; in Smith Mound 4 these frequencies are reversed. The wavy-line stamp is second in importance in both series.

The pottery vessel which accompanied the torso burial is of great value, for it is the only complete Laurel vessel thus far discovered. It is a cooking vessel a foot high with a maximum width of 11.6 inches. The base is pointed, and the upper portion contracts to the rim around the mouth, which measures 9.2 inches in diameter. There is no neck. The entire upper portion is decorated with five bands of simple parallel lines. Those in
the rim band are oblique, while those in the lower bands are vertical. A row of punctates is below the highest band.

Artifacts that were not associated with burials, as well as the pottery vessels found in the mound, are presumably of the Rainy River aspect. Of greatest interest are a socketed bone projectile point, eight socketed antler projectile points, a portion of a bone arm band, and six beaver incisors cut obliquely downward across the anterior face to terminate in a sharp point. Each antler point has a hollow or socketed base above which is a perforation as though for a thong, indicating that the antler points were detachable. Such beaver incisors and antler points are recognized as typical artifacts of the Rainy River aspect.

If the primary burials of Smith Mound 4 are correctly ascribed to the Headwaters Lakes aspect, they probably were intruded in a mound built by people of the Rainy River aspect who practiced secondary burial after disarticulation. The presence of disarticulated bones is evidence that Smith Mound 4 may be more recent than Pike Bay Mound, from which all bones of disarticulated burials had disappeared. If it is later, the differences in the pottery decorations would indicate that dentate stamping was replacing push-and-pull bands in popularity. The mound also might indicate a movement of Rainy River people from the Vermilion Lake area northwestward to the Rainy River.

A Wisconsin archaeological project similar to that reported for Minnesota by Dr. Wilford in the preceding pages and in earlier issues of *Minnesota History*, is described by Moreau S. Maxwell in the *Wisconsin Magazine of History* for June. Under the title “A Change in the Interpretation of Wisconsin’s Prehistory,” the author tells of the excavation of a group of mounds on the Mississippi River in Pierce County, and describes the findings that resulted. His article serves as a preliminary report on the field work conducted in the summer of 1948 by the newly organized Wisconsin Archaeological Survey. Co-operating in the project, which was directed by Dr. Maxwell of Beloit College and Mr. C. W. Rowe of Lawrence College, were their own schools, the University of Wisconsin, the State Historical Society of Wisconsin, and the Milwaukee Public Museum. All who enjoy Dr. Wilford’s reports will turn with interest to the Wisconsin article.