

# Anthropology Papers

## National Museum of Canada



DEPT. OF NORTHERN AFFAIRS  
AND NATIONAL RESOURCES

*Ottawa*

THE W.B. NICKERSON SURVEY AND EXCAVATIONS, 1912-15,  
OF THE SOUTHERN MANITOBA MOUNDS REGION

BY KATHERINE H. CAPES

Issued under the authority of  
The Honourable Arthur Laing P.C., M.F., B.S.A.  
Minister of Northern Affairs and National Resources

ROGER DUHAMEL, F.R.S.C.  
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY  
OTTAWA, 1963

Cat. No. R 95-6/4

## CONTENTS

	PAGE
Résumé .....	1
Introduction .....	2
Nickerson's survey and excavations .....	4
The area explored .....	4
The Souris valley .....	6
The Pembina plain .....	46
The basin of White Mud River .....	60
The Assiniboine — Little Saskatchewan valleys .....	67
The region of St. Andrews Locks, Red River .....	74
Other Manitoba mound investigations .....	75
Comparative data .....	81
Material and artifact descriptions .....	87
Conclusions .....	113
References .....	120
Appendix: Descriptive summary of southern Manitoba earthworks .....	163

### TABLES

Table 1. Trait list of southern Manitoba mounds .....	78
2. Manitoba mounds' traits found in upper Mississippi mound complexes .....	86
3. Commonly held artifacts in Manitoba's mounds .....	112

### ILLUSTRATIONS

Plate I. Large stone tools .....	125
II. Scrapers and prismatic blades .....	127
III. Blades, bifaces, and large spear point .....	129
IV. Projectile points .....	131
V. Marine shell artifacts .....	133
VI. Shell and copper artifacts and historic knife .....	135
VII. Bone artifacts .....	137
VIII. Bone artifacts and stone tube .....	139
IX. Manitoba cord marked ware .....	141
X. Regina corded, Avery corded, and Fabric-impressed wares .....	143
XI. Plain ware and Mandan pottery .....	145

# ILLUSTRATIONS (Cont'd)

	PAGE
Plate XII. Plain ware and aberrant sherds .....	147
XIII. Mound 6 burial and views of Mound R and Star Mound .....	149
XIV. Mound R burial and human tibia with embedded projectile point .....	151
XV. Star Mound bundle burials and view of Arden Mound .....	153
XVI. Views of Lone Mound .....	155
XVII. Lone Mound burial and views of hill with historic graves and the southwestern Fidler Mound .....	157
XVIII. Drawings of limestone pipe and turtle design from pot .....	159
XIX. Restored pot from Mound R .....	161
Figure 1. Map of Manitoba .....	5
2. Map of Souris region .....	6
3. Hut-rings .....	9
4. Structure of Pit "b" .....	10
5. The small enclosure .....	11
6. The great enclosure .....	13
7. Mound G. ....	15
8. Mound H. ....	17
9. Mound R. ....	19
10. Map of South Antler flood-plain .....	22
11. Mound 3 .....	27
12. Mound 4 .....	28
13. Mound 6 .....	30
14. Mound J .....	33
15. Mound K .....	35
16. Riverview Mound .....	38
17. Health Mound .....	40
18. Map showing position of the Moore Group mounds .....	41
19. Moore Mound B .....	43
20. Moore Mound C .....	45
21. Map of Snowflake district, Pembina Plain .....	46
22. Mounds on Star Mound Hill .....	48
23. Sims Mound .....	56
24. An ideal section through the burial pit in the connecting grade of Sims Mound .....	58
25. Arden Mound .....	61
26. Map of Campbell Beach Ridge and vicinity .....	62

# ILLUSTRATIONS (Cont'd)

	PAGE
Figure 27. McKenzie Mound .....	64
28. McGorman Mound .....	66
29. Map of Assiniboine — Little Saskatchewan region .....	69
30. Lone Mound .....	71
31. Map of St. Andrews Lock region .....	74
32. Map of the Upper Mississippi drainage system .....	82
33. Rim cross-sections .....	105

## THE W.B. NICKERSON SURVEY AND EXCAVATIONS, 1912-15, OF THE SOUTHERN MANITOBA MOUNDS REGION

### RÉSUMÉ

Au cours des années 1912 à 1915, M. W.B. Nickerson entreprit l'exploration des nombreux tumulus découverts dans le sud du Manitoba pour le compte du Musée national. Il ne publia rien sur la question, mais il laissa une foule de notes, de cartes et de recueils qui forment la matière du présent mémoire. L'auteur examine la portée des données de Nickerson sur ce que nous connaissons de la préhistoire du Manitoba et des tumulus des plaines nordiques en général.

Les régions étudiées comprennent la vallée de la rivière Souris, la plaine de la rivière Pembina, le bassin hydrographique de la rivière Whitemud, la région au nord de l'Assiniboine près de Brandon et les environs de Lockport sur la rivière Rouge. Les tumulus étaient situés surtout le long des cours d'eau; parfois ils étaient réunis en groupes minuscules, mais en général ils étaient bien disséminés ou même solitaires. La plupart étaient petits et légèrement bombés, tandis qu'un certain nombre, particulièrement dans la région de Souris, étaient reliés par de longues buttes de terre peu élevées; plusieurs étaient plutôt vastes et elliptiques et quelques-uns avaient une forme figurative. Un grand nombre de fosses étaient souterraines, tandis que d'autres sépultures se trouvaient à la base du monticule ou dans le monticule même. On a trouvé deux principaux genres d'inhumation: en posture assise primitive (ou repliée?) et en amas secondaire, ces sépultures contenant des ossements d'un ou de plusieurs corps. Certaines particularités se retrouvent communément dans les tumulus: des amas de perches en travers des fosses, des offrandes de bison, des objets ouvrés tels que de petites pointes de flèche triangulaires, des ornements en coquilles de *busycons* et d'*uniones*, des plaques de cuivre, des colliers et des bracelets d'os, des sifflets en os et des poteries mortuaires. Des chercheurs antérieurs ont trouvé dans la région de Souris un genre unique de poterie spiralée et gravée en creux qui est propre à cette région.

L'auteur conclut que tous les tumulus dans la province datent de la même époque et possèdent des caractéristiques dominantes analogues. Il croit qu'ils se rattachent à une culture préhistorique plus récente, attribuée respectivement aux bandes d'Assiniboines qui se sont établies successivement au nord et au sud de la province, y étant arrivées par des voies distinctes. On croit que ces peuplades introduisirent la coutume du tumulus apportée directement du foyer d'Arvilla avec des antécédents provenant des foyers de Malmo, d'Effigy et de Laurel, mais modifiée sous l'influence du culte des peuplades du Sud. L'auteur est d'avis que les tumulus du Manitoba font partie de la limite nord-ouest de la zone des sépultures tumulaires, cette coutume s'étant développée, dans les plaines nordiques, par fusion de formes culturelles anciennes du Minnesota qui remontent à l'époque du Sylvestre moyen (Middle Woodland).

## INTRODUCTION

The following report on Manitoba mounds is based on the 1912-15 investigations of William Baker Nickerson, whose very full notes, charts, and collections are housed in the National Museum of Canada.

The reason for publishing this material after such a lapse of time is that it contains further facts on the distribution and cultural associations of burial mounds in Manitoba that have some bearing on the history of the Northern Plains. Several questions come to mind. Initially, is there an areal difference amongst Manitoba mounds, and, if so, what does that signify in regard to the age and cultural relationships of the specific areas? Or do Nickerson's mounds bear out MacNeish's (1954, 1958) contention that all Manitoba burial mounds are to be attributed to the Assiniboine? Is there evidence of an interrelation between the mounds of Manitoba and those in the adjoining states of Wisconsin, Minnesota, and the Dakotas? If there is, does this relationship indicate a spread of the mound complex from the southeast or vice versa? In other words, do the Manitoba mounds shed any light on the direction of movement of the burial mound complex?

Mr. Nickerson, an employee of the Chicago and Great Western Railway, was not a professional archaeologist. Nevertheless he anticipated modern methods of controlled excavation that included datum plane, 5-foot grid system, digging by levels, careful smoothing of profiles and floors, and detailed recording. Prior to his work for the National Museum of Canada, he excavated in Illinois between the years 1895 and 1901 under the guidance of the Peabody Museum of Harvard University. Though some of this work saw publication in *Records of the Past* (Vols. VII, X, XI), he remained in undeserved obscurity until his unpublished reports were rediscovered by the University of Chicago in 1926, a few weeks after his death. Bennett (1942) in a special tribute wrote "Nickerson's techniques and interpretative balance were as mature and sophisticated as those of the finest dirt archaeologist of today." Later Bennett (1945) embodied Nickerson's Illinois excavations in one report.

A brief outline of Mr. Nickerson's Manitoba findings appeared annually during the period of his investigations in the *Summary Reports of the Geological Survey*, Department of Mines, for the calendar years 1912 to 1915 inclusive. The reason this work was not published more fully is gleaned from the following statement: "Mr. Nickerson's annual manuscript report summarizes existing data on the archaeology of the region, but will not be published until a culture may be characterized in some detail" (Smith, 1915: 178).

The present report is based on this manuscript, and in the section describing Nickerson's investigations his own wording is, for the most part,

followed. The arrangement of his data, however, is mine. As far as possible his charts have been duplicated exactly, although for photographic purposes a most have had to be re-drawn. Mr. A.E. Ingram of the National Museum staff drew the map, figure 1. Mr. J.A. Dellaire, also on the National Museum staff, restored the pot (Plate XIX). Acknowledgment is made to various members of the Geological Survey of Canada for identification of rocks, minerals (X-Ray Diffraction Laboratory), and shells (Dr. Frances Wagner) in connection with artifact descriptions, to Mr. Earl Godfrey, National Museum of Canada, and to Mr. Austin Cameron, now of McGill University, respectively, for bird and animal bone identifications. Dr. L. Oschinsky of the National Museum examined the human skeletal material. Finally, this paper owes much to the guidance of my supervisor, without whose help it could not have been attempted. In the course of its protracted period of preparation, it has also benefited by pertinent suggestions, in turn, from Professors Robert E. Greengo, David A. Baerreis, and lastly Dr. James B. Griffin, all of whom I sincerely thank. Responsibility for the shortcomings of this final version, however, is mine.



## NICKERSON'S SURVEY AND EXCAVATIONS

### THE AREA EXPLORED

Among the early archaeological programmes initiated by the National Museum of Canada under the archaeologist Harlan I. Smith was a reconnaissance of the plains of southern Manitoba and the excavation of the burial mounds in that region during the years 1912 to 1915 by W.B. Nickerson.

Throughout the area surveyed, which included the Red River Valley and most of the southern part of the province exclusive of the Turtle Mountains, Nickerson found mounds on the plains' level, high above the streams and nearly always well back from the brink of the escarpment. Not usually grouped closely, these mounds were either widely spaced or stood alone. Some were moderately large and elliptical at the base, some few were long earthen ridges, relatively low, and expanding to round mounds at their terminations; but most of them were small dome-shaped tumuli, rather inconspicuous above the level of the plain. They were found usually near deep and sheltered valleys, but often a single mound was found on the summits of isolated hills far removed from shelter.

The 1912 survey (see map, Figure 1) located previously excavated mounds on the Red River at St. Andrews Rapids near Lockport; small single mounds on hill summits near Manitou and Morden, and Calf Mound (partly excavated by Montgomery in 1910) near Darlingford; several mounds on the plains above the Pembina in the region of Mowbray and Snowflake and on the top of Star Mound hill; Pilot Mound also on a hilltop; and more mounds on the plain above Rock Lake. In the Souris valley in the southwest corner of the province, Nickerson reported thirty mounds, comprising twenty-two circular tumuli and eight low-lying 'grades'; village sites; and a rectangular walled enclosure.

The following summer Nickerson concentrated on the Souris valley. Besides digging mounds, he also excavated a large horseshoe-shaped earthwork, two rectangular house sites and some hut rings and pits, all on the North Antler plain. He discovered two village sites: one on the east side of the Souris was entirely below the upper plains' level, and the other, on the South Antler, extended from the upper plains' level to the floodplain. Subsequent test pitting of the South Antler bottom lands for further village material disclosed nothing.

Nickerson investigated the Pembina Valley tumuli in 1914, and in 1915 he explored north of the Assiniboine River. Near the Whitemud River he discovered village material in the vicinity of Arden, and in the same area he

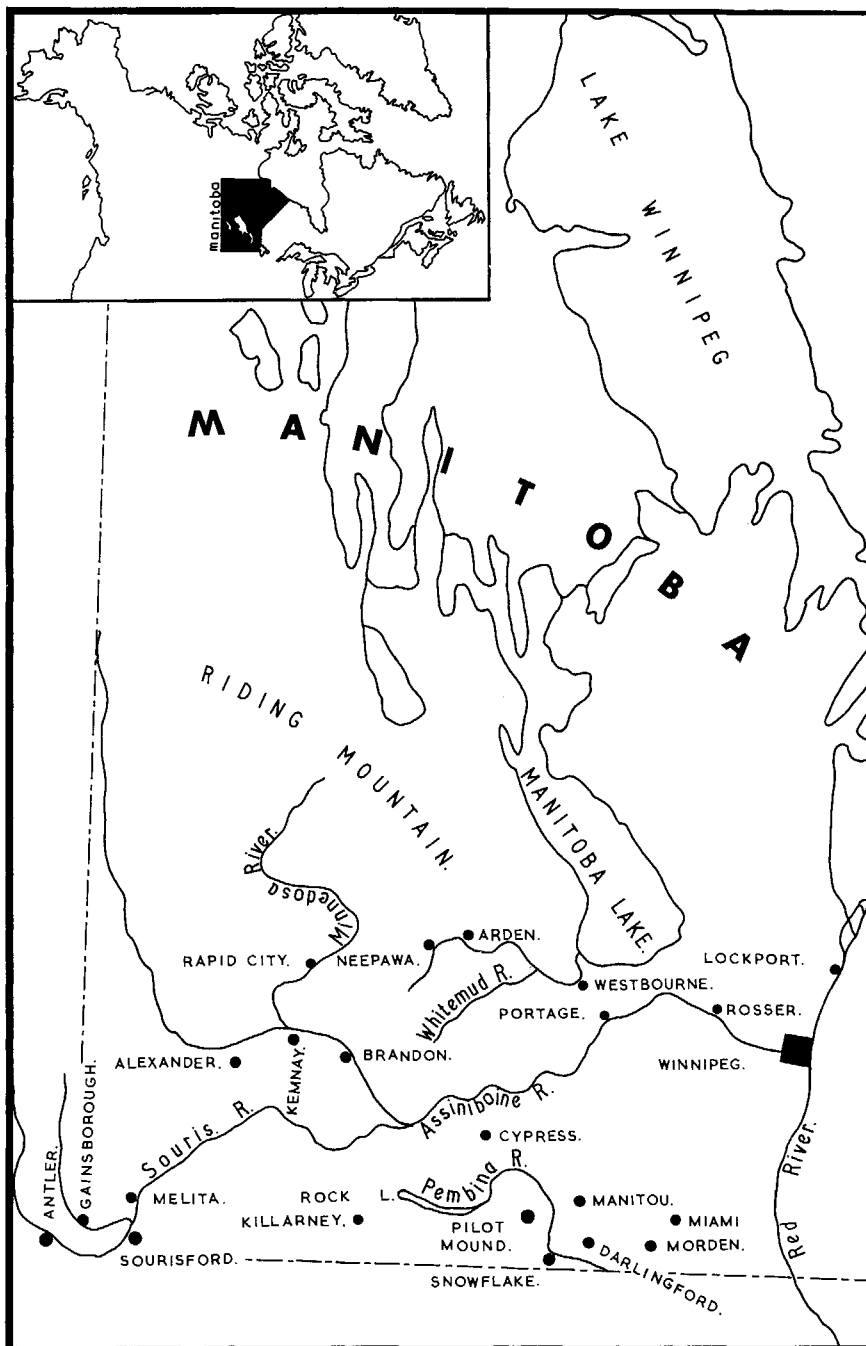


Figure 1. Map of Manitoba

dug mounds along the crest of the Campbell Beach ridge. No mounds were noted along the Little Saskatchewan (Minnedosa River). One small tumulus was found west of this stream on a conspicuous headland north of Alexandra.

THE SOURIS VALLEY

The area investigated (see map, Figure 2) was Township 2 north 27 west, where the Souris River re-enters Canada after making its great southern loop into North Dakota. The general character of the region like that of the

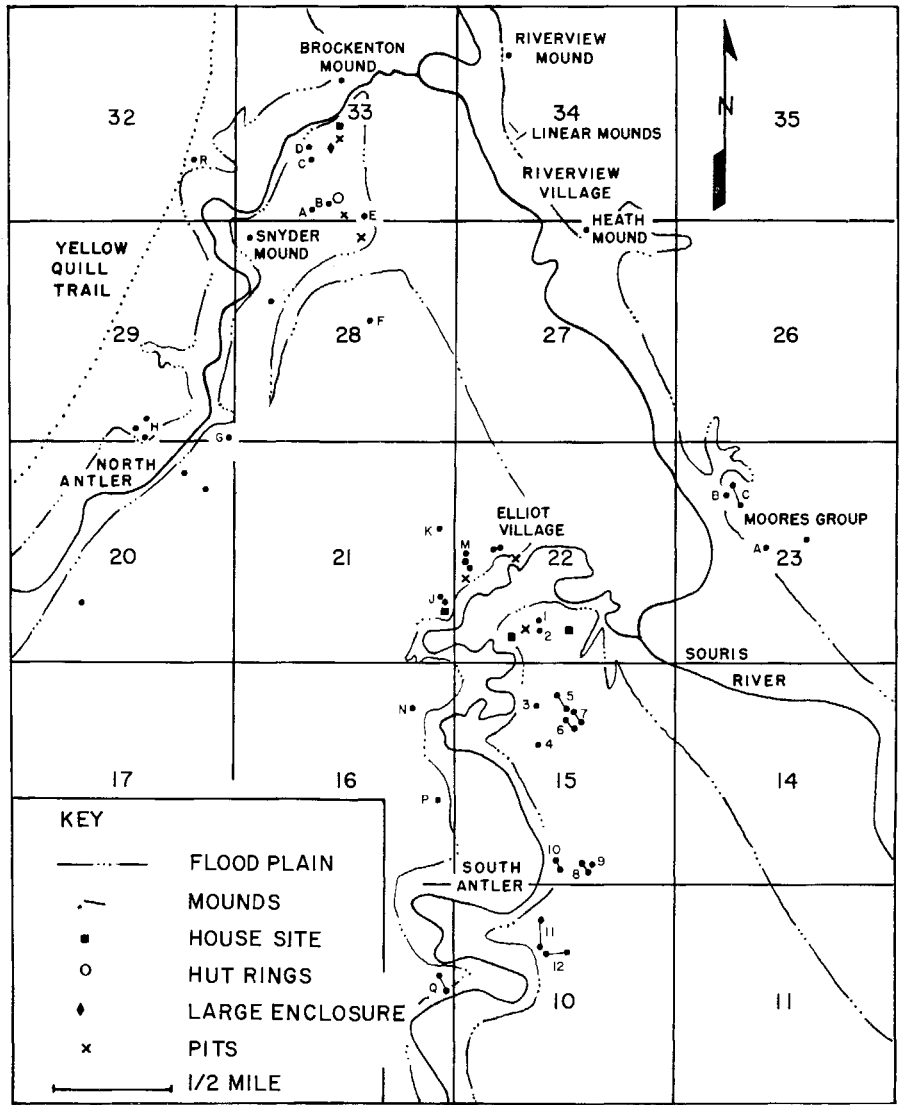


Figure 2. Map of Souris region

great plains, flat and treeless, is broken in this township by the valley of the Souris River, which flows tortuously through wide floodplains, about eighty feet below the level of the general plains' surface.

The Souris River is a relatively small stream, coursing with wide loops through a valley more than a mile wide. Emerging from this great valley to the southwest are the proportionately wide valleys of tributary streams, the North and South Antlers.\* The plain is broken up at this point into two peninsulas, one between the two Antlers, the other between the South Antler and the Souris. Another great valley to the northeast, called the Blind Souris, is a vast alkaline marsh studded with boulders.

Both Antler creeks, except in flood time, are without definite outflow, and consist of a chain of spring-fed pools, obstructed by dry crossings and by barriers of beaver-laid driftwood. The low-water stage of these streams is 15 feet below their floodplains. Natural gas escapes from some of the pools. The flow of the Souris is not obstructed, although there are frequent gravel fords over which the river flows. There are no springs of running water in the region, but water for domestic use may be found only 15 feet below the surface of the plain.

The valleys are well forested with a growth of oak, elm, ash, Manitoba maple, poplar, birch, and willow. Fruit-bearing plants include blackberries, and choke cherries, plums, and hawthorns. Serviceberries and raspberries are well distributed over the floodplain, also strawberries and a few cranberries; wintergreen and squaw or pigeon berries grow on the slopes. Nearing the plain level the trees become dwarfed and distorted, and there is much dead wood suitable for quick fires. The plains' level is 80 feet above the valleys, and the slopes are scarred with deep worn trails leading from the plains to the lower floodplain. Many of these trails, now followed by white man's cattle, were formerly water trails of the buffalo. Before white settlement the forest was of larger growth, and game must have been plentiful. In earlier times this region must have been exceptionally well suited to the requirements of a primitive people, as compared with the regions lying both to the north and south.

Indications of primitive man in this region are most abundant on the plains in the vicinity of the two Antlers and in the valley of the Souris adjacent to the plains. The surface of the North Antler plain, where broken up and cultivated, is strewn with broken buffalo bones, and where the plain is unbroken, groups of shallow pits, indicating camp-sites, may be seen. The South Antler plain is similarly marked with shallow pits at some points. These pits and the mounds scattered over the plains, singly or grouped, comprise the principal archaeological features of the region. Small bands of Sioux and lone hunters still occasionally traverse the Souris Valley (1914), stopping to trap along the Antlers in their journeying to and fro between Dakota and the Moose Mountain reservation. The older settlers of Sourisford

\* On present day maps Gainsborough Creek and Antler Creek, respectively.

tell of large bands of Sioux having frequented this region as transients at some seasons, but never having permanently camped here. Many of the scattered bones on the plains must be attributed to these transients, who left little to mark their passage except broken bones from their soup kettles. Indications of more extended occupation, such as a village, were found at only two places, one on the east side of the Souris, the other on the north bank of the South Antler.

### ***The North Antler Plain***

This area (see map, Figure 2) extends southward from SW  $\frac{1}{4}$  of NE  $\frac{1}{4}$  Section 33, through the greater part of Section 28, the SE  $\frac{1}{4}$  Section 29, and indefinitely southward into Sections 20, 21, and 22. Most of Sections 28, 20, 21, and 22 have been under cultivation, but the rest of the area has not been broken. A ravine heads north in SW  $\frac{1}{4}$  Section 28, becoming quite deep where it traverses the NW  $\frac{1}{4}$  of the section and opens into the Souris Valley. It is a dry run except in early spring.

### **Hut-Ring Camps and Pits**

From the northern point in Section 33, through Section 28, and into SE  $\frac{1}{4}$  Sec. 29, were indications of temporary occupation of the plain in the shape of hut-rings and pit holes. In the hut-rings explored, however, there were no traces of fireplaces, and the pits examined did not indicate conclusively what purpose they may have served. Scattered broken bones, flint and chert chips, and a few very small potsherds were found at nearly every one of the excavations but indicated mere camps rather than permanent sites.

In SW  $\frac{1}{4}$  Sec. 28 many lodge sites or hut-rings were said to have been on the plain before it was broken for cultivation, but no indications of a large or permanent camp were found. Grooved stone hammers and some large mauls have been ploughed out in Section 28, however, as well as on the Souris floodplain in Section 33.

East-northeast of Mound B in Section 33 were three hut-rings faintly outlined on the plains' surface. Two of these were interconnected (see Figure 3) with openings toward the west. The depth of soil in the 'ring' in No. 1 was 10 inches, and at the centre, 6 inches, but no fireplace was found in either No. 1 or No. 2. Under the soil was unbroken gravel. Only three small fragments of bone and a chert chip were found. The third ring was not examined.

Southeast of these hut-rings were some depressions which on examination disclosed pits. Depth of sod covering *Pit 'a'* was  $4\frac{1}{2}$  to 6 inches. Under the sod at SW centre was soft black earth with gravel under it, and under the gravel were sheets of very black soft earth, the disturbance reaching to a depth of 2 feet 3 inches. At a depth of 6 inches a piece of '*Unio*' shell, a chip of white flint, and a piece of thin animal (?) skull were found, and at 8

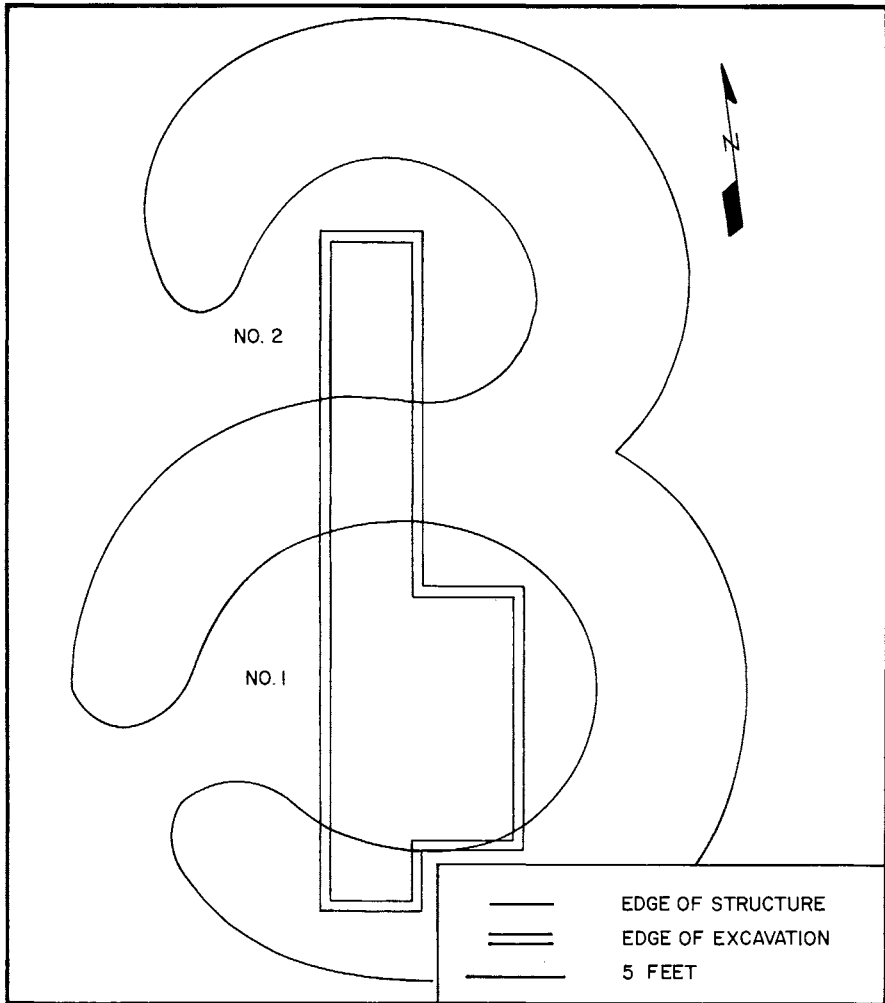


Figure 3. Hut-rings

inches fragments of animal bone. In gravel at a depth of 3 feet were a buffalo horn-base, a fragment of antler, a fragment of animal jaw, and bone fragments, together with some cracked limestone boulders and a rude schist disc 8 inches in diameter and half an inch thick.

In the sod above the slight hollow indicating *Pit 'b'* (see Figure 4) was a small potsherd (missing) at a depth of 6 inches. Below the sod to a depth of 9 inches was black soil containing a few bone fragments; this layer was underlain by a white alkaline soil mistaken at first for wood ash. The white earth reached to a depth of 2 feet 4 inches and under it was dark gravel 2 to 3 inches thick which contained a broken bone. Under the fairly level gravel layer, curving downward in a saucer-like layer, were 3 to 8 inches

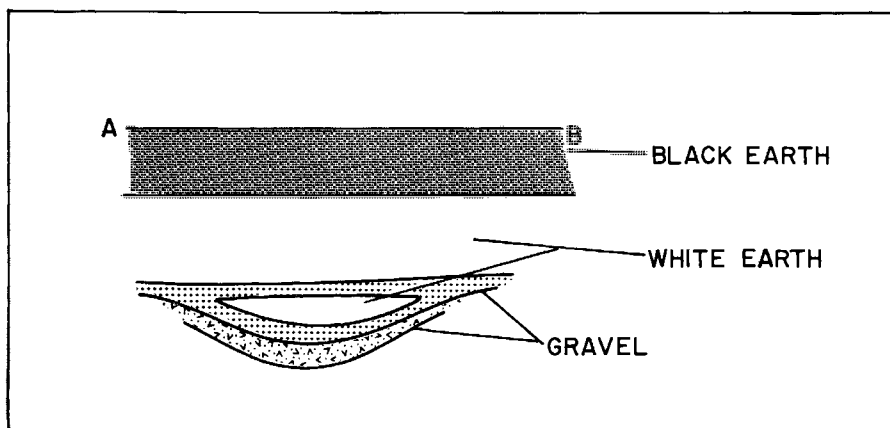


Figure 4. Structure of Pit 'b'

more of white earth, with dark gravel under it containing more broken bones of bears or badgers.\* There were lumps of soft black earth in the gravel, also broken boulders and splinters of calcined bone. The extent of the white earth over the gravel would suggest a natural formation but for the fact that the gravel contained such things as firestones and bones. Trenching from Pit 'a' to Pit 'b', however, failed to explain the white earth formation. The pit extended to a depth of 4 feet, very black soft soil indicating the bottom.

A third pit examined, *Pit 'c'*, was situated northeast of the great enclosure near a house site in SW  $\frac{1}{4}$  Sec. 33. Its appearance before the removal of the sod was that of a circular hollow, 15 inches deep and 10 feet wide, with a slight elevation of surface about the rim. The depth of sod over the rim was 4 inches, and within the hollow 11 inches. Two small potsherds (missing) and bone fragments were found at a depth of 6 inches, while deeper in the pit was a white flint flake, a bit of shell, and a layer of crushed bone. At a depth of 3 feet were many buffalo bone fragments, one vertebra, and a horn-base, and at 3 feet 6 inches were two buffalo frontals or most of two skulls with horn-bases intact. All bones were soft and crumbly. No fireplace or firestones were found, although the plain was trenched for 25 feet northwest of the pit and everywhere broken bones were visible. The pit proper was about 4 feet in diameter and 3 feet 6 inches deep, filled with alternating gravel and black earth. The gravel lies naturally here below the surface soil.

#### Small Enclosure or House Site (Figure 5)

This site was an oblong rectangle in connection with an ellipse on the east. The rectangle, oriented with the cardinals, was about 70 feet north-south by 35 feet east-west, measured from outside of the earthen wall en-

\*Listed in Nat. Mus. of Canada catalogue as skull parts of dog or wolf (Cat. No. X-A-159, 160, 161).

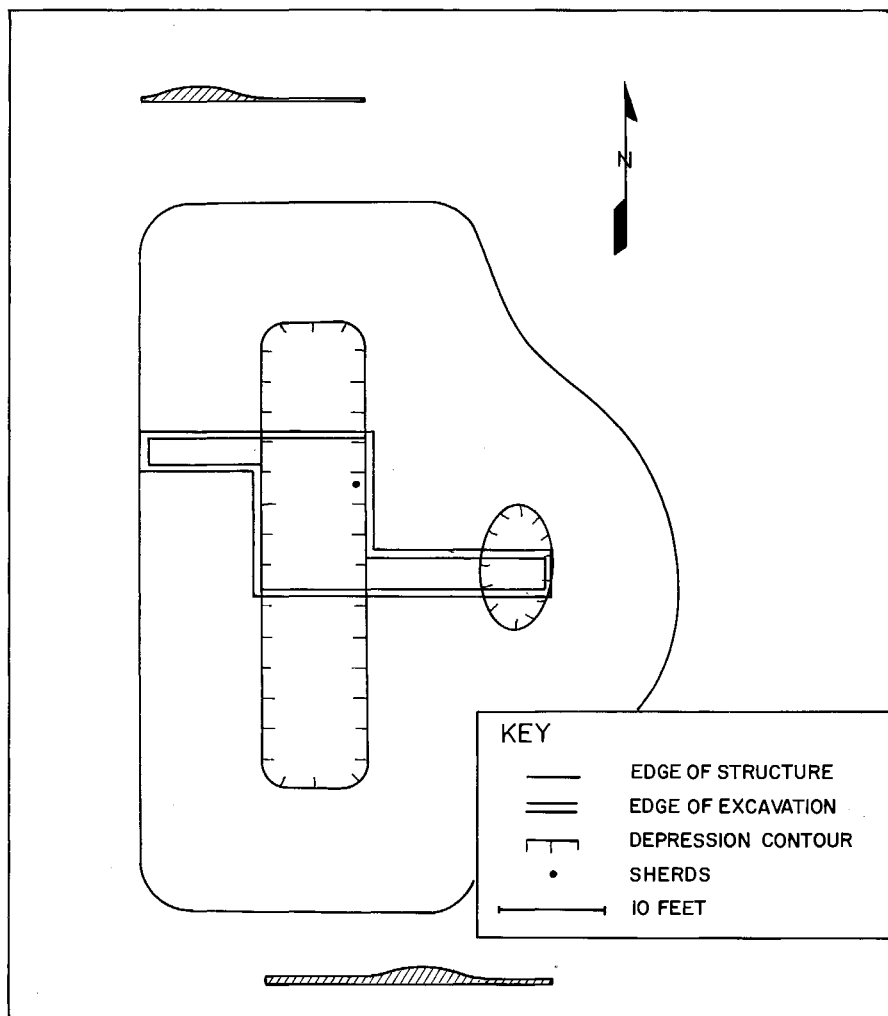


Figure 5. The small enclosure

closing the structure. The wall was almost 12 feet wide, contracting the interior to a level area 46 feet by 11 feet and was 12 inches high except on the east, between the rectangle and the ellipse, where it was a little higher.

Unbroken sod from 3 to 9 inches thick covered the entire site. In the northern trench, 3-inch sod lay on a bedding of gravel pebbles and small boulders. Where the trench cut the west wall was 14 inches of black soil without stones, except for a small pebble polished by wear and one broken stone. The southern trench traversed the centre of the ellipse, the wall between the ellipse and the rectangle, and the central level area, and then swerved north to intersect the first trench. The excavation showed the floor



of the ellipse depressed below that of the rectangle and covered with a sod 4 inches thick; the sod and soil covering the centre of the rectangle was 9 inches deep, gradually becoming thinner towards the north. In the wall, on the side towards the ellipse, were chipped flints, bone fragments, and part of a quartz knife (Plate III, fig. 4). Within the rectangle were occasional bone fragments and small potsherds at a depth of 6 to 9 inches, and two chips of amber-coloured flint (chalcedony) near the potsherds. The potsherds from this site are of the same character as those found elsewhere on the North Antler plain; a crumbly black ware marked with wicker (twined fabric) imprints (Plate X, fig. 9, 11). No hearth, nor any remnant of a chimney, either of clay and wood or of stone, nor burnt stones were found in either the ellipse or the rectangle where trenched. The excavations here were filled in, and the sod was replaced, leaving the site nearly in its original condition. Northwest of the rectangle was an irregular excavation, now sodded over, from which the earth for the structure might have been taken.

At the base of the plain, on one of the many trails leading to the water, an oval-shaped hammerstone was found.

### The Great Enclosure (Figure 6)

A low-lying sod and dirt wall, irregular in outline, bounded the great enclosure, situated in SW  $\frac{1}{4}$  Sec. 33. Its major axis, oriented a little west of north, was approximately 230 feet, and its width varied from 80 feet on the north to 35 feet at its southern end, where it appeared to have been intruded upon and obliterated by lodge sites, and where the extension of the west wall could be traced farther than that of the east. The elevation of the wall above the plain was not uniform and at its termination became very difficult to trace. It was highest on the north and northwest, where it was 12 to 15 inches. The width at the base was 12 to 15 feet, but north of the centre on the east, where it bends outwards, it tapered almost to nothing. Here there was a depression 30 feet long and 2 feet deep outside the wall. Owing to a very slight elevation along the east base of the mound (c) lying outside the west wall, the enclosed area appeared slightly depressed on the west side.

Time allowed for trenching only in the northern end. Tough prairie sod covered a very thin soil on the northwest end of the trench, the soil becoming 6 inches deep towards the south end and 18 inches deep at the west wall. Under the soil was gravel embedded in tough clay, which is the usual subsoil of the plain. Fragments of animal bone were found in the wall, also a very small potsherd (missing). Pebbles, cracked pebbles, and stone chips were found in the top soil of the trench extending south. In the gravel bed at a depth of 9 inches were broken bones of horse or elk (?).

A test hole in the depression outside the east wall showed nothing but black earth above the subsoil. Another in one of the three small depressions

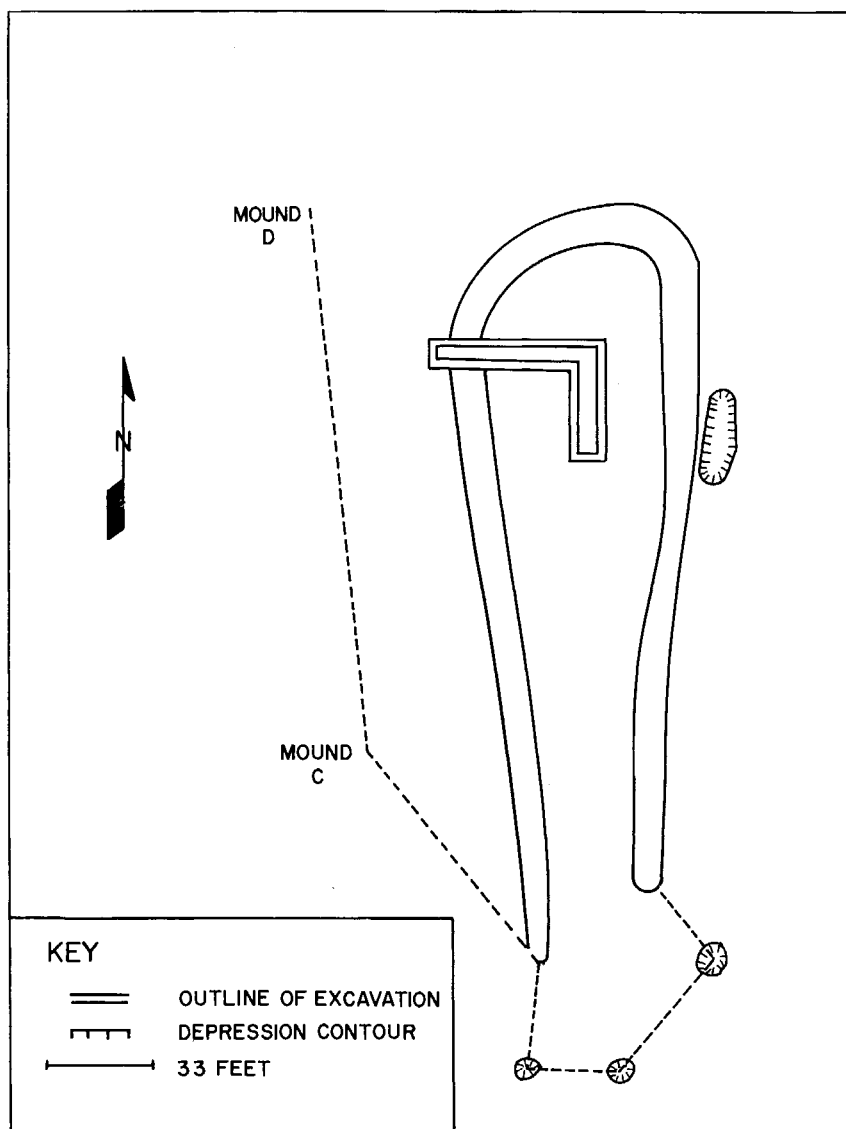


Figure 6. The great enclosure

at the south end of the enclosure showed buffalo bones and a trace of fire. All excavations were filled in and sods replaced.

### Mounds C and D

Near the enclosure were two mounds designated C (the larger) and D, which had been opened prior to this survey. They were said to have been 8 feet high and elliptical at the base, about 100 by 70 feet.

Mound C contained three mortuary centres or graves, not properly pits but depressed slightly below the plains' level. One of these graves was opened in 1886 by a party of Sourisford people assisted by Dr. R.S. Thornton and Dr. George Bryce. Mr. Alfred Gould of Sourisford said he did the digging himself, passing through decaying poles and breaking into one side of the grave to find three skeletons arranged about a birch-bark basket. He thought the skeletons were bundled rather than sitting and said that the basket contained the urn-shaped pipe now in the Elliot collection and a few other articles. A little red pottery jar, now in fragments, in the Elliot collection was also found at this time (Bryce, 1904: 5).

Later in 1906-07, Professor Montgomery found two more graves in this mound and secured two more jars of the same type, which he illustrates (1908).

### **Mound A**

Another large mound, excavated by Montgomery, now a shapeless heap, was in SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  Sec. 33. Like C and D, it stood well back on the plain. There was no record of what this mound contained, but pieces of decaying wood were found similar to those in other mounds in this region. Between Mound A and the edge of the plain on the west and on the south, the surface (of the plain) was uneven or pitted with shallow irregular hollows. In the sunset light, the hollows looked like lodge sites of a large encampment, but digging in them gave no results. Nothing but gravel was found under the sod, and it was concluded that they were hollows from which material had been taken for the erection of the mound.

### **Mound B**

A distance of 165 links east-northeast of Mound A was a rise of one foot, 25 feet in diameter, which was designated Mound B. Animal bone fragments (one worked), a chip of amber-coloured flint, and some quartzite fragments were found at a depth of 6 to 8 inches, and one bone fragment at 18 inches depth. The structure was probably a gravel kame of natural formation. No interment was found.

### **Mound E**

A very small mound, accidentally located early in 1913 on the edge of the plain on Mr. Thompson's land in the SW  $\frac{1}{4}$  of SE  $\frac{1}{4}$  Sec. 33, had been explored by Archie Thompson and Wm. Woodcock. It contained a burial pit covered with decaying wooden poles, in which were two skeletons, a stone disc, and a small pot nearly entire, decorated with four incised turtles (Plate XVIII). The mound above the burial pit consisted of little other than the subsoil, thrown up in digging the pit; the site had been repeatedly ploughed over.

## Mound F

Mound F, the largest mound on the North Antler plain, may still be seen (1914) on Mr. A. D. Thompson's land, in NE  $\frac{1}{4}$  Sec. 28. This mound was first opened when owned by one of the Snyders, about 1890, and it was later explored by Professor Montgomery of Toronto, who used teams, ploughs, and scrapers. It was said to have contained three mortuary centres, but what was really found is unknown. Bits of decayed wood could be seen in the sand of the abandoned excavation.

## Mound G (Figure 7)

Mound G, standing in the southeast corner of SE  $\frac{1}{4}$  Sec. 29 on unbroken school land, but for badger holes, seemed never to have been disturbed. It was 20 inches high and from 33 to 39 feet in diameter; the major axis oriented northwest and southeast.

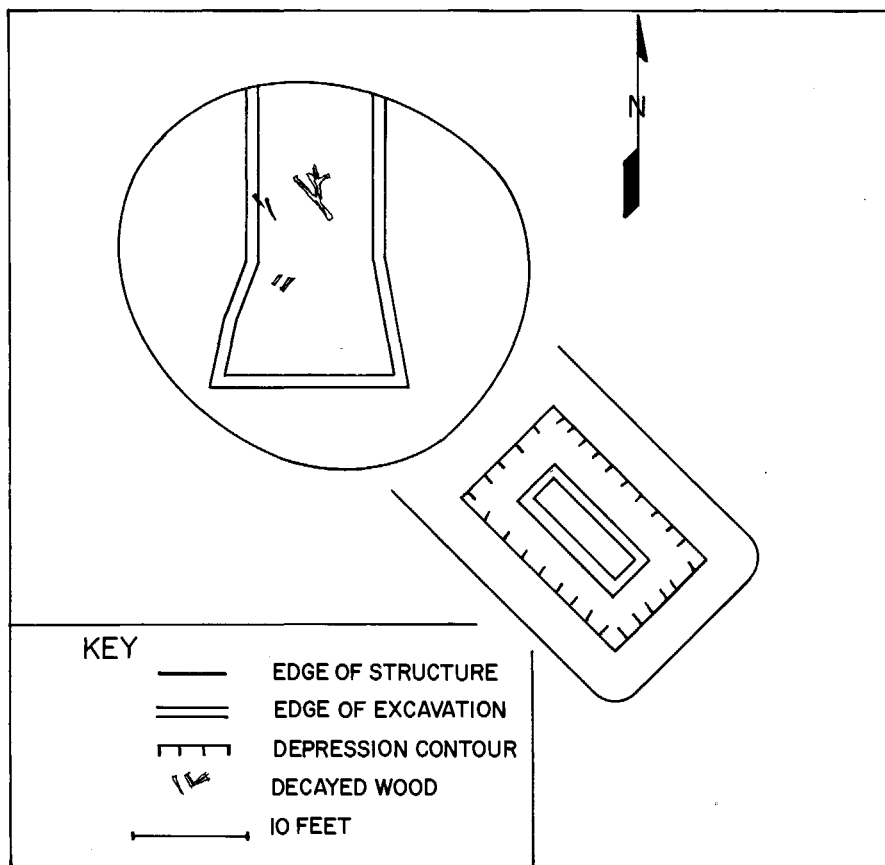


Figure 7. Mound G

The excavation, which was started at the north base, continued well beyond the centre. Stone chips, bone fragments, and decaying twigs were found at the plains' level, and on entering further into the mound it was seen that the twigs were the ends of untrimmed branches laid under the mound at about the plains' level. Samples of these branches showed bark and twigs and, in one instance, worms in a split crotch. The wood was probably poplar.

Fragments of animal bones, pieces of '*Unio*' shell, and the left frontal of an infant were found in a badger hole, and broken buffalo bones and a few bones of an infant were found at a depth of 11 inches at the top of a badger burrow. No primary interment was located, and the mound had the appearance of having been much disturbed all about the centre. A fragment of an adult (human) skull and of a tibia were found at a depth of 2 feet. Below this to a depth of 4 feet 8 inches the subsoil appeared undisturbed. Part of a stone maul, broken at the groove, was found at the top of the subsoil. It was coated on the end that was down with the calcareous scale, so often seen on undisturbed boulders.

Against the southeast base of Mound G was a small, walled, oblong rectangle, 19 by 11 feet, as measured from the top of the wall, the greater axis running northwest and southeast. The centre of the northwest side of this structure was 23 feet southeast of the centre of Mound G. The sod covering this site was extremely tough, owing to a growth of bay bush. Over the centre, there was a black soil 8 to 9 inches deep and in the wall 18 inches deep. Tests only were made here, and nothing was found except a tooth of horse or elk near the centre.

South of G, and on the same side of the North Antler, three other mounds were reported and said to have been opened, probably by Montgomery.

### **Mound H (Figure 8)**

Mound H was a mound similar to Mound G on the opposite side of North Antler Creek in the SW  $\frac{1}{4}$  of SE  $\frac{1}{4}$  Sec. 29. There was no road leading to it, and it was thought to be undisturbed. The 'yellow quill trail' of early historical times passed near this mound to the west. It was a round dome-shaped mound, 40 by 38 feet in diameter, 2 feet high, situated on uncultivated school land overlooking the valley.

Excavation was started at the north base, and as it progressed there was evidence of wood decay, as of some kind of structure, within 10 feet of the centre in very dry earth at the plains level. Some of the wood was charred. The decay of a stake had buffalo vertebrae on two sides of it, and a foot east of this was a human humerus and two objects of antler. One looked like a powder horn (Plate VII, fig. 4). It had a knobbed end and a perforation near the end showing much cord wear, as if worn suspended from a girdle. The other object was hook-shaped, with one antler prong forming the hook and ending in a knobbed point, which had been

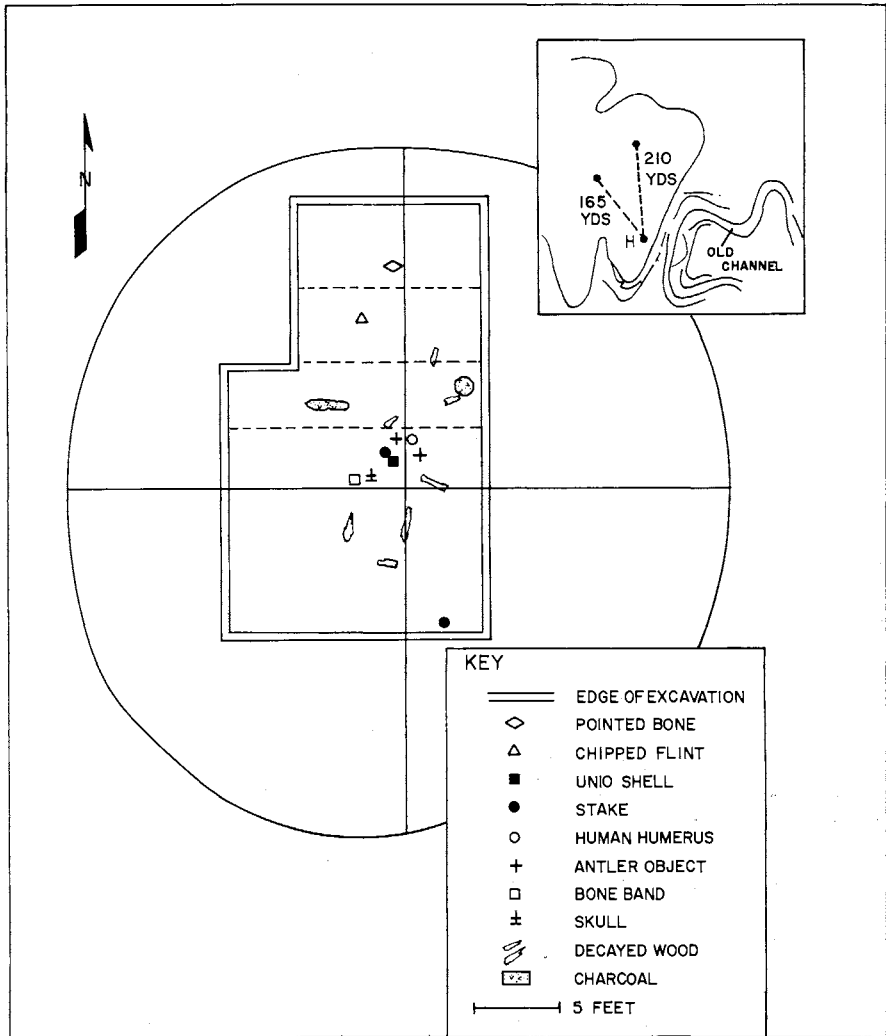


Figure 8. Mound H

broken and reworked. A 'Unio' shell lay convex side up southwest of these. All were at a depth of 13 inches. A human skull lay at a depth of one foot, two feet southwest of these, on the right side, facing southwest. The back of the skull was broken. Just west of the skull, as if it had slipped from it, was a broken band of bone (Plate VII, fig. 1) made from the thin part of buffalo scapula, shaped to a curved form and perforated along the edges with eyelet holes. One edge also showed slight notches, and, like a similar object in the Elliot collection, it had been broken and mended. Another decayed stake, in upright position, was found 8½ feet south-southeast of the centre. From the plains' level under the mound

were two small potsherds (Cat. No. X-A-247), some food bones, a few flint chips, and a pointed used bone. No skeleton was found, only the skull with lower jaw and two vertebrae, atlas and axis, in natural position, and one humerus.

At a distance of 165 yards northwest of Mound H was a mound that had been opened. It was round and dome-shaped and 32 feet in diameter and 2 feet high. A test in this mound revealed some of the decayed wood usually found, some human bones that appeared to be in their original position at a depth of 18 inches, and a lower jaw at 3 feet. Parts of two skeletons were found, evidently having been dug out and thrown back into the old opening. No indications of a pit were found, and the work was abandoned.

Another mound, 210 yards north of Mound H, showed up as a barely perceptible rise in which were badger workings. It contained food bones and dusty earth, but nothing else. The disturbance, which may have been due to the burrowing of badgers, extended to a depth of 4 feet.

West of Mound H the plain was marked by hollows some 4 inches deep. Test trenches gave no indications of habitation; they were attributed to buffalo stamping or to hollows left where earth was taken in the building of the mound.

Reference to the sketch map of the vicinity of Mound H (see Figure 8) will show a rather elevated point of the creek floodplain, about which an old channel of the creek winds. This channel is now a closed slough of marsh grass. A few food bones were found in a test made on this point. On the flat south of Mound H, along the bank of this old channel, a few scattered food bones were found and some very small potsherds, the sherds bearing wicker imprints (twine fabric?) characteristic of the ware found scattered over the North Antler plain.

### **Mound R (Figure 9)**

To the north of Mound H was Mound R in the SE  $\frac{1}{4}$  Sec. 32 on the property of Mr. John Snyder of Elva. Mound R was round, dome-shaped, 34 feet in diameter,  $2\frac{1}{2}$  feet high, and was situated on unbroken pasture land (Plate XIII, fig. 1). It stood quite alone, 100 yards back from a point of the plain, overlooking the North Antler. Excavation disclosed no indications of previous disturbance other than badger burrows, and the mound earth when broken down split in columnar structure, characteristic of soil long undisturbed. Tests of the prairie soil on the level about the mound gave 4 inches of sod lying over the gravel, and this sod line extended under the mound until broken by the burial pit or by badger work.

Excavation started at the east base. Fragments of the anterior portion of a human skull and some scattered bones of the feet were found 9 feet south-southeast of the centre at a depth of one foot, probably disturbed by badger digging. Part of a sharpened stake was found lying flat on the

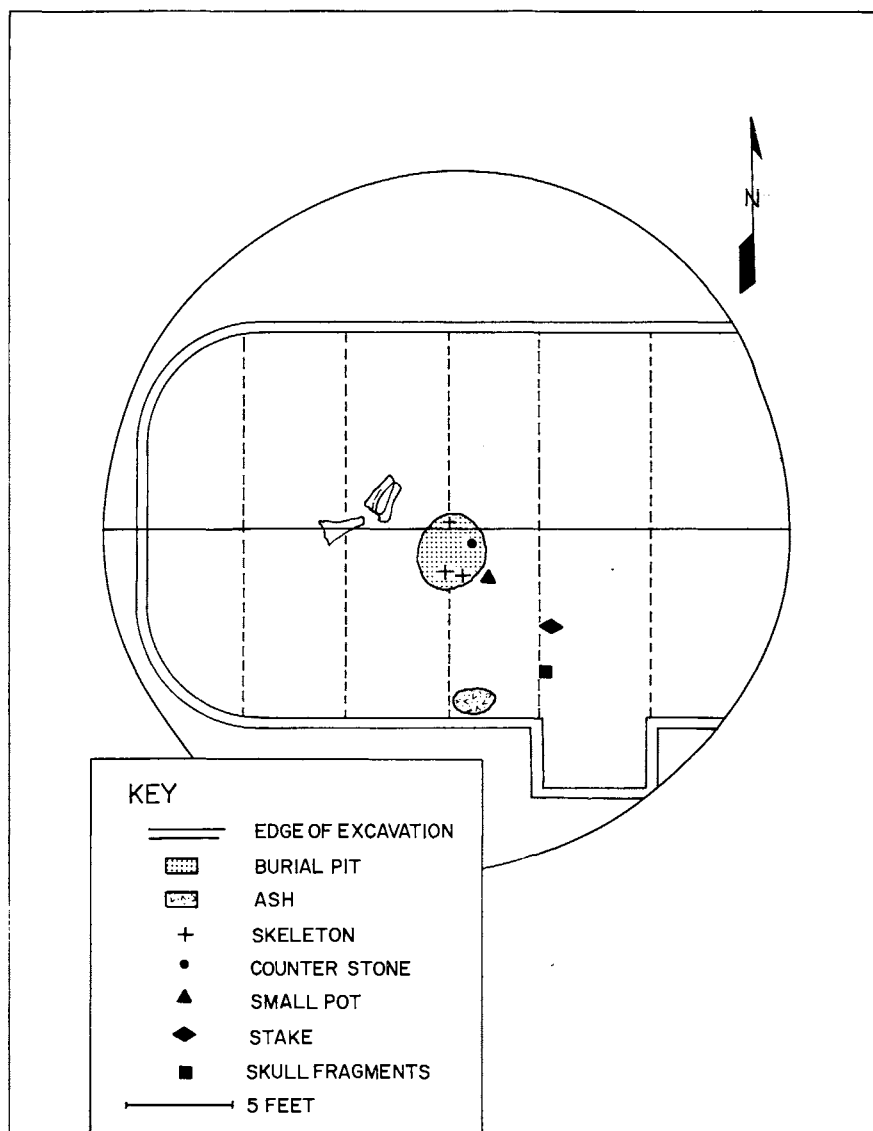


Figure 9. Mound R

sod line under the mound, 7 feet southeast of the centre. It appeared to have been sharpened with a clean stroke as with an iron axe. The wood did not appear to be so old as some of the wood found in the mound, and this and samples of decayed wood were retained for comparison, also some bits of apparent pine boards, found at the sod-line level, southeast and north of the centre. A small ash-bed lay on this level, evidently an old camp-site, 8½ feet nearly south of the centre. It contained one food bone,



but neither stones nor charcoal. A large potsherd had previously been found on this old level, near the east base, 13 feet from the centre. Decorated with an 'incised' design (cord-impressed and pinching), it shows a part of the lip of a large pot of good make (Plate XI, fig. 8).

This mound contained at the centre a typical burial pit, but its symmetry was somewhat broken by the digging of badgers. It had been dug to a depth of  $2\frac{1}{2}$  feet below the plains' level, and was circular,  $3\frac{1}{2}$  feet in diameter, with rounded or bowl-shaped bottom. Marks of the excavating tool used were gouge-shaped, as seen in the pit walls.

The skull of the first skeleton found lay at a depth of 2 feet 4 inches, directly at the centre, on right side, facing northeast. But in these mounds the position in which skulls are found is of no significance, as they have all rolled from the position in which they originally were. Some oak bark in small pieces lay above the skull in very soft earth, and 3 to 4 feet northwest at a depth of one foot were two buffalo scapulae, beyond the northwest edge of the pit. The skeleton belonging to this skull, having been somewhat disturbed by the burrowing of badgers, had collapsed towards the left from a seated position, facing northwest. Below and south of the first skeleton was skeleton No. 2, which had been originally seated on the pit bottom, at about the centre. The ribs and vertebrae were still in columnar position above the pelvis, and most of the other bones were in natural position or had fallen from a natural position. In the bottom of the southwest part of the pit was a third seated skeleton, but in this instance the skull had fallen to the bottom, and all the bones had settled down about the skull. Under these bones was a small, kettle-shaped pot of red ware, so fragile that, though the globular form could be seen in place, it could not be lifted out without its going to pieces. It stood in the pit upright and contained yellow ochre and three '*Unio*' shells. Except for indentations on the squared lip of the pot there was no ornamentation (Plate IX, fig. 11 and 12, and Plate XIX). Part of the lower jaw of a fourth and very old person was found above the third skeleton. Altogether, there were parts of four skulls but only three skeletons. The restricted confines of these pits with the collapsing of skeletons, one upon another, make it difficult to separate the various respective parts and to ascertain position. It could not be ascertained which way the second and third skeletons faced. With skeleton No. 1 was found a counter or coup stone. It is a thin, smoothly-planed stone, in shape a rounded square, each of its four sides bearing five notches (Plate I, fig. 5).

Animal bone fragments, food bones, were found throughout the superstructure, as was usual in these mounds. One of the bones exhibits two clean cuts, as if made with a butcher's cleaver, and does not look like the other bones. Probably this level adjacent to the mound was a camp-site, but one or two tests made did not give results.

Below Mound R a cut-bank south of the highway bridge over the North Antler showed an exposure of two bands of dark earth indicating two flood-plains, the lower level 18 inches below the present level. Both levels contained food bones, and in the lower level was a small potsherd of a light-coloured ware, decorated with punch marks (Plate IX, fig. 4).

### **Brockenton and Snyder Mounds**

Southeast of Mound R, in the NW  $\frac{1}{4}$  Sec. 28, near the old Snyder log house, was a small round mound, opened by Ontario people many years ago. In the same quarter-section another small mound farther to the south was also opened at that time. On the plain to the north, in the NW  $\frac{1}{4}$  Sec. 33, a small round mound, known as the Brockenton Mound, was likewise opened many years ago. There is no record of findings in any of the mounds.

### ***South Antler Plain***

#### **Search for Village Sites in the South Antler Floodplain (See Map, Figure 10).**

Twenty-five test pits in Sections 10, 15, and 22 did not discover a permanent village but showed that the floodplain was utilized for camp-sites from a period antedating that of the mounds until recent times. In detail the tests were as follows:

#### ***Section 15***

1. Twenty or 30 feet back from the creek bank. A temporary camp with split and broken buffalo bones in the sod. No pottery.
2. High clear 'prairie' bottom. Nothing.
3. At the base of the plains' escarpment, near creek. No indications.
4. A land-locked pond called Serpent Pond. No indications about it.
5. Vertical face of creek bank. A dark band of soil indicated an older floodplain, 13 inches below the present floodplain, and in this at a depth of 13 to 22 inches, split and broken buffalo bones, charcoal, and a bit of shell. The bones were fragile and appeared older than any bones found elsewhere. No pottery.
6. A bush point of the floodplain. Nothing.

#### ***Section 22***

7. A strip between Serpent pond and the creek. Nothing.
8. In a thicket of chokecherry and willows. Fragile fragment of deer and elk bones at a depth of 15 inches, with charcoal, the decay of wood or bark, and a bit of shell. No pottery.

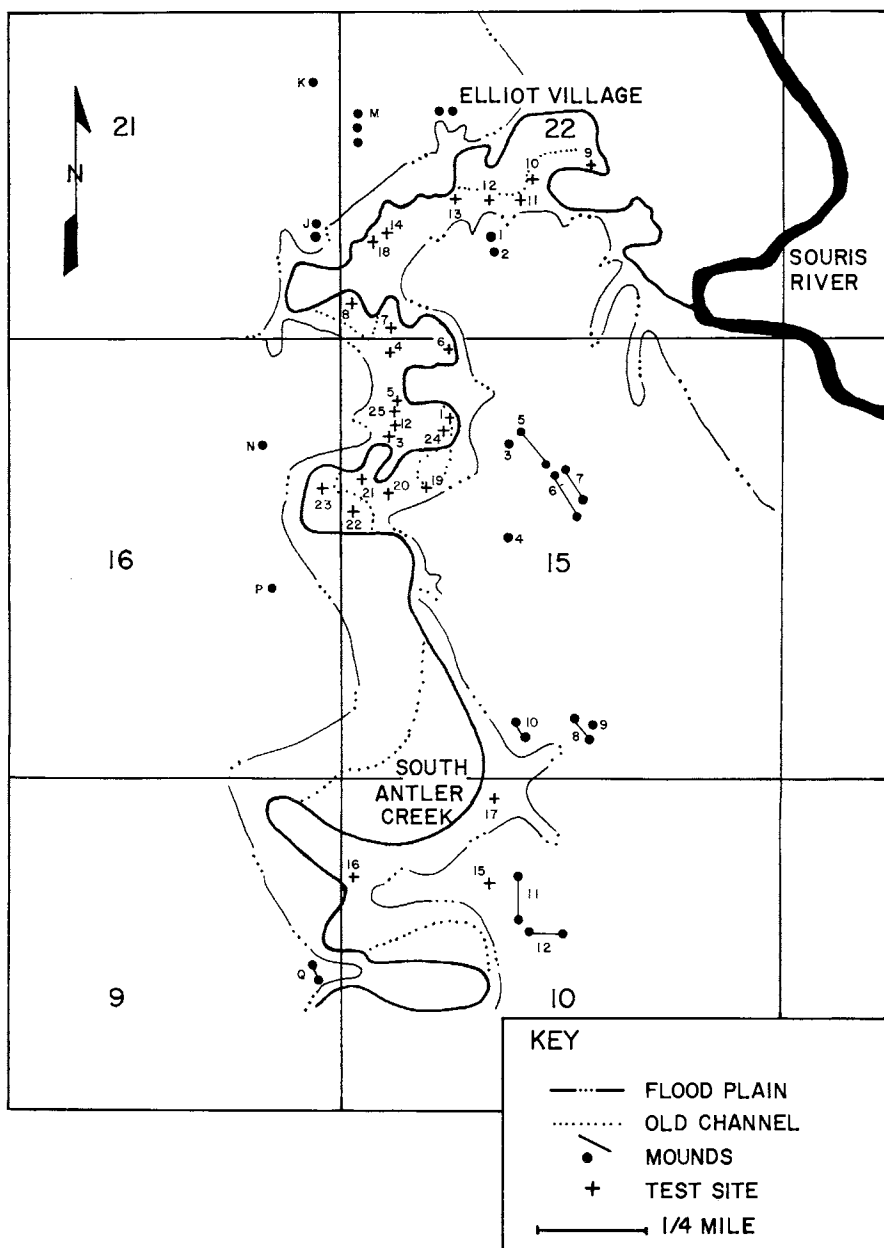


Figure 10. Map of South Antler floodplain

9. In the creek bank, on a horse trail. At a depth of 3 inches below present floodplain, stones of a fireplace outcropped, consisting of five boulders and one flat limestone slab. Here were buffalo bones, broken in the usual manner for food, some of them burnt. The bones, however, did not indicate such great age as those found at Tests 5 and 8, notwithstanding the depth at which they were found. No pottery.
10. On a ridge bordering an old creek channel in chokecherry thicket. Several tests at intervals gave no results.
11. Near the base of the plains' escarpment in thicket. Small bone fragments split in the usual manner, a quartz biface (Plate III, fig. 5) and one potsherd, at a depth of 6 to 7 inches. Several additional tests about this vicinity gave no more potsherds. The sherd found is very small, but it bears parallel incised marks in a horizontal band similar to sherds found at both Elliot and Riverview village sites.
12. West from No. 11. Broken buffalo bones, cracked burnt boulders, and glazed white-ware. The bones and crockery just under the sod, the firestones partly embedded in sod.
13. West from No. 12. Broken buffalo bones at slight depth.
- 14,
18. Fallow field, the so-called 'long bottom.' Surface pickings of broken bones, white glazed ware with decorative figure in black and orange, and a machine-made nail. From this same field came a grooved stone maul (X-A-97) with lime scale coating the groove, and part of an implement of black flint, gifts of David Elliot, and a weathered potsherd found by Edgar Elliot.

The potsherd is especially interesting (Plate XII, fig. 2). It is a lip sherd, showing much weathering. The material is homogeneous, chocolate-brown colour, looking like sandstone. The wide lip, once decorated with diagonal imprints, perhaps of a cord, is suggestive of Mandan ware.\* No subsoil workings were shown by excavations in this field, and no pottery other than this one sherd was found.

#### *Section 10*

15. Near the long mounds. No indications.
16. At the end of the plains' point. Nothing.
17. In the thicket at base of plains' escarpment. Nothing.

#### *Section 15*

19. Near an old creek channel in thicket. Several tests showed broken bones and charcoal at a depth of 4 inches. No pottery.
20. At base of point of plain. No indications.
21. High bottom 'prairie'. Nothing.

---

\*Ascribed to plain ware in this report.

22. Narrow ridge between creek and older channel. A few bone fragments. No pottery.
23. West of 21 in thicket, in Sec. 16. Broken bones at a depth of 5 inches. No pottery.
24. Between two sloughs. Nothing.
25. Southwest of No. 5. No indications, though excavation carried to depth where bones were found at Test 5.

### **'Shanty Bottoms'**

This is a local term applied to certain pits on the South Antler flood-plain in Sections 15 and 22. They were 8 to 10 feet in width, approximately rectangular, and 2 to 4 feet deep, with the excavated earth in a heap at one side. In one, an elm tree 18 inches in diameter was growing. Superficial examination of one 'shanty bottom' produced ashes, bones broken in the usual manner for food, and a machine-made nail.

### **Circular Depressions**

Also in Sections 15 and 22 were shallow circular depressions, occurring in groups of seven or more. They appeared to be lodge sites, but exploration of two of them did not indicate their purpose; they contained neither bones nor firestones. One pit examined was a saucer-shaped hollow, 7 feet in diameter and 6 inches deep. It had been dug in sandy soil to a depth of 4 feet and was filled with alternating deposits of dark and light sand, the result of gradual filling through the caving of the sides upon soil intermittently deposited, an indication that the pit when abandoned was left open.

### **Elliot Village Site**

An area in Section 22, well over two acres in extent, covering the plain and the lower level about Mr. Elliot's house, gave indications of having been a village site, though there were few animal bones and excavation proved scarcely worthwhile.

The soil of the lower level around the house was a very deep puffy soil, very dark in colour, and had long been under cultivation as a garden. The plains' point above this was windswept gravel, from which most of the soil had been blown away, leaving potsherds and flint chips exposed. There were no indications of subsoil working, although there were many shallow pit-like hollows over the plains' point.

From the lower level, surface pickings comprised the following: fragments of animal bone; two arrow points, one of grey chert, one of quartzite (Plate IV, fig. 8, 9); flint chips; small potsherds with tempering

of sand. Some of the potsherds present interesting decorative features of much variety. One bears part of an 'incised volute' of four lines (cord impressed) (Plate XI, fig. 2); several bear textile imprints; one lipsherd bears circular incisions on top; others show incised lines horizontally parallel below the lip, perhaps the imprint 'of a comb' (of a cordwrapped stick). Mr. Elliot had in his collection several well-made arrow points from this level. One was of crystal quartz; several were of the smoky-amber flint so commonly found here, and some were of agate. Mr. Edgar Elliot presented a very rude limestone axe (NMC Cat. No. 98) found here. From the same place came a limestone pipe (Plate XVIII), now in David Elliot's collection, and a few grooved stone mauls.\*

From the surface of the plain above, a small 'duck bill' or scraper of amber flint, flint chips, and potsherds were collected. From the west edge of the site in Section 21 came a 'burnt' point of amber flint and a potsherd bearing the imprint of a woven fabric of excellent texture.

Samples of cretaceous clay, outcropping about a dry spring-hole or bog at the foot of the village plain on the south, were retained. A deeply worn trail led from the plains down to the creek at this point.

### Camp-Sites

A probable camp-site in the NW  $\frac{1}{4}$  Sec. 15 covered an area of 70 square feet. Exploration of the area resulted in a collection of broken food bones (deer and buffalo), flint and quartz chips, and burnt and broken stone. The firestones indicated no definite hearth. No pottery was found. There were no subsoil disturbances, and no material was found deeper than the ploughed earth. The animal bones were of the same character as those found in adjacent mounds, broken and split in the same manner and in the same state of preservation. It was, therefore, considered that the site was a camp of the people who built the mounds.

South of this camp-site, near Mound No. 4 (see map, Figure 2) an arrow-point and the base of another one (Plate IV, fig. 25), both of grey quartzite, were found on the surface; also a knife and 'duckbill' of amber flint collected and presented by Mr. David Elliot.

There were scattered bone fragments elsewhere on the South Antler plain, but nowhere else were there surface indications of habitation for any length of time, notwithstanding the extensive earthworks in Sections 10 and 15 (described below) which must have required a settled population for their erection. It does not seem reasonable that a migratory people encamped in the region for a season, or even several seasons, could account for the labour required to erect these earthworks.

---

\*In 1953 R.S. MacNeish collected from this site sherds of Regina Heavy-corded and Manitoba Cordmarked wares, blade fragments, small side-notched points, thumb-nail scrapers, side scrapers, a stone slab (20 x 11 x 1.5 cm), bone tubular beads, and bone fleshers (NMC Cat. No. X-A-2834 to 2851).

## House Sites

Oblong rectangular enclosures were reported in the SW  $\frac{1}{4}$  Sec. 22. One was on a point of the plain overlooking the valley of the South Antler. It was not very well defined by a low earthen wall not more than 4 inches high; it was 40 by 20 feet, oriented east-west. Two other similar enclosures were reported traceable on the plain, one east of Mounds 1 and 2, and the other near Mound J (see map, Figure 2).

## Mounds 1 and 2

These mounds, situated on David Elliot's land in the SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  Sec. 22, were small round mounds opened by David Elliot and Alfred Gould. They both contained typical burial pits. Mound No. 1 contained some bone whistles, two of them copper stained, and two parts of a triangular fluted-fossil. In Mound No. 2 a large quantity of little flat (shell?) beads and perforated bone anklets or bracelets, illustrated by Professor Montgomery (1908) and now in David Elliot's collection, were found with a woman's or child's skeleton.

## Mound 3 (Figure 11)

Mound 3 was situated in the NE  $\frac{1}{4}$  of NW  $\frac{1}{4}$  Sec. 15, on David Elliot's property, in a fallow field. It stood 300 feet back from the plains' escarpment (like Mounds 1 and 2), was circular, and measured 41 feet in diameter and 2 feet high.

The mound was opened several years ago by Gould and Elliot. A little southwest of the centre they found a burial pit which had been excavated to a depth of 6 feet in the hard clay subsoil. The pit was circular, 4 feet in diameter, and had a flat bottom. It had contained three bundle skeletons of a child and two adults. There were no mortuary offerings. Pieces of the poles that had covered the pit were found.

The mound was thoroughly explored, but no further undisturbed pit was found. The subsoil cast from the pit had been thrown on the north and east sides, scattering a distance of 15 feet from the pit mouth. Scattered through the mound was a large quantity of broken animal bones, probably food bones from the surface carried with the earth used in erecting the mound. Burial pits were never refilled with the earth taken out of them but were covered with poles; then a mound was erected over them.

Under the clay thrown from the pit were found a bit of shell and pieces of burnt bone, and a small pocket under this clay contained broken food bones; another pocket contained burnt bones and black earth. This latter hole extended southeast and at a depth of 4 feet, which was 2 feet below the plains' level, contained a heap of human bones.

This heap comprised some ribs, part of a cervical vertebra, one clavicle, one large and one small patella, part of a tibia, a right femur,

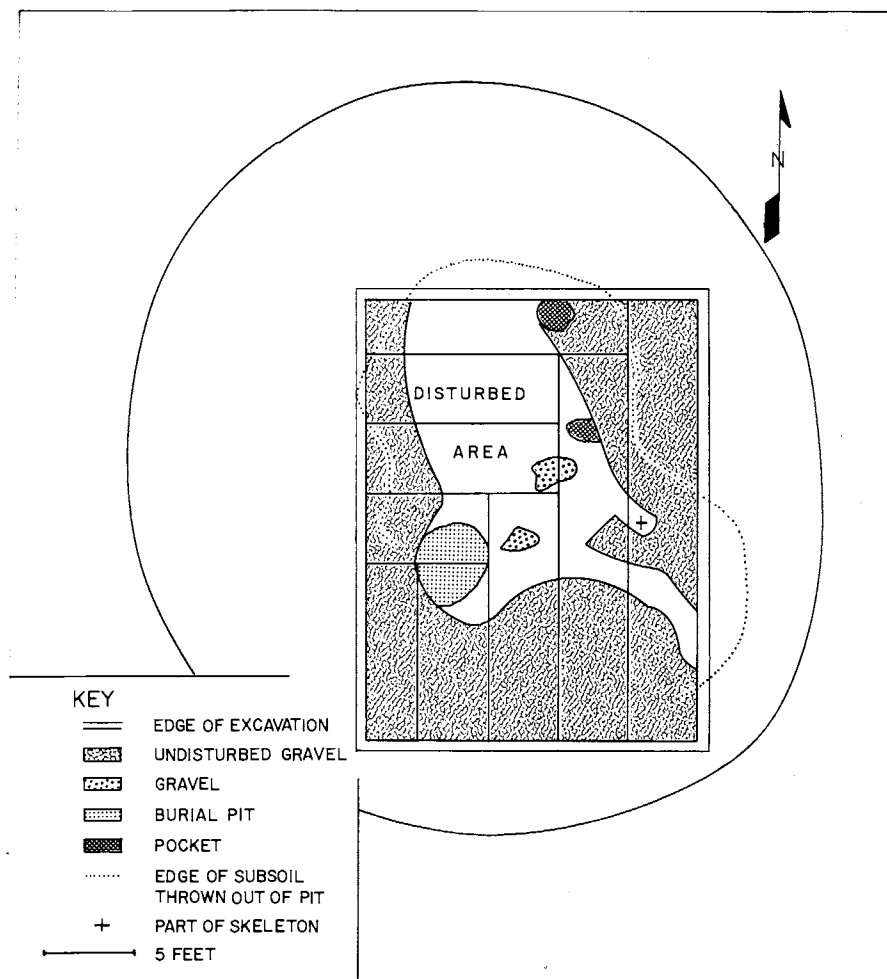


Figure 11. Mound 3

a broken humerus, a foot bone, two fragments of bone, and a deer bone and part of a buffalo rib. All the human bones were broken at the ends, except the ribs, and the humerus was split. The tibia and the deer bone were packed with the yellow earth in which they lay. The human bones must have been those of a skeleton of a woman of small stature. Gould and Elliot did not re-inter any bones. They did not reach the north and east sides of the mound, which appeared to be undisturbed, except for badger burrows, to quite a depth.

#### Mound 4 (Figure 12)

Mound 4 was situated 300 yards south of Mound 3. It was circular, 70 feet in diameter, and but 13 inches high; so inconspicuous was it that



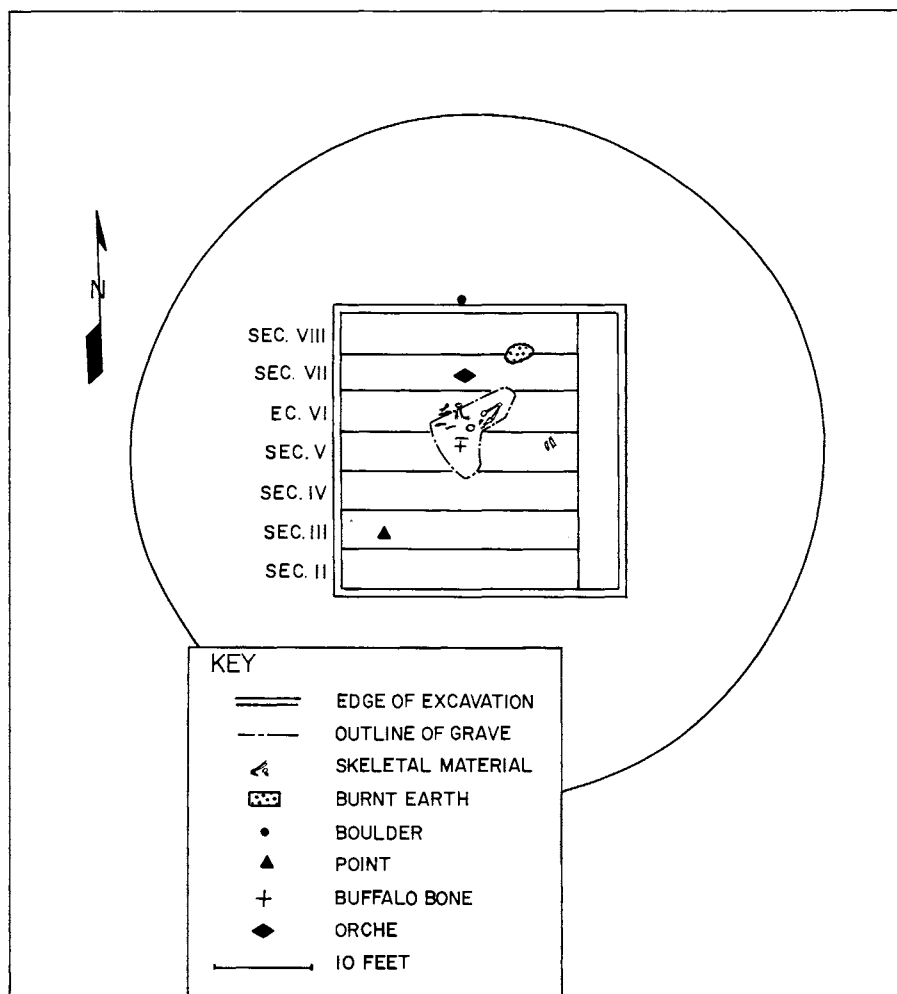


Figure 12. Mound 4

it had escaped attention. The earth of the mound was a dense black soil, free from gravel, containing a quantity of broken animal bones throughout to a depth of 22 inches where a gravel bed was reached, unbroken except where the interment was made. This soil was distinctly laminated horizontally, splitting vertically into columnar fragments when cast from the shovel, characteristic of a soil long undisturbed.

Two skeletons were found at about the centre. One was that of an adult lying extended; the other that of a child, perhaps originally interred in a sitting position. The larger skeleton lay in an irregular shallow grave at a depth just over two feet, with the skull towards the southwest. The skull was crushed, partly on the right side, facing east. Bones of the legs,

pelvis, lumbar vertebrae, and lower right arm were in place in natural order, the left, lower part of leg crossed over the right. The bones of the hands and feet, the left lower arm, both humeri, and most of the ribs and vertebrae were missing or misplaced by badgers. The child's skull was two feet north of that of the adult, at a depth of two feet. It was not crushed and lay on the left side with face southeast, at the northeast of this heap of bones.

There were no mortuary offerings with either skeleton, except perhaps food offerings. A buffalo bone lay on a rounded heap of yellow earth, and southeast of this was one unbroken segment of buffalo vertebra. A few feet north of the child's skull was a boulder surrounded by food bones and a large unbroken buffalo vertebra. Badly decayed human bones were found 13 inches deep, probably misplaced by badgers. Parts of two femurs in contact with a buffalo vertebra and pieces of shoulder blade were found. Just west of the adult skull, lay a broken buffalo rib and vertebra, and wedged in the right eye-socket was a jagged piece of buffalo bone; north of the skull was a buffalo scapula in upright position. A few feet northeast of the skeleton material, burned earth indicated a fire had been kindled, and north of the grave, at a depth of 13 inches, was some red ochre with an amber flint embedded under it. Under the fire bed was a flint chip. A small, flat arrow point of amber flint, very crudely chipped (Plate IV, fig. 22), and two flint chips were found at a depth of eight inches; the arrow point was coated along one edge with a chalky scale.

#### **Mound 5**

Mound 5 was the first surveyed of the 'grades' or long mounds, situated on David Elliot's land, in NW  $\frac{1}{4}$  Sec. 15. The northwest end was sixty paces northeast of Mound 3; it extended thence 35 degrees east of south, 150 paces. It was 15 inches high and 36 feet broad, expanding at both ends to round mounds very little higher, about 45 feet in diameter. No exploration was made.

#### **Mound 6 (Figure 13)**

Immediately to the southeast, separated by a gap of 75 feet, was Mound 6, which extended 160 paces south, 30 degrees east. It was in a fallow field on the property of Alfred Gould, in the SW  $\frac{1}{4}$  of NE  $\frac{1}{4}$  of the same section. Like Mound 5, having been under cultivation for several years, it was lower and wider than originally; its present measurements were 38 feet wide, 16 inches high, and a little higher and broader in the terminating mounds.

In the northwest end, two flexed skeletons were found, one lying on its back and the other on its left side, with heads southeast. Both skeletons were but 18 inches deep, or about on the plains' level, one 15 feet north

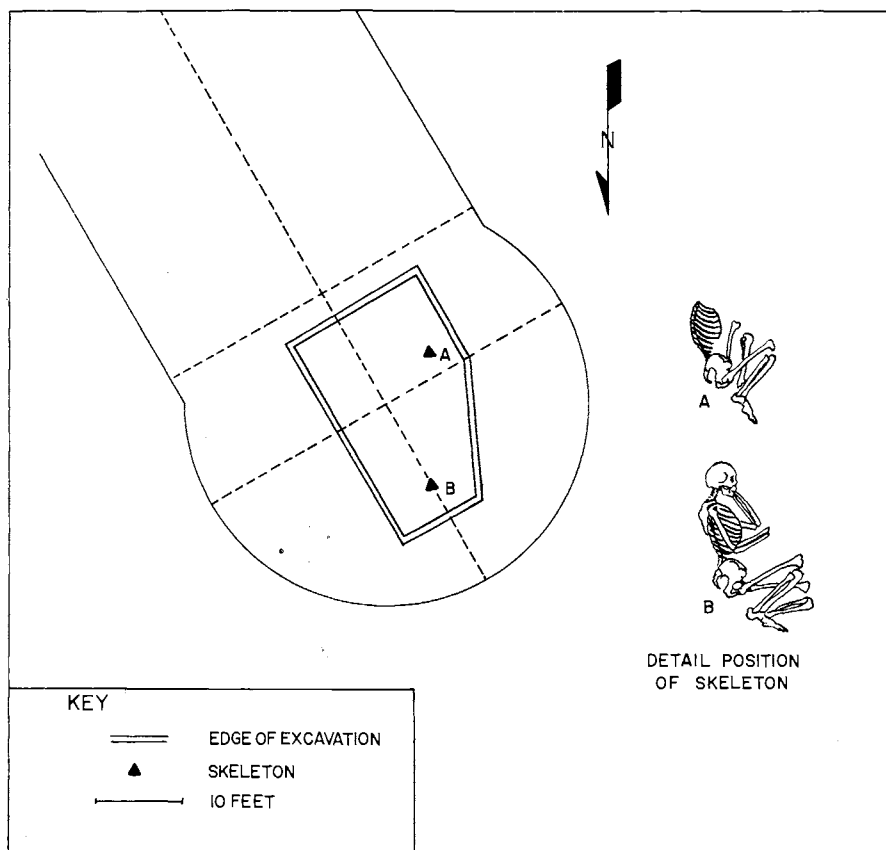


Figure 13. Mound 6

of the other. Both were of adults, probably of middle age, about 5 feet 2 to 4 inches in height.

In the southern skeleton the knees were drawn up, the right leg over the left. The bones were in place in natural order, except the skull, the atlas, the sternum, and the bones of both arms which were missing, though some of the bones of one hand were found.

In the northern skeleton (Plate XIII, fig. 2), the skull was in place, towards the southeast, resting on the left side with face west. The occiput was penetrated on the right side by a square hole; this piece of skull was not found, nor was it within the skull when examined. All bones were in place in natural order except those of the feet, which were missing. The right leg lay over the left, and the arms were flexed. The bones were badly decayed; the left fibula and the vertebrae were nearly gone.

No mortuary offerings were found. Both skeletons lay on the black earth above the subsoil, which had nowhere been penetrated. Scattered animal bones were not present.

### **Mound 7**

Parallel to Mound 6, 60 feet to the northeast, lay Mound 7, which was 41 feet wide and 18 inches high and terminated at both ends in round mounds. No interments were found in either end. The northwest end was trenched, but the plains' level had nowhere been intruded upon, except by burrowing animals. A very few hard pieces of animal bone, slightly encrusted with lime, were found at a depth of 13 to 18 inches.

### **Mounds 8 and 9**

Half a mile south of Mounds 6 and 7, in the same field, were a long mound and a low round mound close together.

Mound 8 was about 130 feet long, oriented south 30 degrees east, with mound expansions at both ends. The mound at the southeast end was explored by Professor Montgomery, who is said to have found a headless adult skeleton at the plains' level; position of skeleton was not known. Mr. Alfred Gould examined the central part of the linear portion of this mound, which he described as having contained a headless buffalo skeleton in a very peculiar position. He thought there was an excavation three feet deep in the subsoil, in which he found the anterior portion of the skeleton, but the posterior portion was outside the pit and higher, the whole skeleton apparently interred in this position. A few fragments of human bones were found in the northwest terminal mound.

In Mound 9 Professor Montgomery was believed to have found an adult skeleton, closely surrounded by five buffalo skeletons minus long bones, in a radiating position, skulls to centre. There was no burial pit; the interment had been made at the plains' level and the skeleton had been in a sitting posture but had fallen to one side. Later Mr. Gould obtained from this mound five segments of two flat shell rings. Three pieces from a dense hard shell are perforated at the broken edges as if for the purpose of mending. Two pieces, not perforated, are parts of another ring made of 'Unio' shell. He also found a tassel-shaped pendant made of 'Unio' shell.

### **Mound 10**

Another mound said to have been opened many years ago was Mound 10, a long mound to the west of Mound 8, oriented in the same direction.

### **Mounds 11 and 12**

These were two long mounds or 'grades' situated in the NW  $\frac{1}{4}$  Sec. 10 on land once broken and now (1914) reverted to wild prairie.

Mound 11 extended 650 feet north-south and was 20 feet wide and about 15 inches high. The terminal mounds at each end were a little higher and formed round mounds about 40 feet in diameter. The 'grade' was covered with a growth of plains grass, bay brush, and wolf willow. Profes-

sor Montgomery, who explored the north terminal mound, was said to have found at the centre the skeleton of a child surrounded by five or six buffalo skulls. The south terminal mound was thought to be undisturbed. Professor Montgomery trenched the linear mound immediately to the north at this end but found nothing.

Mound 12, which extended 500 feet east-west, was 10 feet wide and 12 to 15 inches high. The terminal mounds were larger than those of Mound 11. The east terminal mound was originally nearly five feet high and not quite circular – 50 feet north-south by 55 feet east-west. This mound was opened in 1906 by a party including Dr. A.P. MacKinnon, who wrote as follows: "We dug into the centre of the mound and secured parts of several skeletons, we thought the bones of children, one about birth, one about two years old, and a third about four or five years old. Then there was the skull of a youth, about 18 or 20, and we thought some bones of a fifth were those of an aged person, the lower jaw showing absorption of the alveolar process and no teeth. There was also some close-grained wood that looked like oak. Further than this there were no other relics. We were the first to open that mound."

A trench was made through the base of the east mound at its juncture with the grade, where the mound was about three feet high. Part of a buffalo skull lay in the old opening. The earth was extremely hard with little gravel stones through it. A piece of thick oak bark was found at a depth of 9 inches. At 12 inches, or 2 feet above the plains' level, the formation assumed the shape of separate heaps, part light and part dark soil. At a depth of 19 inches were a few scattered buffalo vertebrae, but none of the usual broken food bones were found until some unusually fragile ones at a depth of 3 feet, at about the plains' level, were discovered. These fragments were either cooked or were very old. Toward the centre of the terminal mound, a large buffalo vertebra was found. At 10 feet from the centre the disturbed earth of MacKinnon's working was encountered, and some animal bones and a human bone, hand or foot, were found. Excavation indicated that the terminal mound had been superimposed over the end of the grade. Mr. Gould, a member of the MacKinnon party, stated that the human bones had been found at the plains' level and that there was no grave. Continuing the test work the following year, a quantity of food bones and fragments of poles 3 inches thick were found, but they formed no part of a connected structure. There were no indications of a pit.

The west terminal mound was explored by Professor Montgomery. Mr. Gould said that several skeletons were found, but that there were many more skulls than skeletons. From this mound came a kind of feather-work which was in such a decayed condition that its form and purpose could not be ascertained.

N.B.

No pottery was found in the vicinity of any of the mounds on the plain east of the South Antler.

**Mound J (Figure 14)**

This was the northern one of a couplet of mounds in the SE ¼ Sec. 21, standing 110 paces back from the escarpment overlooking the South Antler valley. It was a round mound, 40 feet in diameter and 13 inches high. It had never been disturbed.

The entire mound was removed, the work beginning at the south base. The earth of the structure throughout was as hard and compact as that of the plains' level beneath it. Pieces of decaying poles, one to two inches

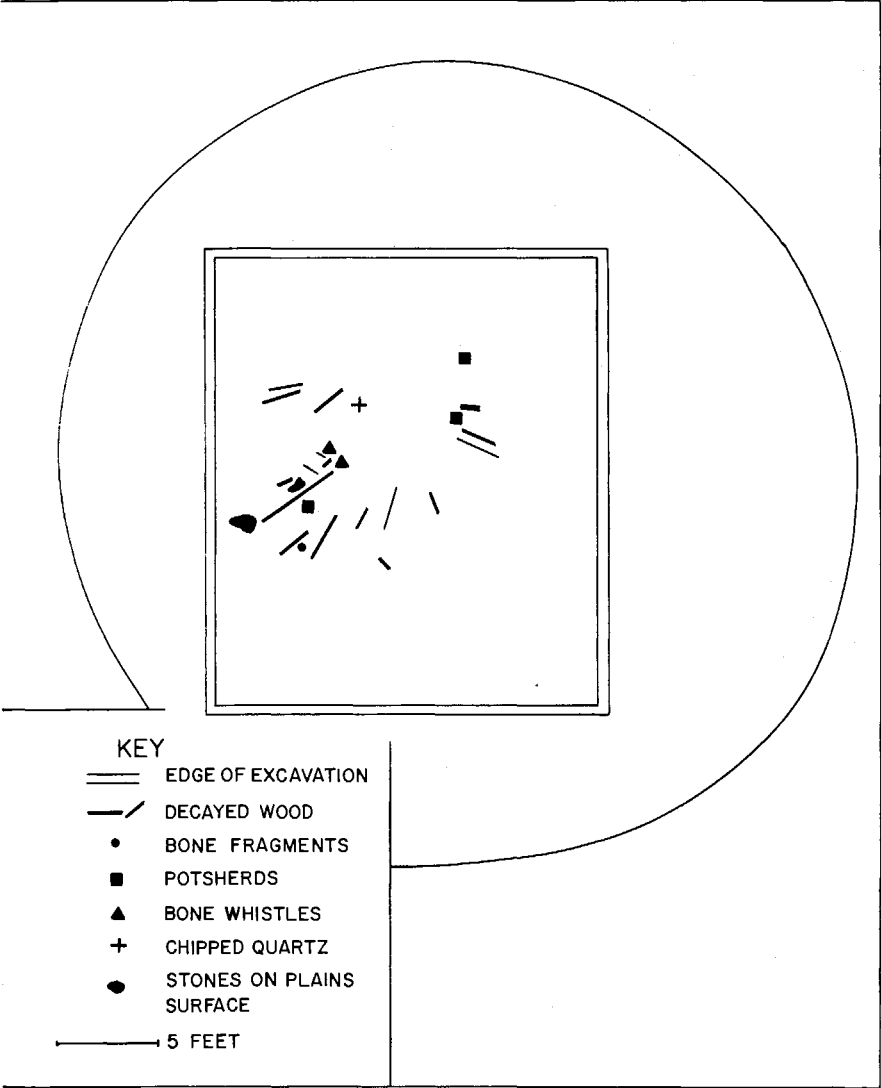


Figure 14. Mound J

in diameter, were found at depths of four, eight, and ten inches. Among the pieces of wood were several with crudely-sharpened ends; many pieces still retained bark. These probably indicated a small lodge frame erected on the plain and later covered with earth. Three bone whistles (Plate VIII, fig. 9) were found at a depth of eleven inches, as if deposited within the lodge or shrine before erection of the mound. A few potsherds were also found at the same depth but probably had been on the plains' surface before the mound was built. Two were of thin red ware. One of these was a square rim sherd, which was decorated on top with circular indentations made with a quill or reed and placed alternately in two rows, one along the outer edge and one along the top near the inner side (Plate XII, fig. 1). At twelve inches lay a small sherd (missing) of thin, dark ware, buff-coloured inside, the exterior decorated with incised markings. A few broken animal bones were found in the mound, and near the top at the centre was a long, thin, narrow '*Unio*' shell from which the brown outer coat peeled off like a husk in strips.

The twin to Mound J, immediately to the southeast, had been excavated by Professor Montgomery.

### Mound M

Mound M was one of three mounds northeast of Mound J, well back on the plain, in the southwest corner of the NW  $\frac{1}{4}$  Sec. 22. It was a large, elliptical-shaped mound. Two smaller ones lay in the northwest corner of the SW  $\frac{1}{4}$  Sec. 22. All had been previously explored with no results.

### Mound K (Figure 15)

This mound was a pear-shaped gravel kame situated in the SE  $\frac{1}{4}$  of NE  $\frac{1}{4}$  Sec. 21, in wheat stubble of a field long cultivated. It was 13 inches above the plains' level and 30 feet at its widest and 49 feet long.

A skeleton was found at the centre of the broader part, covered by only 11 inches of soil. The skull and left clavicle and all the bones of the left arm were missing. These parts could hardly have decayed, for the manubrium-sterni, usually the first to go, was intact. They may have been torn out by the plough. The skeleton was in the flexed position. The body was placed nearly on the back with the legs drawn up, the left leg more so than the right, and underneath. The position of the lower jaw indicated that the skull must have rested on the left side facing south, and the general position of the body was a little north of east.

Nothing was found with the skeleton, but 4 feet north, at a depth of one foot, was a piece of '*Unio*' shell and broken animal bones; at the same depth, 18 inches northwest, was a right frontal and horn-base of a buffalo. Near the south base of the mound, in black earth of apparently an old burrow, was a buffalo vertebra and a broken badger or bear skull.\*

\*Since identified as dog.

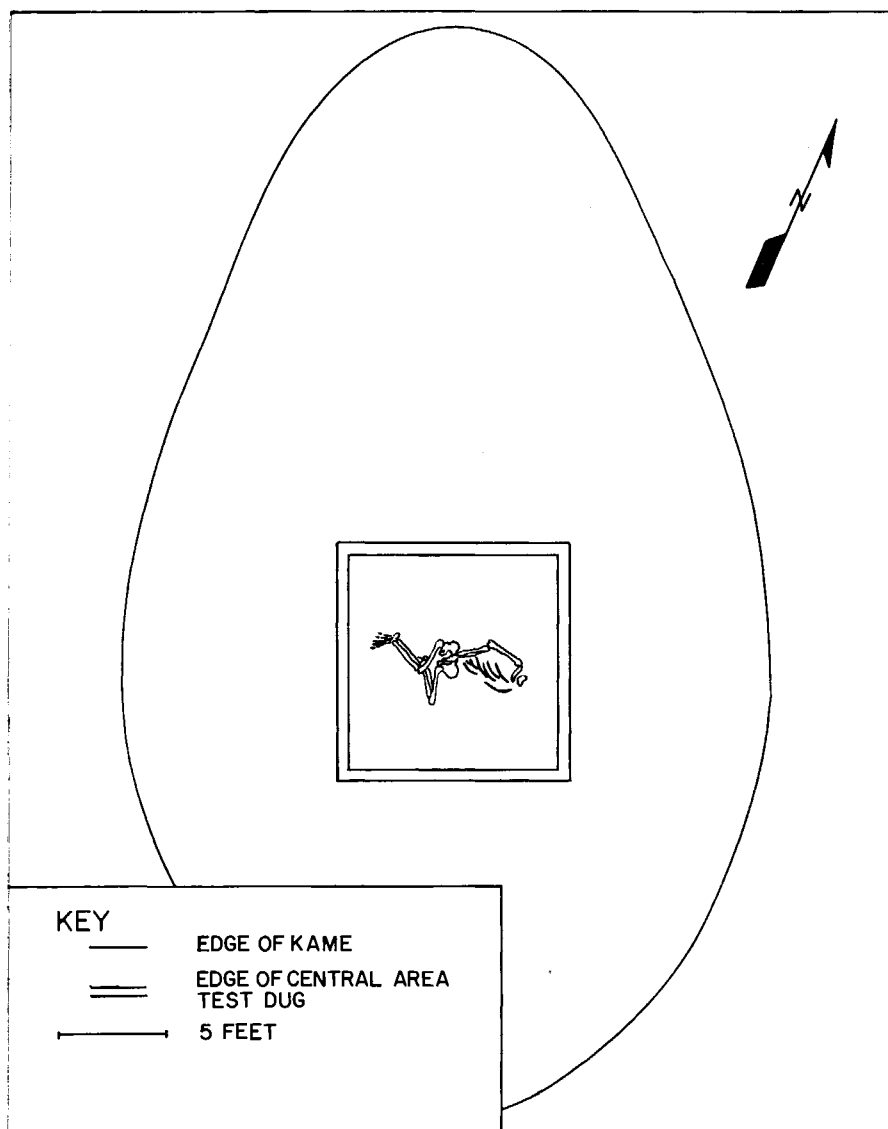


Figure 15. Mound K

### Mound N

Mound N in the NE  $\frac{1}{4}$  Sec. 16 stood opposite Mound 3 across the South Antler creek. It was a round mound, 4 feet high, opened by Dr. J. F. Creighton of Melita. Nothing was reported, but it is believed to be worth further exploration.



## **Mound P**

Mound P, a round mound in the SE  $\frac{1}{4}$  Sec. 16, opened many years ago, was not visited on this survey.

## **Mound Q**

This was a linear mound with terminal expansions in the form of round dome-shaped mounds, situated on land under cultivation in the SE  $\frac{1}{4}$  of NE  $\frac{1}{4}$  Sec. 9, the property of Mr. James Mee, of Coulter. The mound stood well back on the plain from a point overlooking the South Antler valley, opposite the linear mounds in Section 10. It was 300 feet long, oriented 30 degrees east of south, 30 feet wide, and the terminal mounds were 44 feet in diameter. In elevation the connecting grade was not over one foot, and the terminal mounds were 18 inches high.

Excavation was started by a test trench in the northwest mound, transversely to the axis of the connecting grade, just southeast of a centre stake. No evidence of subsoil disturbance was found other than the digging of badgers, evidently the work of these animals before the building of the mound. Removal of the entire centre part and trenching the neck of the connecting grade resulted in nothing except a few of the usual food bones.

A test trench, part way between the northwest mound, and the centre of the connecting grade, revealed nothing. Exploration of the central part of the connecting grade resulted in more food bones, down to a depth of 18 inches. The bones were very hard and coated with alkali. Excavation of the southeast mound showed an unbroken gravel subsoil under the mound, and except for a turkey or crane bone, nothing further was found.

## ***East Side of Souris River***

### **Riverview Village Site**

Indications of fairly extended occupation were found in Section 34, on the east side of the Souris at the base of the plains' escarpment near a ford. The refuse covered an area of about two acres. The land, a dark sandy loam, was in wheat stubble, and the material nowhere lay deeper than eight to ten inches or just below where the plough would reach. As far as the excavation went, no permanent habitations were indicated, nor were pits or other subsoil workings found.

However, a fairly representative collection was made of what probably would have been found had the whole area been excavated. It comprised a large quantity of broken animal bones, mostly deer and buffalo, worked bone and burnt bone, flint chips, the base of a point, and the tip of another (X-A-202), potsherds in which the tempering material is granitic sand, a grooved stone hammer (X-A-99), a hammerstone of hard-banded quartzite (X-A-166), and a slightly elliptical-flattened, polished stone of the same

material, almost marble. Under the magnifying glass, one edge of this specimen shows some battering.

Field study of the pottery shows a variety of wares and of decorative features, such as the following:

1. A wide square rim sherd, with cone-shaped incisions striated transversely in concentric rings within the cone. Cord or roulette imprints horizontally at intervals below the rim (Plate X, fig. 2 (?)).
2. A rim sherd with a banded imprint horizontally, perhaps made with a comb.
3. A sherd of thick ware, the markings blurred or smoothed over.
4. A fragment of pottery pipe or a piece of burnt polished bone. If the former, it is very hard, fine-textured ware, not unlike 'French clay.'

### Riverview Mound (Figure 16)

This was a small dome-shaped mound in the kitchen garden of a house known as the 'old Rumble place,' in the NW  $\frac{1}{4}$  of NW  $\frac{1}{4}$  Sec. 34, on land now the property of A.D. Thompson of Sourisford. The plains' escarpment is here somewhat broken, and the mound was built on the verge of the escarpment overlooking a great bend of the Souris River. It was pushed out to the edge of the plain, which is an exception to the general practice of Manitoba mounds, which usually stand well back on the plain. It stood 2½ feet high as viewed from the plains' side and 3 feet high as seen from the river slope; the base was not quite elliptical, 41 feet south, 30 degrees east by 35 feet.

Excavation showed that the mound had been intruded upon at two different times. On the present excavation the mound was entered from the northeast base by a cut 6 feet wide that penetrated beyond the centre, which had been disturbed and subsequently filled in with earth, ashes, and rubbish. Animal bone fragments were found scattered through the undisturbed earth and also on the plains' surface under the mound. These were food bones from a small camp-site area extending from the mound a few hundred feet northeast. Bits of 'Unio' shell were also found and a minute potsherd. The north half of the structure was composed of dark sandy soil, evidently gathered from the plains' surface, but beyond the centre a different formation was encountered consisting of distinct deposits of parti-coloured earth, beneath which the plains' surface could be distinctly seen. Each of these heaps was made up of yellow earth, gravel, and dark sand, which was a material afterwards discovered to be the earth removed in digging the grave pit in the yellow subsoil, southeast of the mound centre.

In disturbed earth and wood decay between the former opening and the grave pit, there was a polished section of buffalo rib, like a flattened tube, five inches long, marked with three longitudinal parallel grooves on

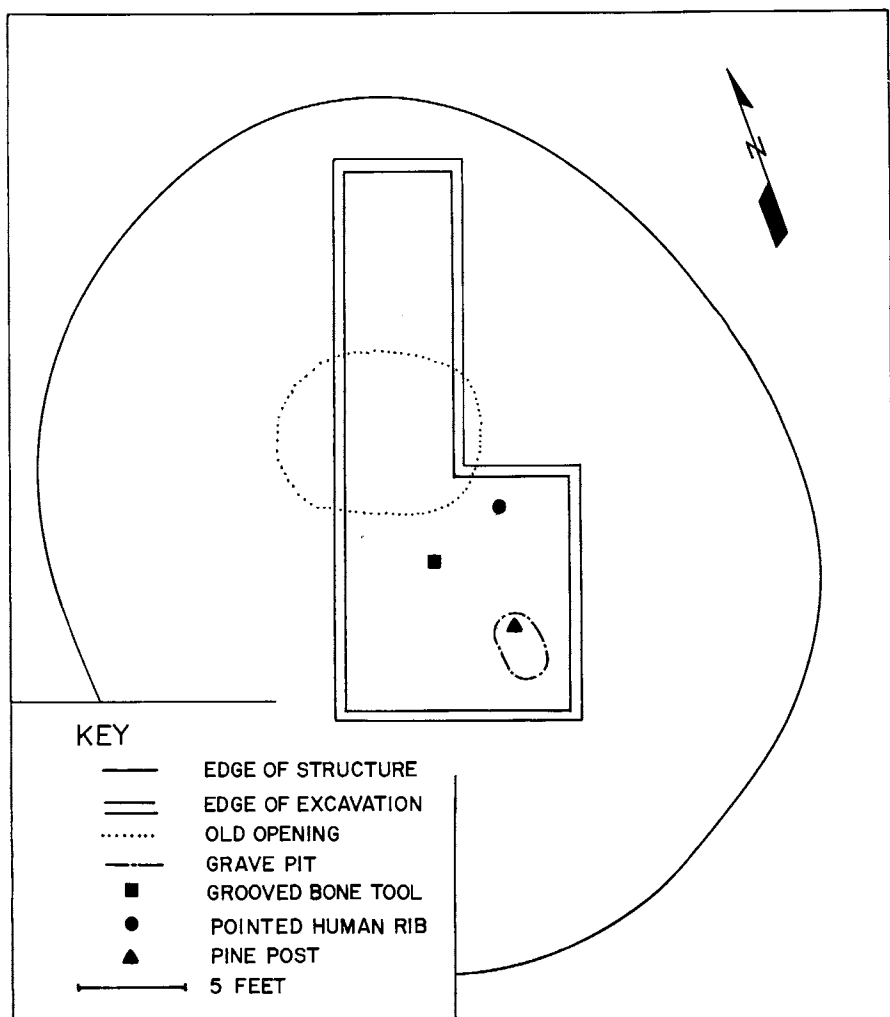


Figure 16. Riverview Mound

one side (Plate VIII, fig. 5). There were also pieces of a very thin bone tube, about the size and shape of a shotgun shell (Plate VIII, fig. 3). Northeast of these finds, in disturbed earth of the old opening, were some human ribs painted with red ochre. Split human bones, fragments of a tibia and two fibulae, also painted with red ochre, were found over the pit.

The burial pit appeared to have been intruded upon at some earlier time from the east, though there were no external indications of such intrusion. The pit was filled with woody dust. It contained most of one skeleton and a trace of two more, but no skulls; the bones were firm and clean. Mixed with the bones were pieces of the wood that once covered the pit.

The ends of these, extending beyond the pit, were found in place on the southwest and southeast sides. The wood was fairly well preserved; one piece was charred. There was also a pine post, palpably of recent intrusion, perfectly sound, one end hacked off with an axe, the other end partly sawn and then broken off.

The pit itself had been excavated in the tough clay subsoil. It was cistern-like and reached a depth of 2 feet 7 inches below the plains' level. It measured 3 feet 6 inches by 2 feet 9 inches, oriented north and south. Ten inches above the bottom, in the wall of the north end, was a little niche. The bottom was perfectly flat. The curved marks left in the walls by the excavating tool showed that some form of gouge had been used, sometimes with a side-to-side motion and sometimes as a pick.

### **Linear Mounds**

South of Riverview Mound, in the SW  $\frac{1}{4}$  Sec. 34, on the property of A. D. Thompson, were two long mounds, without terminating expansions, like those commonly found in Minnesota, Iowa, Wisconsin, and Illinois. They were situated a little back from the plains' escarpment on the edge of a cultivated field.

The larger of the two, measuring 18 inches high, 31 feet wide, and 122 feet long, oriented south 32 degrees east, was examined by test trenches. It had never been ploughed over or disturbed. Three test trenches were dug, one through the centre and one in each end. These tests disclosed a dark, surface-like soil, containing bone fragments, food bones, no doubt, conveyed with the earth. Similar sparsely-scattered bones lay about on the surface of the plough land northeast of the mound. The old plains' level under the mound was well defined, and at this level, through the central part of all the trenches, was a white powdery soil, perhaps indicating wood decay. No wood nor any human remains were found. Bone fragments found at this level and down to 22 inches were coated with a white scale.

The smaller mound extended transversely to the axis of the larger mound, southeast of its southeast end. It was partly in plough land and partly across a roadway, its elevation barely traceable, but where the road crossed it, it was 6 inches high.

### **Heath Mound (Figure 17)**

In the NE  $\frac{1}{4}$  Sec. 27, on the property of Wm. Heath of Melita, was a low broad mound, 18 inches high and 46 by 42 feet in diameter, oriented northwest and southeast. It stood on land never cultivated, not far back from a plains' point above the Souris valley. It had never been disturbed.

Excavation was started at the southwest base. Part of a ring of burnt earth developed 7 $\frac{1}{2}$  feet from the centre, which later proved to be a segment of a nearly complete ring, 15 feet in diameter. The burnt earth forming the

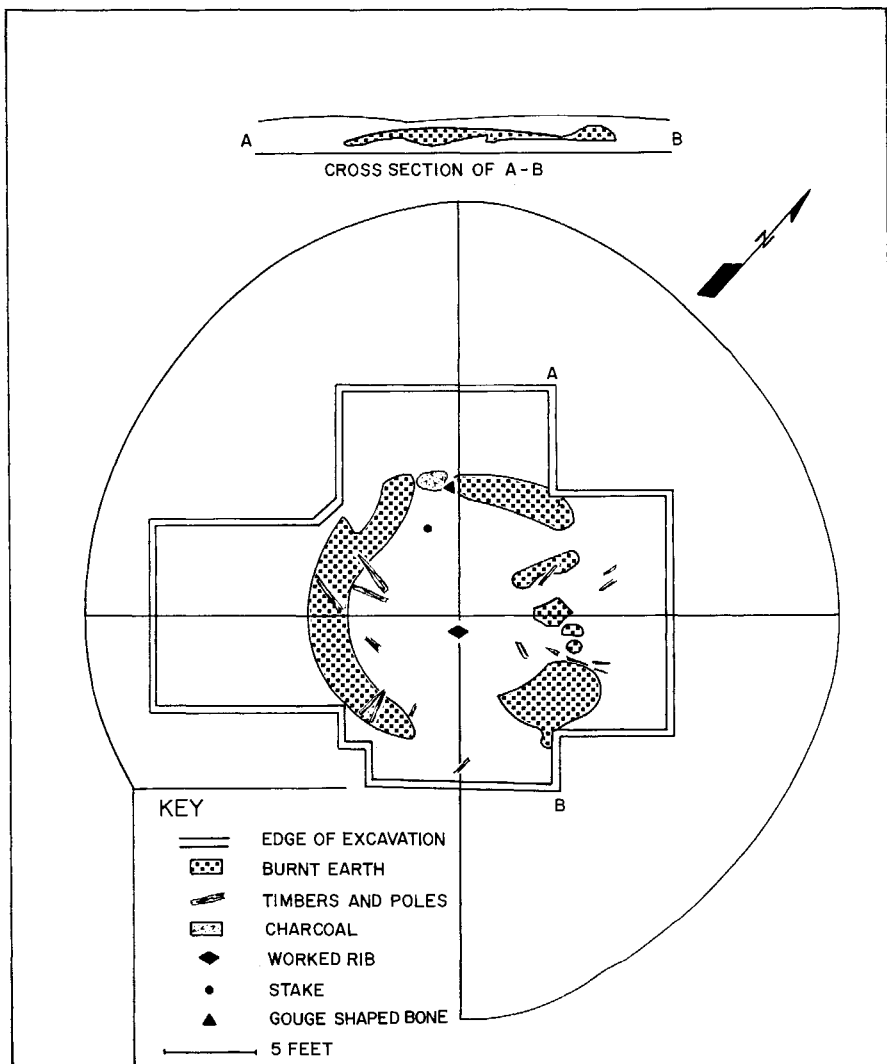


Figure 17. Heath Mound

ring lay in irregular masses on the plains' level, which was unbroken beneath the mound. The ring averaged 2 feet in width and 4 to 6 inches in thickness. In and under the burnt earth were parts of poles 3 inches thick, reduced to charcoal, which became decayed wood towards the mound centre. Smaller charred sticks lay higher. Through the centre of the mound, at a depth of 15 inches was some red dust of bark decay, and at the plains' level lay scattered charcoal and a thin covering of ash. Five feet west-northwest of the centre, a sharpened stake was found driven to a depth of 6 or 8 inches into the plains' level. These finds suggest that some kind

of a round mud-plastered hut was destroyed here by fire, and the mound was built over its ruin. But little was discovered to suggest its purpose. The objects found were a few food bones scattered sparingly throughout the structure, one end of a rib worked to a rounded point (Plate VIII, fig. 8), a gouge-shaped bone, a few flint chips, and some round and burnt stones. Some of the ends of the poles were not charred, and the end of one showed sharpening by a clean cut; another showed a cut made by an instrument less sharp. Comparison of the wood with that growing along the river indicated that ash and oak were both used in construction of the lodge. The opening in the earth-ring on the southeast may indicate an entrance way. The stake was at the back of the lodge opposite this break in the ring. It showed sharpening by an instrument making small clean cuts. Behind the stake was much blackened earth and charcoal.

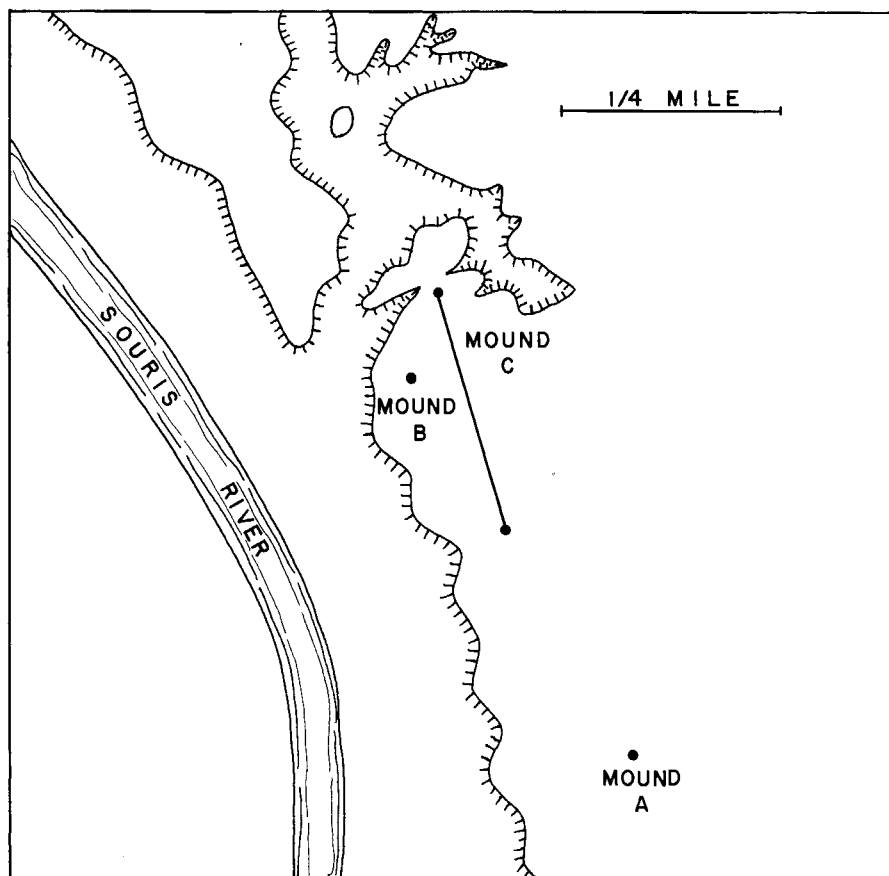


Figure 18. Map showing position of the Moore Group mounds

## The Moore Group of Mounds (See map, Figure 18)

In the NW  $\frac{1}{4}$  Sec. 23, on property owned by Robert Moore of Sourisford, was a group of three mounds, one linear with terminal expansions, and two very small round mounds. They occupied the plains' level on the east side of the Souris, opposite the opening of the South Antler valley, at a point where the plains' escarpment is much broken by a wide-branching dry coulee.

### *Mound A*

Mound A, indicated by a light-coloured spot rather than by any marked elevation, lay in a fallow field that had been under cultivation for some years. It was a foot high and 24 by 26 feet in diameter. A few food bones were scattered about the field. Testing failed to reveal continuity of the plains' level under the mound. A great central pit, ill-defined as to shape, extended to a depth of five feet below plains' level, but it contained nothing except broken animal bones and buffalo scapulae and vertebrae down to a depth of 3 feet. Below this, nothing was found. A great boulder, 2 feet in diameter, apparently never moved, lay at the bottom of the disturbance under which the soil was firm. The excavation was filled in.

### *Mound B (Figure 19)*

This mound, an inconspicuous feature in pasture-land, was one foot high and 29 by 27 feet in diameter, was oriented north magnetic, and was badly cut up by badger burrowing.

Excavation was started 5 feet north of the centre. Two feet north of centre was part of a small buffalo skull consisting of frontal, base, and one horn base. The frontal was penetrated by an old fracture about an inch in diameter. Human skeletons, much disarranged by badgers, were found in what had been a pit, probably of the jug-shaped type. Skeleton No. 1 was found partly in place, seated, facing southeast. The skull had rolled into a badger hole, and the lower jaw was not found until later, when it was recovered from badger earth at the mouth of a burrow outside the mound. Skeleton No. 2 was much disordered. Part of Skeleton 1 or of a third skeleton, consisting of ribs and vertebrae, lay 7 feet northeast of centre, at a depth of 3 feet from the top. The bottom of the pit, where Skeleton 1 was seated with legs drawn up to body, was at a depth of 2 feet 8 inches below the plains' level. Food bones and human ribs were mixed in the pit bottom under white earth, which seemed to have fallen in from above. The subsoil, through which the pit was dug, was a white earth and indicated the pit had caved in, burying the bones.

Just south of the burial pit was an instructive exposure showing the compact mound structure, the old sod line, and the white subsoil. The mound earth was very dry and hard, and the whole face of the cut compact, splitting in columnar structure as of an undisturbed soil.

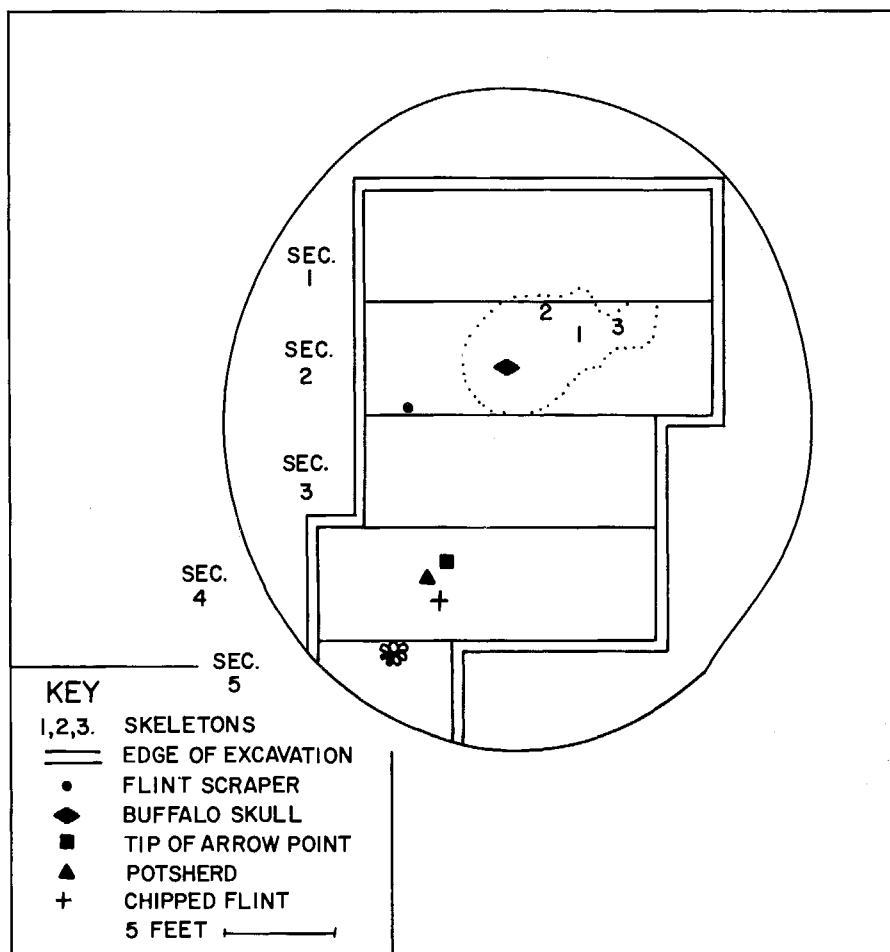


Figure 19. Moore Mound B

Animal bone fragments scattered throughout the structure were very hard and fragmentary and were mostly from the plains' level under the mound. Many were pointed and had been used as tools. There were also a few large bones, such as buffalo scapulae and vertebrae and a small buffalo skull.

Near the southwest base was a round bed of firestones, limestones burnt quite red, and broken boulders, but no ashes or charcoal, only bits of 'Unio' shells. This was on the old sod line, indicating the site of a lodge before the mound was built. A thick potsherd (Plate X, fig. 7), whose tempering material was partly shell and partly stone, and the tip of a point and some chipped flints were found at this level, just north of the fireplace. Five feet west of centre, at a depth of 18 inches, a small scraper-shaped



object, plano-convex, made of amber-coloured flint was found (Plate II, Fig. 5). At the north base of the mound, in earth at the mouth of the badger burrow where the missing jaw was found, the greater part of a small pot, which had been in the burial pit, was recovered. It is a plain ware, well made (Plate XI, fig. 1). Very little wood decay was found.

### *Mound C (Figure 20)*

Mound C was a long indistinct grade, with terminal, dome-shaped expansions at the northwest and southeast ends. Total length of the mound, including the terminal mounds, was 765 feet. The connecting grade was 4 inches high and 20 feet wide, and the terminal mounds were 42 feet in diameter and 2 feet 4 inches high.

Only the northwest end was explored. Excavation was started at the northwest base. Here the old sod line was distinguishable, but through the central part it could not be followed, though it turned up again under the southeast base. The earth of the mound was an extremely hard mixture of surface soil and gravel, evidently put up while wet, containing the usual food bones gathered with the earth.

There did not appear to be any burial pit. The human bones were much scattered, not entirely the work of badgers, and unusually disordered for a mound never intruded upon. Parts of skeletons were entirely missing. An area covering 20 feet at the summit of the mound was flat, and in the middle of the southeast half of this flattened area two babies had been buried, one in a seated position, and both so near the surface of the mound that the skulls were found in the sod at a depth of 6 to 10 inches. The skeletons were buried in earth as hard as concrete, which could only be moved by the use of a pick. A buffalo scapula lay below one skeleton at a depth of 2 feet.

Other burials were at a lower level. One complete skull (of a white man\*) in excellent condition was found 2 feet northwest of centre, at a depth of 2 feet, facing southeast, with lower jaw in position. Bones thought to belong to this skull were scattered to the northwest, with a pelvis in place, as though seated. Near this was a scooped-shaped object of bone, worked to a knob-like termination (Plate VII, fig. 2). Another skull (adult) and part of a skeleton (child) were found near the mound centre. West of these, another skeleton, probably belonging to the adult skull, was found scattered through the old sod line, with a trace of bark decay over it.

A boulder, 2 feet in length, lay 5 feet north of the centre of the mound, its top 6 inches below the surface. Under the southwest end of this stone was a bundle of human bones, wrapped in skin or some other material, which was preserved by salts of copper. The copper wrapper was not found, but the bones were stained a bright green. The ends of all three bones, where not protected by copper, were missing. There were seven

\*Identified by Dr. L. Oschinsky, National Museum of Canada.

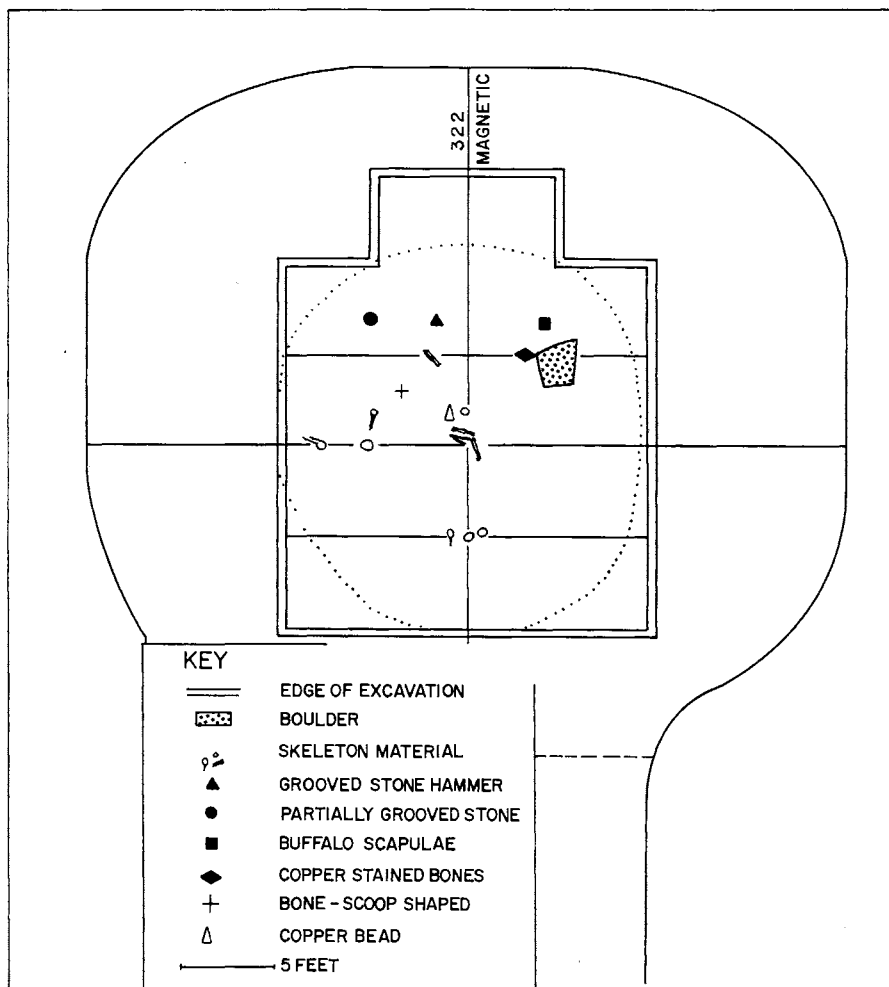


Figure 20. Moore Mound C

smaller stones under the great boulder, and fragments of a skull and a few bone fragments but no grave, and appearances indicated that the stones were in position before the mound was built. Just northwest of the boulder were parts of a buffalo scapula at a depth of 9 inches.

Food bones were not so plentifully found in this mound as in some others. Two great buffalo bones were associated with one of the lower level skulls. Other finds associated with the lower level skeletons were a grooved stone maul and a maul partly grooved, both of which had a scale of lime on the down-facing sides, and a short copper tube broken at one end by the shovel (Plate VI, fig. 11). A plano-convex amber flint scraper (Plate II, fig. 4) was found when filling in the excavation.

The length of the grade was examined for surface finds. Some animal bones were seen all along the grade, but there were no indications of white earth, such as should have been found somewhere along this low grade if the subsoil beneath had been thrown up in digging a pit. The mound at the southeast end, in plough land, was not explored.

### Camp-Site Tests in the Moore Group Vicinity

Twenty paces north from Mound C, at the head of a little lateral coulee, boulders forming a bed 3 feet square outcropped in the sod. This was dug out and found to contain twenty broken and blackened stones with no trace of ash or charcoal about them. A test trench north of this did not disclose any trace of habitation.

Between Mounds B and C, and also on a bit of the plains' point northwest of Mound C, were some of the saucer-shaped hollows always found in the vicinity of mounds. Tests of two of these gave no results, but another produced a little scraper-shaped form, chipped from a flint pebble (Plate II, fig. 11).

Two large mauls, found in this vicinity by Mr. Moore while ploughing, were purchased. Both mauls show a scale of lime coating on one side, as thick as on any unmoved boulder in the fields. One maul has been used at some time as a firestone.

### PEMBINA PLAIN

Following up the survey of 1912, excavation was continued in 1914 in the plains of the Pembina watershed near the town of Snowflake (See map, Figure 21).

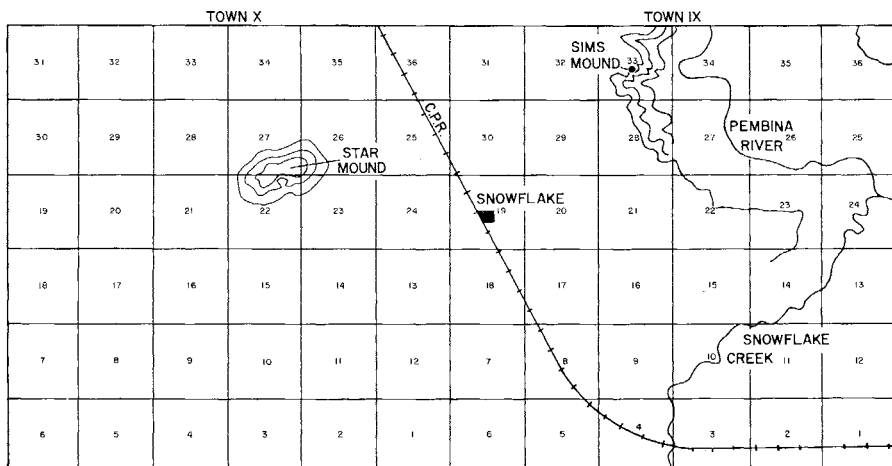


Figure 21. Map of Snowflake district, Pembina Plain

The first area explored was Star Mound Hill, an isolated elevation of shale, rising 100 feet above the general level of the plain, in Township 1 North, 10 West. Its base covers an area a mile long by more than half a mile wide, mostly lying in Sections 27 and 22. Its summit is a fairly level area of about eight acres. All its slopes are very long. There are three small ravines on the southeast slope, all of which may have held springs, but only one is known to have carried water; this has been dry for many years. There are small sheltered areas on the southern flank suitable for camp-sites, but the only known site covered the hill-top. Small blinds, or groves, of poplar would have supplied a transient population with sufficient fuel. All about the sides of the small coulees are rutting and pawing hollows made by buffalo, and the boulders jutting out of the hillsides are polished to a glassy surface by their rubbing. The northern slope shows similar hollows, where the grass grows in high hummocks, at some seasons marshy. The north and east slopes are strewn with stranded boulders. On the north, east, and west sides of the hill are wide areas of marsh land, about fifteen feet lower than the plain. These sloughs, which are flooded now only in the spring, are said to have held water most of the year before the land was broken. Star Mound Hill commands a view of the plain in every direction for a distance of 20 miles.

#### **Star Mound (Figure 22 also Plate XIII, fig. 3)**

This mound, situated on the top of the hill near the centre, in the SE  $\frac{1}{4}$  Sec. 27, was mostly on the property of Allan McAulay, on unbroken land. In shape it seemed to have been intended to represent a beaver. It consisted of a round central body, 70 feet in diameter, with south and north extensions, representing, respectively, head 30 feet long and tail 43 feet long—a total length of 143 feet. It was oriented about three degrees east of geographical south. The apparent elevation of the structure at the centre was 5 feet, but excavation showed less than four feet above the old sod line, and that of the head and tail was but  $1\frac{1}{2}$  feet high. For 16 to 18 feet, radiating from the centre, the summit of the mound was flat. Here were evidences of previous disturbance, but excavation disclosed that in only one case had these holes reached a grave.

Excavation was started at the south or head end, and the entire mound, except a strip along the base and a part of the tail, was taken down in 5-foot sections by shovel and afterwards reshaped to its original lines with team and scraper.

The bulk of the mound was built of earth gathered up from about its base, yet there were no appreciable hollows to be seen in the vicinity. Test of the plain about the base gave 5 inches of undisturbed prairie sod, 4 inches of which must have been due to natural accretion since erection of the mound. Several bushels of food bones, mostly buffalo, and some fish and bird, were carried into the mound with the earth. Also collected were

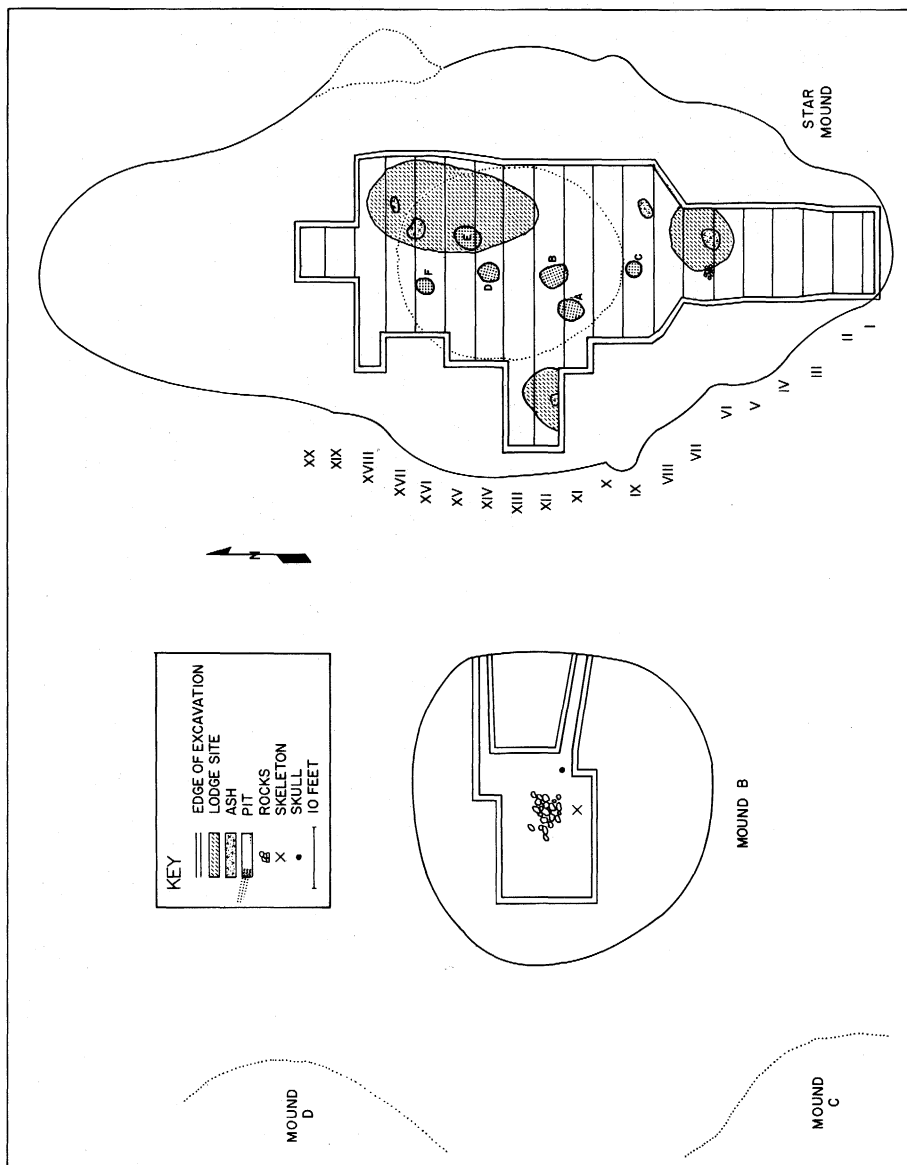


Figure 22. Mounds on Star Mound Hill

pointed bones and others that seemed to have been used as tools; stone chips; an occasional 'Unio' shell (probably from the Pembina River, the nearest point they could have been obtained from) and a few point fragments.

Apparently some of the earth was brought in in sods. Not only were the original laminae of the sods retained, but owing to the dryness of the climate the grass roots had been preserved. Sometimes the grass of these old sods showed charring on the surface. At the east end were discovered large slabs of slough dirt exhibiting a shale-like laminae. Had these old sods formed a continuous surface, the evidence would have suggested an older mound incorporated in the larger structure, but they were found only from Section VIII to Section XI, and there were too many breaks in continuity to support such a theory.

Boulders were incorporated extensively but haphazardly. Through the centre of the mound two or three wagonloads of stones were removed. Some of these were found in burial pits, perhaps precipitated when the pit covering decayed. In all, six burial pits were found.

*Pit A*, so well concealed that the old sod line seemed continuous over it, lay under a heap of boulders. In digging out a boulder, red ochre was found on its underside; this led to the discovery of the interment of a child of probably five years, buried 3 feet below the sod line in the south end of the pit. The skeleton was in a seated position from which it had fallen backwards. The skull lay face upward at the bottom of the pit, and the lower jaw near the knees of the skeleton. Owing to earth pressure, the skull was misshapen, but it was naturally large and broad, and appeared much too old for so small a child. The frontal suture was completely closed. The centre of the pit held no interment, but in the north end there was the skeleton of an older child, about six or seven, and two bundles of bones (Plate XV, fig. 1). The skeleton, apparently fallen from a seated position, lay on the back and left side, with legs partly drawn up. The skull with this skeleton again indicated an older person than was suggested by the other bones; it was small but broad, the sutures were closed, and the dentition nearly completed, with the last molars coming through. Near the skull, which was disconnected from the body, was one cylindrical shell bead (Plate VI, fig. 7), an inch long, half an inch in diameter, and stained with red ochre. The two bundles of bones, in fairly good condition, consisted respectively of a right and left tibia, the left longer than the right, and all the bones of both arms, indicating a stature of 5 feet 10 inches or 6 feet; and a right and left tibia, both fibulae, both ulnae, and one radius, indicative of a stature of 5 feet 8 inches or 5 feet 10 inches. Embedded in the lower end at the front in the right tibia of the first bundle was what appeared to be the tip of an arrow point with a growth of bone over it (Plate XIV, fig. 2). The pit itself was filled with a mixture of shale, white earth, and soil, and four boulders. It was nearly circular, 4 feet long north-south, by 3 feet 10 inches wide, and 3 feet 2 inches deep below the sod line,

with vertical wall and rounded, bowl-shaped bottom. Over the whole bottom, red ochre had been dusted, which adhered to some of the bones. There was no trace of a wooden covering over the pit. It seemed to have been one of the jug-shaped pits with a very restricted aperture that had caved in.

*Pit B* contained but one skeleton in the northeast side. It lay on its back, with lower limbs drawn partly up, the skull facing southeast with the lower jaw in place under it; the original position was probably seated, facing southeast. The bones were in an advanced stage of dry decay. They indicated a stature of 6 feet, although the femora were relatively short and much curved. The subject was evidently a man of middle age, but the lower jaw indicated a much older person, and although found in place under the skull, it did not seem to be the proper jaw for the skull. The left radius was not found. The process for the attachment of the flexor muscles on the posterior surface of both femora (the 'linea aspera') was excessively rugged, and this with the excessive curve of these bones was suggestive of great strength in the lower limbs. Above this pit was a mass of great boulders, eight of which had fallen in. About the edges of the pit was a trace of poplar wood, probably indicative of a wooden covering that had decayed. The pit was not gouged out with the usual nicety of vertical cutting, and the bottom was of irregular form. It had been dug through the white subsoil, and slightly into the underlying shale, to a depth of about two feet below the sod-line level. It was about four feet long, oriented 10 degrees west of north, by 3 feet 6 inches wide. The pelvis and femora of the skeleton lay firmly on the shale bottom, as if seated, at a depth below the mound surface of 5 feet 10 inches, the skull resting against the side of the pit, its top 4 feet 10 inches from the surface.

*Pit C* also contained but one skeleton. The skull was not in the pit proper but against the northeast edge at the top. It faced southeast, with lower jaw in place. The dentition in both jaws was complete and flawless, except for evidence of wear. The skull was complete but crumbled in being taken up. The limb bones and the lumbar vertebrae lay as if the skeleton had fallen from a seated position, and, as originally placed, the body would have faced southwest. The bones of the thorax, the ribs, and most of the cervical vertebrae and bones of the hands had been carried away by badgers. Some of the bones were stained with red ochre, and there was some ochre in the bottom of the pit. All the bones were brittle and badly decayed. They were originally slender, indicating probably a woman of slight build, in middle life, and of small stature, although the femora were rather longer proportionately than is usual. Two of the toe bones were united by a bony growth. In form the pit was nearly circular, 2 feet 10 inches north-south and 2 feet 8 inches east-west. It was excavated in subsoil to a depth of 16 inches; the shale was not penetrated.

*Pit D* was just northwest of the mound centre. It was the deepest pit found, penetrating the shale to a depth of 3 feet 6 inches below the

sod-line level. It was nearly circular, 2 feet 8 inches north-south by 2 feet east-west. It contained only loose bones (Plate XV, fig. 3), and these were not at the bottom but at a depth of 2 feet against the north side of the pit. There were two tibiae, two fibulae, four ulnae, and four radii. Under the human bones was a long buffalo rib, split and polished. Above the pit were many large boulders and a trace of wood decay.

*Pit E* was of irregular shape and of no great depth. Other than boulders it contained nothing whatever, and there was no evidence of intrusion. There were many large boulders above it.

*Pit F* was the only burial pit under the mound that had been robbed. It was said to have been entered twenty years ago by a man named Graves, who removed several skeletons. A tibia and fibula were found in the pit bottom, and in the earth thrown out, a lower jaw. The pit, which was circular and 3 feet in diameter, was dug to a depth of 2 feet below the sod-line level.

Besides pit burials there were other more shallow graves in the mound. The earth and shale cast up in digging pits A and B were thrown to the northwest, partly covering a seated skeleton. The bones found consisted of the leg bones, whose position indicated seated posture; the pelvis; part of a skull; and other scattered fragments indicative of previous disturbance. A skeleton, much decayed, was found at the north edge of Pit B, 3 feet 2 inches below the mound surface, the skull badly crushed. Just beyond this was another crushed skull, the underpart up. Northeast of it were two lower jaws, firmly jammed together, dentition indicating early middle life. Three feet northwest of Pit D was a badly decayed skeleton with a large boulder on the leg bones. Associated with some of this skeletal material were a little red dust of ochre, a small arrow point of amber flint (Plate IV, fig. 21), a small stone core, and bits of wood decay.

The above burials were at the old sod-line level, but there were also human bones scattered through the fill. A skull consisting of the left frontal, probably of a child, lay above Pit C under two boulders at a depth of 14 inches. A skull was found west of Pit B at a depth of 16 inches. Neither maxillary was with it, and it was very fragile. The inferior maxillary was found in a badger hole below. East of Pit B were some human bones that had been disturbed. West of Pit E lay scattered fragments of human bones, consisting of two infantile femora of different subjects, an infantile tibia, part of a small ulna, part of a larger femur, a finger bone, and part of a skull cap.

Nearly all the artifact material that could be assumed to be an offering to the dead who were buried under the mound was found at no great depth at the mound centre. Except for the shell bead already mentioned, nothing was found in the pits with the dead. A gorget (Plate V, fig. 7), made from one valve of a large marine shell, was found in very hard sod at a depth of 10 inches. The shovel nicked one corner. It was quite thoroughly coated



with a scale of oxide. A spear point (Plate III, fig. 10), 10 inches long, came from very hard earth at a depth of one foot. A nick by the pick showed that it was chipped from a bluish dull chert, an argillite or probably some local stone found in the shale. A copper wedge or axe was found in very hard sod at slight depth. It is  $4\frac{3}{4}$  inches long, one-sixteenth inch thick, and weighs 9 ounces (Plate VI, fig. 9). It has been shaped by hammering, and a portion of one surface bears what seems to be the imprint of the native rock from which the malleable copper came. A hammered sheet of copper, in the form of a right-angled triangle, came from the sod at a depth of 9 inches. (Fragments of sheet copper were also found on the east slope of the mound at a depth of 4 inches.) A granite slab, not worked to shape,  $9\frac{1}{2}$  inches by 6 inches and three-quarters of an inch thick, came from a depth of 9 inches.

Material that appeared to have been brought accidentally into the mound with its erection comprised: three small sherds like the wicker-marked (fabric-impressed?) ware of the Sourisford region, a piece of rib showing use as a tool, charred wood from a depth of one foot, and decayed wood. A grooved stone hammer was found in the sod about the centre of the mound on the east side of the excavation. Scattered human bone fragments were collected from fox and badger holes that undermined all the west-central part of the mound. A sample of a well-marked dump of the earth was retained and also a sample of the old sod line.

Excavation disclosed that the hill-top had been a camp-site before the building of the mound, and this old camp level extended under the structure. It was at this level that some of the most interesting material was found. There were a broken grooved stone hammer, plano-convex blades of amber flint (Plate III, fig. 1 and 2), a small stone tube (Plate VIII, fig. 4), arrow points (Plate IV, fig. 1, 2, 19, 20, and 23), and camp refuse of bone, stone chips, and shell, some of the material stained blue-black with manganese or extremely hard and coated with alkaline lime. Three large patches appeared to be lodge sites. They were marked by fireplaces containing white ashes. The largest patch, extending through the east centre, yielded ashes and burnt bone, red ochre, and some blackened stones. West of the fireplace in the south patch stood a cairn-like heap of boulders, which contained nothing. The stones were lime-coated on the sides that were down; some exhibited two coats, one formed since the stones were placed in the mound and the other while the boulders were lying half-buried in the plain before the mound was built.

Where the camp-site extended underneath the mound, it was thoroughly examined, but how far it extended beyond the mound is unknown. Camp refuse, consisting mainly of food bones, was found covering two or three acres of the hill-top east and west of the mound. The surface was covered with a very tough sod 4 inches thick, and the material lay under this; but other than a few tests, no exploration was made.

### Star Mound B (Figure 22)

West of Star Mound were three barely perceptible elevations forming a triangle. It had been supposed that the elevation later designated as Mound B was but a remnant of the old camp-site level remaining after the building of Star Mound. Trenching, however, revealed it to be another mound with a burial.

This mound had an elevation of about one foot, and it was roughly circular with a diameter of 50 feet. Complete excavation of the mound was not attempted, but most of the centre was dug, starting with two trenches from the east side. A skull lay on a flat limestone at a depth of 11 inches, facing southeast. Nearby were parts of two fibulae. The lower jaw was under the skull, in reversed position; the base of the skull was broken, but the missing fragment was found later nearer the centre of the mound, close to bones lying in very tough sod and gravel at a depth of 9 inches, which might have been part of the skeleton belonging to the skull. The central part of the mound was a mass of boulders, beneath which nothing was found; the subsoil beneath was undisturbed. East of the skeleton parts, fragments of an infantile skull and the tibia and femur of a foetus were found.

The adult skull seemed to be of a different type to those found in Star Mound. It was large, with heavy and more prominent molar bones that made the face broader. The frontal bone was divided by the frontal suture; whereas in all the Star Mound crania, even in the child skulls, this suture was entirely obliterated. The dentition indicated early middle life. The third molar had not come. The left upper canine tooth and the second upper right incisor had the enamel split off, an injury they must have received before interment.

Associated finds included seven bone beads (Plate VIII, fig. 1), a bird bone from which the beads were made, and a used pointed bone. The beads were the size of a clay pipe stem in diameter and about 1½ inches long. All but one came from the bottom of the sod overlying the gravel, just northwest of the adult skull, and one was found in trenching 2 feet northwest of the skeleton. Under the beads were found two parts of a buffalo frontal, a very large frontal bone with horn-bases, and the lower end of a buffalo femur. Flint chips and 'Unio' shell were found during excavation, and a peck or more of food bones was dug up.

The other two little mounds were not examined.

On the upper part of the southwest slope of the hill, about 400 yards southwest of the mounds, were many shallow saucer-shaped hollows like those found always about the mounds of the Sourisford district. Exploration of three of them gave no results. They were 4 inches deep, 6 to 8 feet in diameter, and 17 feet apart. Sod, 4 inches thick, had formed over them since they were made, but nothing indicated their purpose. The subsoil was unbroken, except for a slight scooping out.

"The habitation of this exposed, windswept hill-top doubtless indicates that these people had enemies against whom it was necessary to be ever on the alert. Nothing else, it would seem, could induce anyone to make this shelterless spot a place of abode." (Nickerson)

### **Sims Mound (Figure 23)**

This was a linear mound in the form of two round terminal mounds joined by a connecting grade. It was situated in the SW  $\frac{1}{4}$  Sec. 33 of Township 1 North, 9 West (see Figure 21) on land never cultivated, the property of Charles Sims of Snowflake. The mound stood alone on a point of the plain overlooking the Pembina valley, 300 feet below. Here the forest growth of the valley comprises poplar, a little birch, and scrub oak, together forming an almost impenetrable thicket. Several old trails, now overgrown, can be followed a short distance down the hill-side from the mound until they disappear. They may be old cattle trails, or buffalo and deer trails, or possibly village trails to water. A small spring was found about 200 feet down in the gulch, and broken animal bones were encountered in cleaning it out.

The mound, oriented approximately east-west, measured 172 feet long from centre to centre of the terminal mounds, with the connecting grade 22 feet wide, but a little expanded at the base on the south side near the middle. More exactly, the northwest half of the connecting grade was oriented 60 degrees east of south, and the southeast half curved to 70 degrees in adhering to the brink of the escarpment on which it was built. The northwest terminal mound was about 35 feet in diameter and 2 feet high, and the southeast mound was about the same size but a little higher. The natural slope of the surface was towards the southeast, about four degrees, and as the mound followed this gradient, the whole structure fell about one foot, so that the southeast mound was made relatively higher, sustaining thereby a symmetrical relation to the whole. The apparent elevation of the southeast mound was 3 feet 2 inches, but excavation disclosed only 2 feet 3 inches of mound-earth above the sod-line. The elevation of the connecting grade as viewed from the south was 1 foot 9 inches; as viewed from the north, 2 feet 3 inches, the result of the scraping out of earth from this side near the base to build the 'grade', but actual elevation about the sod-line proved to be from 1 foot 3 inches to 1 foot 6 inches.

Excavation was started at the southeast base of the southeast mound, which was taken down in sections 5 feet wide. The sod-line under the mound became distinguishable about eight feet southeast of the centre. South and southeast of the centre, the bones of two children, one an infant, were found commingled. They lay partly on the sod-line, the older child somewhat higher in very hard earth, 1 foot 8 inches below the surface of the mound. The body had either been seated and subsequently fallen, or

placed on its back with legs drawn up. The skull was crushed and lay near the pelvis. All the bones were in very poor condition. As with the Star Mound skulls, the skulls of these children showed no frontal suture.

About the scapula of the skeleton of the larger child were 27 shell rings (Plate VI, fig. 5), shell beads (Plate VI, fig. 8), and a shell gorget (Plate VI, fig. 6). The rings were all cut to a plano-convex surface and were one inch in diameter. The beads were like those found at Star Mound, one nine-sixteenths of an inch long, one a little over an inch, and one a very small cylindrical bead. The gorget was shield-shaped and originally perforated at the upper corners. In the process of excavation, the usual food bones were found, together with a worked bone and some chipped flints.

Excavation was started in the northwest terminal mound at the point of contact with the connecting grade. The mound had been previously opened, about 1908, by Wm. Sims, Dr. Corbett, and others, who removed bones at an unusual depth. The subsoil and old sod line under the mound were undisturbed except where broken by the burial pit, which was south of the mound centre. The white subsoil cast out of the pit became apparent in the first block removed. Pushing the excavation northwest, at a depth of 7 feet a mass of bones was found evidently disturbed, consisting of three adult skulls, somewhat broken; and parts of skeletons, one that of an infant. With the bones were two little shell pendants (Plate VI, fig. 3), similar to another one found in this mound in the 1912 survey. They were soft and fragile, the upper end notched for suspension, and the lower end bearing three light notches. Part of a decaying pole, 3 inches in diameter, was found in the pit.

Six inches below the disturbed bones, in the very bottom of the pit, undisturbed skeletons were found. All had the appearance of having fallen from a seated position. In falling they had become intermingled, making it difficult to assemble the respective parts that were not entirely decayed. Two skeletons were together in the southeast part of the pit. One may have been a bundle of bones; it comprised femora, tibia, a fibula, humeri, a clavicle, part of an ulna, and fragments. The other comprised femora, tibia, fibulae, and humeri. The shattered skull was heavy-boned. The dentition indicated late middle life. All bones of both skeletons were of exceptionally heavy build, but the statures indicated were not above 5 feet 10 inches. A child of about ten years old had been buried, the pelvis and flexed lower limbs indicating a seated position. Another skeleton of an adult of average stature had been seated in the northwest side of the pit. The lower jaw was not found. Dentition of the supr'maxillary showed that the last two molars on the left side had been lost during life. Superciliary ridges of the frontal were prominent, and the angle of forehead was very low. Against the wall in the southwest side of the pit was another skeleton that had been seated. It consisted of the bones of both arms, both scapulae

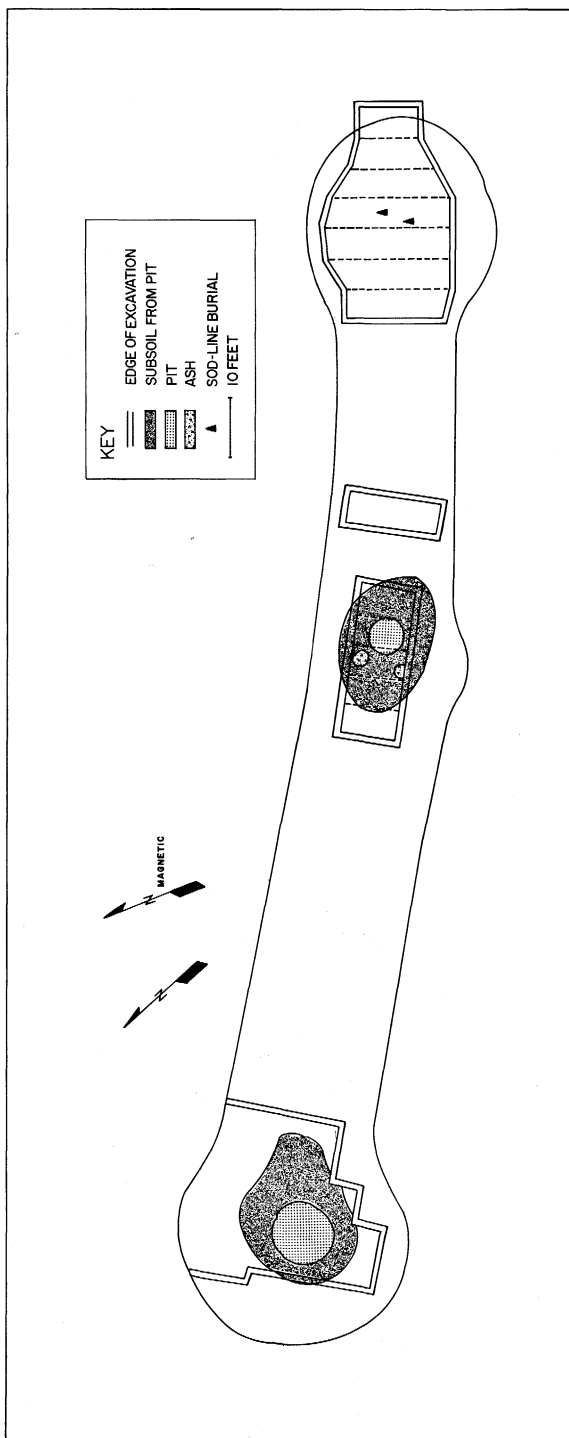


Figure 23. Sims Mound

and clavicles, the sternum, sacra, and one ilium, the three bones of the left leg, part of a right fibula, ribs, vertebrae, and some of the bones of the hands and feet. The skull was thin and fragile with decay, and all the base was broken away. Dentition indicated a youthful subject. With the skull was part of a sacrum, finger bones, and an odd lower jaw. A skeleton had been apparently seated near the centre of the pit. The skull was distorted by pressure and decayed. Two more skeletons were in the southwest side of the pit. All the bones touching the bottom were disintegrating to lime, which was adhering to a decay of bark that coated the bottom of the pit. A number of the bones were retrieved. Dentition of one, probably a woman, indicated middle life; of the other, advanced middle life.

The pit, which had been dug through the white subsoil and shale, had penetrated a hard laminated sand underlying the shale. It was cistern-like with the opening at the top very small. In shape it was nearly circular, 10 feet in diameter, saucer-shaped at the bottom, deepest in the southeast by a foot. Its average depth was  $5\frac{1}{2}$  feet below the sod line or  $7\frac{1}{2}$  feet below the summit of the mound. There was a trace of charcoal in the bottom. The filling of the pit consisted of mixed earth and shale with a trace of burnt earth.

Above the southwest side of the pit (on line E-F-G) was a fine exposure of the old sod line covered with white earth cast out of the pit. With the passing of time the weight of the superstructure had bowed the sod line down. Charcoal was collected here, where a fire had been kindled at the edge of the pit opening. Further excavation revealed nothing more.

It was decided to trench the connecting 'grade' at about the middle. Part way between the middle and the southeast end, a test trench was dug, which yielded only food bones and specks of charcoal in the old sod line. Ten feet further northwest on the 'grade,' five 5-foot sections were taken out. White subsoil and shale that had been thrown up and two spots on the sod line under this soil, where fires had burned, indicated a pit. This was found by following the sod line up to a break not larger than a man's body, and then following the break down through exceedingly hard soil, which completely filled the upper part of the pit. At a slight depth it began to be apparent that a slight burning of the pit wall outlined the shape of the pit, but it was not possible to adhere to this line closely in excavating because of the extreme hardness of the earth within and without the burnt line. The pit had been bottle-shaped, with kettle-shaped bottom, circular,  $5\frac{1}{2}$  feet deep below the sod line, and about three feet above the bottom expanded to a diameter of 6 feet (Figure 24).

The pit had never been disturbed, but as decay had made great inroads, nearly all the bones of the skeletons were reduced to lime. Originally the bodies had been seated about the edge of the pit, with legs extended into the pit bottom. The decay of bark covered the bottom of the pit, the whole of which was dusted over with red ochre. A layer of small sticks seemed

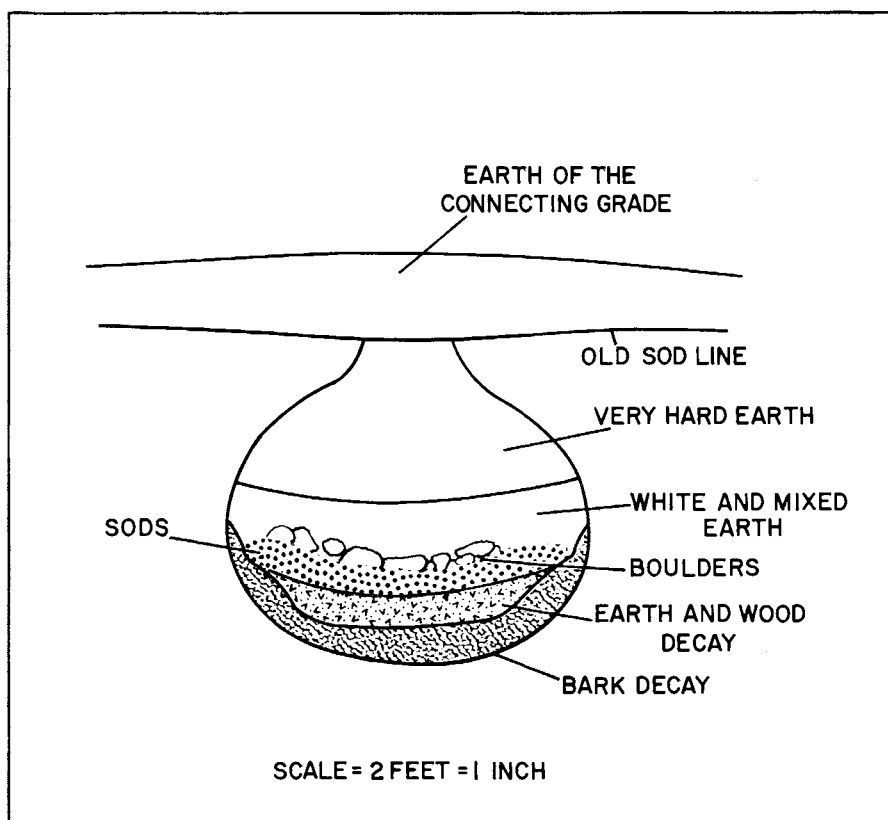


Figure 24. An ideal section through the burial pit in the connecting 'grade' of Sims Mound

to cover some of the bodies. There was the remains of an outer covering, consisting of poles, sods, and boulders, which must have been handed into the pit through the manhole-like aperture. Nine buffalo vertebrae, three cervical and six dorsal, in natural order, that signified a funeral offering of a chunk of meat from the hump of a buffalo, were found on the west side of the pit. In digging the pit, the earth and shale taken out must have been handed up through the constricted neck of the bottle-like hole to helpers outside, and the bodies and boulders must have been handled in the same manner through the constricted opening into the completed pit.

The skeletal material, which was retained, comprised subjects of all ages. A cylindrical shell bead and a shell gorget, much corroded, were found with an infant. Another shell bead from the pit centre was also associated with this skeleton. Also retained were a sample of the burnt wall of the pit, a fragment of worked bison scapula, and a fragment of '*Unio*' shell found in the sod line.

Sims Mound was important in revealing new information. Although many tests had been made previously to discover the purpose of the connecting 'grade,' this was the first one to reveal a burial pit. Up to this time it had been considered that the connecting 'grade' was merely a structural embellishment. Similar objects made of 'Unio' shell found in Sims Mound, in two very different types of interment, one in a shallow grave (southeast terminal mound) and one in a deep pit (the connecting 'grade'), signify that the same people used both types of burial. These shell objects also show a relationship between this mound and Star Mound (Pit A), the mounds of Sourisford (Mound 9), and the Westbourne Mound (below).

### **Pilot Mound**

Northwest of Snowflake is Pilot Mound Hill. From its summit is an extensive view of the plain. Far in the southeast is Star Mound; in the northwest, across the deep valley of the Pembina, lies the mound plain above Rock Lake; and to the northeast is Swan Lake. The Pembina valley, in the depths of which these lakes lie, is a forested gorge 200 feet deep. The slopes of Pilot Mound Hill are covered with the same slate or shale as the Pembina bluffs underlying the plain. These slopes are strewn with boulders, and some very large ones lie stranded on the summit. A small, round, grooved hammer, owned by Dr. Ferguson, made of a compact greyish-black stone, was found in the vicinity.

On this hill a small round mound was opened by Professor Montgomery. Dr. Ferguson said that it had contained some skeletons (one that of a child or a woman). Associated with these were some potsherds, some shell beads, and copper beads bent from sheet copper. Above the wrist of one of the skeletons lay a copper band, perforated in the ends, through which ran a buckskin or rawhide string. Many boulders, which Montgomery must have taken out of the mound, were heaped on the sides of the old opening.

### **Rock Lake\***

A number of mounds were known on the plain above Rock Lake in Township 3 North, 13 West. In the SW  $\frac{1}{4}$  Sec. 13, above the northeast end of the lake, stood four mounds grouped together. The largest was 4 feet high with an ovoid base, the major axis 100 feet oriented northwest and southeast. The second mound was about the same height but not so large. The other two were under two feet high and were circular.

Morrison Mound in SW  $\frac{1}{4}$  Sec. 14, situated on the property of Jos. Morrison, was 6 feet high, circular, with diameter 100 to 110 feet. It was opened by Professor Montgomery, who found parts of skeletons lying on a bed of ashes within a pen of birch poles, and some potsherds and an arrow point.

---

\* For stratigraphy see MacNeish and Capes, 1958.



Odell Mound, in the SE  $\frac{1}{4}$  Sec. 15, stood 350 to 400 yards northwest of Morrison Mound. It was 3 feet high and had a deep old opening. Parts of skeletons and some arrow points were said to have been found.

On the stubble fields of Mr. Creighton, in SE  $\frac{1}{4}$  Sec. 20, approached via Glenora, was an apparently undisturbed mound, 3 feet high and 70 feet in diameter. From these fields have come a grooved stone hammer, made from a granite boulder, and a grooved maul, shaped by pecking.

In NW  $\frac{1}{4}$  Sec. 15 was a small mound ploughed over, located on the property of James Youll of Selkirk.

#### THE BASIN OF WHITE MUD RIVER

This area, lying to the west of the southwest end of Lake Manitoba, where White Mud River empties, was explored in 1915. The upper basin of the White Mud River is a region of rapidly disappearing marshes between long stretches of ancient beach bars of gravel. Its lower basin is the great level plain about the southwest shore of Lake Manitoba. Not more than thirty years ago (as of 1915) the river was navigable for small craft plying from the lake to Westbourne, where transshipment was made by team or rail to Portage la Prairie. The upper river is now but a small, clear, flowing stream; the lower river at Westbourne is sluggish and choked with weeds. As in most other parts of Manitoba, there is evidence that within the historic period there has been here a continuous drying up of the marshes. Settlers of 1870-80 tell of water 4 to 5 feet deep standing the greater part of the year where now crops are grown and harvested, of lake areas which have become grass marshes, and of prairie sloughs where wild hay was cut on which now no hay can be grown. In consideration of this region, therefore, as it was in the prehistoric period, it must be borne in mind that the only available trails led along the crests of the ridges, and camp-sites now uninhabitable because of lack of water would, at the period they were occupied, have been readily accessible by water, and to water for domestic purposes.

The forestation of the region varies somewhat. In the upper valley the crests of the ridges are said to have always been clear of bush, but the margins of the marsh areas were covered with willow and poplar. Along the slopes of the ridges there is still a good growth of poplar, elm, oak, and the smaller growths such as hazel, saskatoon, wolf-willow, sage, and choke-cherry. In the lower valley there is a heavier growth of cottonwoods, elms, and oaks. The plain about the lower valley is treeless, except where planted by settlers.

#### Westbourne Mound

One of the largest mounds in Manitoba was Westbourne Mound. On the property of William Rhind, about one and one-half miles west of the town of

Westbourne, it stood alone on the plain close by the bank of an old closed river loop. It was overgrown with brush and oak trees, but in 1907 it was partially demolished and rebuilt by Professor Henry Montgomery. Earlier, its interior was used as a root cellar. It was originally a circular mound with a base diameter of 90 feet, standing upon one of the long grades which projected from it both north and south some 400 feet. The northern extension ran to the old river bank. These 'grades' had an elevation of 18 inches and were 30 to 36 feet wide. The height of the central mound was said to have been the same as now, about eight or nine feet. Part of the skeleton of a child and part of that of a large man, and some small shell pendants and beads were recovered by Professor Montgomery (1908). The bones were said to have been much scattered. The pendants and beads were similar to those found in the Sims mound. No pottery\* was found, and none has been found in the vicinity. Nor have stone mauls or hammers been found in this region. Food bones were scattered west of the mound, but there was no evidence of a village either here or on the river banks.

\*Broken pieces of pottery are reported from this mound (Montgomery, 1908: 38).

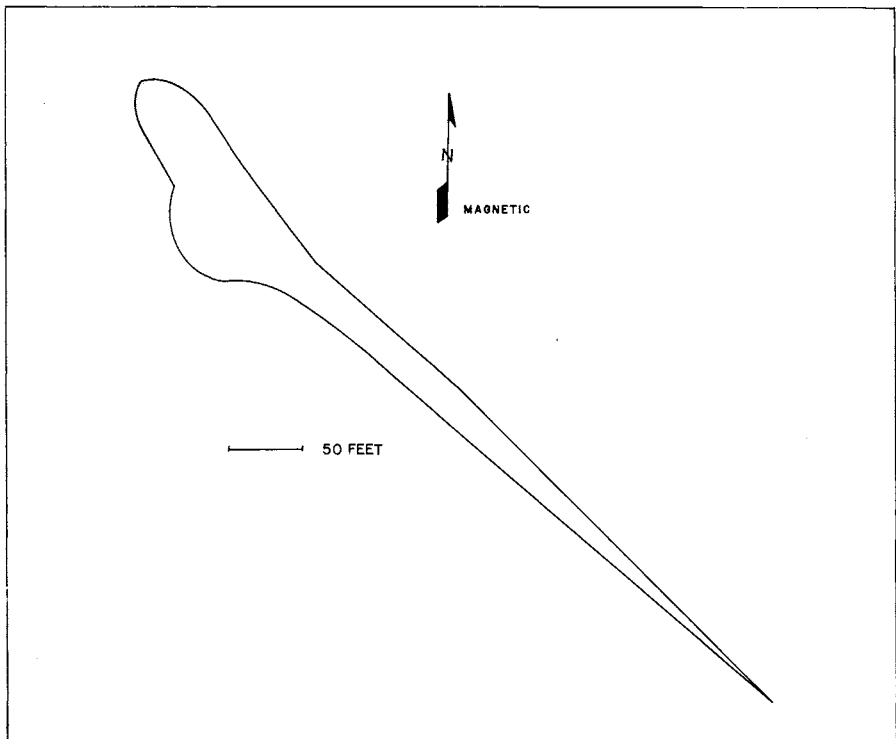


Figure 25. Arden Mound

### Arden Mound (Figure 25)

This mound was situated on the highway diversion in the NW  $\frac{1}{4}$  of NE  $\frac{1}{4}$  Sec. 13 of Township 15 North, 14 West, within the village limits of Arden. It stood on the crest of the ridge known as the 'Campbell Beach of Lake Agassiz' (see map, Figure 26). This ridge here forms a

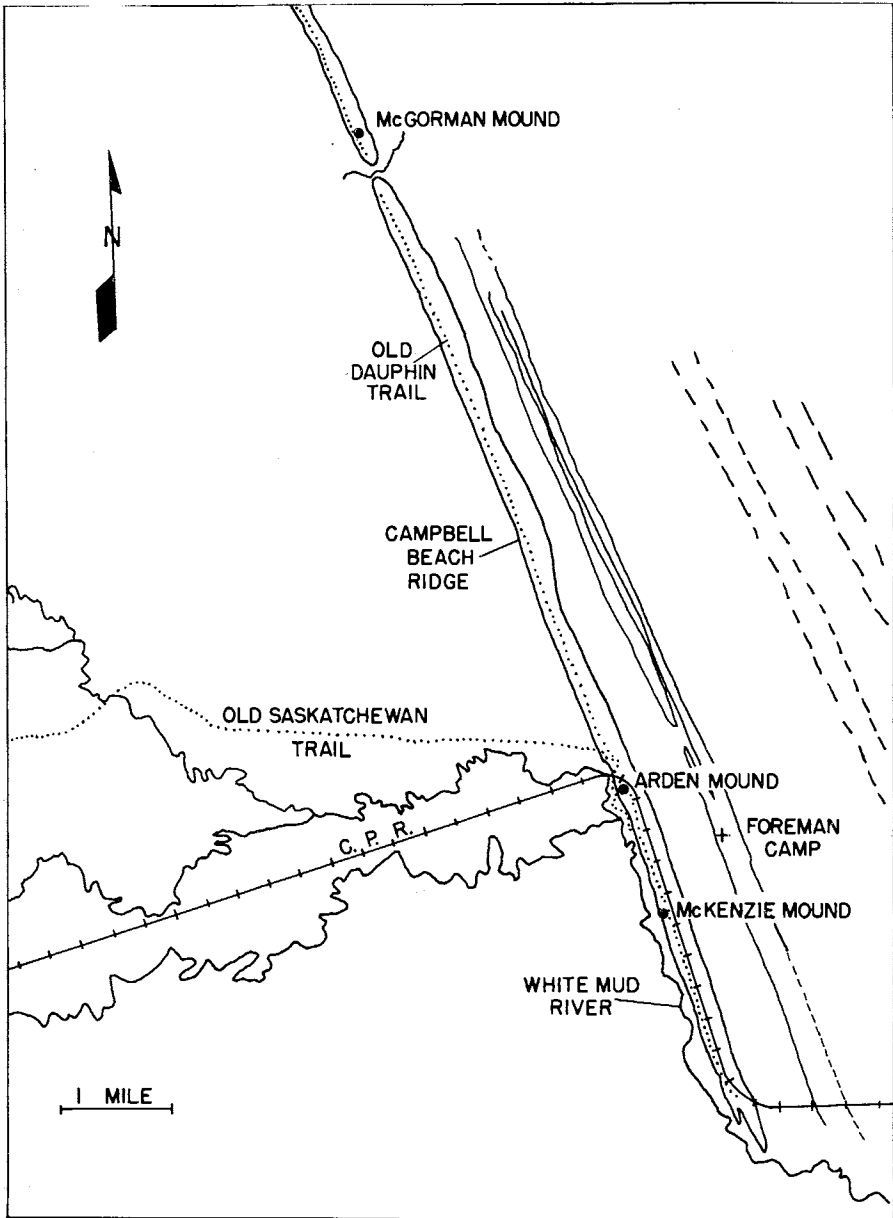


Figure 26. Map of Campbell Beach ridge and vicinity

barrier at the junction of two small streams forming the White Mud, deflecting the river some miles to the southeast until it breaks through to its easterly course to Westbourne. Formerly this point was the parting of the trails, the old Dauphin Trail, which followed the ridge northwest to Riding Mountain, and the Saskatchewan Trail, going west via the north bank of the White Mud. It was another large mound, apparently an effigy of the type of Star Mound, although the tail of this figure was much longer, and the figure was headed north instead of south (Plate XV, fig. 2). It was known to the first white settlers as 'Badger Hill Mound.' It was partially demolished about 1906 by Professor Montgomery and earlier entered by J.F. Choate of Arden. On the present survey, the mound was measured, charted, and photographed, but not excavated. It was said to have been 4 feet high at the centre. The southeast extension, 443 feet long, tapered to its termination where it faded to a trace.

According to D. McRae of Arden, Professor Montgomery took nine skeletons or parts of skeletons from the mound but found nothing else. Some of the skeletons were said to have been extended at length, some seated and encased in clay, and some much disturbed or scattered. Mr. Choate, who was the first to enter the mound, stated that he found the bones of a baby within three inches of the surface and that other bones were not in place as in a grave but were much scattered. He found an iron knife blade in soil, not previously disturbed, at a depth of 2 feet 6 inches (Plate VI, fig. 12). On one side, a scale of carbonate of lime suggests that it has been in the mound as long as other similarly coated artifacts found in other tumuli. The presence of the lime scale and the blade position in the undisturbed matrix argues that the knife was not intrusive, and it is therefore significant as the first object found in a Manitoba mound indicating contact with whites, probably in the trading period about 300 years ago.

### **McKenzie Mound (Figure 27)**

This mound was situated in the NE  $\frac{1}{4}$  Sec. 12, Township 15 North, 14 West, three-quarters of a mile southeast of Arden, on the property of Thomas McKenzie. It stood on the crest of the Campbell Ridge, near the old trail, now unused (see map, Figure 25). It was a long mound, having slight terminal and central expansions, measuring 257 feet in length, 23 to 29 feet in width, and 2 feet in height. In form it deviated from the linear, was somewhat sinuous, curving and expanding southeast of the centre and contracting just northwest of the 'tail' or southeast end, as if intended to represent some kind of snake. The tail end was 6 to 9 inches lower than at the bend.

This structure was excavated from end to end in sections 5 feet wide. The mound was built entirely of scrapings of dark surface sand and gravel. Under the structure, throughout its whole length, the old ridge sod was unbroken, except at the point in Section 19 where it was penetrated by a pit.

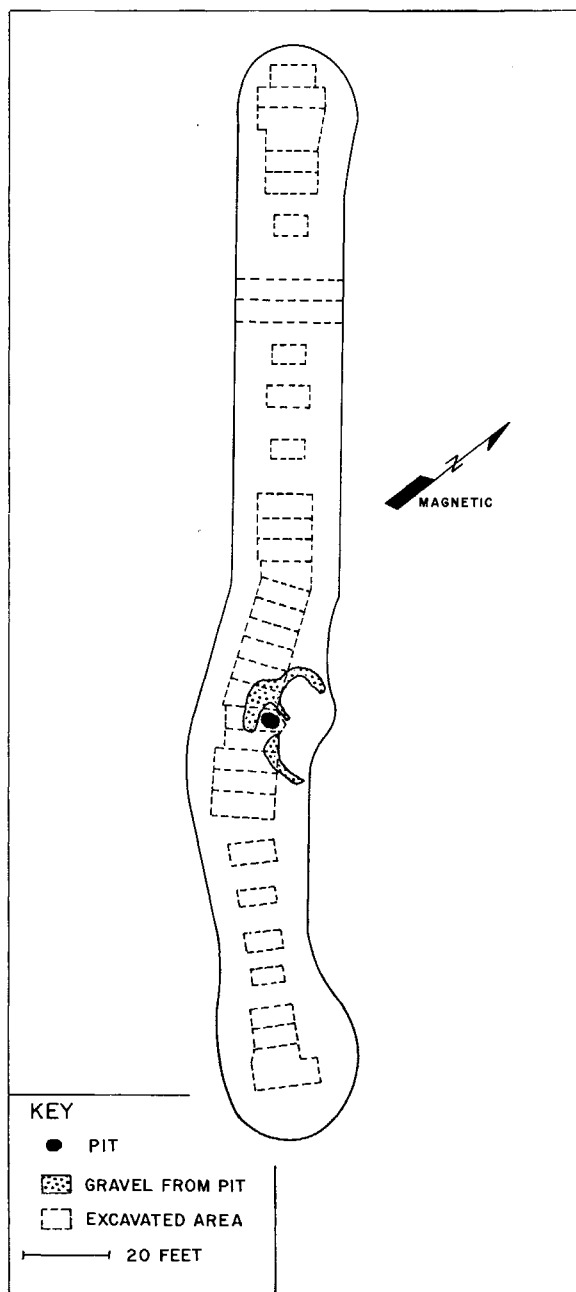


Figure 27. McKenzie Mound

This pit was dug in the gravel to a depth of 8 feet 2 inches below the sod line, which was 10 feet 2 inches below the top of the mound. It was circular, 3 feet 8 inches in diameter, expanding very little below. It was filled from bottom to top with black earth, and contained nothing but three flints (Plate III, fig. 3, 6, and 9) and a trace of wood decay, probably of the handles of these implements. The gravel cast out in digging the pit lay on the old sod, showing that the pit was dug before the mound was built, and none of this gravel was used subsequently in filling in the pit.

Some food bones and some rudely-chipped flints (Plate II, fig. 16, 17) and chert came from the lower part of the old sod under the mound, in the first soil formed on the Campbell Beach of Lake Agassiz. The usual food bones, originating from an adjacent camp or village, were not found, with the exception of fragments of buffalo vertebrae at one point. Associated with the date period of the mound were some flint chips and a small scraper of amber flint (Plate II, fig. 10).

After excavation this mound was graded up and left in its original form.

### McGorman Mound (Figure 28)

This mound lay 6 miles north-northwest of Arden, in NW  $\frac{1}{4}$  Sec. 15, Tp. 16 N., 14 W., on the highway diversion following the Campbell Beach ridge (see map, Figure 25). It was flattened dome-shaped in form, about 2 feet high, with an irregularly ovoid base, 80 feet by 67 feet, and a flattened area on top, measuring 40 by 25 feet.

The whole central portion was taken out in seven 5-foot trenches. The entire structure was badly cut up by badger digging but otherwise not injured. It was built entirely of surface scrapings of sand. Two pits were found, one southeast and one northwest of the centre. Both were shallow pits with rounded bottoms dug to a depth of 2 feet in the sand, of which the ridge here is composed, a material which does not allow digging of deep pits because of caving. No use had been made of the southeastern pit.

Fragments of the bones of a child and an infant were found scattered through the upper northwest central part of the mound where they had been pulled about by badgers. Here was found one of the perforated shell disc rings (Plate VI, fig. 4). At a depth of 2 feet 4 inches, near the southeast edge of the northwestern pit, lay a complete buffalo skull, frontal side down and coated with a scale of lime. At the narrowest part, the frontal measured one foot, and the spread of the horn bases measured two feet. Southwest of the skull were three buffalo vertebrae. In the bottom of a badger hole at a depth of 4 feet was the left side of a child's lower jaw, very small, showing the third molars and one incisor just coming. An adult skeleton was found scattered in badger burrows through Section XI on chart; the femora and part of the pelvis were found in the burial pit at a depth of 3 feet. The skull bore a light incised groove around the frontal and parietal, received when the bone was still fresh, probably made by the

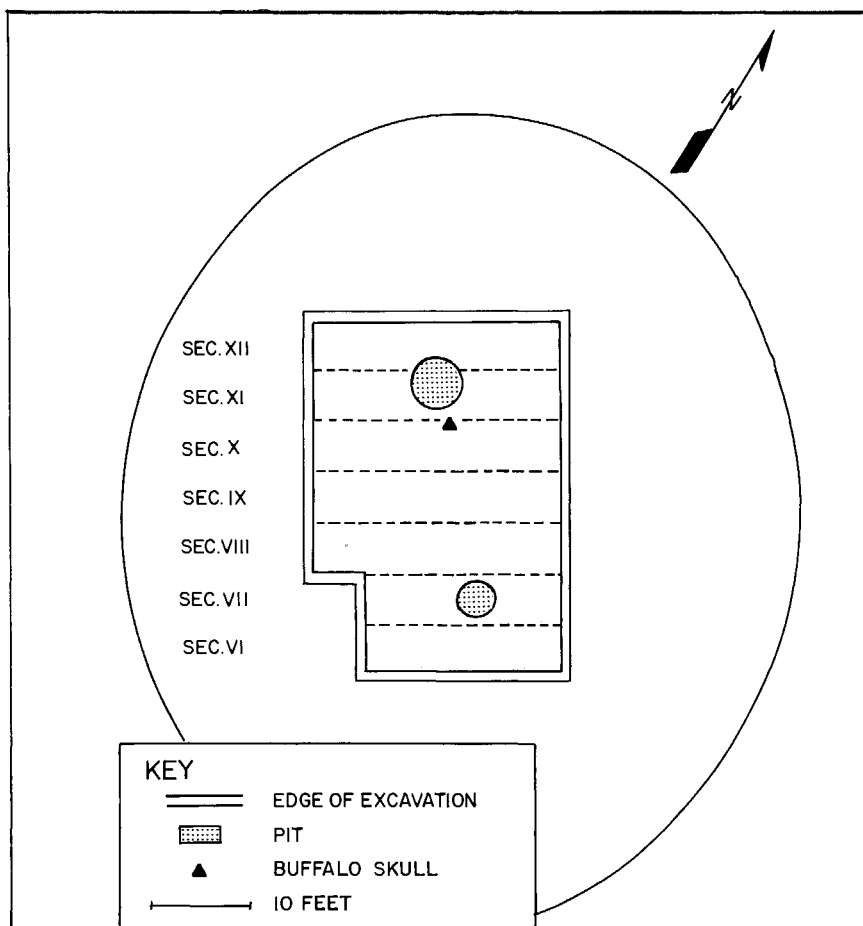


Figure 28. McGorman Mound

scratching of an animal or the point of a knife. Dentition indicated an adult in middle or late middle life, and the bones a stature of about 5 feet 8 inches.

At the bottom of Sections 11 and 12 were found two curved, thin bones, worked to a squared point with elongated perforations at the ends (Plate VIII, fig. 2). Among the food bones found were two worked antlers and a bone worked to a point. Also found during excavation were flint chips and chipped stones.

### Camp-Site West of Arden Mound

West of Arden Mound a camp-site, indicated by scattered stone chips, occupied the crest and western slope of the ridge extending down to near the confluence of the two creeks forming the White Mud River. There were very few bone fragments and no pottery. No excavation was made.

### **Camp-Site Vicinity of McGorman Mound**

On the ridge surface about the McGorman Mound there were indications of a camp-site, though the fields being in crop made searching difficult. An unfinished stone maul, but with use marks on it, was found, and broken fire-stones were scattered over the surface southeast of the mound to a point where a small stream, now carrying very little water, has cut through the ridge.

### **Foreman Camp-Site**

East of Arden and McGorman mounds a series of gravel ridges run parallel with the Campbell Beach ridge, across Townships 15 and 16 North, 13 and 14 West. They have an elevation above the intervening lowland of 20 to 40 or 50 feet. On the ridge immediately east of the Campbell Beach ridge on the property of J.N. Foreman in SW  $\frac{1}{4}$  Sec. 18, Tp. 15 N., 13 W., were indications of a village or camp. In his kitchen garden, Mr. Foreman had found potsherds, a flint blade, and a scraper (Plate II, fig. 2). The blade and scraper were chipped from the amber flint commonly used by the mound builders, but there were no mounds near this site. The pottery was a buff or grey ware, with rather heavy rims ornamented by cord imprints and punch marks (Plate IX, fig. 7). Also found were a hammerstone in a wheat field to the southeast and a chisel blade of quartzite, partly chipped and partly ground on one edge (Plate II, fig. 14). There is now no water nearer than the river, a mile from the site. A charm stone with a turtle engraved on one face is reported from the Arden area.

### **Vicinity McKenzie Mound**

From about the McKenzie Mound, thence southeast over the Campbell Beach ridge to a point where the river cuts through it, a distance of 3 miles, were widely scattered food bones and broken firestones, but no indications anywhere of a large or permanent camp. Part of a stone maul was found on plough land southeast of the mound, and a grooved stone maul came from Russel McKenzie's farm east of the mound.

The Campbell Beach ridge was the only one that appeared to have mounds. No other mounds, except Westbourne, and probably one near Dauphin, were known in the region. Evidence indicates the same people built the mounds of the Pembina region, the White Mud River area, and the region of the Souris River — the latter probably at a later period.

## **THE ASSINIBOINE — LITTLE SASKATCHEWAN VALLEYS**

The region immediately west of the city of Brandon was explored in 1915. The area covered (see map, Figure 29) lies north of the villages of Alexander and Kemnay, a region of elevated plain excavated deeply by the



Assiniboine and its tributary, the Little Saskatchewan.\* There is no rock bedding, and the superficial deposits, where exposed by road-cutting, lie in horizontal formation, presenting a banded appearance composed of re-distributed shale, sand, and loess. Boulders lie stranded in some of the hill summits. There is no gravel, with the exception of massive beds in the immediate river valley.

The village of Alexander lies in a swale, an old river cut-off at a time when the Assiniboine ran at a level 200 feet higher than its present valley. Going north there is considerable ascent to the river heights and then a long descent into the river valley. The heights bordering the valley on the south side are much less precipitous than those north of the river, where wind action is responsible for part of the erosion seen along the hills.

On the north side, the cliff line is broken by wide and deep hollows, carving the heights into an intricate series of rounded ridges and knolls. In the willow bogs is retained the winter's snowfall, a reservoir for the supply of clear cold streams flowing out of each ravine, which then seep away into the river floodplain. The cliff summits are thus but points of the prairie plain, more or less eroded, standing at an elevation of about 300 feet above the river floodplain. The river flowing about 30 feet below the general level of its plain, courses in wide graceful loops from side to side through the valley. For the most part the cliff summits are bald, except for a growth of coarse grass, but sometimes there is a growth of scrub-oak, poplar, sage brush, and wolf willow quite to the top. The lower slopes are covered with almost impenetrable jungles of bush, largely of poplar and scrub-oak, also with hazel, saskatoon, chokecherry, willow, and pin-cherry.

To the west, the valley of the Assiniboine expands from a width of 2 miles to a great breadth of marshland. Here begin two areas of gravel terrace occupying the middle of the valley, elevated from 40 to 70 feet above the river floodplain. The most elevated portion of these terraces is towards their western ends, where they terminate in a hundred or more symmetrical knolls, simulating artificial burial mounds, 2 to 18 feet high, formed of boulders and gravel. Portions of this terrace are under cultivation, and there are several other exposures of surface in gravel pits, and so forth, but nowhere are there any indications of prehistoric habitation. Small boulders, such as hammers and mauls are made of, lie scattered over the surface of the fields, but none has been used or worked.

East towards the convergence of the valley of the Little Saskatchewan there is a gradual falling away of the more precipitous cliff line, and here cultivated fields extend well out to the hill-tops, so that much of the summit line is open to examination. This condition holds good for most of the more elevated points contiguous to the valley of the Little Saskatchewan, but the lower levels nearer the stream are overgrown with brush and are excessively difficult to examine.

---

\* Called the Minnedosa River on modern maps.

The Little Saskatchewan is a rapid-flowing stream of clear water winding tortuously over a bed of gravel and boulders. The valley varies in width, opening out at intervals in wide areas of marsh or old lake bottoms, which the stream has cut through to lower levels. The present forest growth is mostly poplar, with some birch and much oak of good size, but stumpage indicates a heavier growth in the past.

The point of the angle of hills at the convergence of the two valleys is a boulder-strewn plain of an area of nine acres, 200 to 250 feet above the Assiniboine valley. Thence northwest the hill-crests rise to their highest points.

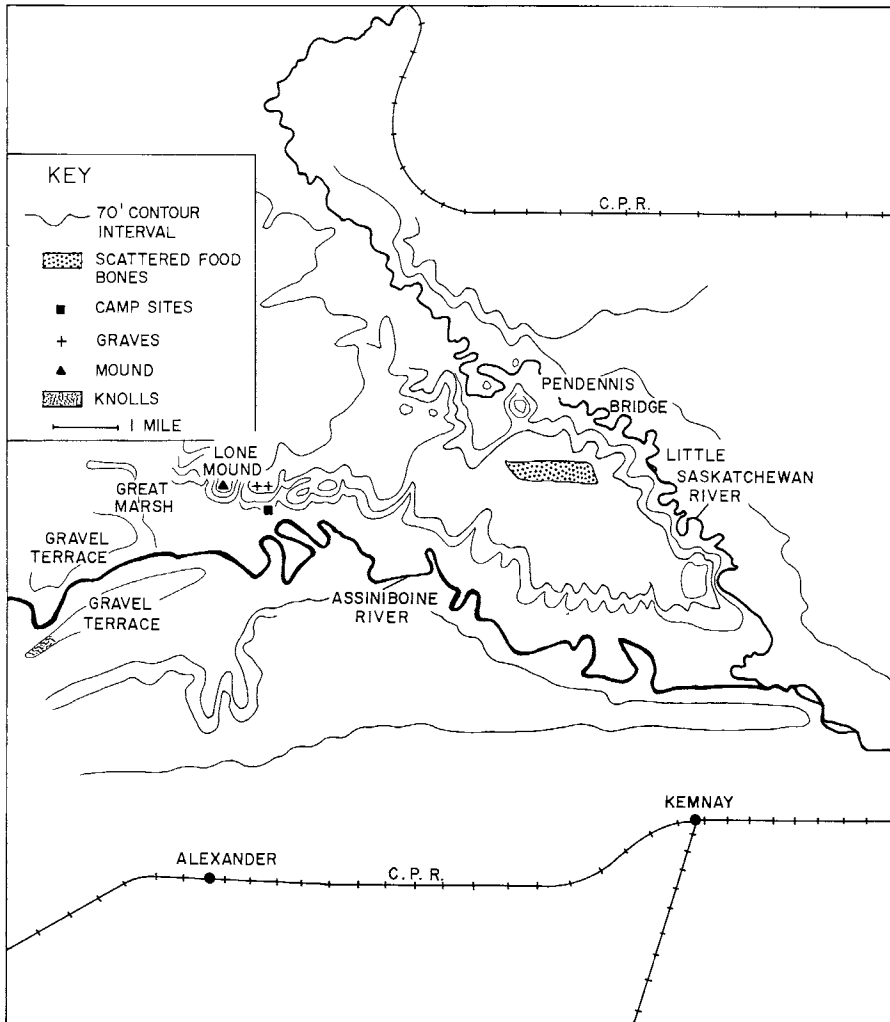


Figure 29. Map of Assiniboine - Little Saskatchewan region

A remarkable feature of the topography of the Little Saskatchewan is the absence of springs except such as come up within the river itself. There are no flowing streams like those into the Assiniboine, and the river would be the only source of water supply for a primitive people. In summer and in flood-time this water is weedy and unpalatable.

### Lone Mound (Figure 30)

North of Alexander, on the summit of the most conspicuous headland overlooking the Assiniboine on its north side (Plate XVI, fig. 1), in the NW  $\frac{1}{4}$  of NW  $\frac{1}{4}$  Sec. 9, Tp. 11-21, just east of the Alexander road, was the only mound found in this region (see map, Figure 28). It was a little mound, 30 feet in diameter and 1 foot high (Plate VI, fig. 2).

As the work of excavation progressed, it became evident, although there had been much subsequent shifting of the bones, that originally an adult skeleton had been seated close to the southwest side of a bowl-shaped grave, measuring 5 feet northeast by 6 feet 3 inches southwest, which was lined with bark that had decayed. The grave had been dug in the sand to a depth of but 1 foot 7 inches below the sod line. Along the southwest side of the grave, stakes (running northwest to southeast) were lined up (Plate XVI, fig. 3). Some of them apparently were put up only after the burial had been made; perhaps all were placed after the body had fallen. Samples of the wood were retained. None of the stakes had been sharpened. Evidently when the body collapsed it fell towards the east; the bones were since disturbed (Plate XVII, fig. 1).

Close about the most northern stake were nine small arrow points (Plate IV, fig. 4, 12-18). Six of these were embedded in wood decay, probably the remains of some slender shafts such as a bow and a container or quiver, apparently once suspended from the stake, together with a food offering, indicated by bones found nearby. Southeast of here, four other small points (Plate IV, fig. 5, 7, and 11) were scattered. One hundred and sixty-two small shells (Plate VI, fig. 1) (probably *Anculosa praerosa*, or *Marginella Oliva* or *Cyprea*), with one side ground off to facilitate stringing, and six large shell beads or pendants (Plate V, fig. 1-6), made from columella of a conch, were in about the centre of the bottom of the grave. An arrow tip was found on the southwest side of the grave, embedded in the old sod under the mound. Beside one of the centre stakes at a depth of 11 inches, were a small arrow point, a tooth, and a very small chip from a pipe of catlinite.

Above the grave burial, at the centre of the mound, fragmentary long bones of an infant were found at a depth of 15 inches. It is probable that two pieces of sheet copper (Plate VI, fig. 10), pierced about the edges with holes like tack holes, found at a depth of 7 and 3 inches respectively, were associated with this upper burial. Probably also connected with the infant burial was a small ash bed, to the southeast of the centre, at a depth of 3 inches, just under the tough sod covering the mound.

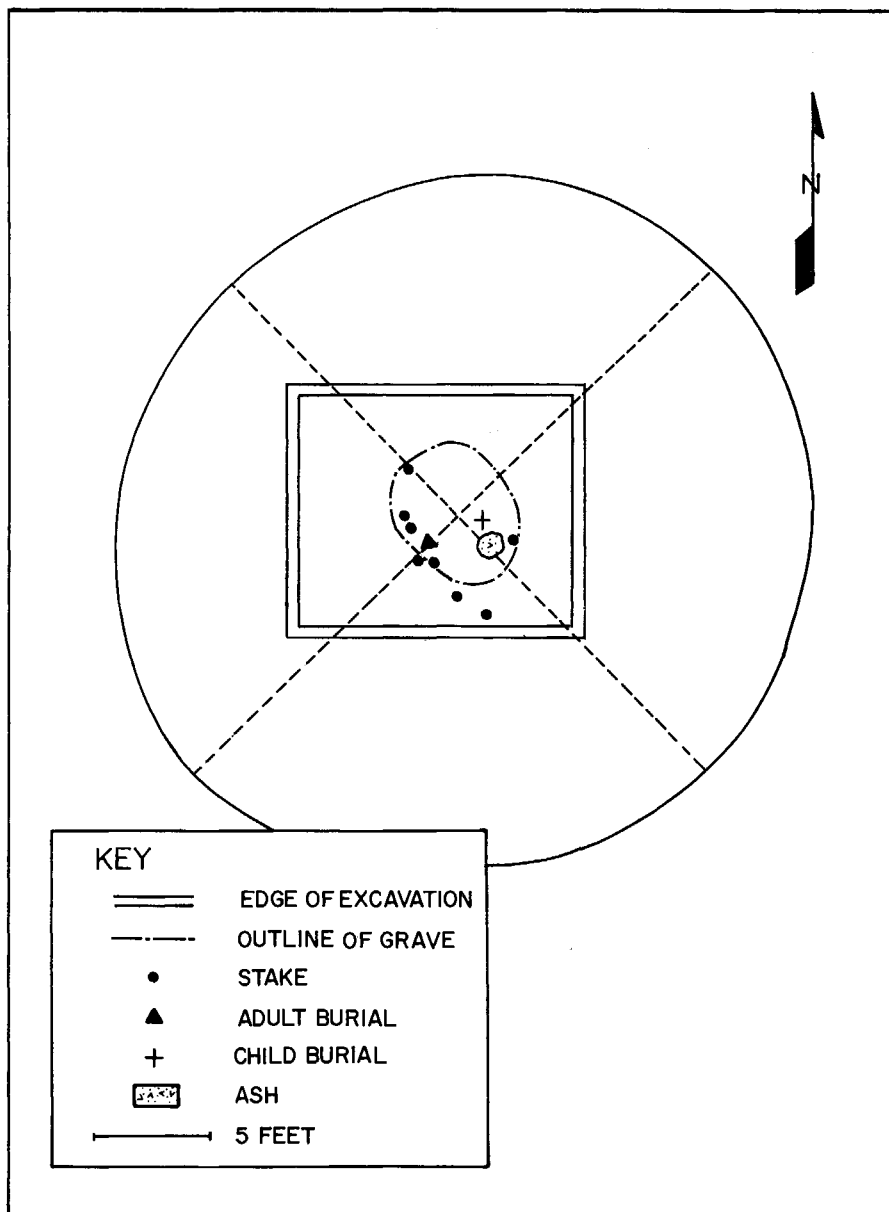


Figure 30. Lone Mound

Associated food bones included animal bone fragments about the northernmost stake, some bones 2 feet east of centre at a depth of 7 inches, and bird bones, including a hawk's beak and duck bones, just northwest of centre at a depth of 7 inches.

Examination of the much disarranged bones of the adult skeleton showed all the long bones disintegrating at the ends; the right femur was represented by but a part of the middle of the shaft; the humeri presented no perforation of the olecranon fossa; there was some injury to one of the terminal phalanges of one of the toes. The bones were all rather slender. Dentition showed that the incisor teeth in the lower jaw were crowded out of alignment, and the third molars had all erupted. The subject was a male, about six feet tall, of probably not more than thirty years.

It was apparent that this burial place was visited once or twice at appreciable intervals after the first interment was made. In the first interval the body had been permitted to fall apart, and the offerings which hung on the post were not molested but had fallen into the grave. The mound was then built, and some of the other stakes set up. The burial of the child may have taken place at this time or at a later period.

## Graves

On the hill immediately east of Lone Mound seven or eight graves were found occupying the southwestern slope of the middle summit (Plate XVII, fig. 2). The graves had all been entered by relic hunters, and the bleaching bones of five or six subjects, babies and youths, had been scattered over the hill-top, together with pieces of boards from the coffins. These evidences of vandalism were re-interred, and then the least damaged grave was examined.

The graves were arranged about two feet apart in a row running southwest to northeast oriented 50 degrees west of north (magnetic). Traces of fire could be seen at the sides of two of the graves. In the one examined, the coffin rested on four cross-poles, and over it lengthwise were six or seven poplar poles charred at the ends or cut as if with an axe. The pole-covering had been at about the surface level, but with time it had decayed and fallen on the coffin, crushing it in. The coffin measured 4 feet 10 inches long, 8½ inches high, and 15 inches wide at the head or southeast end, and 13 inches at the northwest end. The top of the coffin had decayed and fallen in, and the skeleton had shifted partly into the southeast end. The skeleton, that of a child 9 or 10 years old, lay on the left side somewhat cramped but in an extended attitude. The skull lay on the left side, in place, at the southeast end, and near it were nine beads of amber-coloured glass and two beads of blue china, a spool of wood, and a piece of glass, probably a fragment of a mirror. Near the northwest end of the coffin were two squared pieces of pine shingle, well preserved; a piece of silk goods showing a hemmed edge; three squared chipped black flints, probably gun flints; a tin box containing pumpkin seeds wrapped in newspaper, the box having been wrapped in some woollen textile that had decayed; and a smaller tin box, rusted shut and contents unknown. Some of the bones of the skeleton were missing, probably disturbed in the earlier digging on this site; they were

the left femur, right humerus, right radius, both scapulae, one clavicle, and some ribs.

Samples of the poles showing sharpening were retained to compare with sharpened sticks found in some of the mounds. The coffin was made of sawn lumber, probably poplar, nailed with machine-made nails. The top of the coffin was at a depth of 1 foot 8 inches below the general level of the hill surface, which had been levelled off but not rounded like a mound.

Scarcely could there have been a greater contrast between the burial at Lone Mound, where nothing indicated contact with the white man, and this grave, where nothing of native make was found. Yet, in the pole-covering over the coffin there may be a survival of the older pit burial, and in the skull of this child there was the complete obliteration of the frontal suture, as in skulls from the mounds.

Probably these graves were not over 40 years old (1915). No historical data bearing on the habitation of this spot were obtained, but it is possible some could be found at Qu'Appelle. The Oak River Sioux reservation is a few miles west.

### **Camp-Sites**

Small scattered camp-sites were found at the south base of Lone Mound Hill and at the base of the hill of the Indian graves. Here small creeks issue from deep hollows between the hills, and it is probable that people who have passed through the valley have always camped near these springs. Such transients were probably responsible for Lone Mound. No pottery was found and very few chips of stone, and the usual food bones were not numerous. From the base of the grave hill site came two pitted hammer-stones, a gouge-shaped bone, and part of a point.

In the valley of the Little Saskatchewan there were slight traces of former habitation. Some food bones were found widely scattered over the high plain south of Pendennis Bridge, in the south half of Sections 17 and 18, Townships 11-20, where a few chips of stone were exposed in a highway grading near the river at Pendennis Bridge. The most likely spots in this region, the elevated points overlooking miles of this beautiful valley, were without a trace of a camp-site or burial. Even on the plain where the two valleys converged at the angle of the hills, a point commanding a view of both valleys for many miles, there was no trace.

In this whole region the stone maul and hammer were unknown to the farmer. None has ever been found in the fields in the valley of the Little Saskatchewan, as they were always found where there were mounds. There seem to be no mounds in the whole length of the Little Saskatchewan Valley.

## THE REGION OF ST. ANDREWS LOCKS, RED RIVER\*

Three mounds on the east side of the Red River, near St. Andrews Locks (see map, Figure 31), were opened many years ago by Dr. George Bryce of Winnipeg. They were all situated on a slight rise above the general level, about one quarter-mile back from the river. Between them and the river the ground had long been cultivated. Two of the mounds were on Lot 160, owned by Andrew Fidler. The southern mound of this couplet as seen was 4 feet high, with a cellar in the centre (Plate XVII, fig. 3). The other had been dug out to the rim. The record of what was found was not clear. To quote Mrs. Fidler – “Oh, so many people Dr. Bryce found. Little ones, and big ones, and pots and cups, and little white buttons” (Historic trade goods or prehistoric pottery and shell disc beads?). The third mound, situated 1,500 yards to the southeast of the Fidler mounds on Lot 161, the property of J.H. Stranger, was a large one, which must have been 6 feet high. Its centre had been completely excavated.

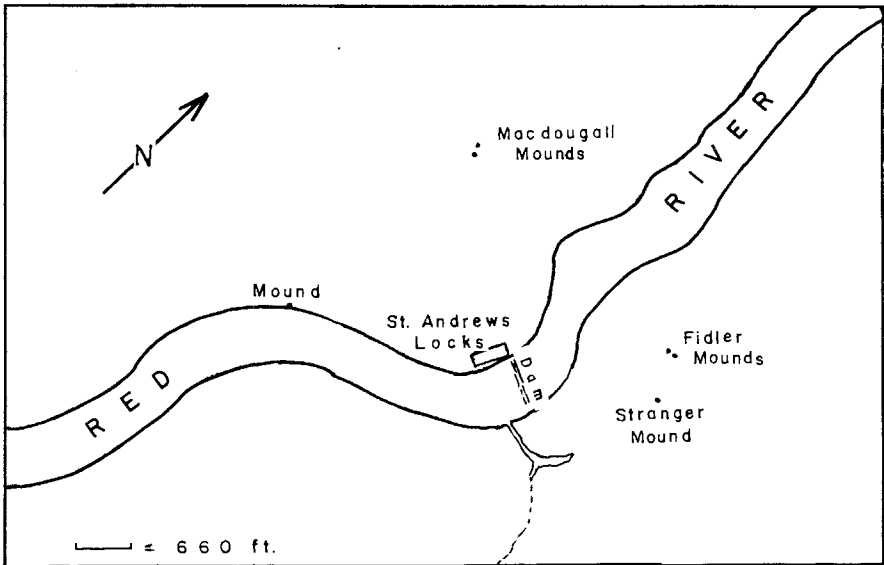


Figure 31. Map of St. Andrews Lock region

On the other side of the river were two small elevations in poplar bush, about half a mile from the river on Lot 104, owned by James MacDougall of Lockport. Mr. MacDougall had a comprehensive collection of artifacts found in the gardens along the upper level above the river and on the beach at the foot of the river before the dam was built.

On the same side of the river on Lot 90, a mound was removed in 1879 by the Manitoba Historical Society. Two potsherds (X-A-69), presumed to be from this mound, were contributed by E.M. Darbey of Winnipeg.

\*See the Lockport site report, MacNeish, 1958: 13-26.

#### OTHER MANITOBA MOUND INVESTIGATIONS

Mounds in Manitoba have been variously examined and reported upon since the late 19th century. Gunn (1868), Bell (1885-6 and 1933), and McCharles (1887) mention a few conical mounds of varying sizes, and one 'grade,' 300 yards long, in St. Andrews parish, north of Winnipeg. They tell of logs, limestone blocks, and burnt clay layers covering multiple bundle burials and single-pit sitting interments in the fill and an extended skeleton on the floor. The interments are variously associated with beaver bones, a pot containing a river shell, stone pipes, a stone hammer, a small red pipestone 'hatchet' decorated with engraved bird and beaver, an incised clay gorget, a marine shell gorget and *Busycon* pendant, a seashell pendant with engraved female face, and turtle shell ornaments. Bryce (1904: 4-7) found bundle burials, with clay-plugged eye-sockets, in the upper fill of one mound, associated with ochre, charcoal, and catlinite pipes. A possibly older sitting interment lower down was marked by a 'Unio' shell gorget and a *Natica* shell necklace. Lewis (1886: 370) writes that there are no mounds on the Red River between St. Andrews parish and Fort Pembina near the International Border.

Several investigators preceded Nickerson into the Antler-Souris region. Small round mounds that Montgomery (1908) examined on the North (?) Antler plain had sub-floor burial pits containing multiple and single, primary sitting and secondary bundle burials, associated with small spiral-grooved pots, notched 'Unio' shell spoons and unworked 'Unio' shells, catlinite tubes, a stone disc, a stone shovel, bone awls and needles, a native copper headband, and charred wooden poles. A group of mounds 'beyond the creek' (South Antler plain?), accompanied by very long earthworks, was characterized by associated buffalo skeletons, bone whistles and anklets, a marine shell gorget, and noticeably no pottery or stone pipes. Montgomery believed these latter mounds were later because of the comparative freshness of the skeleton material (page 37). Thomas (1894: 36) describes conical tumuli located between the North and South Antlers, which had timber-covered sub-floor pits containing sitting interments associated with tubular catlinite pipes, a turtle engraved sandstone tablet, and both spiral and straight incised mortuary ware. One mound without a pit covered a bundle burial on the floor, associated with buffalo bones and straight incised pottery. In view of Montgomery's impressions of the comparative ages of the mound types, it is of interest to note that Thomas remarks on the recentness of the mounds with pottery, which he sees in the state of preservation of the skeletons and associated bark, and in incisions on bone and bark that seem made with a steel knife. In his investigation of six mounds in the



Antler region, Bryce (1904: 39-44) found copper headbands, spiral incised (?) pottery cups (*ibid*: 5 illus.), a bird-bone whistle, bone tubular beads, a bone tube, a fragment of a *Busycon* shell gorget, birch-bark basket fragments, red catlinite pipes, stone hammers, round polished stones, wampum beads, and possibly a turtle bone gorget, a wide bone band, and a *Busycon* columella pendant. He observed charcoal and other evidence of fire in all his mounds.

Calf mound on a hill-top on the Pembina plain was described by McCharles (1887: 73) as a 14-foot-high beehive-shaped tumulus, with a graded approach leading to a transverse ridge, giving it an effigy appearance. Montgomery (1910) discovered that it was an accumulative mound. It contained calcareous clay layer patches overlying successive pit burials, primary and secondary, covered with boulders and buffalo skulls and scapulae. Birch-bark, charcoal, and charred wood were associated. Accompanying artifacts comprised a grooved stone maul, shell ornaments, including small marine shell beads and a *Busycon* columella bead, copper tubular beads, a bone bead, perforated wide bone armlets, birch-bark baskets, and an engraved *Busycon* shell mask. Henry, the younger, relates that the Assiniboiné and Cree were particular to leave offerings on top of Calf mound of bulls' heads, tobacco, and other trifles (Lewis, 1886: 370).

Vickers (1945) explored mounds farther west on the Pembina plain. A group at the east end of Rock Lake comprised seven tumuli and an earthwork. Beneath one mound he found the bundled remains of an adult and child on the former ground surface. Associated finds included a gorget of red catlinite in the form of a hatchet (reminiscent of the Red River find?), a tubular soapstone pipe, a polished stone disc notched at one end, chipped stone implements, and a burnt pole through the mound centre. Another mound had an urn, with a geometric incised design and an outflaring rim marked with cord impressions (Vickers, 1947: Plate, p. 105). A cremated burial with associated tubular pipe fragments lay beneath another tumulus. The 'grade' (?) over 600 feet long, 19 to 35 feet wide, and 2 to 4 feet high, contained burials in one end, associated with a chalcedony knife and point. Sykes mound, one of another group of tumuli, was situated on a hill-top near Pelican Lake. It covered multiple primary burials, associated with triangular points, bone beads, bone bangle (?) fragments, shell disc beads, shell pendants similar to those in Westbourne mound, and copper stains. Vickers (1945: 91) thinks the two mound groups differ culturally. He also notes that the Souris spiral ware has not been found in the region.

A round mound 60 feet in diameter and 4 feet high, situated on a ridge near Rosser on the Assiniboiné (Rand, 1941), covered two bundle burials in a pit (?) under logs, associated with a bone whistle, two catlinite pipes (broken), a bone fish spear head, a flint knife, some flint flakes, a broken awl, several split bison bones, two river shells, and possible charms made of the mandibles of two herons and a raven.

MacNeish (1954) investigated the Stott mound, a small round mound situated on the edge of the plain east of Minnesota Junction near Brandon. It was built over three burial pits that were covered with boulders, oak logs, and puddled clay. Two pits contained sitting, flexed, and bundle burials, while the third held a dog skeleton. An intrusive pit held a single flexed skeleton of an adolescent. Associated finds included fire pits, bark covering, buffalo skulls, red ochre, clam shells, tubular columella beads, *Oliva* shell beads, a bird-bone whistle, and copper stains. On the basis of other traits, which include Manitoba ware, Plains triangular, Plains side-notched, and Prairie side-notched points, small flat and plano-convex end scrapers, semi-lunar side blades, uni- and multi-lateral barbed points, bone handles for end scrapers, bone flaking tools, bone fleshers, and beaver teeth gouges, MacNeish classifies the Stott Village site, to which he believes the mound is related, as belonging to the 'Manitoba Focus' of the Headwaters Lake aspect. In turn, comparing the Stott mound with other mounds across Manitoba, he sees similarities which suggest that all the compared mounds were made by the same group. These people he tentatively identifies as the Assiniboine (page 47).

Table 1. Trait list of Southern Manitoba mounds

MANITOBA MOUNDS	SITUATION					MOUND SHAPE				GRAVE FORM					BURIAL FORM										Orientation of mound						
	Well back on plain 100 yd. from edge	Edge of plain	Hill-top	Crest of ridge	River bank	Elevated ground back from river	On old camp-site	Round	Elliptical 'Grade'	Linear	Accumulative	Effigy	Pit Shape			Multiple	Single	Sitting	Bundle	Split bones	Scattered/secondary	Extra skull/jaw	Flexed	Extended		Primary position unknown	Form unknown	Large	Small		
													Circular	Oval	Restricted Opening															Unknown	Shallow grave
North Antler																															
A	X								?																				X		
B(natural)	X							X																					X	X	
C	X							X	X												3								X	X	
D	X							X																					X	X	
E	X	X						X									X												X	X	
F	X							X	X												3								X	X	
G	X	X						X													X	X							X	X	
H	X	X						X													X	X							X	X	
R	X						X	X						X				X	X			X	X						X	X	
Snyder	X	X						X														X	X						X	X	
Brockenton	X							X																					X	X	
Montgomery's and Thomas's Mounds								X									X	X	X	X									X	X	
South Antler																															
J	X							X																					X	X	
K(natural)	X							X																					X	X	
M	X							X	X																				X	X	
N	X							X																					X	X	
P	X							X																					X	X	
Q	X							X																					X	X	
1	X							X																					X	X	
2	X							X																					X	X	
3	X							X																					X	X	
4	X							X																					X	X	
5	X							X																					X	X	
6	X							X																					X	X	
7	X							X																					X	X	
8	X							X																					X	X	
9	X							X																					X	X	
10	X	X						X																					X	X	
11	X							X		X																			X	X	
12	X							X		X																			X	X	
Montgomery's mounds								X	X								X			X									X	X	
East side																															
Souris River																															
Riverview		X					X	X									X	X			X	X						X	X	X	
Linear 1		X						X																					X	X	
Linear 2		X						X																					X	X	
Heath		X						X																					X	X	
Moore A		X						X									X												X	X	
Moore B		X					X	X									X												X	X	
Moore C		X						X									X	X			X	X							X	X	
Pembina																															
Star		X					X	X					X	X	X		X	X	X	X	X	X						X	X	N-S	
Sims		X						X					X	X	X		X	X	X	X	X							X	X	NW-SE	
Star B		X					X	X									X				X								X	X	
Pilot		X						X									X				X								X	X	
Morrison								X									X				X								X	X	
Odell								X									X				X								X	X	
Calif			?				X			X							X	X	?		?							X	X		
Vicker's Rock Lake							X		X																				X	X	
Vicker's Sykes Md		X						X									X				X								X	X	
White Mud																															
Westbourne					X			X												X			X					X	X	N-S	
Arden				X								X					X		X	X	X		X					X	X	NW-SE	
McKenzie				X								X	X							X			X					X	X	NW-SE	
McGorman				X					X											X			X					X	X	NW-SE	
Assiniboine																															
Lone		X						X												X	X	X	?					X	X		
Stott		X					?	X						X	X					X	X	X	X					X	X		
Rosser			?					X												X		X						X	X		
Red River																															
					X			X	X											X	X	X						X	X		

MANITOBA MOUNDS	Animal bone offering	Buffalo skulls	Buffalo skeletons	Associated dog burial	Fire	Cremation	Burnt clay layers and floors	Puddled clay	Clay-plugged eye- sockets	Poles	Boulders	Stone colmn	Bark	Ochre	Clum shells/spoons	Wood Stakes	Wooden structure?	Mad hut?	Offering post	Plains Side- notched point	Plains Triangular point	Long Side-notched point	Flint knife	Bird mandible clawed	Perforated antler tine	Antler tip flicker	Polished buffalo ribs	Prairie Side- notched point		
North Antler																														
A									?																					
B(natural)																														
C										X																				
D										X																				
E										X																				
F										?																				
G	?									?					X	X														
H	X	X								?					X	X	X	?								X				
R	X									X		X	X		X	X														
Snyder																														
Brockenton																														
Montgomery's and Thomas's mounds	X				?					X					X															
South Antler																														
J																		X												
K(natural)	X		?																											
L																														
M																														
N																														
P																														
Q																														
1.																														
2.																														
3.										X																				
4.	X				X									X																
5.																														
6.																														
7.																														
8.			X																											
9.			X																											
10.																														
11.		X	X																											
12.	X	X								X																				
Montgomery's mounds		X	X																											
East side																														
Souris River																														
Riverview										X				X																
2 Linear																														
Heath																X		X												
Moore A	X																													
Moore B		X																												
Moore C	X																													
Pembina																														
Star										?	X	X	X	X	X															
Sims	X									X	X		X	X								X					X	X		
Star B	X											X		X																
Pilot																														
Morrison						X																								
Odell																														
Calf		X			X		X	X					X																	
Vicker's Rock Lake						X																								
Vicker's Sykes Mound																														
White Mud																														
Westbourne																														
Arden								X																						
McKenzie																														
McGorman		X																									X			
Assiniboine																														
Lone	X					X								X	X	X			X	X	X									
Stott	X	X		X	?			X		X	X		X	X	X								X	X						
Rosser	X									X				X	X															
Red River																														
	X				X		X	X	X		X	X		X	X															

[illegible]

#### COMPARATIVE DATA

Throughout a large part of the eastern United States burial mounds are distributed from the Gulf of Mexico to southern Canada. The region that shows closest affinities to the southern Manitoba mounds region is the area covered by the Upper Mississippi drainage system, which embraces Wisconsin, Minnesota, and the Dakotas (see map, Figure 32). Here several mound-building cultures that are characterized by generalized Woodland traits occur.

Probably one of the earliest of these is the Laurel focus of the *Rainy River aspect* (Wilford, 1950; Bennett, 1952: 112-13), a culture that occurs in northern Minnesota in the Middle Woodland period. It is marked by small round tumuli and larger accumulative mounds, generally constructed over refuse (former camp-site?). Other of its traits that are widespread amongst Manitoba mounds are multiple bundle (and sometimes sitting) burials and accompanying objects that include 'Unio' shells and 'Unio' shell disc beads and pendants; *Busyscon* columella pendants; bone fleshers, arm bands, whistles, tubes, awls, harpoons; steatite pipes; copper ornaments; ochre; and pottery vessels. Among characteristics that separate this focus from later foci in the region, its specific Laurel type ware, socketed antler points, and beaver teeth gouges have not been found in Manitoba tumuli (though an antler handle for a beaver tooth gouge (?) came from Mound H) and its cumulative mounds, long burning fires on successive dirt floors, and clay-plugged eye-sockets seem confined respectively to the Red River region (burnt clay layers and clay-plugged eye-sockets) and to Calf Mound (cumulative with clay layers).

In central Minnesota is the *Mille Lacs aspect* (Wilford, 1944a) with resemblances to Manitoba's traits that include circular, elliptical, and sometimes linear mounds; bundle burials and occasional flexed interments that are found in the fill or in shallow log-covered pits; and, most prominently, mortuary offerings of buffalo skeletons, which are a particular feature of Manitoba's Souris region. Artifacts are not associated. Comprising two foci, the Malmo and Kathio that are differentiated mainly by village pottery, little distinguishes the earlier Malmo burial mounds from the later Kathio other than a small stone cairn sometimes found under the former. Stone cairns occurred under the Star Hill mounds. Partial cremation of bones is an infrequent Manitoba trait (recorded once; Vickers, 1945: 90). The time period of this culture is primarily Late Woodland (Griffin, pers. comm.). Wilford tentatively relates the Kathio focus to the Mdewakanton Dakota tribes (1955: 136). Bushnell (1927: 5) claims "It is quite evident... that the Dakota (Siouan) were the builders of the many small burial mounds now discovered in the region" (surrounding Mille Lacs).

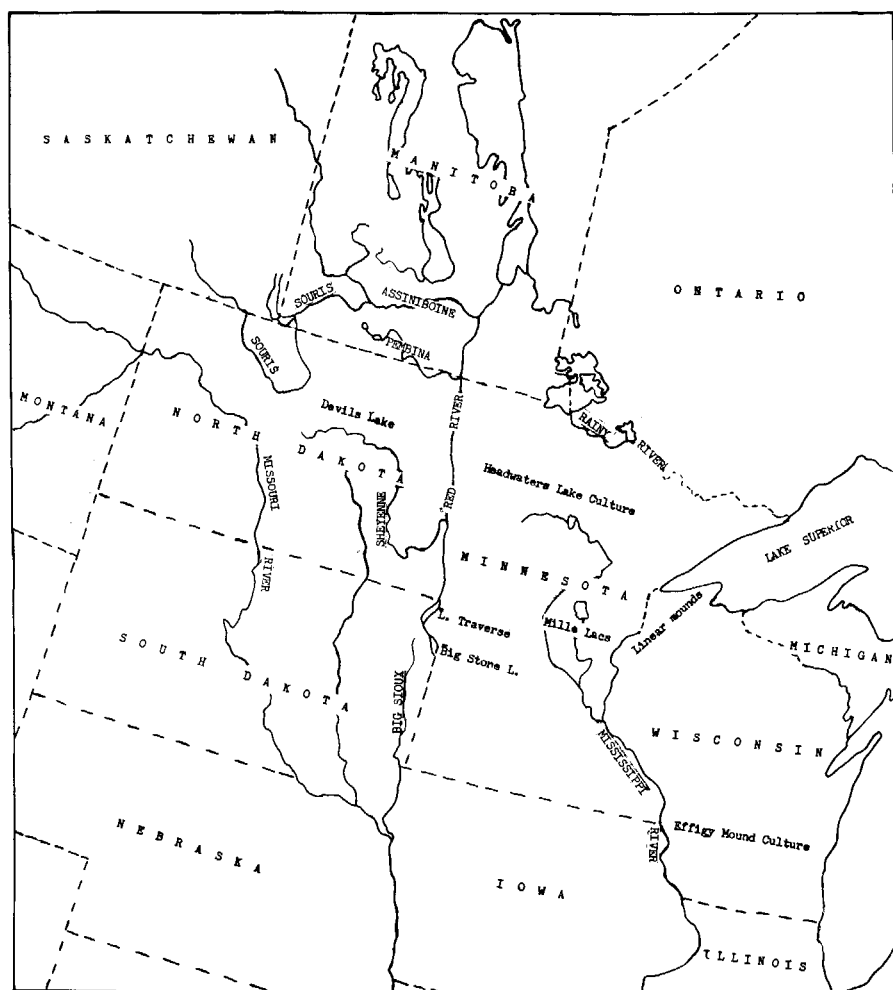


Figure 32. Map of the Upper Mississippi drainage system

The *Red River aspect's* Arvilla focus (Wilford, 1955: 137; Bennett, 1952: 118-19), an early Late Woodland culture along the Minnesota Dakota border, has many similarities with the Manitoba tumuli. Shared traits include round and linear mounds, with sub-floor pit burials, containing multiple, primary inhumation in the sitting, flexed, and extended position, and secondary disarticulated (bundle?) interment, the several forms sometimes occurring in one mound, even in one pit. Associated objects held in common are bone arm bands, tubular beads, barbed harpoons, and whistles; perforated antler tine; shell ornaments that include clam shell pendants and gorgets, flat disc beads and *Busycon columella* beads (tubular beads?); some copper objects; stone pipes (rare); pottery pipes (?); clam shells with

ochre; and globular Woodland-type vessels. Its specific Woodland pottery, marked by dentate stamping and horizontal to oblique cord-wrapped paddling and cord-wrapped stick decoration, however, has not been duplicated in Manitoba mounds' mortuary ware. Nor have the snail shell beads of the Arvilla focus been recorded for Manitoba tumuli. This culture shows a continuity with older Minnesota cultures, and kinship with the poorly known cultures of the northern plains, including Canada (Bennett, 1952: 118).

One of the latest Upper Mississippi mound cultures is the Blackduck focus of the *Headwaters Lake aspect*, which occurs in northern central Minnesota (Wilford, 1945; Bennett, 1952: 117-18). Diverse opinions of its origin suggest that it grew out of either the Malmo focus (Wilford, 1955: 136) or the Laurel focus (Evans, 1961: 272). With the Manitoba tumuli it shares such traits as round and elliptical mounds covering burials in sub-floor pits, on mound floor, and in the fill, which are primary sitting and flexed, and single and multiple bundle. Similar associated finds include red ochre; birch-bark; tubular copper beads; bone tubes; awls; whistles; harpoons; antler tip flakers; small triangular points, some with side notches; schist pipes (rare); and small pottery vessels, a characteristic of this culture. These pots, of varied shapes, with cord-wrapped paddled bodies, plain rims, and decorated neck areas do not resemble those from Manitoba's burial mounds. Wilford (1950a, McKinstry Mound 2) sees this culture succeeding the Laurel focus in the Rainy River area, where it is marked by the additional traits of fire, clay-plugged eye-sockets, and birch-bark baskets. The *Headwaters Lake aspect* is considered quite late Woodland (ca. A.D. 1200: Tyler Bastian, pers. comm.). This culture has been attributed to the Assiniboine (Wilford, 1945: 239), but current thought, based on distribution of Blackduck village ware, is that more than one historic tribe is probably responsible for materials that have been called Blackduck (Griffin, pers. comm.).

Of all the Upper Mississippi Woodland manifestations, the *Effigy Culture* (Bennett, 1952: 114; Rowe, 1956), located predominantly in southern Wisconsin, is the only complex that features prominently all the Manitoba mounds' forms (except cumulative and connecting earth ridges). This culture, recognized as having flourished from late Middle Woodland to well into Late Woodland times, bears estimated dates ranging from A.D. 776 (Wittry, 1956: 133) to A.D. 1300 (Keslin, 1958: 271). The humus is usually removed below the mounds (not noted for Manitoba tumuli). Characteristic are single and multiple primary interment in the flexed position (Nickerson's sitting?) and secondary bundle burial in sub-floor oblong (not Manitoba) or circular pits, on mound floor, and in mound fill. Bundle burial cremation (not prominent in Manitoba mounds) is fairly common. Stone cists lined with unbaked clay, and stone and clay paving are frequent traits (clay layers occurred in Calf Mound and Red River tumuli, and clay also covered burials in Arden and Stott Mounds). Animal bones, a common Manitoba trait, are often



associated. Accompanying dog burials occur occasionally (found in Stott). Grave goods common to both Effigy and Manitoba mounds include some native copper objects, including the celt, small triangular points (Keslin, 1958: 262 and 271); pecked and ground stone axes (not definitely associated with mounds); pottery pipes (?); bone harpoons, awls, and scrapers (fleshers?); copper tubular beads, antler bands, and possibly clay cremation masks (gorgets?); the last three from a late site (Wittry, 1959: 114-15); and simple cord-impressed and smoothed ware. Madison Cord-impressed, a definite Effigy Culture pottery type (Keslin, 1958: 270), has not been found in Manitoba. Except for *Anculosa* shell beads, shell ornaments (a conspicuous feature of the Manitoba tumuli) are not recorded for the Effigy Culture.

A mound complex in northeastern North Dakota, described by Montgomery (1906), has many characteristics of the Manitoba mounds. Conical tumuli of similar size cover one or more sub-floor circular pits, lined with calcareous clay and bark, which contain single, multiple, secondary, and primary interments, some in the 'crouching' position. The pits are overlaid with poles charred at the ends. A few mounds have skeletal material scattered through the fill, sometimes associated with fire beds, while a third type, 12 feet high, contains primary interments covered with a clay layer. Many of the mounds, most frequently towards the Dakota-Minnesota border, are connected by earth ridges, a prominent characteristic of part of the Manitoba Souris region. Associated traits common to Manitoba mounds include straight tubular catlinite pipes, incised catlinite tablets, beads from small sea shells and columellae of large marine shells, unmodified '*Unio*' shells and '*Unio*' shell spoons; bone objects such as needles, unilaterally barbed points, tubular beads, and perforated anklet or bracelet; perforated antler tines; birch-bark baskets; tubular copper beads; lumps of ochre; a clay pipe; and, finally, the tiny, spiral incised mortuary pots, typical of a section of the Manitoba Souris area. As in the Souris area, this ware seems to be of limited distribution in the region, apparently confined to Ramsey county north of Devils Lake and dissociated (?) from the closely neighbouring 'grades.' Montgomery does not record associated buffalo bones for the area.

The trail of the unique spiral ware can be followed south of Devils Lake along the James and Sheyenne rivers to Big Stone Lake (Will, 1933: 152; Howard, 1953: 130). Howard sees a connection of this pottery with the Southern Cult. Though tumuli with Southern Cult objects, in the form of *Busycon* shell ornaments and sheet copper, bone whistles and bands, occur in the same regions as the spiral-marked pots, the two traits have not been discovered in the same mound. Moreover, to date the spiral ware has not been found in the Pembina-Assiniboine areas of Manitoba, where Southern Cult traits are noted.

Manitoba mounds' traits continue south through the eastern Dakotas. Small tumuli with baked clay floors are reported in the region of Traverse

and Big Stone lakes (Comfort, 1873). Along the Big Sioux, dome and elliptical mounds contain flexed and bundled burials in both fill and sub-floor pits lined with bark (Shetrone, 1931: 313). Shell ornaments and a bone bracelet, typical of Nickerson's findings, were associated with the Split Rock Creek mounds (Over and Meleen, 1941: 61). These investigators see their focus's nearest corollary as Wilford's Red River aspect.

West of James River near Streeter, North Dakota, Will (1921) describes a group of conical mounds. One of these, reminiscent of Calf Mound in form, contained burials and layers of ash and of buffalo and bird bones scattered through the fill.

Two lots of mounds in North Dakota, one the Baldhill group on the Sheyenne River (Hewes, 1949) and the other located along the Missouri, from Mandan to Mobridge, South Dakota (Smithsonian Institution, 1960), which are marked by large ovoid and rectangular sub-floor pits over ten feet long, share other characteristics not common to Manitoba mounds. The Missouri River sites, however, are conspicuous for a prominent Manitoba trait, previously recorded only for the Malmo focus, viz.: offerings of bison skulls and carcasses, which are placed with boulders and charred timbers on top of the pits.

Table 2. Manitoba mounds' traits found in upper Mississippi mound complexes

MANITOBA MOUNDS* TRAITS FOUND IN UPPER MISSISSIPPI MOUND COMPLEXES	Eastern Dakotas	Central Dakotas	Headwaters Lake Blackduck Focus Late Woodland	Little Lacs Rainbow Focus Late Woodland	Red River Antler Focus Early Late Woodland	Little Lacs Main Focus Late (?) Woodland	Effigy Culture Late Middle Woodland to Late Woodland	Rainy River Lower Focus Middle Woodland
Built on former habitation site								X
Conical mounds	X	X	X	X	X	X	X	X
Elliptical mounds	X		X	X		X	X	
Cumulative mounds								X
Linear mounds				X	X	X	X	
*Grades	X							
Effigy mounds							X	
Sub-floor burial pits	X	X	X		X		X	
Shallow sub-floor grave or pit				X		X		
Lying on plains surface								
In fill	X		X	X		X	X	
Sitting	X		X		X			X
Flexed	X		X	X	X	X	X	
Extended					X			
Bundle	X		X	X	X	X	X	X
Clay-plugged eye-sockets			X(?)					X
Scattered disarticulation	X							
Single burial	X		X				X	
Multiple burial	X		X		X		X	X
Associated dog burial							X	
Fire	X		X(?)	X		X	X	X
Cremation	?			X		X	X	
Small stone cairn						X		
Puddled clay	X						X	
Burnt clay layers	X						X	
Ochre	X		X		X			X
Bark	X		X					
Bison skull		X						
Bison carcass		X		X		X		
Animal bone offering							X	
Boulders covering pits		X						
Poles covering pits	X	X		X		X		
Birch-bark basket	X							
Mortuary pot	X		X(?)				X	X
Clay pipe(?)	X		X		X		X	
Incised collimite	X							
Incised clay gorget							X	
Stone pipe or tube	X		X		X			X
Fresh water clam shells (spoons)	X				X			X
'Unio' shell flat disc bead	X				X			X
'Unio' shell pendant					X			X
'Unio' shell gorget					X			
Tubular shell bead	X				X			
Small marine shell bead	X							
Busycon shell gorget	X							
Busycon columella pendant	X							
Bone whistle	X		X		X			X
Wide bone or antler band	X				X		X	X
Narrow bone band	X							
Bone tube			X					X
Bone tubular bead	X				X			
Bone awl and needle	X		X				X	X
Barbed bone harpoon	X				X		X	X
Perforated antler tine	X				X			
Antler tip and bone flakers			X					
Bone flesher							X	
Copper objects/ornaments					X		X	X
Copper celts							X	
Sheet copper	X							
Sheet copper tubular bead	X		X				X	
Plains Triangular point			X				X	
Plains Side-notched point			X					
TRAITS NOT RECORDED FOR MANITOBA MOUNDS								
Large rectangular sub-floor pits		X					X	
Small shell beads					X		X	
Humus removed below mounds							X	
Stone cists							X	
Beaver teeth gouges								X
Socketed antler points								X

## MATERIAL AND ARTIFACT DESCRIPTIONS

### STONE ARTIFACTS

#### Grooved stone mauls or hammers (Plate I, fig. 6, 7)

*Location.* These are the most commonly found artifacts retrieved by the farmers from the fields in the mound districts. Of the 35 examined, the majority came from the Souris-Antler region (three from Mounds G and Moore C), two from the area around Arden (though they have never been found near Westbourne), and three from the Red River region. Two were associated with the fill and hill-top camp-site material of Star Mound. Noticeably, none has been found in the Little Saskatchewan area where there are no mounds.

*Description.* These artifacts vary from oval to egg-shaped to rounded-squat, the broader end at the base. Both ends show battering. The groove generally circumscribes the upper half of the tool, but in one rather pointed oval tool from the Red River, the groove is in the lower half (Cat. No. X-A-393). In five tools the groove does not quite meet at one side. From the point of view of handling as a tool, they vary from light weight (2 lb.), to medium weight (4 lb.), to heavy (9 lb.), to one extremely heavy (15 lb.).

Size ranges from three small ovals (Plate I, fig. 7) from the Souris-Antler area, averaging in length 9 cm, width 6.6 cm, thickness at base 3.5 cm, to a heavy limestone tool (Cat. No. X-A-396), from the Red River region, measuring 22 cm by 15.5 cm by 14 cm across the base.

Average measurements are:

<i>Length</i>	<i>Width</i>	<i>Thickness at base</i>	<i>Width and depth of groove</i>
14.7 cm	9.9 cm	5.4 cm	2.3 cm x 6 mm

The average position of the groove cuts the tool at about one-third from the top.

*Material.* Precambrian Shield glacial boulders, predominantly granite and quartzite, also diorite and greenstone. One tool of local limestone.

*Function.* Hammer and sledge hammers, attached by thongs around the grooves to handles, probably of wood, of requisite strength for weight of tool. Nickerson notes that these tools were known historically as pemmican pounders for crushing the berries and meat.

### Small hammerstones without grooves

*Location.* Nine small hammerstones were collected. Six came from the Souris-Antler region, mostly from river-bottom land, associated with village or camp-site material. One came from Star Mound Hill camp-site, one from a camp-site at the foot of the hill of the post-contact graves, Assiniboine area, and one from a field near Arden.

*Description.* They are smooth, round to oval stones, light weight (1 lb.), easily handled. Show battering marks on ends and sides and flat faces. Average measurements are 9.6 by 7.7 by 3.3 cm.

*Material.* Granite, quartzite, diorite.

*Function.* Hammers.

### Grooved and/or side-notched stone axes (Plate I, fig. 1 to 3)

*Location.* Of the seven axes collected, six came from the Elliot property near Sourisford. One grooved and notched tool came from near Arden.

*Description.* The grooves or notches are all placed in the upper half of implements. In three out of five grooved tools, the groove does not meet at one side. In one of these the groove has ridged edges (Plate I, fig. 2). The sides of the grooved axes taper gradually in from the groove to a blunt straight cutting edge. From the groove up, the sides taper sharply into a round pointed or square-cut poll. Of the two side-notched (non-grooved) axes, one is crudely made of limestone with a very thick chopping edge (Cat. No. X-A-98) and weighs 3 pounds 14 ounces. The other side-notched (non-grooved) tool is illustrated (Plate I, fig. 1). They are made in two average sizes: small (fig. 1 and 2) and large (fig. 3), weighing respectively 1¾ pounds and 4 pounds.

<i>Length</i>	<i>Width at bit</i>	<i>Greatest thickness at sides below groove</i>	<i>Width and depth of groove at side</i>
large 18.3 cm	9 cm	3.5 cm	1.8 cm x 9 mm
small 13.8 cm	6.7 cm	2.1 cm	2.2 cm x 11 mm

*Material.* Greenstone and diorite, and one tool is limestone.

*Function.* Chopping, attached to handles by thongs around grooves.

*Occurrence.* Ground stone axes occur in the Effigy Mound aspect (Bennett, 1952: 114).

### Stone tool-wedge (?) (Plate I, fig. 8)

*Location.* Found on the Elliot property, Sourisford.

*Description.* Long, narrow, rounded implement, tapering very slightly inwards to a thick cutting edge, slightly ground. Circular flat top. Length 18.5 cm, width at bottom 4 cm, diameter at top 5 cm.

*Material.* Diorite.

*Function.* Wedge.

### Stone slabs

*Location.* Four slabs came from the Souris-Antler region. One came from pit 'a' at a depth of 3 feet; the others probably came from ploughed land.

*Description.* The one from pit 'a', measuring 20 cm in diameter and 1 to 2 cm thick, was not fashioned. Two broken pieces, each approximately 20 cm wide and 2 cm thick, may possibly have been worked into two separate oblong slabs. The fourth slab (Plate I, fig. 4) from Elliot Village, has been shaped into a round griddle stone 13.5 cm in diameter and 8 mm thick.

*Material.* All are of various blends of mica schist or gneiss, glacial-borne rocks from the Precambrian Shield.

*Function.* Probably used as hand-mills for grinding food.

### Coup stone (Plate I, fig. 5)

This artifact was associated with a skeleton in the burial pit in Mound R on the North Antler Plain. It is a smoothly-planed object of sandstone, in shape a round-sided oblong, measuring 12.4 by 9.5 cm and from 7 to 14 mm thick. Each of its four sides is marked by five notches.

### Stone tube (Plate VIII, fig. 4)

*Location.* This stone tube came from the old camp-site level beneath Star Mound. A tiny fragment of a stone tube or bead was found at a depth of 11 inches beside one of the centre stakes in Lone Mound.

*Description.* The tube is of very light weight (4 gm), thickness of stone being between 1 and 2 mm. Length of tube is about 3.5 cm; diameter 1.5 cm at lower end, slightly constricted towards upper end, thickening slightly and expanding to 1.4 cm at what may be the mouthpiece end.

*Material.* The tube is probably serpentine; the fragment catlinite.

*Function.* Unknown. Ornament? Medicine man's accoutrement?

*Occurrence.* Stone pipes are found in North Dakota mounds (Montgomery, 1906).

### **Irregular-shaped scrapers (Plate II, fig. 12 to 15)**

*Location.* Five of these were associated with Star Mound fill; three came from Section 15, South Antler region; and two from Arden district. Two fragments came from Elliot Village site (R.S. MacNeish's survey, 1953).

*Description.* Irregular in outline; ventral side predominantly flat. Length: from 3 to 7 cm. Flake tools struck from pebbles, percussion flaking applied to dorsal surface and edge. One tool has been side-gouged by pressure flaking to form saw-tooth edge (Plate II, fig. 15). One tool has both surfaces ground at one end to form chisel edge (Plate II, fig. 14). The two Elliot Village fragments are retouched on one edge. The others show no retouching.

*Material.* Quartzite and chert.

*Function.* Mostly hafted to handle and may have been used for scraping skins.

### **Crude snub-nosed scrapers (Plate II, fig. 16, 17)**

*Location.* Associated with three quartzite lumps *beneath* the old sod line under McKenzie Mound.

*Description.* Roughly shaped lumps; dorsal side partly fashioned to form 'nosed' scraping end. Size: 6 by 5 cm and 4.5 by 3 cm.

One is a partially-worked nodule, the other fashioned from a small core. Pressure flaking applied to both.

*Material.* Brown chalcedony.

*Function.* Scrapers; probably hafted.

### **Flat D-shaped scraper (Plate II, fig. 11)**

*Location.* From Mound C, Moore's Group, Souris Plain; associated with mound fill.

*Description.* Roughly D-shaped, flat on both surfaces, but steep working edge (the round part of D) on dorsal surface. Size: 3.3 by 5 cm by 7 mm.

Flake tool. Pressure flaking on working edge.

*Material.* Chert.

*Function.* Hafted and used for scraping skins.

### **Thin flake scraper (Plate II, fig. 8 to 10)**

*Location.* One each from the South Antler, the Star Mound, and the MacKenzie Mound, Arden. One was a surface find, and two were associated with mound material. Eleven from Elliot Village site (R.S. MacNeish's survey, 1953).

*Description.* Thin flake tools, irregularly shaped. Two are side scrapers with fine retouching on edges (fig. 8 and 9); the other has only slight retouching on one narrow end (fig. 10); the rest of the edges have been left sharp and jagged. Size: average measurements are 5.2 by 2.2 cm.

Flaked on dorsal side only by percussion flaking, and pressure flaking to edges.

*Material.* Brown chalcedony.

*Function.* Probably used as knives for cutting. May have been inserted into slotted bone handles.

### **Prismatic blades (Plate II, fig. 6, 7)**

*Location.* Three from village site material beneath Star Mound, one from Elliot Village site near South Antler.

*Description.* Narrow flakes. Average measurements are: length 4.7 cm, width 1.5 cm, thickness 3 mm.

Made of lamellar flakes struck from polyhedral cores. Pressure flaking applied on dorsal surface to all edges except the end.

*Material.* Brown chalcedony.

*Function.* Hafted and used as knives for cutting.

### **End-of-blade scrapers (Plate II, fig. 4, 5)**

*Location.* One was associated with village site material beneath Star Mound. Two were associated with the Moore Group Mounds of the Souris area.

*Description.* Small plano-convex implements. Sides taper to blunt pointed hafting end. Struck from polyhedral cores (?). Pressure flaking applied to edges with working end marked by steep flaking. Average length 3.6 cm, width 2.4 cm, thickness at working end 8 mm.

*Material.* Brown chalcedony.

*Function.* Hafted and used for scraping.

*Occurrence.* Elongated end scrapers occur in the village material of Mille Lacs focus (Bennett, 1952: 113).



### Thumbnail scrapers (Plate II, fig. 1 to 3)

*Location.* Of the nine implements collected, seven were associated with the South Antler region, and two came from the Arden area. They were mostly surface or ploughed finds. Two were associated with Mounds 3 and 4 in the South Antler plain; the one from Mound 4 was found at plains' level beneath the mound, embedded under some red ochre. Four other specimens came from Elliot Village Site (R.S. MacNeish's survey, 1953).

*Description.* Plano-convex, truncated triangular to isosceles triangular, the wider end the scraping edge, which is steeply flaked. The bulb of percussion seen on the ventral surface on five of the tools is at the narrow end. Average length 1.9 cm, width 1.9 cm, thickness at scraping edge 5 mm.

Flake tools with pressure flaking, usually on dorsal side only, but two tools from the Antler region have pressure flaking on both surfaces. Pressure flaking applied to scraping end, and sometimes other edges are retouched.

*Material.* Brown chalcedony.

*Function.* Hafted and used to scrape skins.

*Occurrence.* Village material of Mille Lacs focus (Bennett, 1952: 113).

### BIFACES—

#### Rough biface (Plate III, fig. 5 to 7)

*Location.* One from South Antler bottoms, Section 22; three from Village-site material beneath Star Mound; and one from the bottom of the deep pit under McKenzie Mound, Arden area.

*Description.* In outline oval to D-shaped; Plano ventral surface. From 3 to 5 cm in length. Flake and pebble tools fashioned by percussion flaking. No retouching.

*Material.* Quartz pebble, brown chalcedony, and chert.

*Function.* Hafted and used as scrapers.

#### Ovoid biface (Plate III, fig. 1, 2, and 9)

*Location.* Five were associated with Star Mound village site material; one came from Rapid City, Assiniboine area; and one from bottom of deep pit under McKenzie mound, Arden district. Also collected from Elliot Village (R.S. MacNeish's survey, 1953).

*Description.* D-shaped to ovoid in outline, usually coming to a point at one end; one tool is pointed at both ends; fairly flat on both surfaces. Size range: from 5.5 by 3.5 cm to 10.5 by 6.5 cm. Flake tools struck from cores, finished by pressure flaking, with retouching applied to edges.

*Material.* Brown chalcedony and quartzite.

*Function.* Hafted and used for scraping.

### **Large triangular biface (Plate III, fig. 8)**

*Location.* Elliot farm, Sourisford.

*Description.* Isosceles triangle in outline. Size: 10.5 cm by 7 cm.

Large flake tool struck from core; shaped by percussion flaking applied to both surfaces; no retouching.

*Material.* Quartzite.

*Function.* Possibly for digging roots.

*Occurrence.* Triangular flint knives are recorded for village material of Mille Lacs focus (Bennett, 1952: 113).

### **Side blades (Plate III, fig. 3,4)**

*Location.* One from the bottom of the deep pit under McKenzie Mound, Arden area; the other was associated with the small enclosure in Section 33 on the North Antler plain. Also found at Elliot Village (R.S. MacNeish's survey, 1953).

*Description.* Oblong to pointed oval in outline. Size: 5.5 cm by 2.5 cm.

Flake tools struck from cores. Percussion and pressure flaking. One tool retouched on edges.

*Material.* Chert and quartzite.

*Function.* Hafted and used as knives for cutting.

Some pressure flaking on both surfaces, some edges retouched.

*Material.* Chert.

*Function.* Arrow points.

*Occurrence.* Blackduck and Manitoba foci (MacNeish, 1954: 46).

### **Medium-sized side-notched points (Prairie Side-notched) (Plate IV, fig. 19 to 21)**

*Location.* Star Mound.\*

---

\*With regard to all arrow points found in Star Mound, Nickerson says "Some probably spent arrows foreign to mound, others incorporated in mound material," *Archaeological Evidences* p. 16,

*Description.* All are broken; base slightly concave, convex sides gradually tapering to a point. Average measurements: length 4 cm; width 2 cm; notches, 3 mm deep and 5 mm wide.

Probably percussion flaking on the chert tools; whereas the chalcedony point is marked by fine pressure flaking.

*Material.* Chert and brown chalcedony.

*Function.* Arrow point.

*Occurrence.* Blackduck and Manitoba foci (MacNeish, 1954: 46).

### **Aberrant point (Plate IV, fig. 3)**

*Location.* From Elliot Village site.

*Description.* Narrow, almost parallel sides, tapering gradually to point, flaring slightly at base, which is slightly convex. Length 2.9 cm, width 1.2 cm, thickness 5 mm.

Pressure flaking on both surfaces.

### **PROJECTILE POINTS (PLATE IV)**

#### **Small isosceles triangular points (Plains Triangular)**

*Location.* Two came from the mound material of Star Mound in the Pembina region (Plate IV, fig. 1, 2), and four were associated with Lone Mound burial in the Assiniboine area (Plate IV, fig. 4-7).

*Description.* Equilateral straight sides taper gradually to a point; base straight to very slightly concave. Average measurements are length 2.1 cm, width 1.7 cm. Neat pressure flaking applied to both surfaces.

*Material.* Chert.

*Function.* Arrow points.

*Occurrence.* Blackduck and Manitoba foci (MacNeish, 1954: 46) and Effigy Culture (Keslin, 1958: 262 and 271).

#### **Small side-notched points (Plains Side-notched)**

*Location.* There were surface or village-site finds from the South Antler region (Plate IV, fig. 8-10), and the other eight were found with burial in Lone Mound, Assiniboine area (Plate IV, fig. 11-18).

Dr. R.S. MacNeish retrieved 30 of these points from the Elliot Village site on his survey in 1953.

*Description.* Tiny side-notched implements of varying width, slightly convex sides, tapering gradually to a point, bases slightly concave to straight to slightly convex. Average measurements are length 2.2 cm, width 1.3 cm, depth by width of notch 2 by 4 mm, thickness 3 mm.

*Material.* Chalcedony.

**Large side-notched point (base only) (Plate IV, fig. 25)**

*Location.* Surface find near Mound 4, South Antler Plain.

*Description.* Convex sides above notch, base straight. Width above notch 3.2 cm, notch 5 x 12 mm, thickness of flake 7 mm.

Percussion flaking. Pressure retouch on base.

*Material.* Grey quartzite.

*Function.* Spear point.

**Thin, corner-removed (or stemmed(?)) (Plate IV, fig. 22)**

*Location.* In Mound 4, at a depth of eight inches, well above burials.

*Description.* Thin flat flake, convex sides above stem, gradually tapering to a blunt point, side edges almost at right angles to surfaces, base straight. Length 3.2 cm, width 1.6 cm, width of stem 1 cm, thickness 2 mm.

Surfaces flat and smooth with no chipping except close to edges on dorsal surface. Edges retouched by pressure flaking.

*Material.* Brown chalcedony.

*Function.* Arrow point.

**Leaf-shaped point (Plate IV, fig. 23)**

*Location.* Mound material of Star Mound.

*Description.* Round leaf-shaped, convex edges tapering to a point, straight base. Length 3.8 cm, width 2.8 cm, thickness 5 mm.

Pressure flaking (?) on dorsal surface, ventral surface crudely chipped.

*Material.* Chert (?)

*Function.* Spear point.

**Long, narrow point (Plate IV, fig. 26)**

*Location.* A surface find near Mound 3 on the South Antler Plain.

*Description.* Narrow, equilateral triangle, straight sides gradually tapering to a point, concave base. Length 5.9 cm, width 2 cm, thickness 4 mm.

Percussion flaking.

*Material.* Grey quartzite.

*Function.* Spear point.

**Small, long, narrow point (base only) (Plate IV, fig. 24)**

*Location.* Elliot Village site, South Antler.

*Description.* Isosceles triangle, slightly convex sides, gradually tapering to a point; straight base. Width 1.5 cm, thickness 1 mm.

Fine pressure flaking on dorsal surface, little flaking on ventral surface, which is smooth.

*Material.* Chert.

*Function.* Arrow point.

**Unidentified tips**

Tips of six chert points came from ploughed land of the South Antler region, Elliot Village site, from Mound B of Moore Group, Star Mound, Lone Mound, under the mound in the old sod level, and surface finds near Lone Mound.

**Unidentified bases**

Two surface finds of bases of white chert points were found in Section 15 of the South Antler.

**Large spear point (Plate III, fig. 10)**

*Location.* Star Mound, amongst mortuary offerings found at centre of mound. Found at a depth of 10 inches in very hard sod.

*Description.* Long, thin, narrow, dagger-like implement, slightly convex, sides gradually tapering to a point. Side-notched at base, which is straight-edged. About 25 cm long, width above notches about 5.5 cm; notches start about 1 cm from base and measure 8 by 10 mm.

Fine pressure flaking on both surfaces. Retouching along sides on both surfaces.

*Material.* Light grey chert.

*Function.* Spear point.

**SHELL ARTIFACTS**

**Gorget (Plate V, fig. 7)**

*Location.* With the mortuary offerings at the centre of Star Mound, at a depth of 10 inches, in very hard sod.

*Description.* Pear-shaped, made from part of the body whorl of a *Busycon*, a marine gastropod from Atlantic seaboard (as far north as Cape Cod); measures 18 cm by 13 cm. Two perforations in broad end for suspension by a thong or cord.

*Function.* Ornament. Worn over chest.

*Occurrence.* An engraved *Busycon* shell was found in Calf Mound in the same region as Star. They also occur in Dakota mounds and are considered a Southern Cult trait (Howard, 1953: 130-8).

#### **Marine shell ornaments (Plate V, fig. 1 to 6)**

*Location.* Six of these were found associated with the burial of Lone Mound, Assiniboine Area.

*Description.* Made from the columellae of the *Busycon*. Two are about 14 cm long and the other four measure 7.5 cm in length. One long shell and three of the short ones have been drilled the entire length through the centre, as if for the purpose of threading. Since the natural twist in the other two does not permit threading, they have been drilled at one end for suspension. All are decorated with one or more grooved concentric circles at the ends, and the smaller shells are marked with short parallel slashings. The shells have been variously polished.

*Function.* Beads or pendants. Bryce (1904) calls these fish-line sinkers.

*Occurrence.* Pendants from *Busycon* columellae are recorded for the Laurel focus (Bennett, 1952: 113) and are also found in North Dakota mounds (Howard, 1953: 131).

#### **Clam shell gorgets (Plate VI, fig. 6)**

*Location.* Two fragments of gorgets came from Sims Mound, both associated with child burials, one from the pit in the connecting grade and one from the shallow grave in the east end terminal mound.

*Description.* Probably fresh-water clam shell. Being a large part of a valve, they are concave-convex. They are not quite square in outline, the base is slightly longer than the top, which is about the same length as the sides, which slope slightly. Each has been perforated in the two upper corners and measures 6.9 cm by 5.5 cm (Cat. No. X-A-273).

*Function.* Ornament.

*Occurrence.* Fresh-water clam shell gorgets occur in the Arvilla focus (Bennett, 1952: 119).

#### **Small marine shell beads (Plate VI, fig. 1)**

*Location.* One hundred and sixty-two small shells (*Natica* – eastern seaboard as far north as Nova Scotia) were collected from the bottom of the grave in Lone Mound.

*Description.* One side of each shell has been ground off and perforated to facilitate stringing.

*Function.* Necklace or threaded to garment.

*Occurrence.* Small marine shell beads are reported from other Manitoba mounds and also from the Dakotas (Montgomery, 1906; Over and Meleen, 1941).

### **Cylindrical beads (Plate VI, fig. 7,8)**

*Location.* Five of these beads were found in Sims Mound, Pembina region. Three were associated with one of the child skeletons in the east terminal mound, and the other two came out of the pit in the connecting 'grade.' A similar bead was found with skeletal material of a child in Pit A of Star Mound.

*Description.* They were made from the columellae of ocean shells. They measure between 1.5 cm and 3.5 cm in length and about 1 cm in diameter. One very tiny bead is 1.2 cm long and 3 mm in diameter. They are considerably coated with lime (?).

*Function.* Necklace.

*Occurrence.* Of widespread distribution.

### **Flat rings (Plate VI, fig. 4, 5)**

*Location.* Twenty-seven rings were associated with the child skeleton in the eastern end of Sims Mound, and one shell disc ring was found with the bones of child skeletons in McGorman Mound in the Arden area.

*Description.* They are thin flat discs, perforated in the centre, made from fresh-water clam shells. The rings from Sims Mound have large holes compared to the shell component, average diameter of bead being 2.5 cm and diameter of perforation 1.5 cm; whereas the bead from McGorman Mound measures 3 cm in diameter, with the perforation only 9 mm.

*Function.* Probably necklace.

*Occurrence.* Of widespread distribution mostly in Mississippi period; therefore a late trait.

### **Tiny pendants (Plate VI, fig. 2, 3)**

*Location.* Three of these came from Sims Mound. Two were associated with skeletal material of adults and an infant in the west end pit burial.

*Description.* They are carved from fresh-water clam shells and measure about 3 cm by 1 cm. The upper end is notched for suspension and the lower end bears three light notches.

*Function.* Ornament.

*Occurrence.* Laurel and Arvilla foci (Bennett, 1952: 113, 119)

## BONE ARTIFACTS

### Whistles (Plate VIII, fig. 9)

*Location.* Three were found under Mound J, South Antler region, at a depth of 11 inches, as if deposited within a small lodge frame that the mound appeared to cover (Nickerson). No associated burial.

*Description.* They are hollow, slightly curved bone tubes (probably made from the ulnae of whistling swans, *Olor columbianus*); all are approximately the same size, averaging 23 cm in length, with diameter at top end being 1.5 by 1 cm. A triangular opening, measuring about 1 cm wide and 1.2 cm long, has been cut in each instrument about 6 cm from the top. The bones are polished.

*Function.* Whistle.

*Occurrence.* Of widespread distribution in the Upper Mississippi drainage from Early to Late Woodland times.

### Tube (Plate VIII, fig. 3)

*Location.* Riverview Mound, east of the Souris. In disturbed earth outside of the pit.

*Description.* Two pieces of very thin, polished bone tube, about 6.8 cm long and 2 by 1.5 cm in diameter.

*Function.* Unknown. Medicine Man's accoutrements?

### Grooved bone handle (Plate VIII, fig. 5)

*Location.* Riverview Mound, in disturbed earth outside the pit.

*Description.* Flattish tube made from rib bone, about 12 cm long, with diameter of opening 1.5 cm by .8 cm. Three longitudinal parallel grooves mark one side. Highly polished.

*Function.* Handle.

*Occurrence.* Bone handles for end scrapers occur in the Blackduck and Manitoba foci (MacNeish, 1954: 46).



### **Small cylindrical tubes (Plate VIII, fig. 1)**

*Location.* Seven of these were found with skeletal material in Mound B on Star Mound hill. Two tubular bone beads came from Elliot Village site (R.S. MacNeish's survey, 1953).

*Description.* Those from Star Mound hill are cut from the radial bones of birds, and average 4.2 cm in length and about 5 mm in diameter. They are well polished.

*Function.* Beads.

### **Narrow perforated bone bands (Plate VIII, fig. 2)**

*Location.* North end of excavation in McGorman Mound, Arden district.

*Description.* Two very thin fragments of curved bone about 1 cm wide, each with perforation at squared-off end.

*Function.* Ornament.

*Occurrence.* Similar bone bracelets are common in the Dakotas (Baerreis, pers. comm.; Over and Meleen, 1941, Plate 1, f).

### **Thin wide bone band (broken) (Plate VII, fig. 1)**

*Location.* Associated with human skull in Mound H, North Antler.

*Description.* Made from the thin part of a buffalo scapula, 2 mm thick and about 19 cm long, shaped to a curve. Width at wide end 11.5 cm; at narrow end 5 cm. Small perforations in both ends about one centimeter apart, and one perforation near centre. One long edge marked with slight notches from 4 to 7 mm apart.

*Function.* Ornament. Eyelet holes probably used for lacing. Perhaps head decoration or anklet?

*Occurrence.* Bone or antler bands are recorded for the Laurel and Arvilla foci (Bennett, 1952: 113, 118) and the Effigy Culture (Wittry, 1959: 114-15) and are found in North Dakota mounds (Montgomery, 1906, Plate XXXIV, b).

### **Highly-polished metatarsus implement (Plate VII, fig. 2)**

*Location.* Associated with skeletal material in the northwest terminal mound of Mound C, Moore Group, east of the Souris.

*Description.* Made from the metatarsus of an elk (?), 17 cm long and about 6 cm wide at the butt. The flat side of the bone 6 cm from the proximal end has been sliced open and gradually tapered to a narrow flat working end, which is 2 cm wide. This end on the rounded side of the bone has a ridged termination. The flat side directly above the opening is marked by tiny parallel decorative scratches.

The bottom two-thirds of the tool is very highly polished; the proximal end is unmodified.

*Function.* Scoop or skin flesher.

*Occurrence.* Bone fleshers are recorded for the Laurel (Bennett, 1952: 113) and Blackduck and Manitoba foci (MacNeish, 1954: 46) and occur in North Dakota, e.g., the Koehler site (Cooper, 1957).

### **Antler objects**

*Location.* Two of these objects were found together under Mound H, North Antler region.

*Description.* One (Cat. No. X-A-244) is a hook-shaped object formed by the antler prong, which terminates in a knobbed point that has been broken. This end is slightly polished. The other (Plate VII, fig. 4) is shaped like a solid powder horn. The tip, terminating in a knobbed point, has been polished for a length of 6 cm where it is perforated right through by an oval-shaped hole.

*Function.* The latter is a slotted handle for beaver incisor gouge.

*Occurrence.* Perforated antler tine occurs in the Arvilla focus (Bennett, 1952: 118).

### **Crude pointed bone tools**

*Location.* Twenty-one of these tools (in various sizes and of variously rounded tips), made from bone fragments sliced down the middle and of buffalo ribs, came from Star Mound (Plate VIII, fig. 7). Similar tools came from Elliot Village site (R.S. MacNeish survey, 1953). Sims Mound produced a thin portion of buffalo scapula roughly worked to a rounded point (Plate VII, fig. 3).

Six crudely-worked points of bone fragments and antler tips came from McGorman Mound (Plate VIII, fig. 6).

A well-worn and once polished rounded pointed tool came from Heath Mound, Souris River region (Plate VIII, fig. 8).

*Function.* Knapping tools or fleshers.

### **Split buffalo (?) rib (Cat. No. X-A-304)**

A long buffalo (?) rib, split lengthwise and somewhat polished, was found beneath human bones in Pit D, Star Mound.

## **COPPER OBJECTS**

### **Sheet copper**

*Location.* One piece amongst the mortuary offerings at the centre of Star Mound a little below the surface and tiny fragments elsewhere in the fill, and with the infant burial in the fill of Lone Mound.

*Description.* The piece amongst the Star Mound offerings (Cat. No. X-A-324) is in the form of a right-angled triangle with a rounded tip, about 18.5 by 8.5 cm. Two smaller pieces from Lone Mound, one measuring 9.5 by 5.5 cm and the other 6 by 4.5 cm are pierced about the edges with tack-like holes (Plate VI, fig. 10). Identified as native copper (X-Ray Diffraction Laboratory, Geological Survey of Canada).

*Occurrence.* Sheet copper, a Southern Cult trait, occurs in North Dakota mounds (Howard, 1953).

#### **Copper tube (Plate VI, Fig. 11)**

*Location.* Mound C, Moore group, at a depth of 2 feet near a skull.

*Description.* It is a piece of sheet copper rolled into a tube, broken at both ends; over 6 cm long and 6 mm in diameter.

*Occurrence.* Blackduck focus (Bennett, 1952: 117). The Effigy Culture (Wittry, 1959: 114-15), and North Dakota mounds (Montgomery, 1906).

#### **Copper celt (Plate VI, fig. 9)**

*Location.* Amongst the mortuary offerings at the centre of Star Mound, at a slight depth in very hard sod. Identified as cuprite or native copper.

*Description.* It is 12 cm long, 2.5 cm wide at top, from which sides taper gradually out to a cutting edge 4.5 cm wide. Thickness at centre is 9 mm, tapering off to 5 mm at top and 1 mm at cutting edge. Weight is 9 ounces.

*Function.* Hafted and used as axe or wedge.

*Occurrence.* Effigy Culture (Rowe, 1956: 76).

### **HISTORIC CONTACT ARTIFACT**

#### **Iron knife blade (Plate VI, fig. 12)**

*Location.* At a depth of 2½ feet in undisturbed soil in Arden Mound.

*Description.* Made of an alloy (FeNi) of European manufacture, it is a straight-backed, thin blade, with the cutting edge tapering to a point, and the opposite end is cut and perforated for hafting. Including the hafting end, it measures 23 cm in length and is 3 cm wide at handle end. As the result of corrosion, the original grey metal is covered with a dark brown dull material (goethite). One surface is coated with a scale of carbonate of lime (calcite). It is the only recorded artifact from this burial mound.

*Function.* Knife.

## OBJECTS OF WOOD

Other than samples of decaying wood poles, associated with some of the pit burials, and wooden stakes, no wood objects were found.

Portions of two wooden stakes were retained. They are from 15 to 17 cm in circumference.

Cat. No. X-A-249 was driven into the ground behind the burnt earth ring under Heath Mound. It has been cleaned of its bark, and one end sharpened by an instrument making small clean cuts.

Cat. No. X-A-256 was found lying flat on the old sod-line level under Mound R. It still retains its bark and appears to have been sharpened by an instrument, such as a modern axe, that made long clean strokes.

## SHELL MATERIAL

Fragments of fresh-water clam, were sparsely but frequently found in mounds. Specimens were retained from the Antler-Souris region and from Star Mound. Though sometimes associated with animal bones, the shells did not appear in sufficient quantity to suggest a common source of food. The shell material was utilized for ornaments, and sometimes unworked valves were associated with skeletons in graves. Three unmatched valves with yellow ochre were found in a burial pit (Mound R) inside a small pot. In one of the shallow pit depressions on the North Antler Plain, a shell was found with a flint chip and shell fragment in the gravel layer underlying the sod and top soil.

## BONE MATERIAL

Scattered fragments of bones, designated food bones by Nickerson, littered the surface of the plains and constantly appeared in the mound fill. A large sample of bones, including many cut fragments, were retained from Star Mound. They comprise largely buffalo bones: mostly scapulae, vertebrae, leg bones, and teeth. Also found was a considerable quantity of small mammal bones, chiefly the limb bones. Jaws and skulls of small carnivorous animals were found. The small animals represented include badger, otter, and skunk. Antlers and a metatarsus indicate elk. Bird bones are also represented at Star Mound. At Riverview Village site, deer bones as well as buffalo bones were found. A dog skull came from Pit 'b' on the North Antler Plain, and another dog skull was found in Mound K, probably the 'broken badger or bear skull' mentioned by Nickerson.

Mortuary food offerings, generally in the form of buffalo joints and skulls, were often found with burials. In Mound 8 of the South Antler region, a buffalo, entire except for the head, had been partially buried in a pit in

the 'grade.' The associated terminal mound contained a headless human skeleton. Two shallow-grave single interments were surrounded by buffalo skulls. The skeleton of a child (Mound 11) was surrounded by five or six buffalo skulls. The other single interment (Mound 9) was surrounded by buffalo skeletons (minus the long bones), which extended from their skulls in a radiating position around the human skeleton.

Nickerson remarks that it is a curious fact that he found nowhere any fish bones and very few river clam shells (letter to O.C. Libby).

## POTTERY

### Manitoba Cordmarked Ware (Plate IX, fig. 1 to 4) -

#### *Sample:*

Scattering of sherds from the North Antler Plain; two dozen sherds from the Elliot Village site; and several pieces from the Arden area. One tiny sherd in Star Mound fill.

#### *Paste:*

Temper: Crushed rock, chiefly quartzite, from .5 to 4 cu mm in size, averaging .6 cu mm; 25 cu mm in 1 cu cm of pottery, comprising 1.5 per cent of paste.

Texture: Slightly coarse and laminated.

Thickness: Sherds range from 2 to 8 mm, averaging 4 mm.

Hardness: About 3.

Colour: Exterior surface, vinaceous cinnamon to black; interior surface, the same; cross-section vinaceous cinnamon to dark mousy grey.

#### *Manufacturing Technique:*

Paddle and anvil, or coiled and then paddled.

#### *Surface Finish:*

Cord-wrapped paddle impressions. The cords are from 1 to 2 mm thick, comprised of two yarns, and both the S and Z twists are represented.

#### *Geographical and Temporal Range:*

Manitoba corded ware extends over the whole of Southern Manitoba. It has been found near Brandon,<sup>1</sup> the Rock Lake area,<sup>2</sup> and the

<sup>1</sup>MacNeish, 1954.

<sup>2</sup>MacNeish and Capes, 1958.

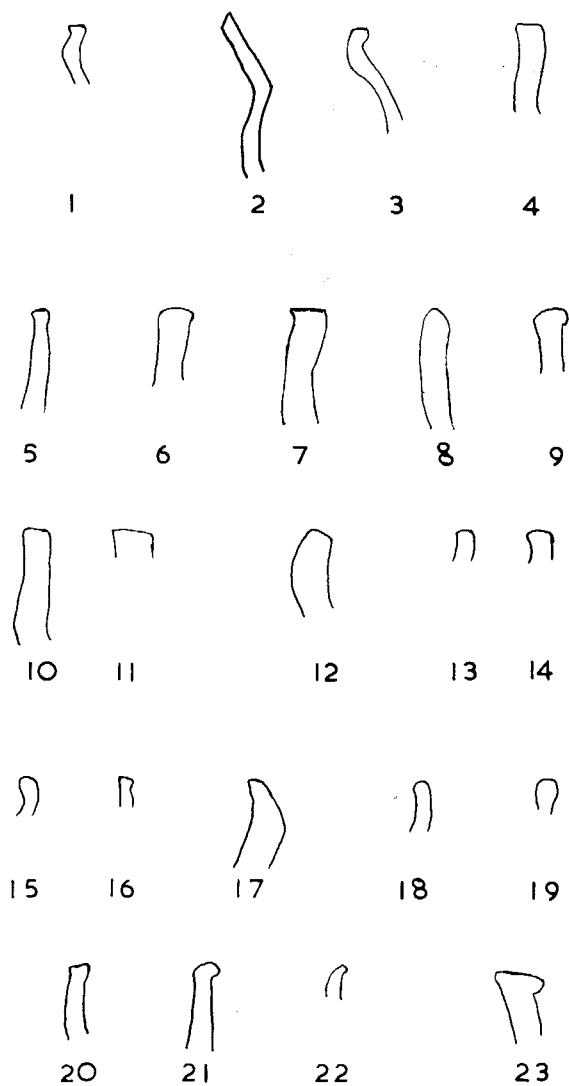


Figure 33. Rim cross-sections

southeastern section of the province between the Red and Winnipeg rivers.<sup>1</sup> It has also been found in Saskatchewan in the region of Moose Jaw<sup>2</sup> and as far north as Flin Flon<sup>3</sup>. In stratified sites (Lockport, United Church) the temporal range of this ware is late prehistoric.

#### **Manitoba Cordmarked Ware (Souris Type) (Plate IX, fig. 11, 12)–**

*Sample:*

Small pot in fragments, from burial pit, Mound R, North Antler Plain.

*Paste:*

See Manitoba Cordmarked Ware.

*Surface Finish:*

Cord-wrapped paddle all over body and then smoothed. The rim surface has been brushed by a fibrous implement.

*Vessel Form:*

Globular body, rounded shoulders, joined to slightly outflaring rim (Figure 32, No. 1). The lip has been flattened, causing slight ridge on interior of rim. The lip has slight horizontal projections at four regularly spaced intervals; or in Mr. Nickerson's description, "the rim forms four wide-scalloped lips." The restored pot (Plate XIX) measures 3 inches in diameter across inside rim, 4¾ inches across shoulders, and 4 inches high (inside measurement).

*Decoration:*

The lip is marked by closely-spaced punctates made by an awl-like point; they lie parallel to the lip edges between the projections and perpendicular to the lip edges on the projections.

*Geographical and Temporal Range:*

The rim-lip treatment seems to relate this pot to Montgomery's (1908: 34) incised pottery.

#### **Manitoba Cordmarked Ware (Horizontal Type) (Plate IX, fig. 5 to 10)–**

*Sample:*

Elliot Village site: Twenty pieces. Foreman farm, Arden: Nine pieces.

*Paste and Surface:*

Representative of Manitoba Corded ware

<sup>1</sup> MacNeish, 1958.

<sup>2</sup> Wettlaufer, 1955: 26.

<sup>3</sup> Harry Moody, collection, pers. comm., R. S. MacNeish.

*Vessel Form:*

The sample includes a number of rims illustrated in Figure 31, No. 4, 6, 7, 13, 14, 15, and 16.

*Decoration:*

This type is distinctive for the horizontal parallel rows (from 1 to 5 mm apart) of closely wound, cord-wrapped stick impressions that encircle the neck. The cord varies from very fine to a thickness of 2 mm. The lip and outer rims are marked with similar cord impressions running obliquely. On one sherd (No. 7), circular punctates (5 to 6 mm in diameter) encircle the rim below the lip at intervals of 8 to 14 mm. Lips of rim types No. 13, 14, 15, and 16 are plain.

*Geographical and Temporal Range:*

This type of Manitoba Cordmarked Ware is widespread. Elsewhere in Manitoba it occurs at the Stott site near Brandon,<sup>1</sup> and at Lockport on the Red River, north of Winnipeg.<sup>2</sup> It has also been found as far west as the Mortlach site, near Moose Jaw, Saskatchewan.<sup>3</sup> This type of decorated ware is related to the Blackduck Focus in Minnesota.<sup>4</sup> Temporally it is late prehistoric.

**Regina Heavy Corded Ware (Plate X, fig. 1 to 6) –**

*Sample:*

Most of this type came from the two village sites in the Souris region. The sample from the Elliot Village comprises 65 pieces (Cat. No. X-A-205, 229, 2834, 2835); whereas Riverview Village is represented by 15 pieces (Cat. No. X-A-208).

*Paste:*

Temper: Crushed rock, mostly quartzite, varying in size from .5 to 5 cu mm, averaging 1 cu mm, 20 pieces in 1 cu mm, comprising 2 per cent of paste.

Texture: Coarse, laminated, angular.

Hardness: 2.5.

Thickness: Ranges from 5 to 11 mm, averaging 8 mm.

Colour: Exterior surface from drab to dark mousy grey. Interior surface the same. Cross-section, deep mousy grey.

*Vessel Form:*

Rim forms are illustrated in Figure 31, No. 8 to 13, and 23.

<sup>1</sup>MacNeish, 1954.

<sup>2</sup>*Idem*, 1958.

<sup>3</sup>Wettlaufer, 1955.

<sup>4</sup>MacNeish, 1958: 79.



*Surface Finish:*

Cord-wrapped paddled. The cords are from .5 to 3 mm in thickness, made in two yarns, some S-twisted, some Z-twisted. The cord impressions are unevenly spaced on some sherds; on others they run parallel, from 2 to 4 mm apart.

*Decoration:*

Eight of eleven rim sherds are decorated, commonly by cord-wrapped stick impressions in lip. One sherd has fingernail impressions below lip, and two fragments bear horizontal cord marks below lip.

*Geographical and Temporal Range:*

This ware has also been found at the Stott site <sup>1</sup> in southern Manitoba and is well represented in Southern Saskatchewan.<sup>2</sup> It is late prehistoric.

**Mandan pottery (Plate XI, fig. 2 to 8) –**

*Sample:*

One large piece of this ware (fig. 8) was found at the sod-line level under Mound R. Half a dozen fragments of rim sherds came from the Elliot Village area, together with two pieces of incised body sherds.

*Paste:*

Temper: Crushed rock ranging from .25 to 2 cu mm in size, averaging 5 cu mm; 34 pieces comprising 1.7 per cent of paste.

Texture: Slightly coarse and laminated.

Thickness: 8 mm.

Hardness: About 3.

Colour: Exterior surface, cinnamon drab to fuscous black; interior surface, the same; cross-section, fuscous black, lightening toward surfaces.

*Manufacturing Technique: ?*

*Vessel Form:*

Rim forms are illustrated in Figure 31, No. 2, 17 to 19.

*Surface Finish:*

Fabric-impressed with a knobby-like material, then smoothed.

*Decoration:*

Decoration was done by pressing a length of cord into the wet clay or by incising with a bluntly-pointed tool, such as a bone awl.

<sup>1</sup>MacNeish, 1954.

<sup>2</sup>Kehoe, 1959.

The rim of the large sherd is decorated with eight parallel rows of cord impressions, about 2 mm wide and 2 mm apart, alternately with a chevron design comprising six rows of the same cord impressions. Dividing the rim from the body is a circle of impressions made by pinching. Rim type 18 has a chevron design made by four rows of cord about one millimetre thick. Rim type 17 has diagonal running cord impressions, and one rim of this type has fingernail indentations one centimetre apart below the cord impressions. The lip of rim type No. 19 is marked by closely parallel cord impressions, about one millimetre thick, running at right angles to rim. Two body sherds show horizontal and oblique parallel incising.

*Geographical and Temporal Range:*

This ware is typical of pottery from 18th century Mandan sites on the upper Missouri.<sup>1</sup>

**Winnipeg Fabric-Imprinted (Plate X, fig. 10) –**

*Sample:*

Two small pieces from Mound B, Moore's Group. Souris River.

*Paste:*

Temper: Crushed rock, mostly quartzite, from .5 to 1 cu mm in size, averaging .7 cu mm; 16 pieces in 1 cu cm, comprising 1.1 per cent of paste.

Texture: Fairly well knit, moderately coarse.

Thickness: 3 mm.

Hardness: 4.

Colour: Exterior surface, drab to mousy grey; interior surface, hair brown; cross-section, mousy grey.

Surface finish: Fabric-impressed – twisted babiche.

*Geographical and Temporal Range:*

This ware is well represented in southeastern Manitoba and is known to extend into historic times at Alexander's Point site.<sup>2</sup> It also occurs in northern Saskatchewan at Reindeer Lake.<sup>3</sup>

**Fabric-Imprinted (Plate X, fig. 8, 9, 11, and 12) –**

*Sample:*

Forty small fragments came from the Elliot Village site and half a dozen pieces from the North Antler Plain.

<sup>1</sup>Will and Hecker, 1944; Cooper, 1958: 20-26.

<sup>2</sup>MacNeish, 1958.

<sup>3</sup>National Museum of Canada collections No. X-B-265-74.

*Paste:*

Temper: Crushed rock, chiefly quartzite, ranging in size from .5 to 2 cu mm, averaging .7 mm; 18 pieces in 1 cu cm, comprising 1.2 per cent of paste.

Texture: Slightly coarse, laminated.

Thickness: About 5 mm.

Hardness: 3.5.

Colour: Exterior surface, vinaceous buff to dark mousy grey; interior surface, avellaneous to dark mousy grey; cross-section, mousy grey, sometimes lightening towards the edges.

*Vessel Form:*

Rim (Plate X, fig. 12) is moderately outflaring with flattened lip.

*Surface Finish:*

Impressed by various types of coarse fabric, some possibly nets. One, at least, is a full twisted coil net, might be twined.

*Geographical and Temporal Range:*

Unknown. Differentiated from Winnipeg Fabric-impressed by type of fabric used in surface treatment.

**Plain ware (Plate XII, No. 1 to 8) –**

*Sample:*

Fifty tiny fragments came from the Elliot Village site, a few pieces from the North Antler Plain, including 2 sherds beneath Mound H and the greater part of a small pot from the pit under Mound B of the Moore Group, Souris River (Plate XI, fig. 1).

*Paste:*

Temper: Crushed rock, mostly quartzite, varying from .5 to 2 cu mm in size, averaging 1 cu mm; 14 pieces in 1 cu cm of pottery, comprising 1.4 per cent of paste.

Texture: Angular and porous.

Thickness: 5 mm.

Hardness: 3.5.

Colour: Exterior surface pale olive buff to dusty neutral grey. Two fragments are a vinaceous tawny shade (Plate XII, fig. 1).

Interior surface: wood brown to dusty neutral grey; cross-section dark mousy grey. Some lightening towards surfaces.

*Vessel Form:*

Rims are illustrated in Figure 31, No. 3 (small pot), 9, 20 to 22. The small pot is almost identical in form to the Souris type pot, except that the rim is not quite so deep, measuring 12 mm from lip to maximum neck constriction, compared to 22 mm on the Souris pot. The same slight projections mark lip.

### *Surface:*

Smooth. There is a suggestion that the plain pot may have originally been cord-wrap-paddled before smoothing. This pot has a thin coating of hematite beneath a flaky charcoal covering. Fire, however, was not associated with the pit from where the pot is purported to have come.

### *Decoration:*

Lips of some of the rim sherds are decorated. Techniques include punctating (Plate XII, fig. 1, 3), incising (Plate XII, fig. 2, 6), stick impressions (Plate XII, fig. 5, 7, and 8).

### *Geographical and Temporal Range:*

There is no comparative data. The hematite coating and soot-like deposit noticed on the burial pot fragment are occasional characteristics of pottery from the Hagen site. The Mandan used a hematite wash.<sup>1</sup> The burial pot fragment resembles the Manitoba Cordmarked (Souris type) pot in form.

### **Aberrant sherds**

All are from Elliot Village, except two pieces as indicated below.

A piece of pottery, of what appears to be the shoulder of a pot, is marked by a barely discernible pattern, probably a fabric impression (Plate XII, fig. 15).

A rim sherd is characterized by horizontally pinched out protuberances around the lip (Plate XII, fig. 17).

One piece of pottery is checker stamped (Plate XII, fig. 16). This technique is reported from the Hagen site.<sup>2</sup>

Three fragments are linear-stamped or groove-paddled (Plate XII, fig. 9 to 11). One piece came from Riverview Village. Sherds marked by this technique occurred at the Hagen and Koehler sites.<sup>3</sup>

Three fragments are crudely incised (Plate XII, fig. 12 to 14). Similarly marked sherds are reported from the Hagen and the Koehler sites.<sup>4</sup>

One sherd (Plate X, fig. 7) found at sod level under Mound B, Moore's Group, Souris River, is typical of Avery corded ware recorded for the region of Rock Lake, Manitoba.<sup>5</sup>

<sup>1</sup>Mulloy, 1942: 13, 36.

<sup>2</sup>*Ibid*: 27.

<sup>3</sup>Mulloy, 1942: 27; Cooper, 1958: 21.

<sup>4</sup>*Ibid*: 24; Cooper, 1958: 24.

<sup>5</sup>MacNeish and Capes, 1958.

Table 3. Commonly held artifacts in Manitoba mounds

MOUND	TYPE	AREA	'UNIO' SHELL			MARINE SHELL				BONE				BUFFALO OFFER- ING	COPPER			STONE			BIRCH BARK BASKET	EFFIGY POT	SPIRAL POT	GEO- METRIC POT	UN- KNOWN POT
			disc bead	pendant	gorget	tubular bead	Notica/Oliva	Busycon pendant	gorget	whistle	tube	bead	wide band		narrow band	tubular bead	band	unspecified	tablet or disc	incised					
Montgomery's C	conical	North Antler														X	X	X				X			
R	ditto	North Antler																X	X						
Moore B	ditto	Souris																							
Moore C	'grade'	Souris																					X?		
Moore E	conical	North Antler																					X?		
Riverview	ditto	Souris																							
H	ditto	North Antler																							
J	ditto	South Antler																							
1 & 2	ditto	South Antler																							
Montgomery's	'grades'	South Antler																							
Bryce's	'conical & 'grades' (?)	North & South? Antler				X		X	X	X	X	X	X										X		
Calf	cumulative	Pembina																							
Star	effigy	Pembina				X	X	X	X	X	X	X	X												
Star B	conical	Pembina																							
Pilot	ditto	Pembina																							
Stott	ditto	Assiniboine				X																			
Lone	ditto	Assiniboine				X	X	X																	
Rosser	ditto	Assiniboine																							
Rock Lake	conical	Pembina																							
Bell & Bryce's	ditto	Red River			X			X	X									X	X	X				X	X
Sykes	conical	Pembina																							
Sims	'grade'	Pembina	X	X	X																				
Westbourne	conical	Whitemud	X	X	X	X																			
McGorman	ditto	Whitemud	X	X	X																				
g	ditto	South Antler	X	X	X																				

## CONCLUSIONS

In the introduction the question was asked, "Is there an areal difference amongst the Manitoba mounds?" Nickerson says "notwithstanding the varying form of mound there is sufficient similarity in the mode of burial as well as in the few objects found in the mounds to permit the inference that nearly all are the work of one people" (MS. Archaeological Evidences, p. 65-6). The foregoing has shown that the various types of mounds right across the country have many attributes in common, of which multiple primary burial in the sitting (or flexed?) position is areally universal, together with other almost universal traits that include sub-floor pit interment, secondary and bundle burial, buffalo offerings, and pole covering of pits. Similar burial artifacts, too, are widely distributed in all forms of mounds (see Table 1). One areal difference, however, is discernible.

The Antler-Souris area is marked off from the rest of the province by its spiral incised ware. Howard (1953) surmises a connection of this pottery with the northward spread of the Southern Cult complex, which he associates with *Busycon* shell gorgets and columellae pendants, sheet copper, incised catlinite, bird-bone whistles and wide bone (antler) bands. These traits are common in the Antler-Souris region, where Montgomery (1908, p. 36-7), however, separates the tumuli containing the spiral incised ware, associated with catlinite pipes and copper, from those marked by marine shell, bone whistle and band, buffalo skulls and skeletons, and connecting earth ridges. Since all the artifact traits, except the pottery, also occur in combination in certain mounds along the Pembina and Assiniboine, it may be that the Southern Cult objects and spiral-incised ware portray two separate influences. 'Unio' shell-marked mounds may represent a third complex (see Table 3). Vickers (1945a: 91) thinks his Sykes mound with 'Unio' shell ornaments differs culturally from his Rock Lake tumuli characterized by a geometric incised vessel. He sees a likeness between Rock Lake mound and village pottery and habitation site ware from the Red River mounds' locality. Neither bone nor copper objects are recorded for these two mound groups, but shell ornaments are prominent in the Red River tumuli. In short, there is a suggestion that the Manitoba mounds reflect different influences, namely those marked by spiral-incised ware, Southern Cult objects, 'Unio' shell ornaments, and probably geometric-incised ware. All the traits, except the spiral ware, cut across areas. The association of effigy-decorated pottery with shell ornaments at the Lowton site (Vickers, 1945a: 91-2) suggests the likelihood of a relationship of the effigy-incised pot from Mound E with Montgomery's marine shell grouping.

On the other hand, the lip treatment of Nickerson's two pots — one in a round mound (Moore group) closely associated with a 'grade' containing a copper bead — implies the probability that 'grades' in the Souris region belong to the same complex as mounds with the spiral-incised ware.

Though there is some evidence of several influences affecting the Manitoba mounds' region, there is little indication that these influences were markedly successive in time. A number of features show that the mounds right across the province are relatively late. As seen above (artifact descriptions, p.       ), most of the ceramic types, except the unknown Fabric-impressed and Plain wares, from neighbouring occupation sites signify a late prehistoric date for the villages. Though evidence of direct association between Nickerson's mound and villages is lacking, a time link is seen in grooved stone mauls (Mounds G, Moore C, and Calf) and in Plains Side-notched points (Lone Mound). Small triangular points (Plains Triangular), also found in Lone, are considered a Late Woodland marker (Wilford, 1955: 135). Southern Cult objects, in the form of engraved *Busycon* shell gorgets, *Busycon* columellae pendants, and sheet copper (Star, Calf, Lone, and Antler-Souris area) are deduced as protohistoric in the Dakotas and Canada (Howard, 1953: 137); probably 17th century in North Dakota (Griffin, pers. comm.). The piece of 'rainbow' designed pottery, from the old sod line beneath Mound R, is of a type dated not earlier than the 17th century (Will and Hecker, 1944: 66). All but one of the skulls in Nickerson's collection are assigned by Dr. L. Oschinsky (pers. comm.) to the Lakotid variety of American Indian, the recognized occupant of the Northern Plains in protohistoric times (Neumann, 1953: 29). The extraneous skull found in Moore C, a 'grade' in the Souris region, is a white man's, which implies historic contact. So does the apparent use of a steel blade and an iron axe associated with round tumuli in the Antler district, and the iron knife blade, considered a non-intrusive find, in Arden mound, an effigy in the Whitemud area. Indications point, therefore, to a late prehistoric setting that extended into historic times for the various mound forms across the province. Nickerson was inclined to think that either the Pembina valley or St. Andrews Locks district was the earliest affected because of the better preservation of wood covering burial pits in the Souris area (MS. Archaeological Evidences: 65-6). He placed "the origin of the culture much earlier than 1640." There is some indication of greater decomposition of burial remains and associated finds in the Red River mounds (Bell, 1885-6: 133-4; Bryce, 1904: 7) and in the lower level interments of Calf (Montgomery, 1910: 55). That the complex died out soon after contact times is indicated by the relative absence of trade goods.

Observations point, therefore, to a mound tradition, probably two to three hundred years old in the Antler-Souris district, which may antedate that period in some of the tumuli of the central region. There is, however, little evidence of marked age differences amongst the mounds to support the concept of the tumuli having derived from successive cultural sources.

Based on his investigations in the central region, MacNeish (1954) places all the Manitoba mounds in the Manitoba focus, which he relates to the Blackduck focus. Wilford (1955: 136) believes that the Blackduck grew out of the Malmo focus of the Mille Lacs aspect. MacNeish (1958: 77) also sees a connection of the Manitoba focus with the Arvilla focus of the Red River aspect. Together, these three foci account for most of the Manitoba traits, excluding effigy and accumulative mounds, clay-plugged eye-sockets, clay floors, and associated fires. All these traits, except the effigy form, are characteristic of the Laurel focus. According to Wilford (1950: 236; 1955: 137) the Blackduck focus succeeded the Laurel focus in the Rainy River area, where the Blackduck people practised the peculiar Laurel burial traits of skull mutilation and associated fires. Perhaps a Laurel-modified Blackduck burial culture spread northwest into the St. Andrews Locks area, whence it proceeded west along the Assiniboine.

Alternatively, or perhaps about the same time, a culture derived from the Arvilla focus, with antecedents in the Effigy culture and perhaps also in the Malmo focus, travelled north up the Red River. Such a movement could account for the traits in the Arden area, where artifacts identical with the Split Rock Creek mounds in South Dakota (believed to be related to the Red River aspect) have been found.

The summation of traits, exclusive of buffalo remains, found in such mounds as Calf and others with Southern Cult characteristics are seen directly south of Manitoba in northeastern North Dakota. The spiral-incised pottery is also found in this region, amongst associations duplicating the Souris area. Similarly, typical Southern Cult shell and bone objects are not reported in mounds containing the spiral ware, which seem to be concentrated in Ramsey county north of Devils Lake (Montgomery, 1906). Perhaps the spiral ware represents a related neighbouring culture of the Arvilla focus. Griffin (1946: 70) recognizes a relationship between the Devils Lake sites and the Arvilla focus, but he considers the former distinct enough, on the basis of its pottery, to be a separate cultural unit, which he suggests be called the Devils Lake focus. He believes this complex is later than the Arvilla focus, probably mid-17th century. This time is compatible with the presumed age of the Souris mounds.

The question arises whether Devils Lake influenced southern Manitoba or vice versa. Nickerson wrote: "I am of the opinion that the cultural affiliation (of the mound builders) will be found towards the upper Red River, in the region bordering Lake Traverse and Big Stone Lake, and thence east through central Minnesota to the Mississippi.... Indications are that the earliest incursion of these people into Manitoba was in the Pembina valley or the region of St. Andrews Locks" (MS. Archaeological Evidences: 65-6). He further remarks, "I gathered the impression that the culture I was studying originated somewhere east of Manitoba and moved over the province west to southward, extending from the north into North Dakota, not from North Dakota into Manitoba."



In view of the distribution of birch-bark baskets, *Busycon* gorgets, and the incised mortuary ware, it seems most likely that the Antler-Souris district and some areas of the Pembina region were influenced lastly from North Dakota. It is conceivable, however, that Southern Cult traits could have been imposed on burial mound cultures already established. Until there is evidence that the uniquely incised spiral ware complex, with connections as far south as Big Stone Lake and antecedents in the earlier Arvilla focus, travelled west across the province (e.g., along the Pembina, by-passing Devils Lake), it must be concluded that the Souris area was influenced lastly from North Dakota.

It seems probable, therefore, that the southern Manitoba mounds were introduced from two directions, initially via the Red River (from the south and possibly also from north Minnesota via the Rainy River) and then west, and later from North Dakota into the Souris and Pembina areas. There is a hint that the people responsible belonged to two closely related cultural groups with a common ancestry in the Arvilla focus.

MacNeish's (1958) contention that the Assiniboine were the authors of the Manitoba focus, to which he relates the burial mounds, has been questioned by Evans (1961) and Forbis (1961: 253). Forbis points out that ethnographic data refute an Assiniboine association with the A.D. 1000-1350 date for the Manitoba focus in the Red River region. Evans claims, with justification, that it is not clear that the burial customs described by Alexander Henry in 1776 (Bain, 1901: 309), with which MacNeish (1954) identifies the burial mound traits, refer definitely to the Assiniboine. Actually, the traits outlined could be applied to a Chippewa ceremony, the only interment of which Henry gives an eye-witness account (Bain, 1901: 143), except that the Chippewa were not in the habit of placing the body in a sitting position, a practice more clearly attributed to the Assiniboine in the journal of Henry the younger (Coues, 1897: 521). Neither of the Henrys specifically records the burial mode of the Plains Cree. "In their religious notions, as well as in their dress, arms, and other particulars, there is general agreement between the Osinipouille and the Cristineaux" (Bain, 1901: 305), but whether this also applies to their mortuary customs is unknown. It is noted that prehistoric and historic burials in Manitoba attributed archaeologically to the Cree are not under mounds (MacNeish, 1958: 18, 20-21, 71). By the middle of the 19th century, however, the Assiniboine must have changed their burial habits to scaffold exposure of their dead (Denig, 1930: 573-6; DeSmett in Bushnell, 1927: 46).

The Assiniboine are chronicled as having moved out of Minnesota in the early 17th century to the Lake of the Woods and Lake Nipigon areas, where they formed connections with the Cree. From there they migrated to Lake Winnipeg, whence they spread west along the Assiniboine and Saskatchewan rivers (Bushnell, 1927: 42; Lowie, 1910: 7). The fur trader Denig, who knew the tribe intimately, wrote in 1854 (Hewitt, 1930: 377, 380) that at the earliest date known the Assiniboine inhabited the country "about

the head of St. Peters (Minnesota), Des Moines, Lac du Diable, and Lac qui Parle," i.e., from Devils Lake to the vicinity of Split Rock Creek. Then the Sioux nation (of which the Assiniboiné were a part) occupied all the land between the Mississippi and the Missouri from Big Sioux River in the south to the head of James River and Devils Lake in the north; whereas the Teton Sioux resided west of the Missouri (Denig, 1930: 395-6). (Bushnell, 1927: 29-30, places the Teton Sioux at Pierre, South Dakota.) Denig further writes that the Assiniboiné separated from the Sioux in 1760 (a date Denig's editor claims is too late, as the Assiniboiné were known to the Jesuit missionaries in Canada a hundred years earlier). In that year one group went north to take possession of uninhabited territory near the Saskatchewan and Assiniboiné rivers. After 1777 the rest of the Assiniboiné, presumably the southern division of the tribe (Denig, 1930: 396; Bushnell, 1927: 42), migrated to the upper Missouri. In the early 19th century, Assiniboiné territory, extending west from the Red River, included Manitoba from the Assiniboiné south, southern Saskatchewan and Alberta, northeastern Montana, and part of northern North Dakota. "The younger Henry defines the Assiniboiné country as beginning at the Hair Hills, near Red River, running west along the Assiniboiné, from thence to the junction of the northern and southern branches of the Saskatchewan, up the former branch to Fort Vermilion, then extending due south to Battle River and southeast to the Missouri, down the Missouri almost as far as the Mandan villages, and ultimately back to the Hair Hills again" (Lowie, 1910: 7).

The known territory of the Assiniboiné and their recorded burial customs at the time of initial white contact is, therefore, in accordance with the area of dispersion, traits, and presumed age of the mounds. Furthermore, from historic evidence it is possible these mound-bearing people entered Manitoba from more than one direction. This would tie in with the slim archaeological findings.

Could it be construed that Denig's informant was not wrong and that there were two northward movements of the Assiniboiné, a century apart, that entered Manitoba separately about the same time via the Red and Rainy rivers? Linguistically it seems probable that the Assiniboiné were originally part of the Yanktonai, and it is possible the latter inhabited the headwaters of the Mississippi, whence the Assiniboiné are presumed to have moved to the Lake of the Woods (Bushnell, 1927: 42). The rest of the Yanktonai apparently travelled (probably at the time of the split) via the Minnesota (?) to the region of Lake Traverse, where they were living in the early 19th century (Bushnell, 1927: 27). Perhaps a remaining body of Assiniboiné followed the same route, continued down the Red River and up the Sheyenne, and established themselves in northeastern North Dakota, eventually (1760?) to move into Manitoba. Since the Souris spiral ware has not been found in the south-central region of Manitoba, it seems appropriate to associate this pottery with the movement involved in the third and

final split (post 1777?), that of the presumed southern division of the Assiniboiné, which the ware traces as moving up the Sheyenne to Devils Lake.

Perhaps the middle 17th–18th centuries is late for these movements, but whether the Manitoba mounds can be linked to a Manitoba focus dating back to A.D. 1000 (MacNeish, 1958) or whether the Blackduck-related culture was introduced to Manitoba by a pre-Assiniboiné Algonquin people (Evans, 1961: 274) cannot be ascertained from Nickerson's data.

In summary, the Souris district spiral ware differentiates that area from the rest of the southern Manitoba mounds' region, which is otherwise marked by widespread dominant characteristics that appear related in time across the province. However, certain traits that cut across areas suggest the possibility that the mounds were introduced from different directions out of cultures derived from earlier Minnesota foci. Basically the complex seems to have stemmed from the Arvilla focus, with antecedents in the Malmo and Effigy cultures. The Laurel focus is thought to have influenced a movement via the Rainy River, whereas the Southern Cult is associated with an impetus directly out of North Dakota. The people responsible are believed to be the northern and southern divisions of the late prehistoric Assiniboiné, whose traditions, territory, and burial customs in early historic times are compatible with the distribution, probable age, and traits of the mounds.

It is likely that the Manitoba burial complex extends into southern Saskatchewan. A spiral-incised pot was found at Kyle (Wedel, 1961: 221), and a burial mound is described by Montgomery (1908: 30) near Halbrite, in the same general region, that had catlinite pipes, *Busycon* shell and bone beads, and a piece of metal, "possibly a copper alloy." Comparatively speaking, though, the mounds seem to thin out west of the eastern Dakotas (Wedel, 1961: 215).

In conclusion, it appears that the Manitoba tumuli form part of the northwestern periphery of the burial mound complex that on the Northern Plains evolved from a coalescence of earlier Minnesota cultural forms, whose traits ultimately stem from the southeast. It certainly seems that the concept of the effigy mound forms derives indirectly from southern Wisconsin, the recognized centre of the Effigy Mound culture. Considered an indigenous development resulting from Middle Woodland influences (Wittry, 1959: 115), this culture is known to have spread into adjoining states, including Minnesota.

The mixed ancestry of the Manitoba mound characteristics signifies a burial institution not peculiar to the Assiniboiné alone. There is historic evidence that the Missouri followed similar practices, including depositing the deceased with personal possessions in jug-shaped pits; animal sacrifice; log-covered pit; earth mounds over logs; and grave-side fires (Bushnell, 1927: 64). Basically, these customs are a mode of disposal of the dead signifying a belief in an afterlife, as indicated by mortuary accompaniments.

Former investigators have been reluctant to assume that *all* the mounds of Manitoba (Vickers, MS., 1945: 8) and of northeastern North Dakota (Wedel, 1949: 332) were, respectively, "the work of a single cultural unit" of "a late horizon." This writer suggests that they were the work, during the late prehistoric period, of closely related peoples influenced by accumulated traits that reach back to Middle Woodland times.

## REFERENCES

- Bain, James (ed.) (1901).  
Alexander Henry's Travels and Adventures in Canada and the Indian Territories. George N. Morang & Company, Ltd., Toronto.
- Bell, D.N. (1885-6).  
The Mound Builders in Canada. Proc. of the Can. Institute, Vol. IV, p. 131-7.
- (1933). Prehistoric Man in Manitoba. Winnipeg Free Press, January 14, 1933.
- Bennett, John W. (1942).  
W.B. Nickerson—Pioneer in Scientific Archaeology. Am. Antiquity, Vol. VIII, No. 1, p. 122.
- (1945). Archaeological Explorations in Jo Davies County, Illinois. Univ. of Chicago Press.
- (1952). The Prehistory of the Northern Mississippi Valley. Archaeology of Eastern United States, ed. James B. Griffin, Univ. of Chicago Press, p. 108-23.
- Bryce, George (1904).  
Among the Mound Builders Remains. The Historical and Scientific Society of Manitoba, Trans. No. 66.
- Bushnell, David I., Jr. (1927).  
Burials of the Algonquian, Siouan, and Caddoan Tribes West of the Mississippi. Bur. of Am. Ethnol., Bull. 83.
- Comfort, A.J. (1873).  
Indian Mounds near Fort Woodsworth, Dakota Territory. Ann. Rept. of the Smiths. Inst. for 1871, p. 389-402.
- Cooper, Paul L. (1958).  
Archaeological Investigations in the Heart Butte Reservoir Area, North Dakota. River Basin Surveys Papers, No. 9, Bur. of Am. Ethnol., Bull. 169, p. 1-40, Washington.
- Coues, Elliott (ed.) (1897).  
New light on the Early History of the Greater Northwest. The Manuscript Journal of Alexander Henry and of David Thompson 1799-1814. Francis P. Harper, New York.
- Denig, Edwin Thompson (1930).  
Indian Tribes of the Upper Missouri. Edited with notes and biographical sketch by J.N.B. Hewitt. 46th Ann. Rept., Bur. of Am. Ethnol. 1928-1929, Washington.
- Evans, G. Edwards (1961).  
Prehistoric Blackduck-Historic Assiniboine: A Reassessment. Plains Anthropologist, Vol. 6, No. 14, p. 271-5.
- Forbis, Richard G. (1961).  
MacNeish: An Introduction to the Archaeology of Southeast Manitoba, Am. Antiquity, Vol. 27, No. 2.

- Griffin, James B. (1946).  
Cultural Change and Continuity in Eastern United States Archaeology. Man in Northeastern North America, ed. Frederick Johnson, Papers of the Robert S. Peabody Foundation for Archaeology, Vol. 3, p. 37-95.
- Gunn, Donald (1868).  
Indian Remains Near the Red River Settlement, Hudson's Bay Territory. Ann. Rept. of the Smiths. Inst. for 1867, p. 399-400, Washington.
- Hewes, Gordon W. (1949).  
Burial Mounds in the Baldhill Area, North Dakota, Am. Antiquity, Vol. XIV, No. 4, pt. 1, p. 322-8.
- Hewitt, J.N.B. (ed.) (1930).  
Indian tribes of the Upper Missouri, by Edwin Thompson Denig. Edited with notes and biographical sketch. 46th Ann. Rept., Bur. of Am. Ethnol. 1928-1939, Washington.
- Howard, James (1953).  
The Southern Cult in the Northern Plains. Am. Antiquity, Vol. XIX, No. 2, p. 130-8.
- Kehoe, Alice B. (1959).  
Ceramic Affiliations in the Northwestern Plains. Am. Antiquity, Vol. 25, No. 2, p. 237-46, October.
- Keslin, Richard O. (1958).  
A Preliminary Report of the Hahn (Dg 1 and Dg 2) and Horicon (Dg 5) sites, Dodge County, Wisconsin. *The Wisconsin Archaeologist*, Vol. 39, No. 4, Wisconsin Archaeol. Soc., Milwaukee, Wisconsin, 1958.
- Lewis, T.H. (1886).  
Mounds on the Red River of the North. Am. Antiquity and Oriental J., Vol. VIII, No. 6, p. 369-71.
- Lowie, R.H. (1910).  
The Assiniboine. Anthropological Papers of the American Museum of Natural History, Vol. 4, pt. 1, Am. Mus. of Nat. Hist., New York.
- MacNeish, Richard S. (1954).  
The Stott Mound and Village, Near Brandon, Manitoba. Ann. Rept., Nat. Mus. Canada for the fiscal year 1952-53, Bull. 132, p. 20-65.
- (1958). An Introduction to the Archaeology of Southeastern Manitoba. Nat. Mus. Canada, Bull. 157.
- MacNeish, R.S., and K.H. Capes (1958).  
The United Church Site near Rock Lake in Manitoba. Anthropologica, No. 6, p. 119-53.
- McCharles, A. (1887).  
The Mound Builders of Manitoba. Am. J. of Archaeol., Vol. 3, No. 1 and 2, p. 70-4, Baltimore.
- Montgomery, Henry (1906).  
Remains of Prehistoric Man in the Dakotas. *The American Anthropologist*, Vol. VIII, p. 640-51.
- (1908). Prehistoric Man in Manitoba and Saskatchewan. *The American Anthropologist*, Vol. X, p. 33-40.
- (1910). Calf Mountain in Manitoba. *The American Anthropologist*, Vol. XII, p. 49-57.

- Mulloy, William (1942).  
The Hagen Site. University of Montana Publications in the Social Sciences, No. 1.
- Neumann, George K. (1952).  
Archaeology and Race of the American Indian. Archaeology of the Eastern United States, ed. James B. Griffin, Univ. of Chicago Press, p. 13-34.
- Nickerson, W.B. (1908).  
Stone Graves of Northwestern Illinois. Records of the Past, Vol. VII, pt. 1, p. 52-8.
- (1908a). Mounds of Northwestern Illinois. Records of the Past, Vol. VII, pt. 2, p. 85-95.
- (1911). The Mound Builders: A Plea for the Conservation of the Antiquities of the Central and Southern States. Records of the Past, Vol. X, p. 336-9.
- (1912). Mounds at Albany, Illinois. Records of the Past, Vol. XI, Pt. 1, p. 69-81.
- (1914). On an Archaeological Reconnaissance of Manitoba. Summary Report of the Geological Survey for the Calendar year 1912. Dept. of Mines, p. 504.
- (1914a). On Archaeological Research in the Valley of the Souris River, Southwestern Manitoba, 1913. Summary Report of the Geological Survey for the calendar year 1913, Dept. of Mines, p. 387.
- Over, W.H., and Elmer E. Meleen (1941).  
A Report on an Investigation of the Brandon Village Site and the Split Rock Creek Mounds. Archaeological Studies, Circular No. III, Univ. of South Dakota Mus.
- Rand, W.H. (1941).  
The Rosser Mound. Manitoba Calling, Vol. 5, No. 9, p. 8-10.
- Ridgway, Robert (1912).  
Color Standards and Color Nomenclature. Privately published by author, Washington, D.C.
- Rowe, Chandler W. (1956).  
The Effigy Mound Culture of Wisconsin. Milwaukee Public Museum, Pub. in Anthropol., No. 3.
- Shetrone, Henry Clyde (1931).  
The Mound Builders. D. Appleton & Company, New York and London.
- Smith, Harlan L. (1915).  
Field Work. Summary Report of the Geological Survey for the calendar year 1914. Dept. of Mines, p. 178.
- (1916). Field Work and Research. Summary Report of the Geological Survey, Dept. of Mines for the calendar year 1915, p. 276.
- Smithsonian Institution (1960).  
River Basin Surveys, Missouri Basin Project. Archaeol. Prog. Rept. No. 5, Field Season.
- Thomas, C. (1894).  
Report on the Mound Explorations of the Bureau of Ethnology. Bur. Am. Ethnol., Twelfth Ann. Rept.

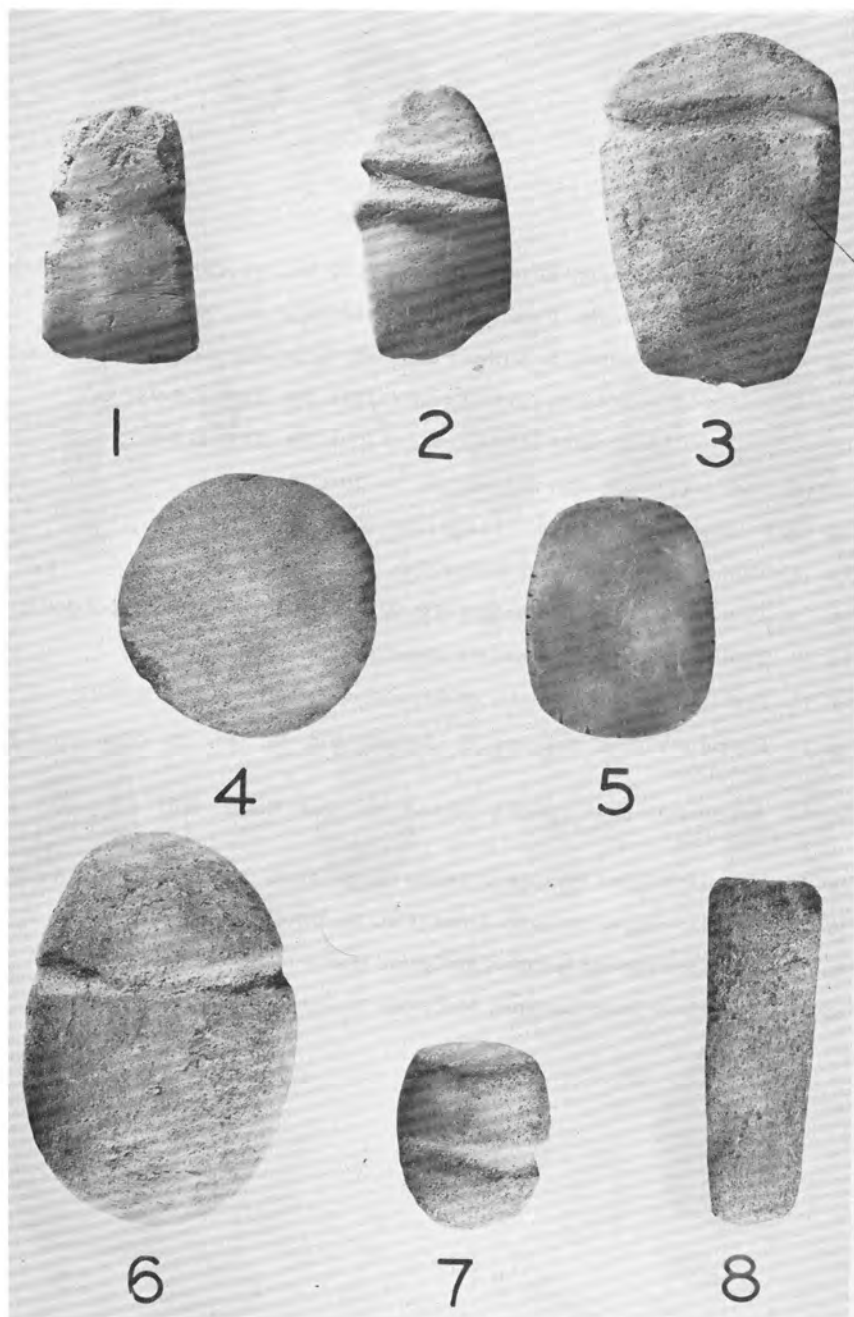
- Vickers, Chris (1945).  
Archaeological Report, 1945. The Historical and Scientific Society of Manitoba, typed MS. in files of Nat. Mus. Canada.
- (1945a). Archaeology in the Rock and Pelican Lake Area of South-Central Manitoba. *Am. Antiquity*, Vol. XI, pt. 2, p. 88-94.
- (1947). Burial Traits of the Headwaters Lake Aspect in Manitoba. *Am. Antiquity*, Vol. 13, No. 2, p. 109-14.
- Wedel, Waldo R. (1949).  
Some Provisional Correlations in Missouri Basin Archaeology. *Am. Antiquity*, Vol. XIV, No. 4, pt. 1, p. 328-39.
- (1961). Prehistoric Man on the Great Plains. Univ. of Oklahoma Press, Norman, Oklahoma.
- Wettlaufer, Boyd (1955).  
The Mortlach Site in the Besant Valley of Central Saskatchewan. *Anthrop. Ser. No. 1*, Dept. Nat. Res., Regina, Saskatchewan.
- Wilford, Lloyd A. (1944).  
The Prehistoric Indians of Minnesota. *Minnesota History*, 25: 153-7.
- (1944a). The Prehistoric Indians of Minnesota: The Mille Lacs Aspect. *Minnesota History*, 25: 329-41.
- (1945). The Prehistoric Indians of Minnesota: The Headwaters Lake Aspect. *Minnesota History*, 26: 312-29.
- (1950). The Prehistoric Indians of Minnesota: Some Mounds of the Rainy River Aspect. *Minnesota History*, 31: 163-71.
- (1950a). The Prehistoric Indians of Minnesota: The McKinstry Mounds of the Rainy River Aspect. *Minnesota History*, 31: 231-7.
- (1955). A Revised Classification of the Prehistoric Cultures of Minnesota. *Am. Antiquity*, Vol. XXI, No. 2, p. 130-8.
- Will, George F. (1921).  
An Unusual Group of Mounds in North Dakota. *Am. Anthrop.*, Vol. XXIII, No. 2, p. 175-9.
- (1933). A Résumé of North Dakota Archaeology. *North Dakota Historical Quarterly*, Vol. VII, No. 2 and 3, p. 150-61.
- Will, George F., and Thad C. Hecker (1944)  
The Upper Missouri River Valley Aboriginal Culture in North Dakota. *North Dakota Historical Quarterly*, Vol. XI, No. 1 and 2, p. 5-126.
- Wittry, Warren L. (1956).  
Kolterman Mound 18 Radio Carbon Date. *The Wisconsin Archaeologist*, Vol. 37, No. 4, p. 133-4, Wis. Archaeol. Soc., Milwaukee.
- (1959). The Wakanda Park Mound Group, Dn 1, Menomonie, Wisconsin. *The Wisconsin Archaeologist*, Vol. 40, No. 3, p. 95-115, Wis. Archaeol. Soc., Milwaukee.



PLATE I

(about  $\frac{1}{4}$  natural size)

- Fig. 1. Stone axe, Elliot Farm (Cat. No. NMC X-A-215b)
- Fig. 2. Stone axe, Elliot Village (Cat. No. NMC X-A-336)
- Fig. 3. Stone axe, Sourisford (Cat. No. NMC X-A-85)
- Fig. 4. Griddle stone, Elliot Farm (Cat. No. NMC X-A-216)
- Fig. 5. Coup stone, Mound R (Cat. No. NMC X-A-254)
- Fig. 6. Grooved stone maul, Sourisford (Cat. No. NMC X-A-75)
- Fig. 7. Grooved hammerstone, Sourisford (Cat. No. NMC X-A-83)
- Fig. 8. Stone wedge, Elliot Farm (Cat. No. NMC X-A-214)



## PLATE II

(½ natural size)

- Fig. 1. Thumbnail scraper, Elliot Village, NW. ¼ Sec. 22 (Cat. No. NMC X-A-207)
- Fig. 2. Thumbnail scraper, Foreman Camp, Arden (Cat. No. NMC X-A-422)
- Fig. 3. Thumbnail scraper, S. Antler Plain, NW. ¼ Sec. 15 (Cat. No. NMC X-A-200)
- Fig. 4. End-of-blade scraper, Moore Group C (Cat. No. NMC X-A-234)
- Fig. 5. End-of-blade scraper, Moore Group B (Cat. No. NMC X-A-227)
- Fig. 6. Prismatic blade, Star Mound (Cat. No. NMC X-A-316)
- Fig. 7. Prismatic blade, Elliot Village (Cat. No. NMC X-A-223)
- Fig. 8. Thin flake scraper, Star Mound (Cat. No. NMC X-A-310)
- Fig. 9. Thin flake scraper, S. Antler, NW. ¼ Sec. 15 (Cat. No. NMC X-A-193a)
- Fig. 10. Thin flake scraper, McKenzie Mound (Cat. No. NMC X-A-361)
- Fig. 11. D-shaped scraper, vicinity of Moore Group (Cat. No. NMC X-A-235)
- Fig. 12. Irregular-shaped scraper, S. Antler, NW. ¼ Sec. 15 (Cat. No. NMC X-A-199a)
- Fig. 13. Irregular-shaped scraper, Mound B, Star Mound Hill (Cat. No. NMC X-A-330)
- Fig. 14. Irregular-shaped scraper, Foreman Camp, Arden (Cat. No. NMC X-A-385)
- Fig. 15. Irregular-shaped scraper, Arden (Cat. No. NMC X-A-386a)
- Fig. 16. Crude snub-nosed scraper, McKenzie Mound (Cat. No. NMC X-A-363a)
- Fig. 17. Crude snub-nosed scraper, McKenzie Mound (Cat. No. NMC X-A-363c)

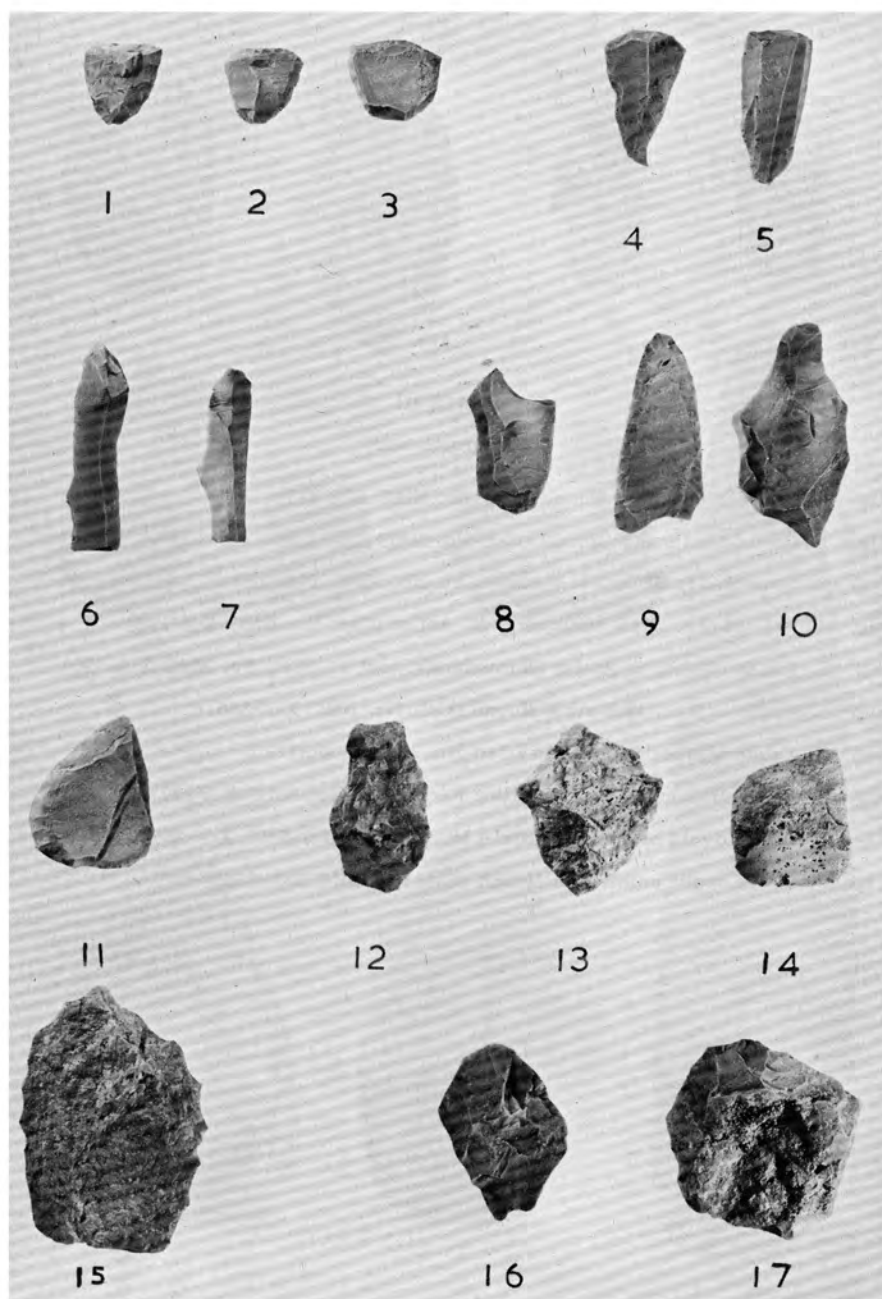
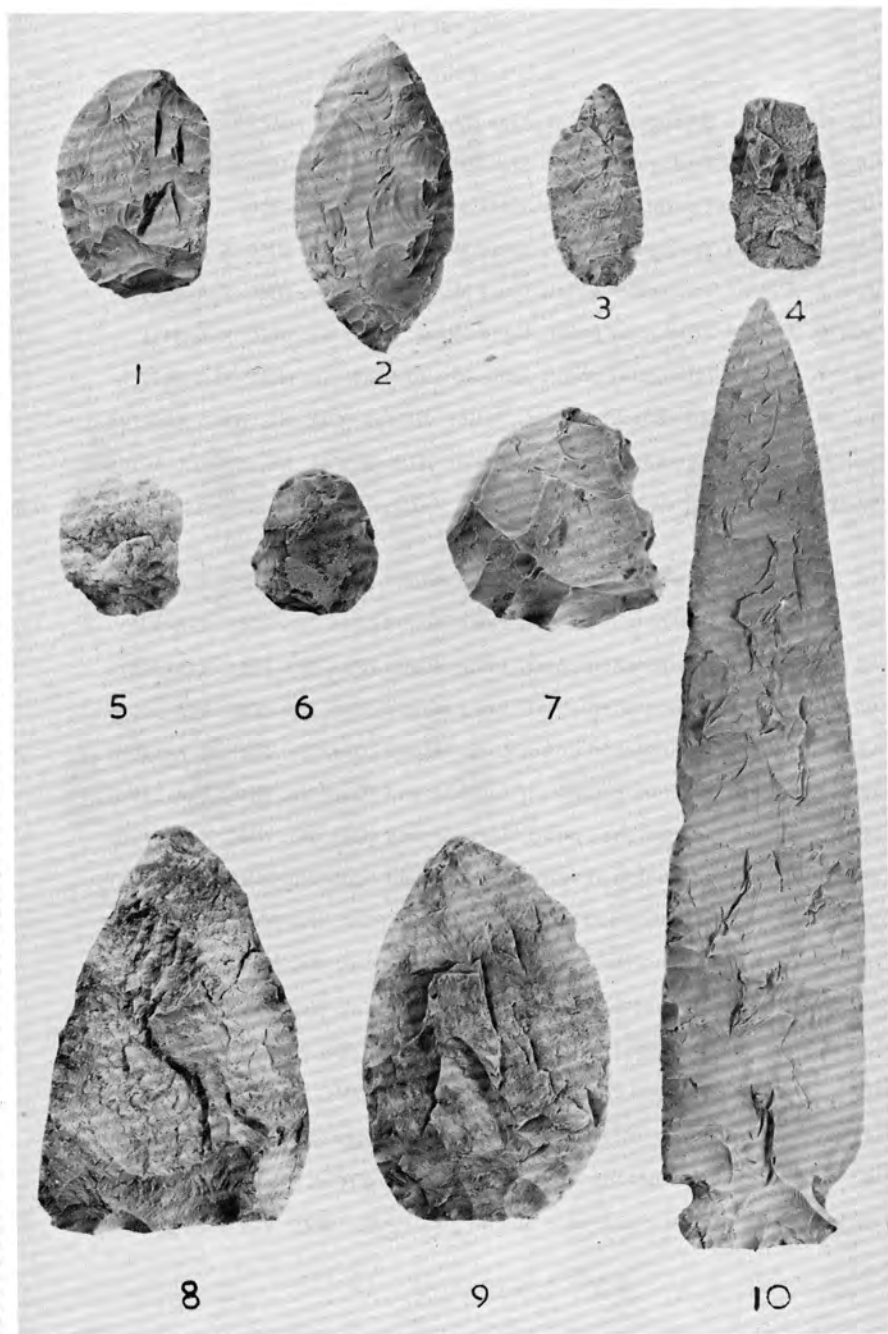


PLATE III

(½ natural size)

- Fig. 1. Ovoid blade, Star Mound (Cat. No. NMC X-A-321)
- Fig. 2. Ovoid blade, Star Mound (Cat. No. NMC X-A-314)
- Fig. 3. Side blade, McKenzie Mound (Cat. No. NMC X-A-365)
- Fig. 4. Side blade, small enclosure, N. Antler (Cat. No. NMC X-A-194)
- Fig. 5. Crude biface, S. Antler Bottomlands, test 11 (Cat. No. NMC X-A-190)
- Fig. 6. Crude biface, McKenzie Mound (Cat. No. NMC X-A-366)
- Fig. 7. Crude biface, Star Mound (Cat. No. NMC X-A-317)
- Fig. 8. Large triangular biface, Elliot Farm (Cat. No. NMC X-A-217)
- Fig. 9. Large ovoid biface, McKenzie Mound (Cat. No. NMC X-A-367)
- Fig. 10. Large spear point, Star Mound (Cat. No. NMC X-A-305)



## PLATE IV

(½ natural size)

- Fig. 1. Plains Triangular point, Star Mound (Cat. No. NMC X-A-307)
- Fig. 2. Plains Triangular point, Star Mound (Cat. No. NMC X-A-309)
- Fig. 3. Aberrant point, Lone Mound (Cat. No. NMC X-A-350)
- Fig. 4. Plains Triangular point, Lone Mound (Cat. No. NMC X-A-338)
- Fig. 5. Plains Triangular point, Lone Mound (Cat. No. NMC X-A-340)
- Fig. 6. Plains Triangular point, Lone Mound (Cat. No. NMC X-A-341)
- Fig. 7. Plains Triangular point, Lone Mound (Cat. No. NMC X-A-342)
- Fig. 8. Plains Side-notched point, Elliot Village (Cat. No. NMC X-A-192a)
- Fig. 9. Plains Side-notched point, Elliot Village (Cat. No. NMC X-A-192b)
- Fig. 10. Plains Side-notched point, S. Antler, NW. ¼ Sec. 15 (Cat. No. NMC X-A-193c)
- Fig. 11. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-347)
- Fig. 12. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-339)
- Fig. 13. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-348)
- Fig. 14. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-349a)
- Fig. 15. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-349b)
- Fig. 16. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-349c)
- Fig. 17. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-349d)
- Fig. 18. Plains Side-notched point, Lone Mound (Cat. No. NMC X-A-349e)
- Fig. 19. Prairie Side-notched point, Star Mound (Cat. No. NMC X-A-307)
- Fig. 20. Prairie Side-notched point, Star Mound (Cat. No. NMC X-A-307)
- Fig. 21. Prairie Side-notched point, Star Mound (Cat. No. NMC X-A-306)
- Fig. 22. Thin corner-removed point, Mound 4 (Cat. No. NMC X-A-198)
- Fig. 23. Leaf-shaped point, Star Mound (Cat. No. NMC X-A-308)
- Fig. 24. Thin narrow point (base only) Elliot Village (Cat. No. NMC X-A-225)
- Fig. 25. Large corner-notched point, near Mound 4 (Cat. No. NMC X-A-197)
- Fig. 26. Thick narrow point, near Mound 3 (Cat. No. NMC X-A-196)

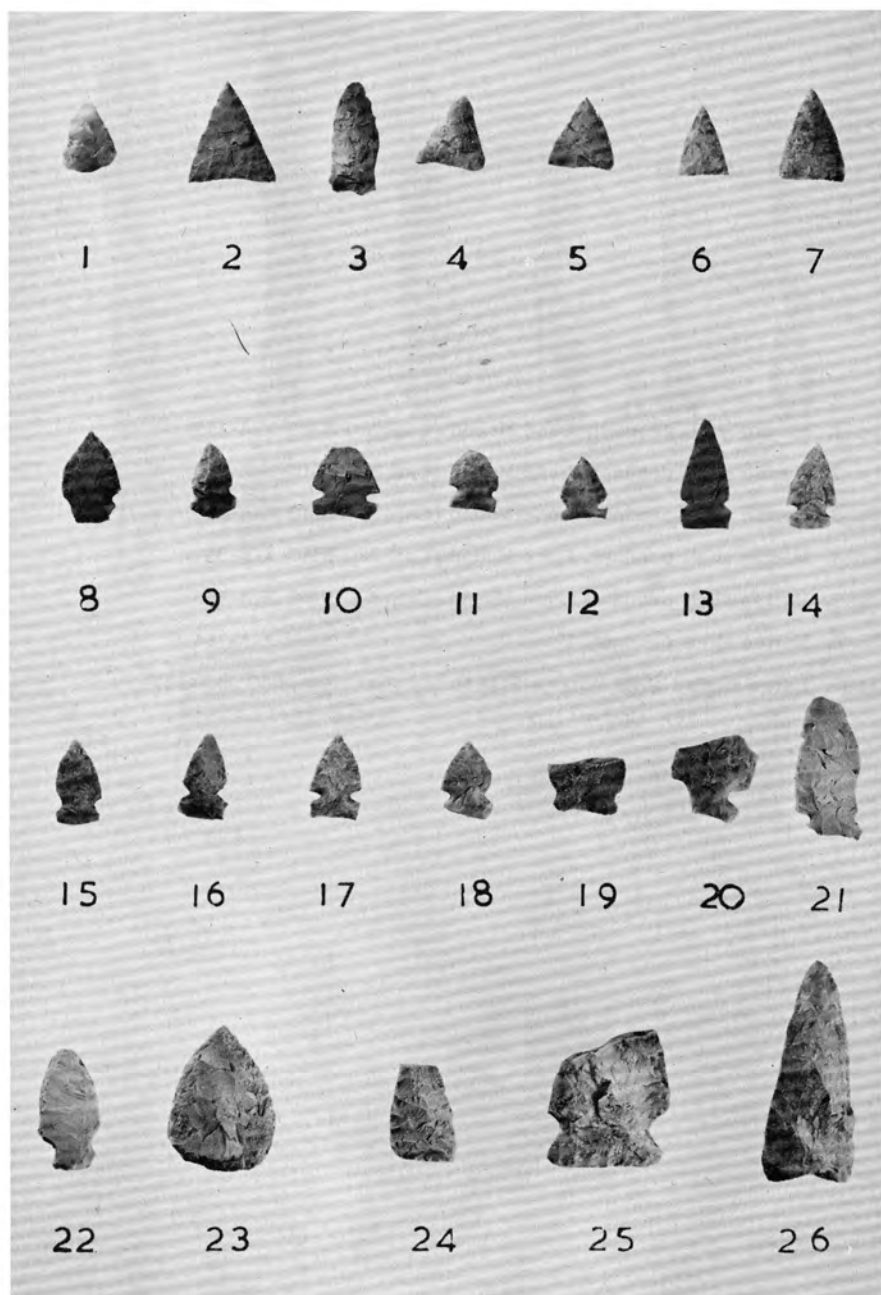




PLATE V

(½ natural size)

- Fig. 1. Marine shell pendant, Lone Mound (Cat. No. NMC X-A-355)
- Fig. 2. Marine shell pendant, Lone Mound (Cat. No. NMC X-A-356)
- Fig. 3. Marine shell pendant, Lone Mound (Cat. No. NMC X-A-351)
- Fig. 4. Marine shell pendant, Lone Mound (Cat. No. NMC X-A-352)
- Fig. 5. Marine shell pendant, Lone Mound (Cat. No. NMC X-A-353)
- Fig. 6. Marine shell pendant, Lone Mound (Cat. No. NMC X-A-354)
- Fig. 7. Large marine shell gorget, Star Mound (Cat. No. NMC X-A-327)

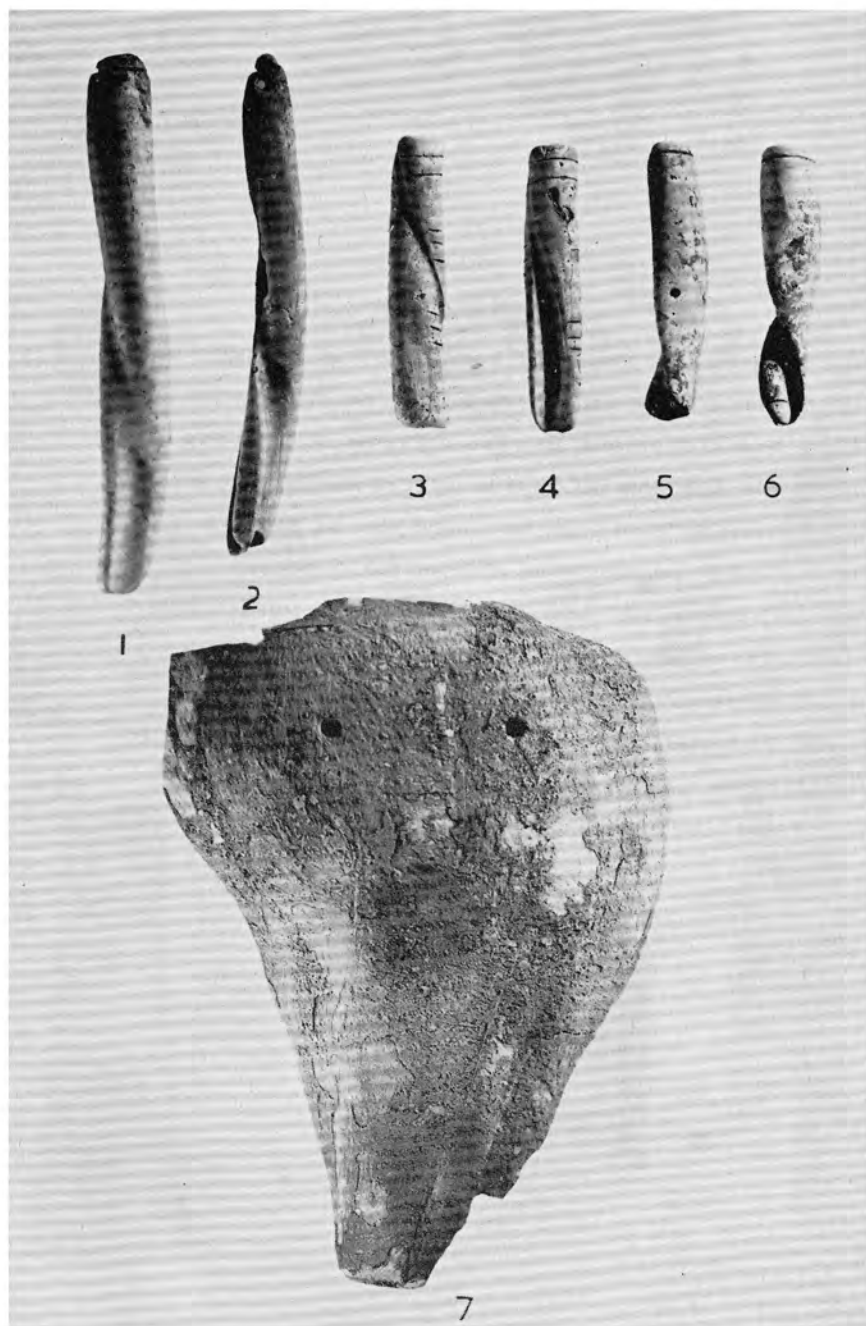


PLATE VI  
( $\frac{1}{2}$  natural size)

- Fig. 1. Small marine shell beads, Lone Mound (Cat. No. NMC X-A-357)
- Fig. 2. Tiny shell pendant, Sims Mound (Cat. No. NMC X-A-72)
- Fig. 3. Tiny shell pendant, Sims Mound (Cat. No. NMC X-A-271)
- Fig. 4. Flat shell ring, McGoirman Mound (Cat. No. NMC X-A-380)
- Fig. 5. Three flat shell rings, Sims Mound (Cat. No. NMC X-A-270)
- Fig. 6. Shell gorget, Sims Mound (Cat. No. NMC X-A-273)
- Fig. 7. Cylindrical shell bead, Star Mound (Cat. No. NMC X-A-326)
- Fig. 8. Two cylindrical shell beads, Sims Mound (Cat. No. NMC X-A-268)
- Fig. 9. Copper celt, Star Mound (Cat. No. NMC X-A-325)
- Fig. 10. Perforated sheet copper, Lone Mound (Cat. No. NMC X-A-343)
- Fig. 11. Copper tube, Moore Group C (Cat. No. NMC X-A-238)
- Fig. 12. Iron knife blade, Arden Mound (Cat. No. NMC X-A-391)

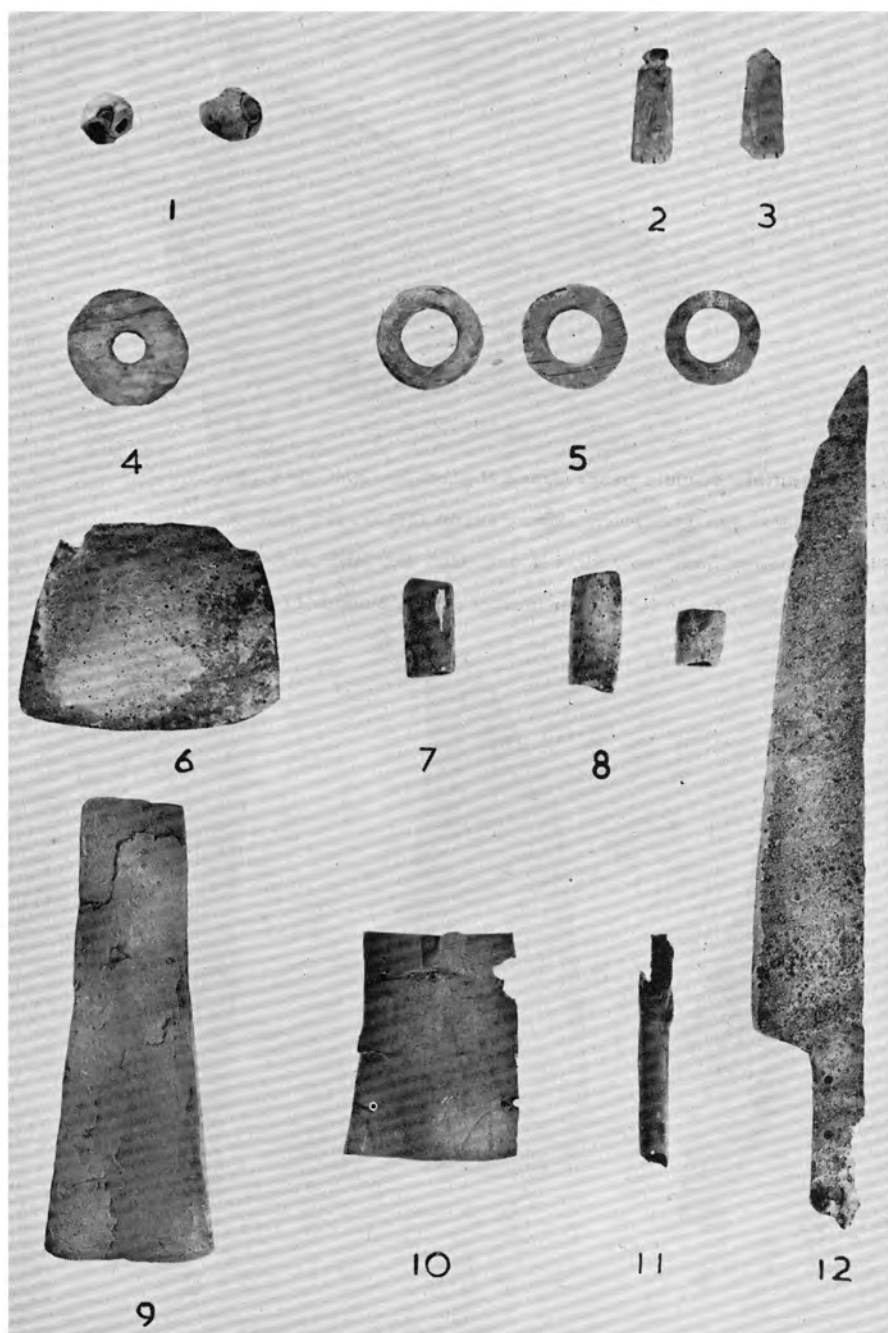


PLATE VII

(½ natural size)

Fig. 1. Buffalo scapula band, Mound H (Cat. No. NMC X-A-245)

Fig. 2. Metatarsus implement, Moore Group C (Cat. No. NMC X-A-239)

Fig. 3. Pointed bone tool, Sims Mound (Cat. No. NMC X-A-267)

Fig. 4. Antler handle for beaver incisor gouge, Mound H (Cat. No. NMC X-A-246)

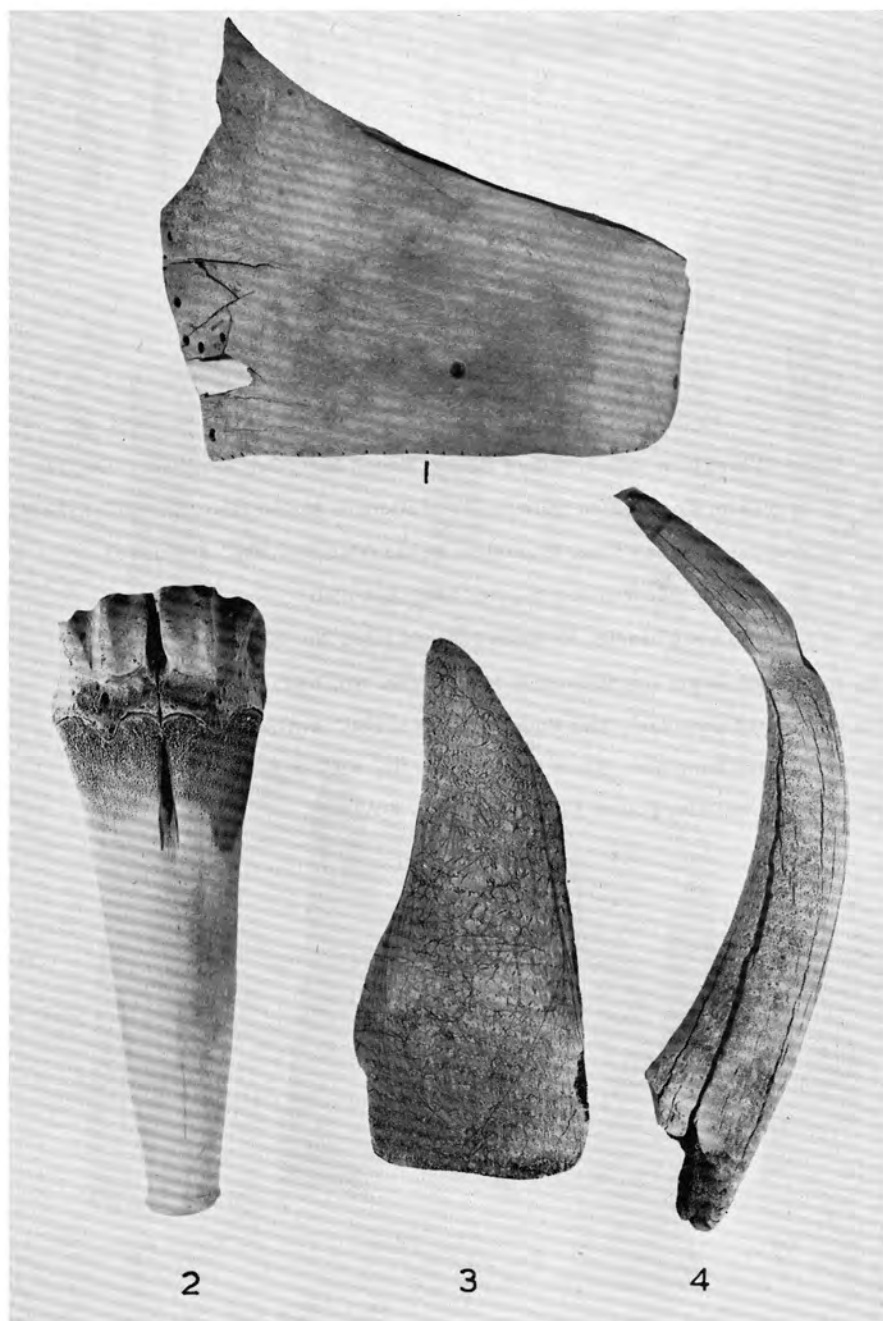
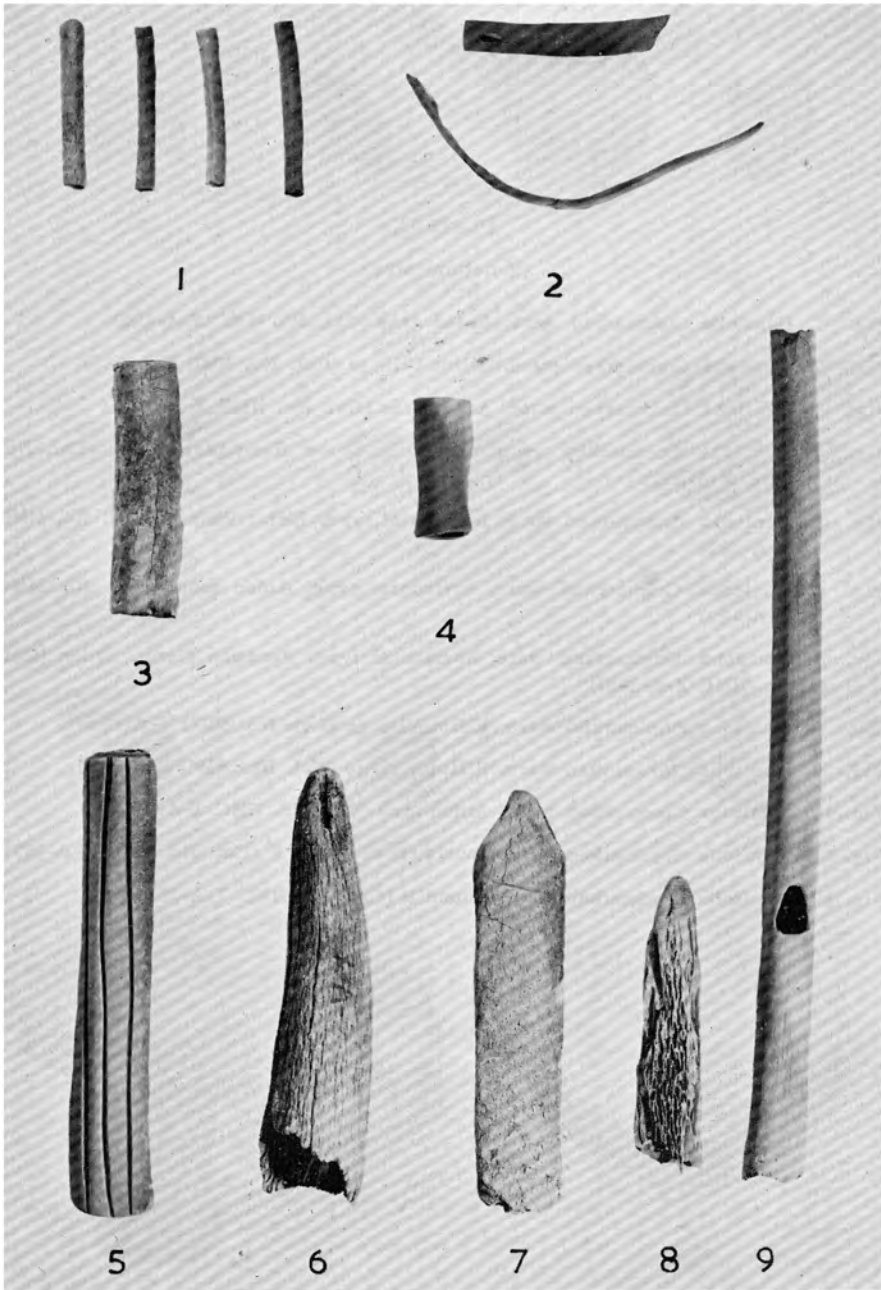


PLATE VIII

( $\frac{1}{2}$  natural size)

- Fig. 1. Small bird-bone tubes, Mound B, Star Mound Hill (Cat. No. NMC X-A-334)
- Fig. 2. Two narrow perforated bone bands, McGorman Mound (Cat. No. NMC X-A-381)
- Fig. 3. Fragment of bone tube, Riverview Mound (Cat. No. NMC X-A-154a)
- Fig. 4. Stone tube, Star Mound (Cat. No. NMC X-A-328)
- Fig. 5. Grooved bone handle, Riverview Mound (Cat. No. NMC X-A-155)
- Fig. 6. Worked antler tip, McGorman Mound (Cat. No. NMC X-A-378a)
- Fig. 7. Pointed bone tool, Star Mound (Cat. No. NMC X-A-301)
- Fig. 8. Pointed bone tool, Heath Mound (Cat. No. NMC X-A-248)
- Fig. 9. Bone whistle, Mound J (Cat. No. NMC X-A-157)





## PLATE IX

(½ natural size)

- Fig. 1. Manitoba Cordmarked ware, Arden Area (Cat. No. NMC X-A-422)
- Fig. 2. Manitoba Cordmarked ware, Elliot Village (Cat. No. NMC X-A-224)
- Fig. 3. Manitoba Cordmarked ware, Arden area (Cat. No. NMC X-A-388d)
- Fig. 4. Manitoba Cordmarked ware, N. Antler, lower flood plain level (Cat. No. NMC X-A-222).
- Fig. 5. Manitoba Cordmarked ware, horizontal type, Elliot Village (Cat. No. NMC X-A-283)
- Fig. 6. Manitoba Cordmarked ware, horizontal type, Arden area. (Cat. No. NMC X-A-422)
- Fig. 7. Manitoba Cordmarked ware, horizontal type, Foreman Camp, Arden (Cat. No. NMC X-A-388f)
- Fig. 8. Manitoba Cordmarked ware, Elliot Village (Cat. No. NMC X-A-2834)
- Fig. 9. Manitoba Cordmarked ware, Elliot Village (Cat. No. NMC X-A-2834)
- Fig. 10. Manitoba Cordmarked ware, Arden area (Cat. No. NMC X-A-388d)
- Fig. 11. Manitoba Cordmarked ware, Souris type, Mound R (Cat. No. NMC X-A-257)
- Fig. 12. Manitoba Cordmarked ware, Mound R (Cat. No. NMC X-A-257)

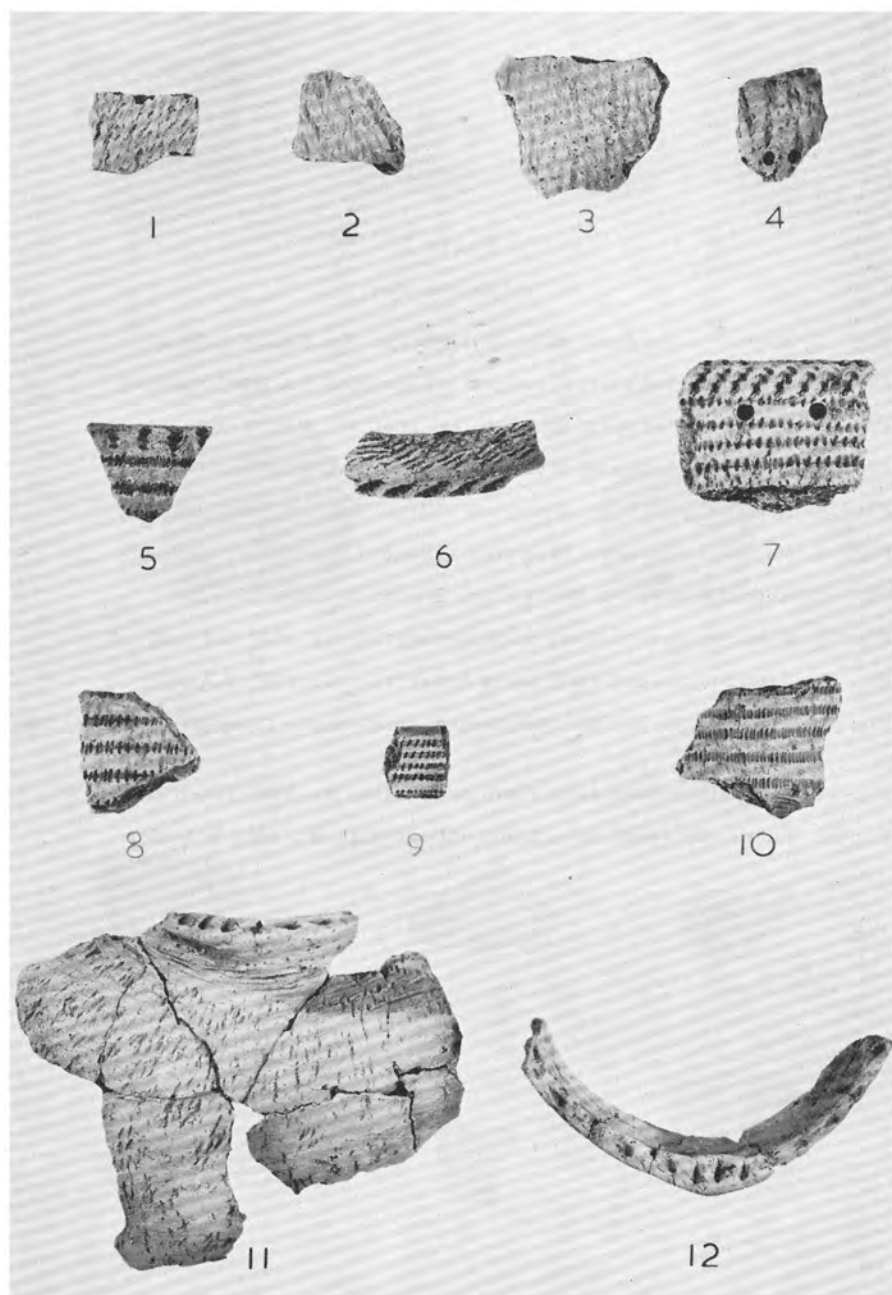


PLATE X

( $\frac{1}{2}$  natural size)

- Fig. 1. Regina Corded ware, Elliot Village (Cat. No. NMC X-A-2834)
- Fig. 2. Regina Corded ware, Riverview Village (Cat. No. NMC X-A-208)
- Fig. 3. Regina Corded ware, Elliot Village (Cat. No. NMC X-A-68)
- Fig. 4. Regina Corded ware, Riverview Village (Cat. No. NMC X-A-208)
- Fig. 5. Regina Corded ware, Riverview Village (Cat. No. NMC X-A-208)
- Fig. 6. Regina Corded ware, Riverview Village (Cat. No. NMC X-A-208)
- Fig. 7. Avery Corded ware, Moore Group B (Cat. No. NMC X-A-230)
- Fig. 8. Fabric-impressed ware, North Antler (Cat. No. NMC X-A-250)
- Fig. 9. Fabric-impressed ware, North Antler (Cat. No. NMC X-A-209)
- Fig. 10. Winnipeg River Fabric-impressed ware, Moore Group B (Cat. No. NMC X-A-231)
- Fig. 11. Fabric-impressed ware, North Antler (Cat. No. NMC X-A-209)
- Fig. 12. Fabric-impressed ware, Elliot Village (Cat. No. NMC X-A-224)

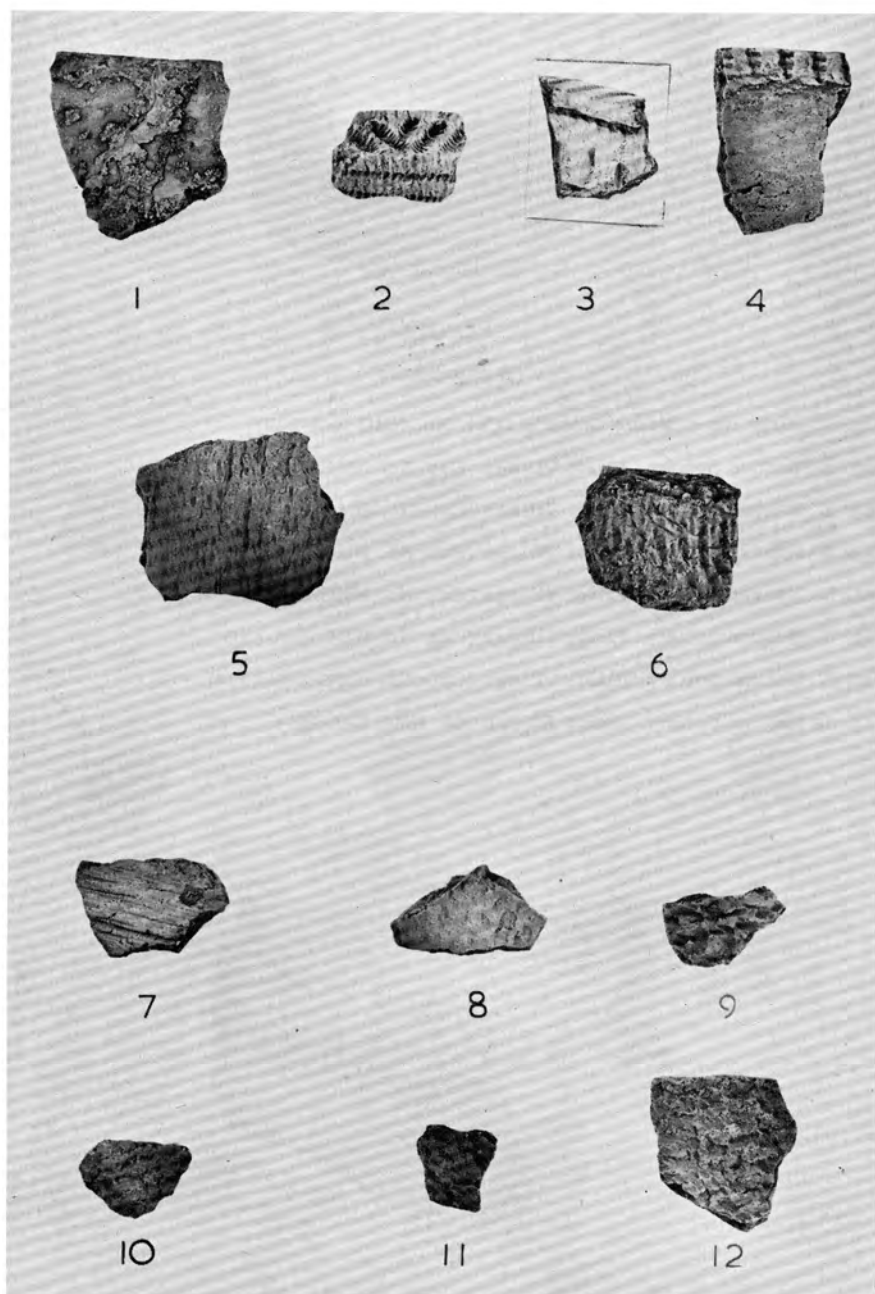


PLATE XI  
( $\frac{1}{2}$  natural size)

- Fig. 1. Plain ware, Moore Group B (Cat. No. NMC X-A-229)  
Fig. 2. Mandan pottery, Elliot Village (Cat. No. NMC X-A-205)  
Fig. 3. Mandan pottery, Elliot Village (Cat. No. NMC X-A-68e)  
Fig. 4. Mandan pottery, Elliot Village (Cat. No. NMC X-A-224)  
Fig. 5. Mandan pottery, Elliot Village (Cat. No. NMC X-A-224)  
Fig. 6. Mandan pottery, Elliot Village (Cat. No. NMC X-A-68f)  
Fig. 7. Mandan pottery, Elliot Village (Cat. No. NMC X-A-2834)  
Fig. 8. Mandan pottery, Mound R (Cat. No. NMC X-A-255)

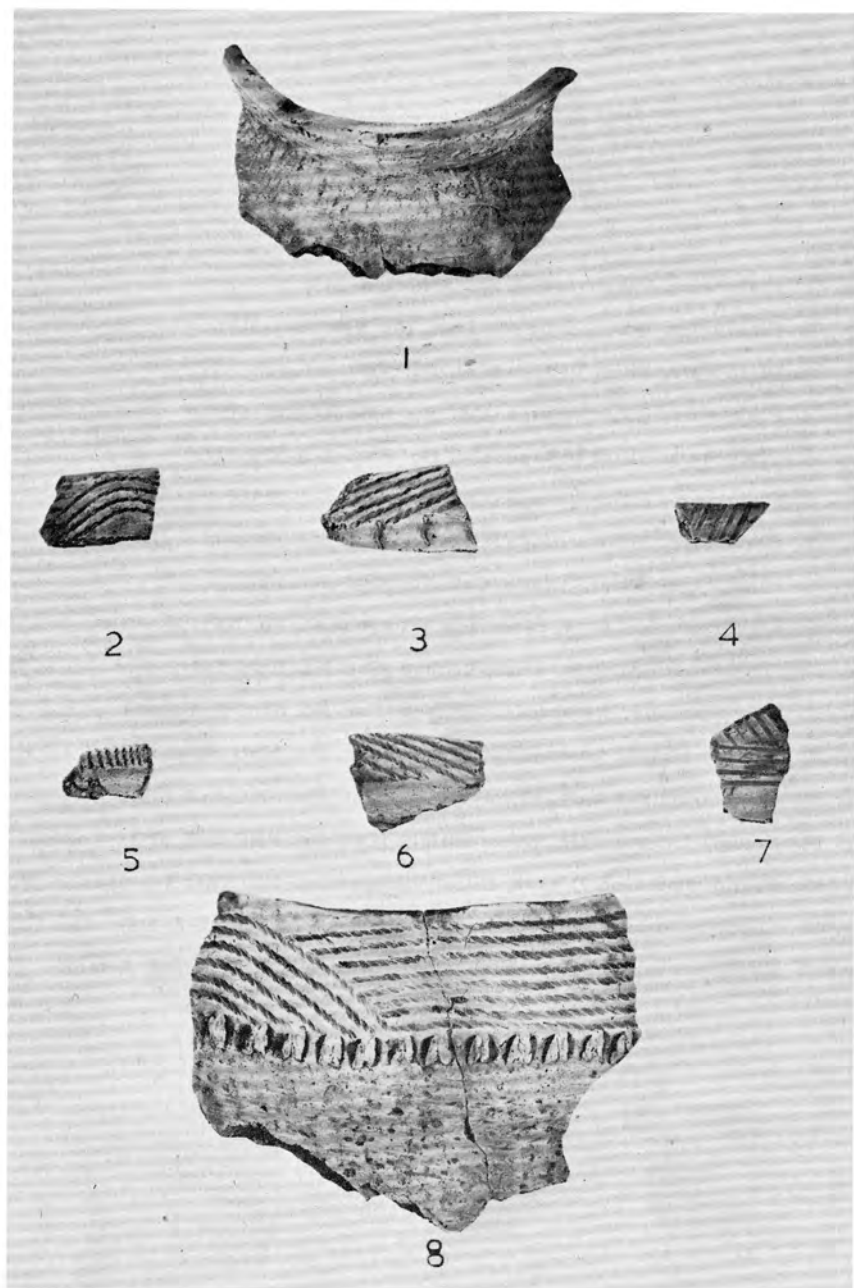


PLATE XII

(½ natural size)

- Fig. 1. Plain ware, Mound J (Cat. No. NMC X-A-203)
- Fig. 2. Plain ware, S. Antler bottom (Cat. No. NMC X-A-210)
- Fig. 3. Plain ware, Elliot Village (Cat. No. NMC X-A-68b)
- Fig. 4. Plain ware, Elliot Village (Cat. No. NMC X-A-2834)
- Fig. 5. Plain ware, Elliot Village (Cat. No. NMC X-A-205)
- Fig. 6. Plain ware, Elliot Village (Cat. No. NMC X-A-205)
- Fig. 7. Plain ware, Elliot Village (Cat. No. NMC X-A-224)
- Fig. 8. Plain ware, Elliot Village (Cat. No. NMC X-A-206)
- Fig. 9. Linear-stamped ware, Riverview Village (Cat. No. NMC X-A-206)
- Fig. 10. Linear-stamped ware, Elliot Village (Cat. No. NMC X-A-205)
- Fig. 11. Linear-stamped ware, Elliot Village (Cat. No. NMC X-A-2835)
- Fig. 12. Crudely-incised ware, Elliot Village (Cat. No. NMC X-A-205)
- Fig. 13. Crudely-incised ware, Elliot Village (Cat. No. NMC X-A-205)
- Fig. 14. Crudely-incised ware, Elliot Village (Cat. No. NMC X-A-205)
- Fig. 15. Fabric-impressed(?) ware, Elliot Village (Cat. No. NMC X-A-68a)
- Fig. 16. Checker-stamped ware, Elliot Village (Cat. No. NMC X-A-205)
- Fig. 17. Rim sherd with protuberances, Elliot Village (Cat. No. NMC X-A-68)

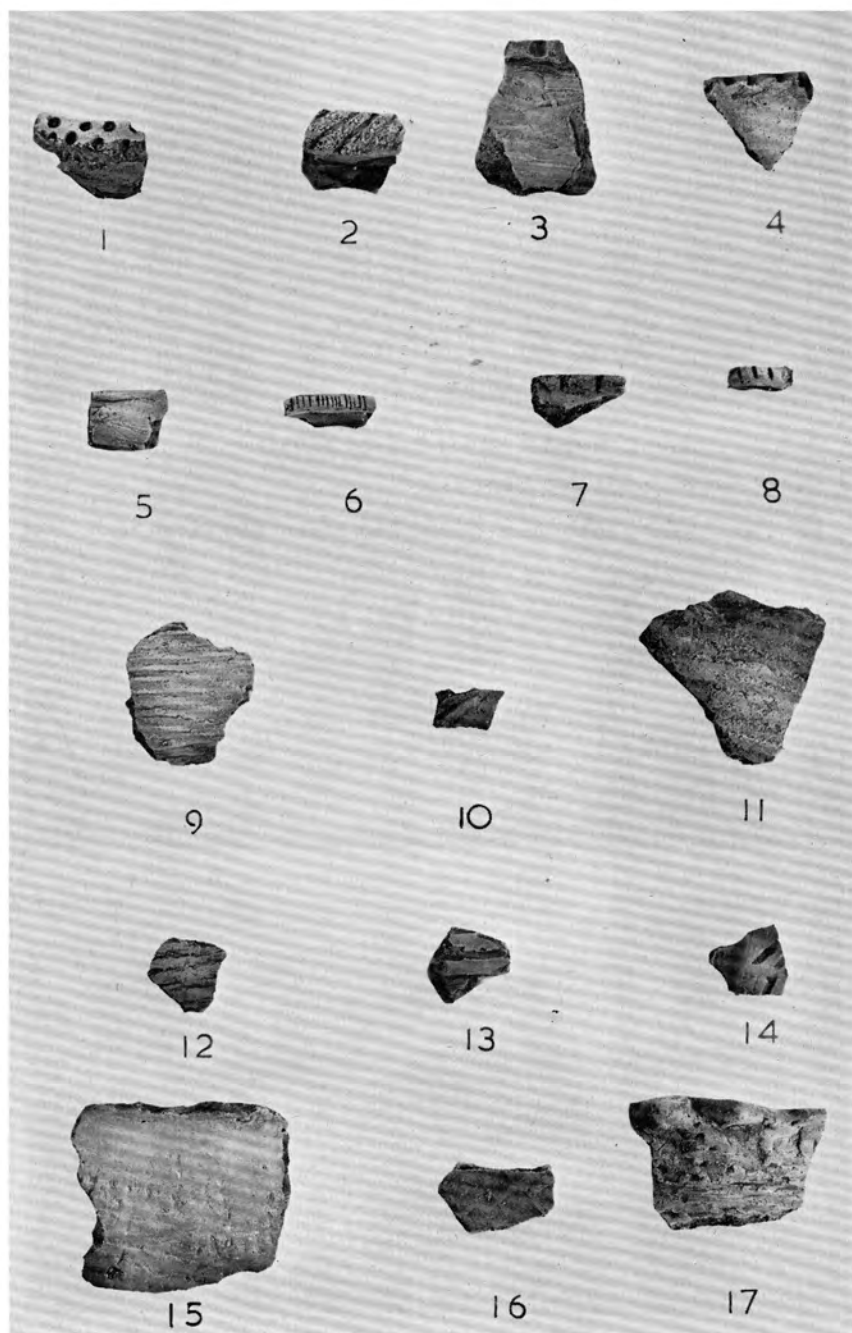




PLATE XIII

Fig. 1. Mound R viewed from the southeast

Fig. 2. Skeleton, Mound 6

Fig. 3. Star Mound, viewed from east at fifty paces



1



2



3

PLATE XIV

Fig. 1. Burial pit in Mound R, showing coup stone with skeleton

Fig. 2. Showing arrow point in human tibia from Pit A, Star Mound



1



2

PLATE XV

Fig. 1. Skeletal material in Pit A, Star Mound

Fig. 2. Arden Mound, viewed from northeast

Fig. 3. Bundle burial, Pit D, Star Mound



1



2



3

PLATE XVI

Fig. 1. Lone Mound Hill, viewed from east at one mile

Fig. 2. Lone Mound, viewed from south-southwest

Fig. 3. Stakes around grave in Lone Mound



1



2



3

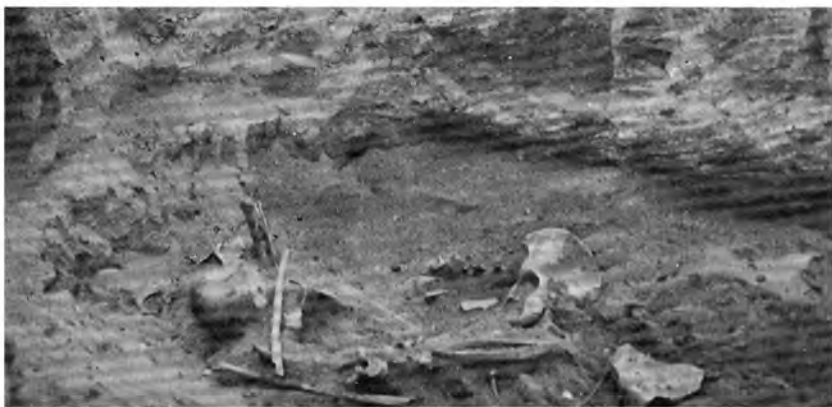


PLATE XVII

Fig. 1. Disturbed skeleton in pit, Lone Mound

Fig. 2. Hill of Indian graves, viewed from half a mile south

Fig. 3. The Southwestern Fidler Mound



1



2

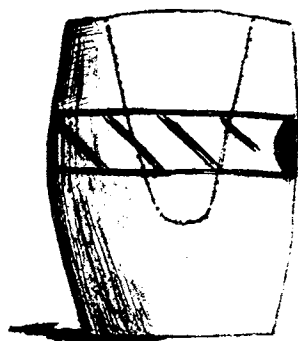


3

PLATE XVIII

Fig. 1. Sketch of limestone pipe from Elliot Village

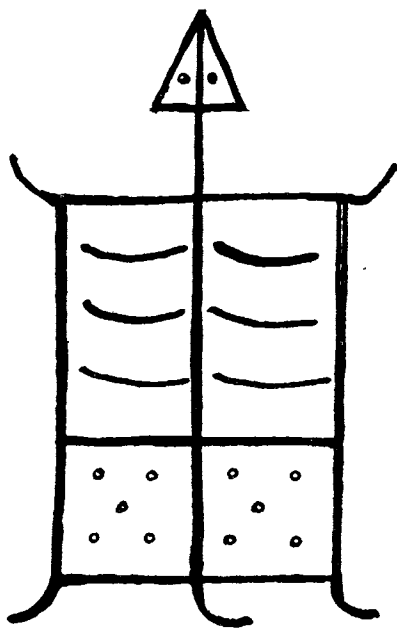
Fig. 2. Sketch of turtle design on pot from Mound E



*Limestone Pipe*

$\frac{1}{1}$

1



*Turtle Design from pot*  
(from memory not an actual sketch)

2

PLATE XIX

(natural size)

Pot (Cat. No. NMC X-A-257) from burial pit under Mound R

Restored by Mr. J.A. Dellaire, National Museum of Canada





## APPENDIX

### DESCRIPTIVE SUMMARY OF SOUTHERN MANITOBA EARTHWORKS

#### Souris River Valley

##### NORTH ANTLER AREA

###### Hut-Rings (Figure 3): Section 33

1. Little or no associated cultural material.
2. No associated fireplace.

###### Pits: Sections 28 and 33

1. Indicated by shallow 10-foot-wide hollows.
2. Dimensions of pits proper, approximately 3 to 4 feet deep, slightly wider diameter.
3. Animal bones associated.
4. Stone slab disc associated.\*

###### Small Enclosure or House-Site (Figure 5): Section 33

1. Shape: oblong, with ellipse on one side.
2. Dimensions and orientation: 70 feet north-south by 35 feet east-west.
3. Wall dimensions: 12 feet wide, 12 inches high (slightly higher at ellipse).
4. Floor of ellipse depressed below floor of rectangle.
5. No associated hearth.
6. Associated artifacts.

Fragments of quartz side blade found in wall (Plate III, fig. 4).\*

A few small fabric-impressed sherds within rectangle beneath sod covering (Plate X, fig. 9, 11).\*

Hammerstone (Nat. Mus. Canada Cat. No. X-A-164) near by.\*

###### Large Enclosure (Figure 6): Section 33

1. Shape: horseshoe.
2. Dimensions and orientation: slightly east of north, 230 feet long, 80 to 35 feet wide.
3. Wall dimensions: 12 to 15 feet wide, 12 to 15 inches high.
4. No associated cultural material.

###### Mound A (excavated by Montgomery): Section 33

1. Situated well back on plain.
2. Large mound (elliptical?).
3. Wood-associated.
4. Nearby shallow hollows probably source of mound fill.

###### Mound B: Section 33

1. Well back on plain.
2. 25 feet in diameter, 1 foot high.
3. No interment; probably natural gravel kame.

\*See Artifact description.



**Mound C (opened previously): Section 33**

1. Mound stood well back on plain.
2. Elliptical at base, 100 to 70 feet.
3. 8 feet high.
4. Three shallow graves slightly below old surface.
5. Poles associated.
6. One grave contained three bundled (?) skeletons arranged about birch-bark basket.
7. Basket held an urn-shaped pipe (clay pipe?).
8. One burial pot in each grave (illustrated by Montgomery, 1908: 34).

**Mound D (opened previously): Section 33**

1. Similar in size and shape to Mound C.
2. Well back on plain.

**Mound E (opened previously): Section 33**

1. On edge of plain.
2. Small, round.
3. Burial pit.
4. Poles covering pit.
5. Pit contained two skeletons.
6. Pit contained stone disc.
7. Small pot decorated with incised turtles (Plate XVIII, bottom).
8. Mound built of subsoil from pit.

**Mound F (opened by Montgomery): Section 28**

1. Well back on plain.
2. Largest mound on North Antler plain.
3. Contained three mortuary centres.
4. Wood associated.

**Mound G (Figure 7): Section 29**

1. On edge of escarpment.
2. Oriented northwest by southeast, 39 by 33 feet.
3. 20 inches high.
4. Untrimmed poplar branches laid on old surface.
5. Animal bones, 'Unio' shells, and bones of infant in area disturbed by badgers at about one foot depth.
6. Fragment of adult human skull and tibia at depth of 2 feet.
7. Broken grooved maul (NMC Cat. No. X-A-165,) medium size,\* at subsoil level.
8. One end of walled rectangle, 19 by 11 feet, touched base of mound.

**Mound H (Figure 8): Section 29**

1. On edge of escarpment.
2. Round, dome-shaped, 40 by 38 feet.
3. 2 feet high.
4. At depth of one foot lay:
  - decayed and partially charred pieces of wood;
  - two buffalo vertebrae beside a decayed stake;
  - one upright stake decayed;
  - one 'Unio' shell;
  - two antler objects (Plate VII, fig. 4)\* associated with human humerus;
  - one bone band (Plate VII, fig. 1)\* beside human skull.

---

\*See Artifact description.

5. At old surface level lay two sherds of Plain ware (NMC Cat. No. X-A-247)\* with food bones and chips.
6. Two small round mounds lay respectively 210 yards and 165 yards North and Northwest of Mound H.
7. Four-inch-deep hollows west of Mound H were probably either source of fill or buffalo stamping grounds.

**Mound R (Plate XIII, fig. 1, 9): Section 32**

1. Situated 100 yards back from point of plain.
2. Round, dome-shaped, 34 feet in diameter.
3. 2½ feet high.
4. Old surface sod undisturbed except where broken by pit or badger burrows.
5. At depth of 1 foot scattered human bones and two buffalo scapulae.
6. At old sod level lay part of iron (?) axe-sharpened stake, bits of decayed wood and pine boards, a large sherd of Mandan village type ware (Plate XI, fig. 8)\*, and a small, ash bed of former camp-site(?).
7. Central burial pit, circular, 3½ feet in diameter, 2½ feet below old surface, bowl-shaped bottom.
8. Marks on pit walls showed excavation by gouge-shaped tool.
9. Pit contained three seated skeletons, one above the other, and one extra lower jaw. Pieces of bark covered skull of upper skeleton.
10. Associated artifacts were a coup stone (Plate I, fig. 5)\* and pot Manitoba Cordmarked ware (Plate XIX)\*, which contained ochre and 'Unio' shells.
11. Usual animal bones throughout fill.
12. Near Mound R a bank profile revealed two flood-plain levels. In the lower one, 18 inches below present level, was found a small sherd of Manitoba Cordmarked ware (Plate IX, fig. 4)\*.

**Snyder Mound (opened previously): Section 28**

1. On edge of escarpment.
2. Small, round.

**Brockenton Mound (opened previously): Section 33**

1. On edge of escarpment.
2. Small, round.

**Mounds on North (?) Antler Plain (excavated by Montgomery, 1908: 33-6, and**

1. Small, round. Thomas, 1894: 36).
2. Burial pit.
3. Multiple and single burial.
4. Sitting.
5. Bundle.
6. Tiny spiral and straight grooved mortuary pots.
7. Notched 'Unio' shell spoons.
8. Unworked 'Unio' shells.
9. Catlinite tubes.
10. Polished stone disc.
11. Engraved sandstone tablet.
12. Bone awls and needles.
13. Copper head band.
14. Stone shovel.
15. Charred wooden poles.
16. Buffalo bones (one grave).

\*See Artifact description.

**Mounds (excavated by Bryce, 1904: 42-4).**

1. Copper head band.
2. Mortuary pots.
3. Bone whistle.
4. Bone tubular beads.
5. Bone tube.
6. *Busycon* shell gorget fragment.
7. Birch-bark basket.
8. Wampum beads.
9. Stone pipes.
10. Hammerstones.
11. Charcoal and other evidence of fire in mound.

**SOUTH ANTLER AREA**

**'Shanty bottoms' or pits: Sections 15 and 22**

1. Occurred on floodplain.
2. Rectangular, 8 to 10 feet wide.
3. Depth 2 to 4 feet, excavated earth in heap at one side.
4. One pit produced ashes, food bone, machine-made nail.

**Circular depressions: Sections 15 and 22**

1. Occurred in groups of seven or more.
2. 7 feet diameter, 4 feet deep.

**Elliot Village: Section 22**

1. Two acres in extent, spread over upper plain and flood-plain.
2. Artifact assemblage:

Grooved stone mauls\*; non-grooved hammerstones\*; grooved and side-notched stone axes (Plate I, fig. 1, 2)\*; stone wedge (Plate I, fig. 8)\*; griddle stone (Plate I, fig. 4)\*; limestone pipe (Plate XVIII); large triangular biface (Plate III, fig. 8)\*; prismatic blade (Plate II, fig. 7)\*; thumbnail scraper (Plate II, fig. 1)\*; Plains Side-notched points (Plate IV, fig. 8, 9)\*; base of point (Plate IV, fig. 24)\*; Manitoba Cordmarked ware (Plate IX, fig. 2, 5, 8, 9)\*; Regina Heavy Corded ware (Plate X, fig. 1, 3)\*; Plain ware (Plate XII, fig. 3 to 8)\*; Fabric-impressed ware (Plate X, fig. 12)\*; Mandan village-like ware (Plate XI, fig. 2 to 7)\*; Aberrant sherds (Plate XII, fig. 10 to 17)\*;

**House Sites: Sections 21 and 22**

1. Rectangular enclosure, 40 by 20 feet.
2. Oriented east-west.
3. Outlined by earthen wall 4 inches high.

**Mound 1 (opened previously): Section 22**

1. Well back on plain.
2. Small, round.
3. Burial pit.
4. Copper-stained bone whistles.

**Mound 2 (opened previously): Section 22**

1. Well back on plain.
2. Small, round.
3. Burial pit.
4. Skeleton of child or woman.
5. Quantity of small flat shell beads.
6. Perforated bone anklets (Montgomery, 1908: 37?).

\*See Artifact description.

**Mound 3 (Figure 11—opened previously): Section 15**

1. Situated 300 feet back from escarpment.
2. Round, 41 feet diameter.
3. 2 feet high.
4. Burial pit, southwest of centre, 6 feet deep through hard clay subsoil, circular, 4 feet diameter, flat bottom.
5. Pit contained three bundled skeletons (two adults, one child).
6. No mortuary offerings.
7. Poles had covered pit.
8. Large quantity of animal bones in mound fill.
9. In southeast section of mound, clay from pit covered another pit 2 feet deep below original surface level, containing two animal bones and a heap of split human bones comprising part of skeleton of a small woman.
10. Projectile point (Plate IV, fig. 26)\*, surface find near Mound 3.
11. Chalcedony thumbnail scraper (NMC Cat. No. X-A-189)\*.

**Mound 4 (Figure 12): Section 15**

1. Situated 300 yards south of Mound 3.
2. Round, 70 feet diameter.
3. 13 inches high.
4. Fill comprised dense black soil, full of animal bones, to a depth of 22 inches.
5. Interments on gravel bed below black earth near mound centre.
6. One adult skeleton extended in irregular shallow grave, crushed skull towards southwest, facing east.
7. One child skeleton perhaps originally in a sitting position.
8. Buffalo bones associated with burials.
9. Fire patch northeast of grave.
10. North of grave in fill at depth 13 inches, a patch of red ochre contained a chalcedony thumbnail scraper (NMC Cat. X-A-180).\*
11. A projectile point (Plate IV, fig. 22)\* was found in fill at depth of 8 inches.
12. Broken projectile point (Plate IV, fig. 25),\* surface find near Mound 4.

**Mound 5: Section 15**

1. Well back on plain.
2. A 'grade,' c. 400 (?) feet long, 36 feet wide, 15 inches high.
3. Expanded at each end to slightly higher round mounds, 45 feet diameter.
4. Oriented northwest-southeast.

**Mound 6 (Figure 13): Section 15**

1. Well back on plain.
2. A 'grade,' c. 400 (?) feet long, 38 feet wide, 16 inches high.
3. Slightly higher terminal mounds.
4. Oriented northwest-southeast.
5. In northwest terminal mound two adult flexed skeletons (Plate XIII, fig. 2) lay on the old surface level, 15 feet apart, with heads to the southeast.
6. No mortuary offerings.

**Mound 7: Section 15**

1. Well back on plain, parallel to Mound 6.
2. A 'grade' about 400 (?) feet long, 41 feet wide, 18 inches high.
3. Round terminal mounds.

\*See Artifact description.

4. Oriented northwest-southeast.
5. No interments found in either terminal mound.

**Mound 8 (opened by Montgomery): Section 15**

1. Well back on plain.
2. A 'grade,' 130 feet long, with terminal mounds.
3. Oriented northwest-southeast.
4. In southeast terminal mound, a headless skeleton on old surface.
5. In central lineal portion of grade, a headless buffalo skeleton lay half in and half out of a 3-foot-deep pit.
6. A few fragments of human bone in the northwest terminal mound.

**Mound 9 (opened by Montgomery)**

1. Well back on plain beside Mound 8.
2. Low, round.
3. Adult (?) skeleton on old surface, sitting position.
4. Skeleton surrounded by five legless buffalo skeletons, extending in a radiating formation, skulls to centre.
5. 'Unio' shell, flat ring, and tassel-shaped pendant.

**Mound 10: Section 15**

1. On edge of escarpment west of Mound 8.
2. Long mound without terminal mounds.
3. Oriented northwest-southeast.

**Mound 11 (opened by Montgomery): Section 10**

1. Back from escarpment.
2. A 'grade' 650 feet long, 20 feet wide, 15 inches high.
3. Slightly higher terminal mounds, 40 feet diameter.
4. Oriented north-south.
5. At centre of north terminal mound a child's skeleton surrounded by five or six buffalo skulls.
6. South terminal mound not investigated.
7. Nothing found in linear mound trenched immediately north of south terminal mound.

**Mound 12 (opened by Montgomery): Section 15**

1. Back from escarpment.
2. A 'grade' 500 feet long, 10 feet wide, 12 to 15 inches high.
3. Oriented east-west.
4. East terminal mound 4½ feet high, 50 by 55 feet, north-south — east-west.
5. Parts of several skeletons found at centre of east terminal mound at old surface level.
6. Pole fragments found but no pit indicated.
7. Buffalo skull and bones associated.
8. West terminal mound covered several skeletons, extra skulls and a 'kind of featherwork.'

**Other 'Grades'**

Bryce (1904, p. 39-40) reports on Section 15 four north-south aligned 'grades' in echelon formation.

**Mound J (Figure 14): Section 21**

1. Situated c. 300 feet back from edge of escarpment.
2. Round, 40 feet diameter.
3. 13 inches high.

---

\*See Artifact description.

4. Pieces of decaying poles, 1 to 2 inches in diameter, some with crudely sharpened ends, found in the fill suggested to Nickerson that the mound covered a small lodge frame.
5. Three bone whistles (Plate VIII, fig. 9)\*; at depth 11 inches within the framework.
6. A few sherds of Plain ware (Plate XII, fig. 1)\*; at old surface level.
7. One 'Unio' shell in fill.

**Mound M: Section 22**

1. Situated well back on plain.
2. Large, elliptical.

**Mound K (Figure 15): Section 21**

1. Situated well back on plain.
2. Pear-shaped natural gravel kame, 49 by 30 feet.
3. 13 inches high.
4. Partial remains of flexed skeleton found at centre of broad end at depth 11 inches.
5. Found in mound about same depth but not with skeleton were one piece of 'Unio' shell and some broken animal bones, buffalo bones, and a broken dog skull in an old burrow.

**Mound N (opened previously): Section 16**

1. Situated well back on plain.
2. Round.
3. 4 feet high.

**Mound P (opened previously): Section 16**

1. Situated well back on plain.
2. Round.

**Mound Q: Section 9**

1. Situated well back on plain.
2. A 'grade,' 300 feet long, 30 feet wide, 12 inches high.
3. Round, domed, terminal mounds, 44 feet diameter, 18 inches high.
4. Oriented northwest-southeast.
5. Trenching both terminal mounds and connecting grade found nothing but food bones in fill.

**Mounds near Sourisford, South (?) Antler Plain (excavated by Montgomery, 1908, p. 36-7).**

1. Small, round mounds.
2. 'Grades.'
3. Burial pit.
4. Multiple burial.
5. Buffalo skeletons.
6. Buffalo skulls.
7. Bone whistles.
8. Wide bone anklet.
9. Marine shell gorget.
10. No stone pipes, no pottery.

**EAST SIDE OF SOURIS RIVER**

**Riverview Village: Section 34**

1. Site covered about two acres at base of escarpment.

\*See Artifact description.

2. Material lay no deeper than 8 to 10 inches or just below plough zone.
3. A large quantity of broken animal bones from site comprise chiefly deer and buffalo.
4. Artifacts from site include:  
     A small grooved stone maul (NMC Cat. X-A-99)\*; a small hammerstone (NMC Cat. X-A-166)\*; a projectile point base (NMC Cat. X-A-202) quartz; similar in form to point (Plate IV, fig. 26) except base is slightly concave; Regina Heavy Corded ware (Plate X, fig. 2, 4-6)\*; one linear-stamped sherd (Plate XII, fig. 9)\*.

**Riverview Mound (opened previously — Figure 16): Section 34**

1. Situated on edge of escarpment.
2. Small, domed, elliptical, 41 by 35 feet.
3. 2½ feet high.
4. Oriented northwest-southeast.
5. Animal bone fragments through fill and on old surface.
6. Built on former camp-site.
7. Fill composed of both surface soil and subsoil from pit.
8. Grave pit, jug-shaped, restricted opening, flat bottom, 2 ft. 9 in. by 3 ft. 6 in., oriented north-south, depth 2 ft. 7 in. below old surface, in tough clay subsoil.
9. Pit contained one skeleton and parts of two others, all of firm bone; no skulls.
10. Pole covering of pit; wood well preserved; one piece charred.
11. Human ribs and split human long bones painted with red ochre, outside pit.
12. Two bone tubes (Plate VIII, fig. 3, 5);\* from mound centre (not associated with pit).

**Linear Mound 1: Section 34**

1. Situated back from edge of escarpment.
2. 122 feet long, 31 feet wide, 18 inches high.
3. Oriented northwest-southeast.
4. Testing revealed a white powdery soil, perhaps signifying wood decay, along centre long axis of mound, at old surface level.
5. Food bones in fill.

**Linear Mound 2: Section 34**

1. Extended transversely to axis of Mound 1 at its southeast end.
2. Smaller than Mound 1, showing height of 6 inches where cut by roadway.

**Heath Mound (Figure 17): Section 27**

1. Situated back from edge of escarpment.
2. Elliptical, 46 by 42 feet.
3. 18 inches high.
4. Oriented northwest-southeast.
5. Covered a ring of burnt earth 15 feet in diameter, on old surface.
6. Ring measured 2 feet wide, 4 to 6 inches thick.
7. Burnt poles and sticks, charcoal and ash associated.
8. Within circle a stake, sharpened by an instrument making small, clean cuts, stood driven into ground.
9. Also found within ring were a rib bone polished, and one end shaped to a rounded point (Plate VIII, fig. 8),\* a gouge-shaped bone, flint chips, and burnt stones.

---

\*See Artifact description.

10. Nickerson suggests the mound was built over the ruins of a mud-plastered, round hut.

#### Moore Group Mounds: Section 23

Situated back from edge of escarpment.

##### Moore A

1. Almost round, 24 by 26 feet.
2. 1 foot high.
3. Large, ill-defined pit, 5 feet deep.
4. Pit contained nothing but large boulder at bottom and food bones.

##### Moore B (Figure 19)

1. Almost round, 27 by 29 feet.
2. 1 foot high.
3. Oriented north-south magnetic.
4. Jug-shaped pit, 2 feet 8 inches deep.
5. Multiple burial.
6. Sitting position.
7. Buffalo skull and food bones associated.
8. Fill contained food bones and a few used, pointed bones.
9. Near southwest base of mound a bed of firestones indicated former lodge site.
10. Near fireplace were found a potsherd of Avery Corded Ware (Plate X, fig. 7)\*, chipped flints, and projectile point fragment.
11. At depth 18 inches, one end scraper (Plate II, fig. 5)\*.
12. Burial pot of Plain ware (Plate XI, fig. 1)\* from pit.

##### Moore C (Figure 20)

1. 'Grade,' 765 feet long, 20 feet wide, 4 inches high.
2. Terminal mounds 42 feet diameter, 2 feet 4 inches high.
3. Oriented northwest-southeast (northwest end excavated).
4. Summit of northwest terminal mound flattened over a 10-foot radius.
5. Fill, extremely hard mixture of surface soil and gravel, containing food bones.
6. Two babies' skeletons near surface of flattened mound summit.
7. Human bones much scattered at depth 2 feet.
8. One skull, a whiteman's.
9. Sitting position indicated.
10. A large boulder covered seven small stones, a few human bone fragments, and a bundle of copper-stained human bones.
11. No burial pit but indications that turf removed from centre of mound floor.
12. Finds associated with lower level skeletons:  
Bone (metatarsus) object (flesher ?) (Plate VII, fig. 2)\*; a copper tube (Plate VI, fig. 11)\*; two large mauls (NMC Cat. X-A-221), one grooved, one partly grooved\*; buffalo offerings.
13. Found in fill, one chalcedony end scraper (Plate II, fig. 4)\*.
14. One of saucer-shaped hollows near mound contained flint pebble side scraper (Plate II, fig. 11)\*.
15. Two large grooved mauls (NMC Cat. X-A-220) ploughed up near mound.\*

\*See Artifact description.



## Pembina Plain

### Star Mound (Figure 22 and Plate XIII, fig. 3)

1. Situated on summit of Star Mound Hill near town of Snowflake (map, Figure 21).
2. Effigy: irregular elliptical mound, in outline like a beaver.
3. Total length 143 feet: round central body 70 feet in diameter, head extension 30 feet long, tail extension 43 feet long.
4. 4 feet high at centre, 1½ feet high at ends.
5. Oriented north-south.
6. Top of mound flat over an area radiating 16 to 18 feet from centre.
7. Bulk of fill comprised surface soil, including some sods, from around base and haphazardly incorporated stones.
8. Fill contained several bushels of food bones, mostly buffalo with some fish and bird, pointed used bones, stone chips and projectile point fragments, and occasional '*Unio*' shells.
9. Six burial pits.

#### Pit A

- (a) Opening sealed with boulders.
- (b) Jug-shaped with restricted aperture, circular, vertically walled body, 4 feet in diameter.
- (c) 3 feet 2 inches deep below old sod line.
- (d) Bowl-shaped bottom dusted with red ochre.
- (e) Skeletons of two children in sitting position.
- (f) Cylindrical shell bead (Plate VI, fig. 7)\* associated.
- (g) Two bundle burials (Plate XV, fig. 1).
- (h) Projectile point, 9 mm in width, encased with growth of bone, embedded in right tibia of one bundle (Plate XIV, fig. 2).

#### Pit B

- (a) Opening covered with boulders and poles (?).
- (b) Oval (?), 4 feet by 3 feet 6 inches, oriented approximately north-south.
- (c) 2 feet deep below old sod line.
- (d) One male adult skeleton in sitting position.

#### Pit C

- (a) Nearly circular, about 2 feet 10 inches in diameter, oriented north-south.
- (b) 16 inches deep below old sod-line.
- (c) One female adult skeleton in sitting (?) position.
- (d) Red ochre associated.

#### Pit D

- (a) Opening covered with boulders and poles (?).
- (b) Nearly circular, 2 feet 8 inches north-south by 2 feet east-west.
- (c) 3 feet 6 inches deep below old sod-line.
- (d) At depth 2 feet, one bundle of loose human bones (Plate XV, fig. 3).
- (e) Beneath bones a long buffalo rib, split and polished.

#### Pit E

- (a) Covered with boulders.
- (b) Shallow, irregular in shape.
- (c) Contained nothing but boulders.

\*See Artifact description.

**Pit F (previously robbed)**

- (a) Circular, 3 feet in diameter.
  - (b) 2 feet below old sod line.
  - (c) Said to have contained several skeletons.
10. Three skeletons, including one seated, and skull parts, were found at the old surface level and in the lower fill.
  11. Ochre and a Prairie Side-notched projectile point (Plate IV, fig. 21)\* were associated.
  12. Human bones and two skulls scattered through the upper fill.
  13. Mortuary offerings placed in central area at no great depth:  
Gorget (Plate V, fig. 7);\* spear point (Plate III, fig. 10);\* copper axe (Plate VI, fig. 9);\* sheet copper;\* unworked granite slab.
  14. Artifacts in fill:  
Three sherds (two missing), Manitoba Corded; small grooved stone maul, (NMC Cat. X-A-311).\*
  15. Mound built on old camp-site.
  16. Fireplaces marked three lodge sites beneath mound.
  17. Artifacts from camp-site level:  
Small broken grooved maul, (NMC Cat. X-A-312);\* ovoid blades (Plate III, fig. 1, 2);\* stone tube (Plate VIII, fig. 4);\* projectile points: Plains Triangular (Plate IV, fig. 1, 2);\* Prairie Side-notched (Plate IV, fig. 19 to 21);\* Leaf-shaped (Plate IV, fig. 23).\*
  18. A cairn of boulders stood beside lodge site beneath south end of mound.

**Star Mound B (Figure 22)**

1. One of three barely perceptible tumuli immediately west of Star Mound on hill summit.
2. Circular, 50 feet diameter.
3. 1 foot high.
4. Parts of an adult skeleton and of a foetus were scattered at a depth of 9 to 11 inches.
5. Associated finds included:  
Seven bone beads (Plate VIII, fig. 1);\* the bird bone from which the bands were made; a used pointed bone.
6. Buffalo food offerings.
7. Flint chips, 'Unio' shell, food bones in fill.
8. A mass of boulders on floor, at centre of mound; nothing beneath them.

**Sims Mound (Figure 23)**

1. Situated on point of plain overlooking Pembina valley (map, Figure 21).
2. 'Grade' approximately 172 feet long, 22 feet wide (expanded at middle), 1 foot 3 inches high.
3. Terminal mounds approximately 35 feet diameter, 2 feet high.
4. Oriented approximately northwest-southeast.
5. Southeast terminal mound:  
Commingle bones of two children at old sod line; sitting position (?); 27 'Unio' shell disc beads (Plate VI, fig. 5);\* marine shell cylindrical bead (Plate VI, fig. 8);\* 'Unio' shell gorget (Plate VI, fig. 6).\*

---

\*See Artifact description.

6. Northwest terminal mound (previously opened):

Burial pit: jug-shaped with restricted aperture, circular body 10 feet in diameter, saucer-shaped bottom 5½ feet below old sod-line; multiple burials, adults and children; sitting position; two 'Unio' shell pendants (Plate VI, fig. 2, 3);\* pole in pit (pole covering?); fire kindled on edge of pit; bark-lined bottom of pit.

7. Middle of connecting grade:

Burial pit: jug-shaped with restricted opening, circular body 6 feet in diameter, saucer-shaped bottom 5½ feet below old sod line; multiple burial, adults and children; sitting position; 'Unio' shell gorget and cylindrical shell bead associated with infant bones; wall of pit burnt, bark and ochre on pit bottom; buffalo-joint offering in pit; covering of small sticks over some skeletons; outer covering (inside pit) of poles, sods, boulders; usual food bones in mound fill.

**Pilot Mound (opened by Montgomery):**

1. Situated on Pilot Mound Hill northwest of Snowflake.
2. Small, round.
3. Multiple burial.
4. Shell beads.
5. Sheet copper beads.
6. Perforated copper wrist band with rawhide string.
7. Boulders associated.

**Morrison Mound (opened by Montgomery):**

1. Situated on plain above Rock Lake.
2. Circular, diameter 100 to 110 feet.
3. 6 feet high.
4. Multiple burial (primary or secondary?).
5. Skeleton parts lying on bed of ashes within pen of poles.
6. Potsherds and arrow point (associated or in fill?).

**Odell Mound (opened previously):**

1. Situated on plain, vicinity of Morrison Mound.
2. 3 feet high.
3. Parts of skeletons (primary or secondary?).
4. Arrow points.

**Rock Lake Mounds (Vickers 1945 and 1947):**

1. Group of seven tumuli and one 'grade'.
2. Bundle burial on old surface.
3. Cremation.
4. Red catlinite 'hatchet' ornament.
5. Tubular soapstone pipe.
6. Polished and notched stone disc.
7. Chipped stone implements.
8. Burnt pole.
9. Geometric incised mortuary pot.

**Sykes Mound (Vickers 1945 and 1947):**

1. Situated on hill-top near Hilton.
2. Round.
3. Multiple burial.
4. Sitting position.
5. 'Unio' (?) shell disc beads.

---

\*See Artifact description.

6. 'Unio' (?) shell pendants.
7. Triangular points.
8. Bone beads and bangle (?).

**Calf Mound** (opened by Montgomery, 1910: 49-57):

1. Situated on ridge.
2. Circular, 80 feet diameter.
3. 10 feet high.
4. Accumulative: alternate layers of earth and calcareous clay.
5. Successive generation pit burials.
6. Multiple, primary, and secondary.
7. Sitting (?) ( 'crouching' ) position.
8. Stones placed over interments in pit.
9. Buffalo skulls and scapulae placed over stones.
10. Charcoal and charred wood associated.
11. Grooved maul.
12. Small marine shell beads (Montgomery, 1910: fig. 7).
13. *Busycon* shell beads.
14. *Busycon* shell gorget, engraved (Montgomery, 1910: Plate III).
15. Copper tubular beads.
16. Bone armlet.
17. Bone head.
18. Birch-bark and birch-bark baskets.

### Basin of White Mud River

**Westbourne Mound** (opened by Montgomery 1908: 38; previously used as a root cellar):

1. Situated on plain by old river bank.
2. Circular, 90 feet diameter.
3. 8 to 9 feet high.
4. 'Grades,' 400 feet long, 30 to 36 feet wide, 18 inches high, projected north and south from mound (the north projection extending to old river bank).
5. Scattered skeleton parts of man and child.
6. Small sea shell beads.
7. 'Unio' shell pendants (Montgomery, 1908: Plate V, a).
8. Tubular shell bead (Montgomery, 1908: Fig. 18).
9. "Broken pieces of pottery, which differed much in decorative design from pottery previously described" i.e., spiral incised from Souris area (Montgomery, 1908: 38) (associated?).

**Arden Mound** (opened by Montgomery, 1908) (Figure 24 and Plate XV, fig. 2):

1. On crest of Campbell Beach ridge (map, Figure 25).
2. Effigy, over 500 feet long (tail 443 feet).
3. Height at centre of body 4 feet, tapering to a trace at tail tip, head 2 to 3 feet high.
4. Oriented northwest-southeast.
5. Multiple pits (*ibid.*, p. 37).
6. Multiple burial.
7. Skeletons extended, seated, encased in clay, scattered.
8. Bones of baby in fill near surface.
9. Iron knife blade in undisturbed soil at depth 2 feet 6 inches (Plate VI, fig. 12).\*

\*See Artifact description.

**McKenzie Mound (Figure 26):**

1. On crest of Campbell Beach ridge.
2. Serpent effigy or 'grade' (?), 257 feet long, 23 to 39 feet wide, 2 feet high.
3. Slight rounded terminal expansions.
4. Oriented northwest-southeast.
5. Fill of surface sand and gravel.
6. Built on top of old sod.
7. Pit east of mound centre, circular, 3 feet 8 inches diameter, 8 feet 2 inches below old sod line.
8. Pit filled with black earth.
9. Pit contained three flint implements:  
Side blade (Plate III, fig. 3);\* crude biface (Plate III, fig. 6);\* large ovoid biface (Plate III, fig. 9),\*
10. Two crude snub-nosed scrapers (Plate II, fig. 16, 17)\* were found beneath old sod line.
11. A chalcedony flake scraper (Plate II, fig. 10)\* was associated with fill.

**McGorman Mound (Figure 27)**

1. On crest of Campbell Beach ridge.
2. Elliptical 80 to 68 feet.
3. 2 feet high.
4. Oriented northwest-southeast.
5. Flat area on summit measured 40 by 25 feet.
6. Fill entirely of surface sand.
7. Two pits, northwest and southeast of centre, each 2 feet deep through old surface sand.
8. Southeast pit not used.
9. Associated with other pit were scattered bones of an adult, child, and infant disturbed by badgers.
10. Buffalo skull offering.
11. 'Unio' shell ring (Plate VI, fig. 4),\*
12. Two bone bands (Plate VIII, fig. 2),\*
13. Two worked antlers (knappers ?) in fill (Plate VIII, fig. 6),\*

**Foreman Camp-site and Arden district surface finds:**

1. Small grooved stone mauls (NMC Cat. XA-382, 383, 384) and ungrooved hammerstones.
2. Thumb-nail scraper (Plate II, fig. 2),\*
3. Two irregularly shaped scrapers (Plate II, fig. 14, 15),\*
4. Manitoba Cordmarked ware (Plate IX, fig. 1, 3, 6, 7, 10),\*
5. Stone amulet with engraved turtle design.
6. Grooved stone axe (NMC Cat. X-A-387) similar to (NMC Cat. X-A-336) (Plate I, fig. 2) except poll is square-cut instead of pointed, and groove entirely encircles tool; (NMC Cat. X-A-336) not grooved on one edge.

**North Side of Assiniboine River Valley**

**Lone Mound (Plate XVI, middle, and Figure 28)**

1. Situated west of Minnedosa (Little Saskatchewan) River on summit of headland overlooking the Assiniboine (see Map, Figure 29 and Plate XVI, top).
2. Round, 30 feet diameter.

\*See Artifact description.

3. 1 foot high.
4. Burial pit, bowl-shaped, 5 feet by 6 feet 3 inches, oriented northwest-southeast, 1 foot 7 inches below old sod line through sand (Plate XVII, top).
5. Pit lined with bark.
6. Adult male skeleton originally seated close to southwest edge of grave.
7. Associated finds:
  - Plains Triangular and Side-notched projectile points (Plate IV, fig. 4-7, 11-18);\* 162 small marine shell (*Natica*) beads (Plate VI, fig. 1);\* 6 *Busycon* columellae pendants (Plate V, fig. 1-6);\* small chip of catlinite pipe; food bones about stake.
8. Seven unsharpened stakes lined southwest side of grave (Plate XVI, bottom) probably put up after body collapsed (?).
9. Mound built some time after burial.
10. Fragments of infant's long bones at mound centre, above grave burial at depth of 15 inches.
11. Two pieces sheet copper at depth 7 and 3 inches respectively (Plate VI, fig. 10),\*
12. Food bones at depth 7 inches.
13. Small ash bed near infant bones at depth 3 inches just below turf.

**Rosser Mound (excavated by Rand, 1941)**

1. Situated on ridge.
2. Round, 60 feet in diameter.
3. 4 feet high.
4. Burial pit (?).
5. Log covering of grave.
6. Two bundle burials.
7. One bone whistle.
8. Two catlinite pipes broken.
9. One bone fish spear-head.
10. One flint knife and flint flakes.
11. One broken awl.
12. Three bird mandible charms (?).
13. Two river shells.
14. Split bison bones.

**Stott Mound (excavated by MacNeish, 1954)**

1. Situated on very edge of plain overlooking valley, one mile east of Minnedosa junction.
2. Oval, 50 by 60 feet, oriented east-west, 2½ feet high.
3. Excavation revealed that originally the mound was round, 35 feet diameter, 4 feet high.
4. Four burial pits:
  - (a) Oval, 2 feet 6 inches by 1 foot 10 inches, oriented east-west, 1 foot 2 inches deep: dog burial.
  - (b) Oval, 7 feet 6 inches by 4 feet 6 inches, oriented northeast-southwest, 3 feet deep, sides tapering inwards to flat bottom 4 feet by 1 foot 6 inches: flexed adolescent male and bundled adolescent male.
  - (c) Circular, 4 feet diameter, 4 feet deep, flat bottom c. 3 feet diameter: adults and children, bundled, flexed, sitting.
  - (d) Intrusive, oval, 3 feet by 1½ feet, oriented east-west: single flexed adolescent.

\*See Artifact description

5. Burial pits below mound covered with boulders, logs, puddled clay.
6. Bark covering of burials.
7. Buffalo skulls.
8. Burials sprinkled with red ochre.
9. River clam shells.
10. Tubular columellae beads.
11. *Oliva* shell beads.
12. One bird-bone whistle.
13. Copper stains.
14. Mound built on previously briefly-occupied camp-site.
15. Two fire pits associated with previous occupation or burial rites (?).

**Mounds near St. Andrews Locks, Red River**  
**(Excavation by Bell, 1885-6; Gunn, 1868; McCharles, 1887; Bryce, 1904)**

1. Situated on rising ground back from river (see Map, Figure 30).
2. Round, 4 to 10 feet high (Plate XVII, bottom).
3. Multiple bundle burial in fill and on floor.
4. Single sitting pit burial in fill and on floor.
5. Extended burial on old surface.
6. Clay-plugged eye-sockets.
7. Burnt clay layers.
8. Oak timbers or limestone blocks covering burials.
9. Charcoal and ash patches in fill.
10. Red ochre.
11. Burials pots containing river shell and ochre.
12. Engraved stone hatchet ornament.
13. Stone tubes.
14. Stone mauls.
15. River shell 'spoons.'
16. '*Unio*' shell gorgets.
17. Marine shell gorget.
18. Incised clay gorget.
19. Small sea shell (*Natica*) beads.
20. *Busycon* shell pendant.
21. Engraved marine shell pendant.
22. Turtle shell ornament.
23. Associated animal bones (beaver).
24. One recorded 'grade,' not excavated (Bell, 1933).