ABORIGINAL MOUNDS IN SOUTHERN MANITOBA:
AN EVALUATIVE OVERVIEW
by E. Leigh Syms
1978
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Abstract

Recommendations have been made to declare a linear mound of significant historic interest. The paucity of information on which to determine the mounds of importance led to the recently completed study of the linear mounds, concentrations of prehistoric burial mounds, in southern Manitoba.

The following report discusses the objectives of the preliminary assessment: an assessment of previous research and research orientations; tabulation of the number, distribution, nature and cultural affiliation of the mounds; assessment of the current state of the mounds as a result of cultivation, looting and excavations; accumulation of available data on previous research, and a presentation of recommendations for future research and development.
Acknowledgements

This research was funded through a contract from Parks Canada, Prairie Region.

This report was produced with the help of two research assistants - Mr. Gary McNeely and Mrs. Sylvia Corenblum. They spent many hours visiting mounds and attempting to derive meaningful data from generally vague reports that often contained errors and contradictory information. I am particularly indebted to Mrs. Corenblum for her tireless efforts in assessing reports and manuscripts to complete the forms in the appendix and for amassing comments for the section on problems. Both researchers compiled the maps but Mr. Corenblum produced the final, corrected forms.

Much of my personal data on mounds was accumulated during the summers of 1970 and 1971. Mr. Ken Williams of Melita shared with me the local information that he had accumulated over the years on mounds and I am indebted to him for these data.

Dr. George Lammers of the Manitoba Museum of Man and Nature, Winnipeg generously made the files of Dr. Ronald Nash available. Mr. Gary Dickson and Mrs. Kathy Pettipas of the Museum provided valuable assistance in using the Museum collections.
Introduction

Recent events by the National Historic Sites Advisory Board have renewed interest in the unusual phenomenon of the long, linear mounds, up to 765 feet in length, that are a part of concentrations of prehistoric burial mounds in Manitoba. Although recommendations have been made to declare a linear mound of significant historic interest, there was a paucity of information of the nature, number, distribution, cultural affiliation, and significance of the mounds and also insufficient data upon which to determine which mounds were important and what research and development programs needed to be initiated. The present study is a preliminary assessment from which to develop future plans. Among the objectives to be considered are:

a) an assessment of previous research and research orientations;

b) tabulation of the number, distribution, nature (burial versus ceremonial or linear versus conical mounds), and cultural affiliation of the mounds;

c) assessment (involving field visits to the mounds) of current state of mounds as a result of cultivation, looting, and excavations;

d) accumulation of available data on previous research including local published data, unpublished archival data by researchers, and relevant comparative data from other areas, and

e) presentation of recommendations for future research and future public development.

Most mounds in Manitoba are small rounded to conical
features of raised earth over one or more burials in subsurface pits. There are also a few raised ridges with rounded mounds on either end, large mounds of 10-15 feet in height, and effigy mounds having the possible forms of turtle and muskrat.

Research was confined to southern Manitoba because the mounds are clearly artificial tumuli made by Native peoples in the prehistoric period; mounds reported in and near northern communities are very shallow humps associated with historic burials and are often indistinguishable from local natural features such as old deadfalls unless pointed out by local residents.

Initial efforts to tabulate the mounds were fraught with unexpected problems. Early accounts were expected to be vague; however the degree of confusion, errors in location of mounds, and errors in secondary sources proved to be a monumental task to sort out (see Appendix 3 on problems).

It is clear that relatively few mounds are worthy of consideration as being of sufficient historical significance to be declared. However, there are several outstanding mounds and more work is recommended to provide further insights into their place in Canadian cultural history.

The data on the mounds reflect a variety of perceptions and techniques over the decades. In order to appreciate previous efforts and interpretations it is necessary to understand the historical development of the interest in the mounds.
Mound Designations

Considerable confusion exists with respect to the names of mounds. They have tended to be given either names based on landowners' names or local topography or arbitrary numbers and letters. Vickers (1948g) compiled the first check list of mounds. Capes (1963) subsequently provided a somewhat different list based primarily upon the work of George Bryce, Henry Montgomery, and W. B. Nickerson during the period 1880-1915; she was apparently oblivious of Vickers' list and she maintained both letter and number duplication that had been assigned by various researchers. Syms (1971a) compiled a list of mounds in Southwestern Manitoba in which he started with Nickerson's designations and then assigned arbitrary numbers for mounds that had been previously assigned duplicate letters or numbers, when several mounds were lumped under one letter designation, and for mounds discovered in recent decades.

For this report, the arbitrary numbering system of Syms (1971a) has been expanded to be applied to all mounds and possible mounds in the southern part of the province. Therefore, there is no duplication of numbers or letters. The numbers do not follow chronologically within each region because mounds are being assigned a number as they are discovered in the literature or through recent informants.

When well-known mounds such as Calf Mountain or the Fidler mounds are mentioned, the common name and numerical designation are given. Researchers who wish to refer to earlier
articles in which only common names are given can readily
interrelate this report with earlier reports.
History of Mound Research

The mounds in Manitoba have attracted interest for at least the last 125 years. The efforts have been stimulated by curiosity, dilettantastic pillaging, and scholarly research. Research into the contents of the mounds reflects and parallels archaeological research in North America. However, methodological developments in southern Manitoba represent an intellectual lag compared to developments in the United States.

Using Willey and Sabloff's (1974) scheme for the general developments, it is possible to characterize Manitoba effort in four stages (Fig. 1). These stages are: Speculative Period; Classificatory Descriptive Period; Classificatory Historical Period; and Explanatory Period.

The Speculative Period
The Speculative Period persisted in the United States as a whole from 1492 to 1840. It is characterized by: a) the collection of archaeological data as incidental activities to other interests, resulting in little data or effort; b) lack of anthropological research and orientation; c) absence of a time framework, and d) rampant speculation, particularly by explorers and armchair speculators. Among the fanciful interpretations of the various sources of North American Indians are the lost continents of Atlantis and Mu. The mounds, particularly the large Hopewellian and Mississippian examples, were assigned to a "lost race of mound builders"
Figure 1. Stages of methodological development for North American archaeology (adapted from Willey and Sabloff 1974: 18) and Manitoba archaeology. (D. Milton, draftsperson)
(see Silverberg's *The Mound Builders* for a particularly informative account of the development of this concept).

For Manitoba, this period lasts from the earliest recorded effort by H. Y. Hind to dig into one of the mounds near the mouth of the Antler River in southwestern Manitoba in 1858 (Hind 1971) until the early 1940s at which time Chris Vickers began to excavate systematically, keep records for the Manitoba Historical and Scientific Society, and develop an archaeological chronology; the only exception was Nickerson's scholarly efforts in 1912-15 (Nickerson 1913, 1914a, 1914b; Capes 1963). Thus, this stage persists much later in Manitoba than in areas to the south (Fig. 1). Individuals tended to be, at best, antiquarians and at worst pot hunters. They kept no notes, tended to distribute the artifacts among local collections, maintained little or no awareness with research elsewhere, and those who did publish their materials tended to speculate wildly.

The earliest recorded account of the opening of a mound was Hind's effort to open a mound near the mouth of Gainsborough Creek (referred to in the early literature as North Antler River):

...on a point between a small brook and the river we found a number of conical mounds, and the remains of an entrenchment. Our half-breeds said it was an old Mandan village; the Indians of that tribe having formerly hunted and lived in this part of the Great Prairies. We endeavoured to make an opening into one of the mounds, and penetrated six feet without finding anything to indicate that mounds were the remains of Mandan lodges (Hind 1971: 299).

There is a flurry of looting and reporting of mounds during the 1880s and intermittent activities during the early 1900s (Table 1).
# TABLE 1

## MOUND EXCAVATORS IN MANITOBA

<table>
<thead>
<tr>
<th>Individual</th>
<th>Date</th>
<th>Region</th>
<th>Mound</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.V. Hind</td>
<td>1857</td>
<td>SW Manitoba</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>D. Gunn</td>
<td>1867</td>
<td>Red River</td>
<td>Fidler A(147)</td>
<td>Reported several mounds; may have opened others</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fidler B(148)</td>
<td></td>
</tr>
<tr>
<td>C. Bell</td>
<td>1879</td>
<td>Red River</td>
<td>Fidler A(147)</td>
<td>Calls #147 St. Andrews mound; mentions opening several mounds</td>
</tr>
<tr>
<td></td>
<td>1885</td>
<td></td>
<td>Fidler B(148)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>McLeod (83)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lost Md. (195)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1886</td>
<td>N end of Lake Winnipeg</td>
<td>unknown</td>
<td>Probably did not view this mound</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pembina</td>
<td></td>
</tr>
<tr>
<td>G. Bryce</td>
<td>1879</td>
<td>Red River</td>
<td>St. Andrews (151)</td>
<td>Probably excavated this mound</td>
</tr>
<tr>
<td></td>
<td>1885</td>
<td></td>
<td>Fort Garry (165)</td>
<td>Mentions this mound in his 1904 paper, as well as Riverview, Selkirk and Stranger</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Riverview (145)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Selkirk (152)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fidler A (147)</td>
<td>Nickerson reports that Bryce opened these mounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fidler B (148)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rainy River, Ontario</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SW Manitoba</td>
<td>Mound C, &quot;other&quot; mounds</td>
<td></td>
</tr>
<tr>
<td>A. McCharles</td>
<td>1887</td>
<td>Red River</td>
<td>St. Andrews (151)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fidler A (147)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Fidler B (148)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rainy River, Ontario</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arden/ Westbourne</td>
<td>Westbourne (160)</td>
<td>Unable to excavate the mound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pembina</td>
<td>Calf Mtn. (142)</td>
<td>Does not mention excavating it</td>
</tr>
<tr>
<td>Individual</td>
<td>Date</td>
<td>Region</td>
<td>Mound</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------------</td>
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<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>H. Montgomery</td>
<td>1907-1910</td>
<td>Arden/Westbourne</td>
<td>Arden (163)</td>
<td>Possibly excavated: 1, 2, 3, 5 and 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pembina</td>
<td>Calf Mtn. (142)</td>
<td>see Cameron 1962: A42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pembina</td>
<td>Pilot Mnd. (121)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pembina</td>
<td>Rock Lake (126)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SW Manitoba</td>
<td>Mounds: A, C, D, F, M, J(14), G(18), G(19), G(20), 8, 9, 10, 11, 12.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Possibly excavated: 1, 2, 3, 5 and 7</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>1880s</td>
<td>Pembina</td>
<td>Thornhill</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(118 and 119)</td>
<td></td>
</tr>
<tr>
<td>Wm. Sims &amp; Dr. Corbet</td>
<td>1908</td>
<td>Pembina</td>
<td>Sims Mound (113)</td>
<td></td>
</tr>
<tr>
<td>David Elliot &amp; Alfred Gould</td>
<td>before 1912-1915</td>
<td>SW Manitoba</td>
<td>Mounds: 1, 2, 3</td>
<td>Probably before Montgomery</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mounds: M, 8</td>
<td>Excavated with Montgomery</td>
</tr>
<tr>
<td>A.P. MacKinnon</td>
<td>1906</td>
<td>SW Manitoba</td>
<td>Mound 12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Excavated with D. Gould</td>
</tr>
<tr>
<td>Creighton</td>
<td>before 1912-1915</td>
<td>SW Manitoba</td>
<td>Mound: N, P &amp; Riverview (106)</td>
<td></td>
</tr>
<tr>
<td>A.D. Thompson</td>
<td>before 1912-1915</td>
<td>SW Manitoba</td>
<td>Mound E</td>
<td></td>
</tr>
<tr>
<td>A. Gould</td>
<td>1912-1915</td>
<td>SW Manitoba</td>
<td>Mound 9</td>
<td>Possibly excavated with Montgomery</td>
</tr>
<tr>
<td>D.A. Stewart</td>
<td>1931</td>
<td>Pembina</td>
<td>McKay (139)</td>
<td></td>
</tr>
<tr>
<td>R. Brown</td>
<td>1920s?</td>
<td>Pembina</td>
<td>Richards A (192)</td>
<td></td>
</tr>
<tr>
<td>W.B. Nickerson</td>
<td>1912-1915</td>
<td>Arden/Westbourne</td>
<td>McGowan (164)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>McKenzie (162)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Central Assiniboine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lone Mound (159)</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 1

<table>
<thead>
<tr>
<th>Individual</th>
<th>Date</th>
<th>Region</th>
<th>Mound</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>W.B. Nickerson</td>
<td>1912-1915</td>
<td>Pembina</td>
<td>Sims (113)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Star A(115)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Star B(116)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SW Manitoba</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Moore Group A(110)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Moore Group B(111)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Moore Group C(112)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Mounds: B, G, H,</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>R, J(13), K, O,</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>H(21), H(22),</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>H(23), 3, 4, 6, 7, 12</td>
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<td></td>
<td></td>
<td></td>
<td>Riverview(106)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Riverview Linear A(24)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Riverview Linear B(25)</td>
<td>It is not clear if he excavated it</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Heath Md. (109)</td>
<td></td>
</tr>
<tr>
<td>C. Vickers</td>
<td>1941-1947</td>
<td>Pembina</td>
<td>Sykes (138)</td>
<td>Excavated with Rand</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Crayston (129)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>McLaren Linear (134)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>McLaren (133)</td>
<td></td>
</tr>
<tr>
<td>W.H. Rand</td>
<td>1940s</td>
<td>Red River</td>
<td>Rosser Md. (146)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pembina</td>
<td>Morden (117)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Ninette (136)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>McKay (139)</td>
<td>possibly with C. Vickers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sykes (138)</td>
<td>possibly with C. Vickers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Olsen (132)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>McLaren (133)</td>
<td>possibly with C. Vickers</td>
</tr>
<tr>
<td>R. MacNeish</td>
<td>1954</td>
<td>Central Assiniboine</td>
<td>Stott (157)</td>
<td></td>
</tr>
<tr>
<td>T. Fiske</td>
<td>1963</td>
<td>Red River</td>
<td>Fidler Mounds:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A(147) &amp; B(148)</td>
<td></td>
</tr>
<tr>
<td>R. Nash</td>
<td>1969</td>
<td>Red River</td>
<td>St. James (143)</td>
<td></td>
</tr>
</tbody>
</table>
The Honourable Donald Gunn, pioneer and politician, reported several mounds that had been opened, and he probably dug part of Fidler Mounds A and B (nos. 147 and 148)\(^1\) (Gunn 1867; Saylor 1975). He offers to open others but there are no further reports.

In the late 1800s there was a flurry of activity as several individuals dug into various mounds throughout the province and reported on the remains of the "mound-builders". Some were satisfied to write (Schultz 1881; Lewis 1886; Upham 1896), but most developed a frantic search of the centres of mounds throughout the province (McCharles 1887; Bell 1879, 1885a, 1885b, 1885c, 1886a, 1886b, 1886c, 1887a, 1887b, 1887c, 1895, 1898; Bryce 1879, 1885, 1887, 1890a, 1890b, 1890c, 1904, 1909).\(^2\) Both Bell and Bryce excavated as early as 1879\(^3\) and published primarily from 1885 to 1890 and tended to write general articles with little evidence as to specific mounds and dates. Despite the fact that both men were working at the same time and publishing profusely, there is a noticeable absence of references to each other's works.

Several of the mounds in the Melita Region were visited and reported by Reynolds (1889) for the monumental work by Powell (1894) and Thomas (1894) for the Smithsonian Institution. Thomas' work includes a sketch of linear mounds with circular mounds on the end.

In the period 1907-10, Henry Montgomery shifted his passion for digging mounds from North Dakota to Western Canada, particularly Manitoba (Montgomery 1906, 1907, 1908, 1910). He tended to leave behind a series of "doughnut-shaped" features where he dug out the centre (his efforts can still be seen in some of the uncultivated mounds in the Melita Region). He dug between 25 and 30 mounds\(^4\) (see Table 1). His materials reside in the Royal Ontario Museum.

At approximately the same time, there were several residents of the Melita Region who were looting the local mounds. Alfred Gould, David Elliot, Mr. MacKinnon, Mr. Creighton, and Archie Thompson apparently dug mounds before, with, and after Henry
Montgomery, but prior to W. B. Nickerson's work beginning in 1912 (Capes 1963). At least some of the materials are now in the Manitoba Museum of Man and Nature.

The work of W. B. Nickerson in 1912-15 was refreshingly different in that he brought with him a concern for systematic excavation and recording (Nickerson 1913, 1914a, 1914b). His techniques have been described as equivalent to that of any dirt archaeologist of the 1940s (Capes 1963: 2). He was sent by the National Museum of Canada to excavate mounds and village sites within one township in the Melita Region but he also spent time at other mounds. His manuscript has been edited, appended, and published (Capes 1963). The materials are in the National Museum, Ottawa.

Unfortunately, neither Montgomery nor Nickerson were familiar with the Smithsonian's monumental work on mounds in which Powell and Thomas laid to rest the myth of a "race of mound-builders" by demonstrating that mounds were made by many Indians in the historic period.

Montgomery (1908: 40) referred to the mound builders as pre-Siouxsan and non-Algonquian while Nickerson (1914b) seemed to favour, at least implicitly, a Siouxsan association. These identifications were based on intuition rather than ethnographic or ethnohistorical data.

Archaeological work was non-existent for the remainder of the period and few data are available on the collecting or looting that may have taken place in the period 1915-40.

Excavations during the Speculative Period tended to be by shovel or team and scraper in order to reach the artifacts in the central pits with great haste; W. B. Nickerson was the notable exception to this orientation. People were interested in making access to these items as easy and enjoyable as possible. When digging the McLeod Mound (#196) in 1885, Bell prepared the excavation for friends while he collected materials along the river bank.
With ten men as assistants, I decided to go on with the preliminary uncovering. Some days after this, I accompanied a party of friends who drove down to inspect the mounds and I set them to work with a spade and a grubbinghoe (Bell 1885a: 159-160).

After meeting with the settlers at a most enjoyable picnic, the party hastened away. After three or four hours' hard work the "find" was gathered up (Bryce 1904: 42).

Montgomery also did his digging with shovels and the assistance of local residents or a team of horses and scraper. As a result, contextual data were almost non-existent.

The mounds were initially identified as the remains of the Mandans (Hind 1971; Gunn 1867) but by the 1880s the remains, when identified, were considered to be some race of "mound-builders" that were more civilized than the "savage Indians" who replaced them and occupied the land during the historic period (Bell 1886a; Schultz 1881; Lewis 1886). The identification ranged from a vague group to specific, imaginative, but wildly speculative creations.

Bryce (1885: 14-16) was the most far-fetched with respect to the "mound-builders" for he developed an elaborate reconstruction whereby the Toltecs left Mexico in the 7th century, spread down the Rio Grande River, up the Mississippi River into the north over a period of three centuries, and became the Takagamies, or northern Mound-Builders, about the 11th century. The Takagamies were eventually destroyed as the savage Iroquois and Sioux, who were off-shoots of the Aztecs, migrated up the Ohio and Mississippi rivers. Bryce's creation reflects the danger of limited knowledge and unlimited speculation.

The concept of "mound-builders" was widespread. It has been discarded by archaeologists as anthropological data accumulated in the late 1800s and was soundly disproved by the monumental work, Report on the Mound Explorations of the Bureau of Ethnology (Thomas, 1894; Powell 1894). Despite the early refutation of this
concept, it persisted into the 1940s among a group of pot-hunters associated with the Manitoba Museum and The Historical and Scientific Society of Manitoba (Rand 1941, 1945, n.d.b). It has also tended to persist in the writings of teachers turned amateur historians (Kavanaugh 1946; Clarke 1976).

The materials from these early efforts have tended to end in private collections or as poorly recorded items in museums. Since the purpose of this pot-hunting was to collect the items, these items tended to be distributed amongst all members who were present. Vickers (1973: personal communication) reported that Rand's group divided the artifacts into four lots and drew straws to see who would receive the various shares. Stewart's recollections of the 1931 excavations of the McKay Mound (#139) typifies the attitude towards the artifacts:

My father was the soul of generosity, and decreed that each participant should keep some part of the "proceeds". Even the unique arrowhead...was pressed upon a Winnipeg visitor who was there almost by chance when it was found (Stewart 1978: 7).

Some of the collections have ended in institutions. Montgomery's remaining materials are located in the Royal Ontario Museum, however, field notes are rare and notes on boxes were often vague and contradictory (see Cameron [1962] for a detailed discussion of Montgomery's efforts and cataloguing problems). Some of the materials collected by members of the Manitoba Historical and Scientific Society are in the Smithsonian Institution, e.g. Gunn's materials from the St. Andrews Mound (Bell 1898: 229) and others in the Manitoba Museum of Man and Nature. Nickerson's materials are in the National Museum, Ottawa. A few artifacts have been illustrated in general articles and the occasional specimen is accompanied by a trait or two but most have never been systematically analyzed. The only exception is Nickerson's materials which
have been published in detail with additional discussion (Capes 1963).

Several of the authors published their results. However, the reports have tended to be general and were almost invariably based on memory. Montgomery's notes consisted of scraps of paper and lists of items collected. Archival research failed to yield any field notes by the pot-hunters except Bell. Vickers (1973: personal communication) noted that Rand in the 1940s "never had a pencil in his hand" and only under duress took the effort to help Vickers make a sketch of the McLaren Mound (#133).

Therefore, throughout the Speculative Period, efforts tended to consist of weekend pilfering of mounds for the grave goods with no concern for context or systematic recording of dating, followed by wildly speculative ideas about a lost race of mound-builders. Since some of these researchers such as Bell and Bryce published profusely and since they were identified as scholars associated with societies having scholarly sounding titles, e.g. The Manitoba Historical and Scientific Society, their ignorance and speculative ideas were taken as facts.

The Classificatory Descriptive Period
For the United States, this period lasted from 1840 until about 1914 (Willey and Sabloff 1974: 42-87). This period was characterized by: a) concern for description, rudimentary classification and geographical distribution but little chronological emphasis; b) the recognition of great antiquity for Natives, and c) the involvement of universities, museums, and scientific societies with the gradual emergence of instruction in anthropology (cultural and ethnography) and archaeology. Research in mounds was extensive and works on distribution, form and contents of the mounds were being published (e.g. Squier and Davis 1848; Thomas 1894). It was Thomas' monumental work that unequivocally shattered the hypotheses of a special
race of Mound-Builders by means of a vast quantity of archaeological and ethnohistorical data. He showed that mounds were made by many tribes into the historic period and that Indians were, in fact, quite capable of making them.

In Manitoba, the Classificatory Descriptive Period is developed as a result of the pioneering works of Chris Vickers (1943, 1945, 1946a, 1946c, 1947, 1948a, 1948b, 1948c, 1948d, 1948e, 1948f, 1948g, 1949a, 1949b, 1949c, 1949d, 1950a, 1950b, 1951, 1952, 1953; Vickers and Bird 1949). He developed a rudimentary chronology and typology of cultures during the period 1943-1950 (Fig. 2). Vickers' work heralded a new perspective. By combining W. D. Strong's (1940) Direct Historical Approach with local stratigraphy and Wilford's (1941, 1945) works in Minnesota, he was able to set the foundation for subsequent research. Vickers' interest in ethnohistory, particularly of the Assiniboins (Vickers 1946a, 1947, 1948d, 1953) combined with a sensitive perception of variable resources of the land, produced the beginnings of an ecological perspective. He kept copious notes and produced a yearly archaeological report for The Historical and Scientific Society of Manitoba (Vickers 1948b, 1948c, 1948d, 1949b, 1950a, 1951) in addition to numerous popular and scientific articles, despite the fact that he was self-trained and involved in archaeology only as a spare-time interest. Despite the fact that Vickers was a lay archaeologist (in the sense that he had a professional attitude but was self-trained and practised it only in his spare time), he introduced: a) the idea of keeping notes and describing and quantifying findings; b) relative dating through stratigraphic excavations, and c) the identification of mounds with an historically recognized Indian group.

Vickers assigned all of the mounds to his Manitoba Focus (characterized by Blackduck pottery) which, following Wilford's work in Minnesota, he assigned to the historic Assiniboins. He completed the first list of mounds (Vickers 1948g) and reported the excavations of five mounds (see Table 1).
<table>
<thead>
<tr>
<th>Time Division</th>
<th>Aspect</th>
<th>Focus</th>
<th>Site</th>
<th>Estimated Date</th>
<th>Ethnic Identity</th>
<th>Comments</th>
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<tr>
<td>Historic Period</td>
<td></td>
<td></td>
<td>E. St. Paul</td>
<td>1850</td>
<td></td>
<td>Saulteaux?</td>
</tr>
<tr>
<td>(ca. 1670-1870)</td>
<td>Headwaters Lake</td>
<td>Manitoba</td>
<td>Snart</td>
<td>1768-1794</td>
<td>Assiniboine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rainey River</td>
<td>Rock Lake</td>
<td>Kreiger</td>
<td>1760</td>
<td>Algonkian?</td>
<td></td>
</tr>
<tr>
<td>Ceramic Period</td>
<td></td>
<td>Pelican</td>
<td>Lowton</td>
<td>1600-1650</td>
<td>?</td>
<td>Upper Missouri connections</td>
</tr>
<tr>
<td>(ca. 1400-1670)</td>
<td>Headwaters Lake</td>
<td>Manitoba</td>
<td>Stott</td>
<td>1670</td>
<td>Assiniboine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Headwaters Lake</td>
<td>Manitoba</td>
<td>Avery #1</td>
<td>1600</td>
<td>Assiniboine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Headwaters Lake &amp; Rainey River</td>
<td>Manitoba &amp; Rock Lake</td>
<td>Rock Lake mounds</td>
<td></td>
<td>Siouan?</td>
<td>Rock Lake Focus earlier</td>
</tr>
<tr>
<td></td>
<td>Headwaters Lake &amp; Rainey River</td>
<td>Manitoba &amp; Rock Lake</td>
<td>Calf Mountain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rainey River</td>
<td>Rock Lake</td>
<td>Montroy</td>
<td>1620</td>
<td>?</td>
<td>Rock Lake Focus earlier</td>
</tr>
<tr>
<td></td>
<td>Rainey River</td>
<td>Rock Lake</td>
<td>Avery #2</td>
<td>1500</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red River</td>
<td>?</td>
<td>Sykes mound</td>
<td>?</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red River</td>
<td>?</td>
<td>McKay mound</td>
<td>?</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Preceramic Period</td>
<td></td>
<td></td>
<td>Lake Shore</td>
<td>?</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>(prior to A.D. 1400)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unnamed Period</td>
<td></td>
<td></td>
<td></td>
<td>?</td>
<td>?</td>
<td>Folsom and Yuma points</td>
</tr>
<tr>
<td>(ca. 8000 B.C.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. terms "focus" and "culture" used interchangeably.

Figure 2. Vickers' archaeological chronology for Manitoba (Syms 1976a: 179).
Vickers was the first researcher to postulate the Blackduck pottery-Assiniboin Indian affiliation. His argument was based upon: a) frequent references by fur traders to the presence of Assiniboins in southern Manitoba; b) the identification of only three ceramic complexes of which one, the Manitoba Focus, was presumed to be early historic, and c) the efforts of Lloyd Wilford (1945) in Minnesota to make the same affiliation.

There was also a tendency for Vickers to lump the mounds together as the remains of a single group or at least most of the mounds from the various regions in the province that shared traits such as sitting burials, small mortuary vessels, and on some occasions had harpoons or Blackduck pottery in the mound fill or in near-by fields (Vickers 1945, 1947, 1948e, 1953). Vickers was very cautious about any suggestions of homogeneity or cultural affiliation, however, later researchers proved less cautious.

Despite the new, more scholarly attitude being fostered by Vickers, the speculative orientation persisted. Members of the Manitoba Museum Association and the Historical and Scientific Society continued to loot mounds (Rand n.d.a, n.d.b, n.d.c, 1941, 1945). W. Rand, P. Stokes and others continued to open mounds and speculate on the race of "Mound-Builders". Rand never bothered to carry a pencil to record observations and only made notations on the McLaren Mound with reluctance when under pressure (Vickers 1973: personal communication).

The work of Vickers moved Manitoba research into the Classificatory-Descriptive stage and his work provided the basic framework upon which subsequent interpretations developed.

The Classificatory-Historical Period
For the American efforts, the stage can be subdivided into earlier (A.D. 1914-40) and later (1940-60) periods (Willey and Sabloff 1974). The earlier stage was concerned primarily with
chronology in which stratigraphy and seriation were used to set up more refined regional sequences than had previously occurred and artifact classifications were studied in terms of changing patterns through time and space. Excavation techniques were more refined in terms of distinguishing greater numbers of "cultures" throughout several levels (Willey and Sabloff 1974: 88-89). For the later period, chronology was still the prime concern, but dissatisfaction with chronology as a final goal stirred some researchers to reconstruct paleo-environments, consider settlement patterns, consider context and function, develop large-scale syntheses, formulate evolutionary stages, and to search for ways to derive process (Willey and Sabloff 1974: 131-177). The latter part of the period was augmented by techniques from other fields such as radiocarbon dating, fluorine dating, aerial photography, and electronic detecting.

Research in Manitoba moved into this stage with the work in the early 1950s by Richard S. MacNeish (MacNiesh 1954, 1956, 1958; MacNeish and Capes 1958) and continued under the direction of Mayer-Oakes (1967, 1970) and his research assistants and students until the early 1970s (see Hlady 1970b).

During the 1950s professional research was developed by the National Museum of Canada. Wettlaufer (1952) made a survey of many known collections and MacNeish tested at least seven habitation sites and two mounds. There were no local professionals or anthropology programs in the universities to train future archaeologists.

MacNeish produced a stacked chronology of foci for the eastern part of the province which was essentially an elaboration of Vickers' pioneering work (Fig. 3). There are several premises underlying this stacked chronology model:

a) all foci or "cultures" are mutually exclusive in time and space;

b) there is only one foci for any region or area for any given time period;
a. The terms "focus" and "culture" were used interchangeably.

Figure 3. The stacked chronological sequence proposed by MacNeish compared with Vickers' earlier chronology (Syms 1976a: 180).
c) relatively small samples of excavation units are necessary to obtain the necessary definitive "index-fossil types";

d) mixture of components is unimportant because the "index-fossils" can be sorted and stacked chronologically, and

e) each "culture" or focus is represented by an unmixed set of index-fossils such as McKean projectile points or Blackduck (Manitoba Ware) pottery.

In addition to sorting artifact types from mixed components, MacNeish was less discriminating than Vickers; he lumped all of the mounds in the province into the Manitoba Focus and Melita Focus and assigned them to the Assiniboin. The fact that there was considerable variation in associated artifacts, mound form and burial form did not seem to be considered of any importance.

Despite the fact that the radiocarbon dating technique was known and some dates were used by MacNeish, he did not bother to have any samples submitted. His temporal estimates were based on guesstimates of a few dates as far away as the Ohio valley, and a crude attempt to correlate flood deposits on the Red River with tree ring samples in South Dakota (see Syms 1976a: 176-183 for a more detailed discussion). Thus, all mounds were placed in a temporal estimate of A.D. 1000-1300 on the basis of few data.

Several changes took place in the early 1960s. William J. Mayer-Oakes started research, developed an Anthropology Department at the University of Manitoba and encouraged the formation of the Manitoba Archaeological Society. The amount of research and publication of data increased at a rapid rate and students were being trained locally to do local research in addition to filling positions in archaeological research that eventually became available. Mound research during the 1960s was almost non-existent except for the analysis of the skeletal populations (Cameron 1962; Ossenberg 1969). However, the general developments are important for understanding the interpretive framework within which mound materials were placed.
Both the professionals (Mayer-Oakes 1970; Nash 1969, 1970), "budding" student professionals⁹ (Pettipas 1967, 1969, 1970; Joyes 1969, 1970; Syms 1969, 1970 to name a few of the earlier examples) and lay archaeologists (Hlady 1965b, 1967)¹⁰ utilized the stacked chronology, with modifications, that was proposed by MacNeish (Fig. 4). Radiocarbon dates were not being submitted; most research consisted of excavating multiple component sites with collapsed stratigraphy or analyzing surface collections.

One new development in the 1960s was a concern for environmental reconstruction and determining what resources were being used (Lukens 1967).

The St. James Mound (#143) was trenched in 1969 as part of a Field School activity (the only burial mound to be excavated in recent years) (Nash 1974). The mound yielded little information other than a recent radiocarbon date of A.D. 1730 + 90.

The analysis of mound populations (Cameron 1962, Ossenberg 1969) was hampered by the chronological orientation of the 1950s (MacNeish 1958) largely due to the influence of MacNeish on Ossenberg through discussions. In analyzing the skeletal populations, Ossenberg lumped all mounds by regions regardless of cultural materials associated with the skeletons.

The Classificatory-Historical Period in Manitoba (1950-70) was more similar to the earlier period (1914-40) in the United States than it was to later developments. There was little theoretical growth and little data or interpretation that aided an understanding of the mounds in Manitoba.

The Explanatory Period
Willey and Sabloff (1974: 178-211) designate this term for developments beginning in the early 1960s. It is characterized by: a) the re-emergence of cultural evolution, b) the processual approach, as advocated by a group influenced particularly by
Figure 4. Recent archaeological chronologies and temporal estimates for Manitoba (Syms 1976a: 184).
Binford, c) application of systems theory and the eco-system concept, d) logico-deductive reasoning and the positivist philosophy of science in the testing of hypotheses, e) use of statistics and computers to quantify, classify and assess interrelationships, and f) the increased and refined use of ethnographic analogy. Settlement studies, environmental-socio-cultural interrelationships, and changes in social organization in the archaeological record became objectives with the concern for methodological rigour. Many researchers maintained the earlier approach and many of the "new archaeologists" produced results that justified the skepticism (see the articles in *Research and Theory in Current Archeology*, Redman 1973, for an excellent account of recent trends).

In Manitoba, the "winds of change" blow slowly. Little change took place in the 1970s except for: a) a series of M.A. theses concerned primarily with experimenting with various statistical techniques (e.g. Reid 1972; Jamieson 1973), b) a concern for systematic sampling techniques for regions and sites (Saylor 1975; Weirsum and Tisdale 1977, plus much discussion by members of the Archaeological Research Centre) and c) the development of a new research paradigm, the Co-influence Sphere Model (Syms 1976, 1977).

Syms' work in Southwestern Manitoba plus the growing body of data accompanied by dates from elsewhere require a complete re-evaluation of the mounds. Syms found the stacked chronological model that was used during previous periods to be completely useless. He (Syms 1976a, 1977) found that:

a) the ethnohistorical literature reveals that numerous Native groups co-existed and over-lapped territorially, e.g. for Southwestern Manitoba at least nine and possibly fifteen groups utilized the region to varying degrees during the fur trade period;

b) during the Middle Woodland Period, sites representing at least four different complexes existed;
c) during the Late Woodland Period, sites representing at least nine different complexes existed;

d) mounds are dated from A.D. 620 ± 90 (GaK 1883) to A.D. 1730 ± 90 (I-4684) (Nash 1974) and, on the basis of cultural temporal estimates, probably as early as A.D. 1.

e) mounds can be assigned to several groups throughout the last 2000 years (Fig. 5).

Furthermore, the distribution of mounds of at least one group, as represented by the Devils Lake-Sourisford Burial Complex, reflect that mound distribution is related to groups following the seasonal bison movements from the sheltered river valleys and Aspen Parkland Ecotone in the winter to the prairie grasslands in the summer (Syms n.d.). Thus, the mounds need to be re-assessed in light of a new set of variables. Unfortunately, the lack of detailed re-analysis and the vague-ness of the early work presents many problems (see Appendix 3 on Problems).

Nash (1972, 1973) also attempted to introduce a new approach in terms of sampling rigour and searching for interrelationships between settlement patterns, site size, and social organization associated with mound building. Two preliminary reports were completed after two summer's activities and the project was never completed because Nash left for other activities. Many of his observations were general or inconclusive but he was at least concerned with searching for process.

Summary
The history of research associated with the mounds has been sparse, intermittent, largely non-professional, and generally lacking in theory. A number of methodological orientations such as the primary concern for stacked chronology has obscured the variability and potentiality of the existing data and has ignored many important problems.
SCHEMATIC PRESENTATION OF CERAMIC CULTURAL HISTORY OF SOUTHWESTERN MANITOBA IN RELATIONSHIP TO DEVELOPMENTS IN NEAR-BY AREAS

Figure 5. Schematic Presentation of the Ceramic Cultural History of Southwestern Manitoba in Relation to General Developments in Nearby Areas (Syms 1976a: 368) (Drawn by L. Perry)
The emphasis upon mounds, to the almost total exclusion of associated settlements, has limited the kinds of data that are necessary, and future work must continue to shift towards establishing a greater range of activities with the various groups who built the mounds. Excavations of encampments of a variety of functions will be necessary.

All of the existing materials need to be re-assessed in terms of the variability that is now known to exist and which will undoubtedly increase as research increases!
Function
The features designated as mounds are small raised tumuli of earth. Mounds can be either natural or cultural phenomena, and the difficulty of distinguishing between the two is one of the major problems. Natural mounds are of little concern except as a complicating problem and will be discussed in the latter section on problems in mound identification.

Cultural mounds are primarily humps of earth associated with burials. However, there appear to be mounds that served other functions than covering the dead, and even those mounds containing burials had primary functions other than being burial plots.

Montgomery (1906) identified three kinds of mounds: a) burial mounds, b) ceremonial or feast mounds, and c) beacon mounds during his looting of mounds in North Dakota. Examples of mounds with cultural material but no skeletal material could serve one of the latter functions.

Even those mounds which served as burial mounds served primarily as foci of social interaction and ritual rejuvenation of supernatural well-being. Recent reinterpretations of the effigy mounds of Wisconsin, for example, emphasize their ritual importance; despite the fact that these mounds were made in the forms of a variety of totemic animals, they often contained small scattered remnants of burials.

In Manitoba, small ritual fire hearths are often found on the original ground surface, in association with the log covering over the central pit, and are scattered throughout the mound.
Montgomery (Montgomery 1910; Capes 1963) noted layers of non-local clay that had been laid down systematically over at least some burials. These fire hearths occasionally contained charred fragments of cremation burials but generally appear as small clusters of ash associated with "ritual fires" (Fig. 6).

Furthermore, the mounds were used only for a small portion of the populations that made the mounds. Archaeologically, numerous burials turn up in gravel and shale pits (Bradell et al. 1970; Syms 1972; Syms and Pettipas 1972) and along rivers (Syms 1976c). Furthermore, the mounds do not have representative populations, e.g. the Stott Mound (#157) yielded only women and young children. From the historic record, we know that alternative forms of burials included interment on scaffold or branches of trees, and sitting propped up in tipis (Bushnell 1927; Hanna 1976).

While the burials found in mounds undoubtedly represent a small percentage of the total populations, there is no evidence that the mound burials represent some form of status or rank differentiation of a chiefdom or state form of socio-political organization. There are no items associated with the burials that would require the presence of part-time crafts specialists; the only possible exception to this generalization are the conch shell mask-gorget with the weeping-eye motif, but these items are extremely rare and represent items of both non-local origin and design and thus were probably traded into the area. The grave goods do not appear to be associated with any specific sex or age class although this observation should be tested statistically. There is no evidence of a high status individual surrounded by individuals of lower rank as is manifest in Hopewellian and Mississippian burials by means of relative location, primary versus secondary interment, marked differences in accompanying grave goods and/or mutilation or semi-dismemberment of accompanying burials (Jennings 1974: 220-264).
Figure 6. Artistic Rendition of a Bundle Burial being Prepared. The burial is accompanied by a ritual fire to raise the message to the "gods" and the sacred pipe to legitimize the discussion with the "gods". (Drawn by J. Sadowick)
When we turn to the ethnohistorical record, we find that southern Manitoba was inhabited by nomadic, small-scale egalitarian Plains tribes of multi-band groups (Lowie 1954). Tribes and composite bands are characterized by essentially egalitarian societies (Service 1962). There are accounts of tribal groups such as the Santee in Minnesota burying their dead in mounds (Winchell 1911).

If then, these mounds are associated with egalitarian, nomadic societies who buried a small number of their dead in mounds, why are these substantial features built? It is likely that their prime function was to bring related groups and allies together under the excuse of burying a few individuals. Like the burial rituals in Wisconsin, the construction of the mounds and burial ceremonies served as a focus of the expression of co-operative behaviour. The ritual importance is substantiated by the presence of small fires, clusters of offerings, layers of clay, the presence of foreign materials such as copper and items such as conch shell mask-gorgets and columella beads.

Recent research on the reasons for proliferation of mounds in Minnesota during the Middle to Late Woodland transition, circa A.D. 500-800, raises some challenging hypotheses that must be considered for the Manitoba mounds (Batura and Connolly 1977). It has been suggested that the emphasis upon Minnesota mound building was due to the following:

a) mound activity was correlated with a shift in scheduling of resources as populations grew and resulted in a shift to fishing as a result of declining land resources, and

b) mound activity was a ritualistic expression of creating amicable relationships among local groups in response to population growth and minor changes in resource utilization, thereby resulting in more co-operative behaviour rather than maladaptive warfare.

These ideas raise a series of challenging problems in terms of defining the parameters to establish similar hypotheses for
southern Manitoba and establishing and carrying out a research design to test these hypotheses. These problems are beyond the scope of this research, but it is important to indicate at this time the complexity of the issues of why the mounds were built.

**Form**
The primary characteristic of mounds in Manitoba is a raised mound of earth over one or more sub-surface burial pits. Among the mounds that contained interments, the most common form is a roughly symmetrical, low, rounded height of land varying from six inches to eight feet in height with most mounds containing cylindrical or shallow concave subsurface pits, burials on the original plain, and/or intrusive burials. A platform of poles over the central pit(s) is common. Skeletons may be flexed and articulated or clustered in unarticulated bundles; rarely does an extended, supine burial occur.

These mounds often occur in fields where village debris has been found but a considerable number lack any evidence of village debris within the mound fill or near the mound. Mounds may have been built in the village (Fig. 7) or on a high flat open area near the edge of a valley with the encampment located in the sheltered river valley below. The former example is difficult to establish unless the village materials can be unequivocally associated with the mound burial items because in at least some cases, the mounds may have been built in flat open areas which had been occupied during earlier periods, or later groups may have set up an encampment around an earlier mound.

There are several additional forms of burial mounds. These are typed primarily according to morphology (Fig. 8). In addition to the rounded mounds, there are small numbers of
Figure 7. Artist's conception of a Woodland camp site with associated burial mound (Johnson 1969: 13). The drawing is by Chester Kozlak and depicts a Minnesota scene but it could apply equally to areas of Manitoba.
<table>
<thead>
<tr>
<th>MOUND TYPE</th>
<th>TOP VIEW</th>
<th>SIDE VIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Rounded</td>
<td><img src="image" alt="Simple Rounded Top View" /></td>
<td><img src="image" alt="Simple Rounded Side View" /></td>
</tr>
<tr>
<td>Accumulative</td>
<td><img src="image" alt="Accumulative Top View" /></td>
<td><img src="image" alt="Accumulative Side View" /></td>
</tr>
<tr>
<td>Linear Grade</td>
<td><img src="image" alt="Linear Grade Top View" /></td>
<td><img src="image" alt="Linear Grade Side View" /></td>
</tr>
<tr>
<td>Composite Linear</td>
<td><img src="image" alt="Composite Linear Top View" /></td>
<td><img src="image" alt="Composite Linear Side View" /></td>
</tr>
<tr>
<td>Effigy</td>
<td><img src="image" alt="Effigy Top View" /></td>
<td><img src="image" alt="Effigy Side View" /></td>
</tr>
</tbody>
</table>

Figure 8. Schematic typology of burial mounds in southern Manitoba (D. Milton, Draftsperson).
linear mounds or grades, linear mounds with round mounds on the ends (composite linear mounds), accumulative mounds and effigy mounds. The linear mounds with the rounded mounds on the end reflect considerable effort and despite a shallow height (fifteen inches for the grade and 3-5 feet for the rounded ends), the presence of grades 20 feet wide with lengths of 500, 650, and 765 feet (Capes 1963) provide impressive features reflecting the efforts of pre-European Natives as they built these sod and earth monuments to their dead. All of the linear mounds have been identified as burial mounds.

Effigy mounds, i.e. mounds built in the form of some animal, are very rare. Star Mound A (#115), near Snow Flake has been identified as a beaver (Capes 1963: 47). The Westbourne Mound (#160) appears to be a 10 foot high muskrat with a long tail.

The number of mounds in the province can not be stated categorically. While there are numerous mounds that are obvious by their size, shape and location, there are also numerous "humps" that are possible mounds but can only be confirmed by exploratory test excavations. There appear to be approximately 175 mounds with an additional 25-40 possible mounds.

The mounds have been separated initially into three categories: a) possible mounds, b) probable mounds and c) non-mounds. Possible mounds include two categories: a) mounds that have been reported because of their appearance but are doubtful because location, distribution, variability in appearance, and results of testing, and b) mounds that have been reported but have not been visited by people who can assess their likelihood with some degree of reliability. Probable mounds include those mounds that have been excavated, that are sufficiently distinctive in appearance that they can not be mistaken for natural features, or that are sufficiently different from the surrounding landscape and in a typical
location, e.g. a rounded, symmetrical hump on a flat landscape located near the edge of the plain overlooking a river valley. Non-mounds are natural features that have been reported.

Possible Mounds
The possible mounds must be considered since at least some may be real mounds; future research strategies will require shovel-testing into the sides of these features since a soil auger has proven inadequate. A number of mounds have been reported in secondary sources and during the late autumn when visits were impossible (Table 2, Appendix 1). These mounds will require further efforts to locate them.

The other category of possible mounds may be artificial or natural features (Table 2, Appendix 1, Appendix 3). One source of pseudo-mound is a combination of the accumulation of soil about clusters of snowberry (*Symphocarpus albus*), known locally as "badger bush", plus a tendency for badgers to throw up dirt amidst the roots of these clumps (Syms 1971a and field notes for 1971, 1972). The feature is a marked rise above the surrounding flat environment. These questionable features are often found in uncultivated fields where badger bush occurs, lack symmetry, and are located in areas unlike the areas where most known mounds are located. They are often shallow with a height of not more than two feet. It must be remembered, however, that the smaller burial mounds are no higher and in some cases their symmetry has been disrupted due to denning activities of badgers, foxes or coyotes and cultivation.

Other possible mounds that I believe to be pseudo-mounds consist of small irregular humps along the slopes of gently sloping valley walls. While these are rounded they tend to be asymmetrical in profile.

A third category of possible mounds are clusters of humps to the southwest and northwest of Melita (Fig. 9). The
TABLE 2

POSSIBLE MANITOBA MOUNDS

a) Possible Mounds that have not been visited or adequately assessed:
   Melita: Numbers, 48, 49, 56-60, 84, 86-88, 100-105, 182-185
   Pembina: Numbers, 140, 141, 190
   Red River: Numbers, 83, 144, 145, 149, 152, 165, 195
   Arden/Westbourne: Numbers, 81, 186, 188
   Central Assiniboine: Numbers, 82, 158, 189, 191

b) Possible Mounds viewed as highly unlikely specimens by the author:
   Melita: Numbers, 30, 35, 36, 47, 50-52, 62-73, 80, 85, 89-99, 153, 154, 167-181
Figure 9. Possible mound or pseudo-mound on the plains to the west of the Souris River. (Photography by Leigh Syms)
specimens to the northwest are located on marginal land known as "Poverty Plains" (Syms 1971a). The specimens to the southwest were located in Nash's (1972, 1973) survey. These mounds range from irregular to symmetrical forms and from one to three feet in height.

Upon visiting the samples identified by Nash and looking at the surrounding countryside in general, I was struck by the location and frequency of these features. They were found in pastures, and literally thousands are scattered over sections of marginal pasture land. I propose that these features are erosional humps where blowing soil of the 1930s accumulated around small clumps of vegetation such as tumble weed or Canada thistle; the latter provided one of the few plant forms that helped to stabilize shifting sand. Vickers (1977: personal communication) had shovelled the centre of one of these features near Pierson and found nothing to indicate that it was man-made.

Nash tested two small, distinct mound features. He found evidence of possible prehistoric materials in one mound but found no evidence that they were burial mounds and he concludes that:

...it appears that most or all of these plains mounds are not burial mounds (although they may be artificial). Superficially, there is nothing to distinguish the 41 new riverine mounds not recorded by Nickerson from the plains mounds and the same conservative hypothesis should hold... most or all of these features are not burial mounds. Only resistivity surveying or core sampling could economically reveal the nature of these features (Nash 1973: 20).

Nash had his doubts about these humps being mounds and I feel even more strongly that they are only erosional humps. However, more testing is required to substantiate this view.
Probable Mounds

These mounds have either been opened, found in association with other mounds, or are so prominent and distinguishable that there is little doubt for uncertainty, or have been identified by someone who has had considerable experience in distinguishing mounds from pseudo-mounds. They have been lumped under five morphological categories (Table 3).

The most common form is the simple, rounded mound with its frequent sub-surface pit and occasional burials and/or items throughout the mound; a general overview has been presented at the beginning of this section.

The accumulative mounds consist of large mounds that have been built in a series of stages as a result of groups returning to bury their dead. When Montgomery excavated Calf Mountain Mound (#142), he noted that:

...my excavations brought to light nine burial places within a circular area of about thirty-five feet in diameter and under conditions which point to the mound's having been built in portions at different times. These conditions are, firstly, the difference in the state of preservation of the remains in the various burial places, and, secondly, the presence of many layers of limy matter at different levels and having different inclinations or curvature (Montgomery 1910: 49-50).

Calf Mountain Mound (#142) was a large mound about 80 feet in diameter and 10 feet high (Capes 1963: 175). It contained an unknown number of burial pits accumulated throughout the mound. The Westbourne Mound (#160) (Figs. 10, 11) is also large, approximately 90 feet in diameter and 10 feet high, and recent pot-hunting has revealed burials under limestone slabs within three feet of the apex; it undoubtedly is accumulative as well. Other probable examples include the Morrison (Rock Lake) Mound (#126) (Capes 1963) and Fidler Mound (#147) (Saylor 1975).
TABLE 3. Examples of Probable Mound Types in Southern Manitoba, excluding the simple rounded type.

<table>
<thead>
<tr>
<th>Region</th>
<th>Simple Linear</th>
<th>Composite Linear</th>
<th>Accumulative</th>
<th>Effigy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melita</td>
<td>Riverview A(24)</td>
<td>A, 5, 6, 7, 8, 10</td>
<td>F?</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Riverview B(25)</td>
<td>11, 12, Moore C(112)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Mound 34?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pembina</td>
<td>Walter Sykes(137)</td>
<td>Sims (113)</td>
<td>Calf Mtn.(142)</td>
<td>Calf Mtn.(142)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walter Sykes(137)</td>
<td></td>
<td>Star A (115)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>McLaren B(134)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cavers (122,124)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Red</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>River</td>
<td></td>
<td>Fidler(147,148)?</td>
<td>Fidler(147,148)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>St.Andrews (151)</td>
<td>0</td>
</tr>
<tr>
<td>Arden/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Westbourne</td>
<td></td>
<td>McKenzie (162)</td>
<td>Westbourne(160)</td>
<td>McKenzie(162)?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arden (163)</td>
<td></td>
<td>Arden (163)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Westbourne (160)</td>
<td></td>
<td>Westbourne(160)?</td>
</tr>
<tr>
<td>Central</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assiniboine</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

TOTAL * 4 17 5 5

* Some mounds have been placed in more than one category which produces a slightly exaggerated total. Total mounds: 25.
Figure 10. View of the Westbourne Mound (#160), an example of an Accumulative and Possible Effigy Mound. Approximate height is 10 feet. (Photograph by L. Syms)

Figure 11. View of the Grade ("tail") of the Westbourne Mound (#160) with farmer's roadway cutting through it. (Photograph by L. Syms)
Linear mounds occur in at least two forms: a) a simple grade or ridge that tapers at both ends and b) a composite form most commonly represented by a grade with a circular mound attached to each end but occasionally represented by a circular form with a grade or ridge extending in one or more directions from one circular mound. The simple linear forms are rare; two examples are Riverview Linear A (#24) and Riverview Linear B (#25) (Capes 1963: 39). The larger of the two was 122 feet long, 18 inches high and 31 feet wide.

The composite linear mounds represent unusual and impressive works of labour (Table 4, Fig. 12). There are seventeen examples, most of which are in the Melita Region. Most of these mounds consist of a long, low, wide grade with two rounded tombs on either end. They are up to 765 feet in length with grades often about 20 feet wide and 1 to 1 1/4 feet high and with circular mounds 35-50 feet across and 1 1/3 to 5 feet high. A few examples such as Mound #11 have not been cultivated but many are barely perceptible.

These mounds have drawn the most attention over the years. They represent monumental efforts of their time. With only stone and bone technology, the nomadic hunters came together, dug the burial pits, buried the dead, and then built these monuments to the dead by transporting and piling sod and earth. Centuries of erosion have smoothed and levelled these forms to some degree.

The effigy mound category is more difficult to identify. Few mounds are clearly effigy in form like those assigned to the Effigy Mound burial complex south of the Great Lakes. Star Mound A (#115) has been identified as an elliptical beaver effigy (Capes 1963: 172-173) and Arden (#163) and Westbourne (#160) mounds have large centres with tail-like appendages (Montgomery 1908; Capes 1963: 175). There is some danger of imaginative individuals seeing animal forms in irregular, geometric forms, but I have been impressed with the muskrat-like appearance of the Westbourne Mound (#160) everytime I have visited it.
TABLE 4
DIMENSIONS OF SOME COMPOSITE LINEAR MOUNDS

<table>
<thead>
<tr>
<th>Mound</th>
<th>Grade&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Circular Diameter</th>
<th>Ends Height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>W</td>
<td>Ht.</td>
</tr>
<tr>
<td>Fidler Mounds (147 and 148)</td>
<td>900&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Moore Mound C (112)</td>
<td>765&lt;sup&gt;c&lt;/sup&gt;</td>
<td>20</td>
<td>.33</td>
</tr>
<tr>
<td>Mound 11</td>
<td>650</td>
<td>20</td>
<td>1.25</td>
</tr>
<tr>
<td>McLaren B (134)</td>
<td>608</td>
<td>19-33</td>
<td>2 - 4</td>
</tr>
<tr>
<td>Mound 12</td>
<td>500</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td>Walter Sykes (137)</td>
<td>325</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Mound Q</td>
<td>300</td>
<td>30</td>
<td>1.00</td>
</tr>
<tr>
<td>McKenzie Mound (162)</td>
<td>257</td>
<td>23-39</td>
<td>2</td>
</tr>
<tr>
<td>Sims Mound (113)</td>
<td>207&lt;sup&gt;c&lt;/sup&gt;</td>
<td>22</td>
<td>1.25</td>
</tr>
</tbody>
</table>

<sup>a</sup> All measurements are in feet
<sup>b</sup> A grade mentioned by McCharles (1887)
<sup>c</sup> Total length includes circular ends
Figure 12. Low aerial view of a composite linear mound (#11). A, B are round tumuli at the end.
Non-Mounds

There are at least two examples of natural features that have been reported as mounds but which I categorize as non-mounds. The first is the "Lovatt Mound" which is located north of Highway No. 2 between Souris and the junction of Highways No. 2 and No. 10. This feature is a large hump on a sinuous, undulating ridge that represents a glacial moraine. I have visited the mound on two occasions and have found an occasional flake; during the last visit, the land owner informed me that a grader had levelled six feet off the top of the feature without revealing any bones. Even after being levelled, the feature was sufficiently large that I used a van as a scale while taking a photograph.

The second example was reported by a Professor Jaenen who lived as a youth in the region around Sinclair near the Manitoba-Saskatchewan border. I attempted to locate two mounds but these were only large hills in a rolling landscape.

These non-mounds shall not be considered further, nor are they plotted on the maps.
Distribution and Cultural Identification of the Manitoba Mound

Distribution within Manitoba
When the mounds are quantified and plotted (Table 5, Figs. 13, 14, 15, 16, 17, 18), it is clear that they are a southern phenomena. The largest cluster, including most composite linear specimens, is located in the Melita Region of Southwestern Manitoba. The Pembina Valley and near-by area ranks second in density; within this broad region, there are three clusters: a) north of Rock Lake, b) northwest of Pelican Lake, and c) farther east in the LaRiviere-Snow Flake Locality. There are small clusters in the Lower Red River and the Arden-Westbourne regions and isolated scattering along the central Assiniboine River Valley and Oak Lake.

The Melita Region has the largest number of both possible and probable mounds. Since most of the possible mounds appear to be natural features, until further tests prove otherwise, discussion is confined to the probable mounds and most of these have been confirmed as definite mounds.

The mounds are concentrated near the mouths of the Antler River and Gainsborough Creek. They are generally located near the edge of the Plain overlooking the river valley. Rarely do they occur beyond 100 yards from the edge of the valley.

The composite linear mounds are confined primarily to a very limited area near the mouth of the Antler River. However, the linear Moore Mound C(#112) is separated slightly from the main concentration. Simple linear grades are found near the mouth of the Gainsborough Creek, e.g. Riverview Linear Mounds (#24 and #25). These differential distributions of mounds could reflect different groups, the same group during different periods,
### TABLE 5
NUMBER OF MOUNDS IN SOUTHERN MANITOBA

<table>
<thead>
<tr>
<th>Region</th>
<th>Probable Mounds</th>
<th>Possible Mounds</th>
<th>Total Mounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melita</td>
<td>69</td>
<td>70*</td>
<td>139</td>
</tr>
<tr>
<td>Pembina Valley</td>
<td>33</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>Lower Red River</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Arden/Westbourne</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Central Assiniboine</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>117</td>
<td>87</td>
<td>204</td>
</tr>
</tbody>
</table>

* 49 of these are more likely to be natural features than mounds.
Figure 13. Distribution of mounds in southern Manitoba (D. Milton, draftsperson).
Figure 14. Mounds of the Melita region (D. Milton, Draftsperson).
Figure 15. Mounds of the Antler River and Gainsborough Creek locality (inset from Figure 14) (D. Milton, draftsperson).
Figure 16. Mounds of the Pembina Valley region (D. Milton, Draftsperson).
Figure 17. Mounds of the Arden-Westbourne Region (D. Milton, draftsperson).
Figure 18. Mounds of the central Assiniboine region (D. Milton, draftsperson).
or idiosyncratic behaviour. Montgomery (1908: 36-37) believed that the clusters of mounds at the mouths of the two rivers represented two different groups because the burials at the mouth of the Antler River were in a better state of preservation (hence more recent), contained linear mounds that were absent in the other cluster, and lacked catlinite pipes and miniature vessels.

The mounds in the Pembina Region have the greatest concentration near the north side of the Pembina Valley overlooking Rock Lake (Fig. 16). Others are clustered north of Pelican Lake or scattered over the near-by "Plain". This scattering is not random, however, for the locations of several mounds are prominent hills overlooking the local landscape, e.g. Sykes Mound (#138), Star Mound A (#115), Calf Mountain Mound (#142) and Pilot Mound (#121).

...the Sykes Mound...is located on a high hill locally known as Medicine Hill, Signal Hill, etc.;...the Sykes and McKay mounds on the crests of some of the highest elevations in the Tiger Hills country (Vickers 1945:91).

(Nebogwawin Butte or Star Mound) covers an area of about 300 acres, its elevation is 1600 feet above sea level, that being about 50 feet above the surrounding plain...There is a burial mound on the summit (Vickers 1948b: 2).

Northwest of Snowflake is Pilot Mound Hill. From its summit is an extensive view of the plain...a small round mound was opened (Capes 1963: 59).

Most of the Pembina Region mounds are simple mounds like the Crayston Mound (#129) (see Frontispiece), but there are at least two linear grades, e.g. the McLaren "earthworks" (#134) and Walter Sykes Mound (#137), one composite linear mound (the Sims Mound #113), and one combination accumulative-effigy mound, e.g. Calf Mountain Mound (#142).

The mounds in the Lockport locality of the Lower Red River Region are located close to the edge of the Red River Valley. The Rosser (#146) and St. James (#143) mounds are located near tributaries. These are primarily simple mounds although the
Fidler Mounds A and B (#147 and #148) may have been joined by a grade thus making it a composite linear mound. These mounds were also accumulative although smaller than Calf Mountain Mound (#142).

There are only a few mounds in the Arden-Westbourne Region. With the exception of the possible Brookdale Mound (#81) the mounds are located along the edge of the Whitemud River Valley, along the high ridge of the Glacial Lake Agassiz Campbell Beach, e.g. McGowan (#164), Arden (#163) and McKenzie (#162) mounds, or a combination of the two locations. The "tail" or grade emanating from the Westbourne Mound (#160) trails to the edge of an "oxbow" or dry channel of the Whitemud River.

Despite the relative paucity of mounds in the Arden-Westbourne Region, there are a relatively large number that are distinguished or unusual in size or form. The Westbourne Mound (#160) is a large accumulative mound circa 90 feet across and 10 feet high with at least one large, long ridge emanating from it; this ridge is about 2 1/2 feet high, 30 feet wide, and 400 feet long. It may also be an effigy mound.

The McKenzie Mound (#162) is a linear mound measuring 257 feet in length, 23-29 feet in width, and 2 feet in height. The Arden Mound (#163) was a possible effigy like Star Mound with a 443 foot long "tail" (Capes 1963: 63). It was only about 4 feet high.

Finally, in the Brandon locality of the Central Assiniboine River Region there are a couple of circular mounds. One possible mound near Oak Lake (#191) was not located. Both the Stott (#157) and Lone (#159) mounds are located close to the edge of the Assiniboine River Valley.

Mounds tend to be located close to the edge of a river valley or, less frequently, on a high hill. Composite linear forms tend to be concentrated in the Melita Region but simple linear and composite linear forms occur in small numbers in
most regions. The effigy and accumulative forms occur in three of the regions as a minor element.

When the distribution of the mounds is compared with the natural vegetation as reconstructed for the period prior to the homesteading era of the 1880s (see Syms 1977: 17), the mounds are found primarily within the southern edge of the Aspen Parkland and in the adjacent edge of the Plains grassland (Syms n.d.). There is a notable gap in the eastern part of the province, east of the Red River and in the central and northern portions of the province which are covered with the northern edge of the Aspen Parkland and Boreal Forest. With the exception of one possible mound north of Lake Winnipeg, the literature is void of reference to mounds. Extensive archaeological work has been done in some regions such as Southern Indian Lake, the Rat-Burntwood River System and the Winnipeg River and Manigotagan-Wanipigow River System, as well as more cursory work in the Inter-Lake country and numerous lakes in northern and north-eastern Manitoba, and yet the reports do not include references to burial mounds other than the small, barely perceptible hump of some historic burial. The implications of this mound and vegetation zone correlation are discussed in the later section on cultural identification.

Distribution in Adjacent Areas Outside Manitoba
It is important to be aware that the overall distribution of mounds in southern Manitoba represents: a) the largest concentration of prehistoric burial mounds in Canada, and b) a "distributional wedge" extending from the Oak Hickory Forest and Prairie and Oak Savanna of western, central and southern Minnesota and the extreme periphery of the Northeastern Plains grassland of western Minnesota and eastern North Dakota. In Saskatchewan, there are only two mounds (Hanna 1976: 4) and these are located in the extreme eastern and southeastern parts of the province.
To the south in North Dakota, there is no systematic tabulation of which I am aware but Montgomery (1906) opened mounds primarily in the northeastern part of the state, particularly in the Devils Lake Region, where he reported 61 examples. Chomko and Wood (1973) compiled a list of the simple and composite linear mounds; they found the greatest concentration in eastern and northern North Dakota but did report 23 linear mounds in seven clusters in the locality of the confluence of the Knife and Missouri rivers. Further evidence of the quantity of mounds in eastern North Dakota is indicated by Lloyd Wilford's early work at the Blasky mounds on the Forest River where 16 round and simple linear mounds were reported and the Kallstrom Mound along the Red River Valley in southeastern North Dakota (Wilford 1970).

When we turn to the east, a very different pattern is apparent. Lothson (1967, 1973) tabulated the results of early mound surveys in Minnesota and recorded 7,773 throughout the state plus an additional 1,125 in the Mille Lacs Region of central Minnesota. These mounds were found mainly in the central, southern and western parts of the state and are relatively rare in the northern mixed Conifer-Hardwood and Boreal Forest areas. Lothson (1967) found that the mounds were strongly associated with rivers, with deciduous forests and ecotone vegetation, with areas below the 110-day frost free isobar and increased in frequency with increasing length of growing season.

In Ontario most mounds are scattered in a few clusters along the Rainy River and there is an occasional mound to the north of the Rainy River, e.g. 1 on Lake Nipigon, 1 on Whitefish Island, and a few on Lake-of-the-Woods (David Arthurs and Walter Kenyon 1978: personal communication). One concentration of 17 mounds including the Laurel "grand mound" occurs in and near Manitou Mounds Park Reserve at the Long Sault (Arthurs 1976), and 18 mounds occur between Pithers Point and Fort Francis at the mouth of the river. Despite considerable research in the
southern edge of Northwestern Ontario, there has been no compilation of mounds but the above informants make it clear that mounds are not frequent. Furthermore, only a couple of mounds occur in the Manitoba-Ontario border area. This relative paucity of mounds along the southern border of Northwestern Ontario corresponds with the relative paucity of mounds in northern Minnesota and eastern Manitoba.

With a sample of 117 probable and 87 possible mounds, Manitoba has the largest quantity of mounds in Canada. This concentration of mounds represents an extension of mounds in central and southern Minnesota. Not only do the mounds show a continuous distribution along an ecotonal zone, they also share similarities in form such as linear, composite linear, effigy and accumulative forms.

Distribution patterns provide little information other than the possible limitations of environment as Lothson (1967) attempted to ascertain. These patterns can help to fortify or refute possible cultural relationships determined on the basis of artifactual and skeletal materials. For example, the paucity of Blackduck mounds in the Boreal Forest of eastern and northern Manitoba combined with a pattern of mounds having a continuous distribution along the Aspen Parkland-Plains interface from Manitoba down into Minnesota suggests that many of Manitoba's mounds have cultural affiliations to the southeast rather than to the east.

Cultural Remains, Cultural History and Mound Relationships
The primary concern of this report is the mounds. In order for the mounds to be placed in a cultural context, it is necessary to: a) consider the variability and homogeneity of artifactual material found in the mounds, b) the temporal framework of artifactual materials, and c) the relationship of the mounds to
the overall activities of the makers by comparing the mounds with the associated encampments. In order to achieve these goals, it is necessary to consider the quality of the data and the methodological perspective of the researchers who have attempted to analyze the mound materials.

There are four limitations that one must face constantly: a) numerous mounds lack any diagnostic artifacts and can not be assigned to any archaeological complex, b) all burials in particular mounds must be lumped together and treated as a single cultural unit because the crude techniques, haste, and lack of concern for context failed to account for the possibilities of different "groups" building accumulative mounds, e.g. some mounds in Minnesota contain both Laurel and Blackduck burials (Wilford 1941, 1945; Evans 1961a) and for the occasional intrusive burial of later groups, e.g. the historic Santee interred their members in the prehistoric spawn Mound, South Dakota which had originally been built by some much earlier Plains Woodland group (Howard 1968), c) for the early research in the 1890s and 1910s, the brief, cryptic comments often provide inadequate data on specific locations of artifacts to particular mounds, d) the artifacts in the mounds are frequently of a specialized nature and are often found only rarely in village excavations or collections, and e) only one mound has been excavated in conjunction with a near-by encampment that is probably, but not unequivocally, associated with the mound, e.g. the Stott Site and Stott Mound (#157) (MacNeish 1954; Saylor 1976; Watrall 1976; Syms 1976b). Despite these limitations, there are a number of mounds that can be assessed in terms of cultural identity and history.

It is necessary to review the earlier efforts by Vickers and MacNeish to assign various mounds to specific archaeological complexes (phases, foci). Vickers was the first and only individual to systematically attempt to assign mounds to various foci.
Vickers (1947, 1948c, 1948d, 1948f, 1949b, 1951) developed a chronology of four foci:17 a) the Pelican Lake Focus of an unnamed aspect which was represented by the Lowton Village Site but no mounds, b) the unnamed focus of the Red River Aspect which was represented by the McKay (#139) and Sykes (#138) mounds and identified by washer-shaped shell beads and trapezoidal shell pendants, c) the Manitoba Focus of the Headwaters Lake Aspect which represented a Manitoba manifestation of Wilford's Blackduck Focus and which he believed probably represented the historic Assiniboine, and d) the Rock Lake Focus of the Rainy River Aspect which was stratigraphically earlier than the Manitoba Focus and which he equated with the Laurel Focus of Minnesota. Mounds were assigned to all taxonomic units except the Pelican Lake Focus.

Vickers accomplished a staggering task in excavating village sites and mounds, reporting each year's activities in a variety of journals and attempting to establish an initial chronology through his spare time efforts and the assistance of only his family. He related much of the chronology to the work of Lloyd Wilford (1941, 1945) in Minnesota. While we can only admire the magnitude of the man's efforts, we must also view his results critically:

a) his work was done prior to the utilization of radiocarbon dating and he, like Wilford, had a very narrow temporal perspective with pottery having been made only since A.D. 1400;

b) his field techniques were typical of the Classificatory Descriptive Period; he dug the Avery Site in two arbitrary six-inch levels and assigned all materials in each level to the earlier Rock Lake Focus of the Rainy River Aspect and the later Manitoba Focus of the Headwaters Lake Aspect. Joyes (1969, 1970) re-analyzed the Avery Site pottery and found Avery Corded pottery which was Plains Woodland, Manitoba Phase, Selkirk Phase, and a variety of miscellaneous, unnamed specimens. Thus, we know that Vickers was lumping multiple phases (complexes)
under particular foci;

c) he identified several historical Native groups for southern Manitoba but attempted to assign archaeological materials to only two groups—the Cree and the Assiniboine, and he concentrated on the latter who held a particular interest for him;

d) when he attempted to assign mounds to a particular archaeological complex, his data were often tenuous; he was basically a cautious scholar and was aware of the tenuous nature of the data but later researchers proved to be less discriminating, and

e) he had very limited comparative data.

Bearing these limitations, we can now look at his taxonomy and interpretations. The Sykes (#138), McKay (#139) and Westbourne (#160) mounds were lumped under an unnamed focus of the Red River Aspect because they yielded washer-shaped shell beads, notched trapezoidal shell beads, and pit burials (Vickers 1947).

Vickers (1945, 1947, 1948e, 1949b) identified a series of mounds as part of the Manitoba Focus of the Headwaters Lake Aspect because they had: a) sitting burials; b) small mortuary vessels, and c) pottery with cord-wrapped stick decoration in the mound fill or collected from the surface on nearby fields or terraces. Confusion arises when he includes, as examples of mounds with these traits, such mounds as the McKay Mound (#139) because it has a seated burial (Vickers 1947: 110) when he has assigned it to the Red River Aspect because of the accompanying artifacts -- the shell beads and pendants.

Further confusion arises with regard to the trait of sitting burials because Nickerson (1914b) was of the opinion that at least some of the purported sitting burials were mis-identified contracted (flexed) burials. There are relatively few unequivocal examples of burials which were discovered in a sitting position; examples are the Fidler Mound (#147) (Gunn 1867;
Saylor 1975), McKay Mound (#139) (Stewart 1978), Sykes Mound (#138) (Rand 1941) and one of the mounds excavated by Bryce (1904) near Lockport. Since there is some question whether people such as Montgomery, Rand and several other pot hunters were mis-interpreting the position of burials, only a few mounds can be considered as reliable examples.

A second trait that Vickers used was the presence of small mortuary vessels. These vessels are smooth and incised, are generally associated with a series of traits that I have lumped under the Devils Lake-Sourisford Burial Complex (Syms n.d.) and bear no resemblance to the miniature vessels found in Blackduck sites in northern Minnesota. This trait also has little validity in identifying the Manitoba Focus.

The final defining variable, the presence of Blackduck sherds in the mound fill or from collections within several hundred yards, is also fraught with problems. The presence of Blackduck sherds in the mound fill can also be accounted for by the mounds being built in an area where a previous Manitoba Focus village had been and the debris subsequently being gathered up in the earth during the mound construction, or it can represent debris or offerings left by later occupants of the site. Vickers had the problem of not knowing how many ceramic complexes existed, how many occupations were represented in the surface collections, or the relative temporal framework of the various pottery types. To date, the Stott Mound (#157) is still the only mound which has been excavated with accompanying excavations of a nearby encampment; even the Stott Mound lacks diagnostic artifacts in association with the burials and can only be assigned to the village because intensive surface collections and recent excavations have failed to produce any ceramics other than Blackduck pottery.

In retrospect, Vickers' efforts to assign the mounds to the Manitoba Focus were of a spurious nature. Only one of the
mounds could and can reasonably be assigned to the Manitoba Phase.

In the early 1950s, Richard S. MacNeish conducted excavations along the Winnipeg and Red rivers, at the Stott Mound and village site along the Assiniboine River, and at the United Church Site on Rock Lake (MacNeish 1954, 1958; MacNeish and Capes 1958). He developed his stacked chronology (see Fig. 3), which was to be the basis of all research until the 1970s.

MacNeish essentially elaborated upon the chronology established by Vickers. With a single flourish of the pen, he assigned all mounds in Manitoba to the Manitoba Phase, dated the phase to A.D. 1000-1350 (without bothering to obtain any radiocarbon dates), and assigned the materials to the Assiniboine (MacNeish 1954; 1958: 64-76, 73, 77)! He did not bother to consider the variability in artifacts found in the mounds nor any of the above-mentioned problems. The Stott Mound (#157) (MacNeish 1954) lacked items that were sufficiently diagnostic; harpoons and birdbone whistles are found throughout numerous burial complexes in the Plains and Northeastern Woodlands, the sherds found in the mound fill were minute, obliterated textile-impressed sherlets lacking any diagnostic decorative traits, and the columella beads, although more restricted than the other traits, do occur in several mound complexes. He incorporated the Rosser Mound (#146) into the Manitoba Phase because of two textile-impressed sherds found in the backdirt of earlier digging. With the remainder of the mounds, he does not even justify their inclusion in the phase.

MacNeish (1958: 77) refers to the Melita Focus which he describes only as covering southwestern Manitoba, eastern North Dakota and southeastern Saskatchewan; he is presumably referring to the mounds of the Melita Region and he later designates these mounds as part of the overall Manitoba Phase mound-building in discussions with Katherine Capes (1963) who
was his laboratory technician and edited and elaborated upon Nickerson's manuscript and with Dr. Nancy Ossenberg (Cameron 1962; Ossenberg 1969, 1974) who analyzed the human skeletal material from the mounds.

Capes (1963) published Nickerson's materials and synthesized the data on the mounds by previous researchers. Her work includes detailed sketches of excavations and numerous illustrations, plus considerable discussion on relationships between Manitoba mounds and mounds from elsewhere. First, she recognizes that various traits in Manitoba mounds had similarities with Wilford's Laurel, Malmo, Arvilla, Kathio and Blackduck materials in Minnesota, with the Effigy Mound Culture of Wisconsin, and with Howard's (1953) Southern Cult materials in North Dakota (Capes 1963: 81-85). Furthermore, she notes variation within the mounds (e.g., the spiral incised miniature vessels being confined to the Melita Region).

Capes felt that the evidence pointed to "a late prehistoric setting that extended into the historic setting...a mound tradition, probably two to three hundred years old in the Antler-Souris district, which may antedate that period in some tumuli of the central region" (Capes 1963: 114). She suggests that the mounds and their traits were introduced from different directions - Devils Lake, North Dakota to the south, Rainy River to the east and Minnesota to the southeast - that they were the work of "closely related peoples influenced by accumulated traits that reach back to Middle Woodland times" (Capes 1963: 119).

Her conclusions were based on a great deal of work. However, her comparative data consisted primarily of early reports lacking radiocarbon dates and having limited illustrations. For example, Wilford's illustrations consisted of a few pages of mediocre sketches for the entire ceramic record of Minnesota. More recent works such as Wedel (1961) dealt primarily with the Plains farther south and referred to the mounds and miniature vessels of the Northeastern Plains but did not fit them into
In the early 1970s, it became apparent that: a) there was considerable antiquity to the mounds, and b) the cultural history of Manitoba is much more complicated than earlier literature indicated. Furthermore, there has been a considerable growth in comparative data from other areas.

Since we can no longer assign all mounds to a single complex (phase, focus), we must analyze each mound and its traits individually (see Appendix 2) and compare each mound with the range of archaeological complexes that have been, and are still being, identified. Such a task is beyond the scope of this report because there has been a proliferation of "mound culture" categories which have not been rigorously defined or identified using consistent traits and because such a comparison would entail studying and re-analyzing collections that have comparative materials in several institutions in North Dakota, South Dakota, Minnesota and Ontario.

The mounds in northern Minnesota and adjacent Ontario are identified with the Laurel and Blackduck complexes (Stoltman 1973; Dawson 1974; Lugeneal 1976). In central and southern Minnesota, mounds are assigned to the Arvilla Burial Complex, Kathio Complex, Cambria, Oneota, Malmo, an unnamed southern focus, and the Mill Lacs Aspect when they can not be assigned to Kathio or Malmo categories (Wilford et. al. 1969; Wilford 1970; Johnson 1973). In North and South Dakota, mounds have been assigned to the Sonota Complex, (Newman 1975) Valley Complex (Syms 1976a), Arvilla Complex (Johnson 1973) and the Plains Southern Cult (Howard 1953) which was expanded to become the Devils Lake-Sourisford Burial Complex (Syms n.d.). In addition, there are many mounds that have not been assigned to any complex and others that have been assigned to two or more complexes.

Turning to the Manitoba mounds, it is now possible to re-assess their relationship to some of the mound groups from outside the
province and to suggest some initial generalizations. We realize, for example, that the mounds have a long antiquity, having been made throughout the last 2,000 years, and have a large number of complexes to which they could potentially belong (Fig. 5) (Syms 1976a, 1977). There are now radiocarbon dates on six mounds: A.D. 595 ± 60 (S-1303) on the Stott Mound (#157), A.D. 620 ± 90 (Gak-1883) on the Riverview Mound (#106), A.D. 1100 ± 75 (S-690) on the Heath Mound (#109), A.D. 1560 ± 90 (Gak-1881) for Mound G and A.D. 1570 ± 80 for Fidler Mound (#147) and A.D. 1730 ± 90 (I-4684) for the St. James Mound (#143) (Nash 1974, Saylor 1976; Syms 1976a).

During the Middle Woodland Period, circa 200 B.C. to A.D. 600, four archaeological complexes which included mounds appear in Manitoba—the Laurel Composite in eastern Manitoba, the Valley and Sonota complexes, from the Plains to the south and possibly the Arvilla Burial Complex from the Red River Valley of Minnesota (see Syms 1976a and 1977 for detailed discussion and references).

While Laurel sites are frequent in eastern and northern Manitoba, none of the Manitoba mounds that have been excavated have had Laurel pottery in association with the burials. This latter phenomenon is confined primarily to the Rainy River region of Ontario and nearby regions in northern Minnesota. Therefore, it is unlikely that any of the Manitoba mounds are Laurel.

The Sonota Complex on the Northeastern Plains includes burial mounds (Neuman 1975). Several Sonota sites have been recorded in Manitoba (Richards 1975; Syms 1976a; Hysop and Syms n.d.) and many more have been subsumed under the Besant Phase (Reeves 1970a, 1970b). Sonota sites are concentrated along and near the Pembina Valley. At the Richards Site, which is located between Killarney Lake and the Pembina Valley, there are three mounds (#192, 193 & 194) of which two (#193 & 194) are located in the village area. These mounds may also have been built during a later Blackduck occupation; only excavation will determine their affiliation. Since Sonota camp sites occur in
the Pembina Valley, e.g. the Montroy Site, some of the mounds along the valley could belong to this complex.

The Valley Complex occurs rarely in Manitoba. However, one reconstructed vessel has been recovered next to one of the Moore Group mounds (#110, 111 & 112) (Syms 1971b, 1977: 134-135).

The Arvilla Burial Complex has been identified in southern Manitoba (Johnson 1973; Saylor 1975) but it will be re-evaluated later in the discussion on the Devils Lake-Sourisford Burial Complex.

Of the four Middle Woodland Period complexes, it is likely that some of the mounds belong to the Sonota Complex, one or more of the Moore Group mounds could belong to the Valley Complex, and one or more mounds belong to the Arvilla Burial Complex.

During the Late Woodland Period, circa A.D. 600-1800, there are numerous complexes from both the Plains and Boreal Forest that utilize southern Manitoba to varying degrees. Two with an eastern and northern Boreal Forest orientation are the Blackduck Horizon and Selkirk-Clearwater Lake Punctate Composite, however, mounds are associated only with the Blackduck Horizon.

Mounds have been assigned to the Blackduck Horizon in northern Minnesota (Wilford 1941, 1945; Evans 1961a, 1961b; Webster 1973; Syms 1976a, 1977; Lugenebeal 1976) and Ontario (Wright 1965, 1972; Dawson 1974). However, only the Stott Mound (#157) seems to have sufficient evidence to make a strong case for Blackduck affiliation.

Mounds seem to be rare in the eastern part of the province such as the Winnipeg River drainage system where they would be expected to occur and are non-existent in the north where Blackduck sites are frequent. Furthermore, Blackduck mounds in Minnesota frequently have distinctive textile-impressed miniature vessels with cord wrapped dowel or multi-punctate decoration; none of these particular miniature vessels have been found in Manitoba mounds. Therefore, I predict that few mounds can be assigned to the Manitoba Phase of the Blackduck Horizon.
For the Late Woodland Period, there are numerous complexes and components in southern Manitoba which have a Northeastern Plains, Missouri Valley, or unknown source of influence and/or development (see Syms 1977: 135-140 for details). Several of these are at least potential sources for many of the Manitoba mounds.

Syms (n.d.) has attempted to define a cluster of traits as the Devils Lake-Sourisford Burial Complex. These traits include: small incised vessels with smooth surface finish; conch shell mask-gorgets with and without the weeping-eye motif; long conch columella pendants; short columella beads; flat incised tablets (most having angular representations of animals); tubular pipes of catlinite and steatite; curved "wristlets and anklets" of incised bone; notched trapezoidal shell pendants; washer-shaped shell beads, and copper bands and beads as a core of traits (Figs. 19, 20, 21). When these items are plotted, they form an arc, following the Plains-Aspen Parkland interface from southeastern North Dakota through southern Manitoba to southeastern Saskatchewan with scatterings beyond the central area.

Syms (n.d.) proposes the following for this burial complex:

a) it spread into the Northeastern Plains when Mississippian expansion took place circa A.D. 900-1000 and Plains villages and Upper Mississippian complexes first appeared;

b) it persisted until the 15th century, and a few items persisted into the historic period, e.g., one shell mask-gorget has a horse incised on it and one mask-gorget persisted among the Kansa into the 1800s (Howard 1953);

c) the traits tend to cluster and be interrelated, e.g. there tend to be lines in sets of 3 on the incised tablets and notches in sets of 3 on the trapezoidal pendants; the Thunderbirds incised on the pottery were associated with war and the Kansa used their mask-gorget in war ceremonies; several traits occur together frequently in the mounds;
Figure 19. Miniature vessels of the Devils Lake-Sourisford Burial Complex showing variety of incised designs. (Drawn by J. Brancewicz)
Figure 20. Shell mask-gorgets of the Devils Lake-Sourisford Burial Complex. (Drawn by J. Brancewicz)
Figure 21. Other items associated with the Devils Lake-Sourisford Burial Complex. (Drawn by Jan Brancewicz)
d) the miniature vessels have considerable variation in incised design including spirals, Thunderbirds, turtles, and zig-zag lines but all vessels are smooth-surfaced and most have a combination of 4 lip tabs with zig-zag incising or parallel incising between tabs;

e) they were made by a Siouan group which was involved in a seasonal round of bison hunting; they were in no way associated with Blackduck materials which are considered to be Algonquian, and

f) the conch shell came in through the Missouri villages of the Extended Middle Missouri Tradition.

Manitoba examples of the Devils Lake-Sourisford Burial Complex include:

a) the Reston Burial (Braddell et al. 1970);

b) mounds C, D, R, H (#21) plus others by Bryce from the Melita Region;

c) Pilot Mound (#121), McLaren Mound (#133), McKay Mound (#139), Sims Mound (#113), Star Mound A (#115), Sykes Mound (#138), Cavers Mound (#122), Crayston Mound (#129) and Calf Mountain Mound (#142) of the Pembina Valley Region;

d) Fidler Mound (#147), Rosser Mound (#146), St. Andrews Mound (#151) and McGovern Mound (#164) of the Lower Red River Region;

e) the Westbourne Mound (#160), and

f) the Lone Mound (#159) of the Central Assiniboine Region. These include simple mounds, accumulative mounds and composite linear mounds. One notable pattern is that all of the known large, accumulative mounds fall within this burial complex.

One of the problems in identifying this burial complex lies in the fact that no village sites have been excavated. Recent surveys in North Dakota have discovered sites that do have clusters of traits with similar ceramic traits (Good et al. 1977) but these have not yet been reported in sufficient detail. There are also collections in southern Manitoba that include smooth,
incised pottery and pottery with tabs and incised lips; some of these collections are currently being described but excavations are required to identify whether the variability is due to culture mixing or mixing of multi-component sites and to determine the time range.

Johnson (1973) recently reassessed the Arvilla Burial Complex in Minnesota. This complex shares with the Devils Lake-Sourisford Burial Complex items such as miniature vessels, copper ornaments, bone beads, antler-hafted beaver incisors, bone bracelets, shell pendants, columella beads and disk beads. However, it shows marked dissimilarities in the absence of tubular pipes, presence of Middle and Late Woodland fabric-impressed miniature vessels, presence of a distinctive clay elbow pipe, gorgets made from local shell rather than conch shell and lacking facial designs, and harpoons. Both complexes seem to be part of similar trade spheres as sources of certain items such as the columella beads but otherwise are relatively different.

Johnson (ibid.) is of the opinion that the complex developed rapidly about A.D. 500 or 600 and disappeared about A.D. 900 in Minnesota and perhaps slightly later in Manitoba; this evidence is based primarily on two dates. I propose that the Arvilla Burial Complex dates to a time period similar to that of the Devils Lake-Sourisford Burial Complex because both would have been influenced by the same Mississippian developments and because at least one of the vessels represents a late Blackduck vessel *circa* A.D. 1200-1400 (Syms n.d.).

The cultural history of the Late Woodland and protohistoric ceramic periods of the Northeastern Plains is poorly known. Ann Johnson's recent description of ceramics from the Dune Buggy Site in northeastern Montana personifies the frustration and uncertainty of the ceramic variability. She emphasizes that "future work must delineate with more precision the separate ceramic groups in the Northwestern Plains..." the major contribution to unscrambling relationships will come with the development
of a good temporal framework and stratigraphic relationship" (Johnson 1977: 48).

A reanalysis of the Lowton collection (Reid 1972) and various reports on the Mortlach Complex (?) on the Northeastern Plains (Wettlaufer 1956; Wettlaufer and Mayer-Oakes 1960; Joyes 1973) and the recent materials from Southwestern Manitoba (Syms 1971b, 1972, 1976a, 1977) all indicate tremendous ceramic complexity. The mound affiliations, while less complicated, must be assigned to several complexes on an individual basis rather than on an areal or phase basis!

Human Biological Remains, Cultural History and Mound Relationships

There have been several recent efforts to study specific biological populations from mounds and village cemeteries from the Northeastern Plains, Upper Mississippi Valley and Upper Great Lakes regions in order to discern demographic characteristics, pathologies, degrees of dissimilarity, cultural identity and cultural relationships (Bass 1964; Peterson 1964; Phenice 1969; Bass et. al. 1971; Wilkinson 1971; Ossenberg 1969, 1974). Since Ossenberg worked with materials from the Manitoba mounds, it is useful to turn to the results that her type of research has yielded and to evaluate her results.

Peterson (1964) conducted a biological distance ($D^2$) analysis on remains from four Minnesota mounds representing four different archaeological manifestations, e.g., McKinistry Mound No. 2 (Blackduck), Crookston Mound (tentatively Kathio), Lindholm Mound (Cambria) and the Hogback Mound (Oneota); the first two are late Woodland and the latter two are Upper Mississippian. The $D^2$ analysis indicated that the Blackduck sample was discrete and that the other three grouped in such a manner that statistically each could belong to the population of the other (Peterson 1964: 26). Peterson (1964: 26-27) derived the following:
Figure 22. Distribution and Identification of Skeletal Populations used in Ossenberg's (1974) Analysis. (Drawing by K. Walton)
## KEY TO FIGURE 22

<table>
<thead>
<tr>
<th>Prehistoric Populations</th>
<th>Sample Number</th>
<th>Mounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRLT Arvilla South</td>
<td>75</td>
<td>De Spiegler, Habben, Kallstrom, Red Lake River, Slininger 2, Stumme, Wilson 3</td>
</tr>
<tr>
<td>RRA Arvilla North</td>
<td>83</td>
<td>Arvilla 1-3, Lake Bronson, Fertile (Warner 1, 2, Peter Lee), Haarstad, Snake River</td>
</tr>
<tr>
<td>ML Kathio (Mille Lacs)</td>
<td>48</td>
<td>Bartke, Christensen, Cooper, Fingerson, Huber, Halpin, Malmsten, Morrison, Round, Shakopee 4, Synsteby, Vineland Bay</td>
</tr>
<tr>
<td>BDS Blackduck South</td>
<td>43</td>
<td>Osufsen, Schocker</td>
</tr>
<tr>
<td>BDN Blackduck North</td>
<td>51</td>
<td>McKinistry 2, Hungry Hall</td>
</tr>
<tr>
<td>L Laurel</td>
<td>39</td>
<td>Smith 3, 4</td>
</tr>
<tr>
<td>DL Devil's Lake</td>
<td>36</td>
<td>Montgomery's excavations, Army excavations and Bald Hill Mound (lumped on basis of geographical closeness)</td>
</tr>
<tr>
<td>MAN &quot;Manitoba Phase&quot;</td>
<td>86</td>
<td>Stott, Fidler, Arden, Morrison, Pilot, Lone, Darlingford, McGorman, Sims, Star, Star B</td>
</tr>
<tr>
<td>MEL Melita Phase</td>
<td>49</td>
<td>All mounds in SW Manitoba region excavated by Montgomery and Nickerson</td>
</tr>
<tr>
<td>H Hopewell</td>
<td></td>
<td>Klunk 11, Wilson</td>
</tr>
<tr>
<td>CK Crookston</td>
<td>18</td>
<td>Woodland, unknown</td>
</tr>
</tbody>
</table>
a) if the McKinistry Mound remains are Blackduck and are accepted as Woodland, then none of the others are Woodland;
b) the three sites that are similar could represent a mixed Woodland-Mississippian population, and
c) the basic premise that the remains from various sites are statistically representative of that population and that the sites are an accurate representation of the cultural unit may be true but most likely is not true.

Peterson's results were inconclusive but did yield important insights into the problems of using clusters of biological remains, particularly from a limited number of sites.

Ossenberg (1974) applied a multivariate estimate of biological distance ($D^2$) analysis on a sample of 942 individuals from 19 prehistoric and historic skeletal populations (Fig. 22) in an effort to explore relative affinities between the various populations and to propose a series of hypotheses on mound/ethnographic relationships plus biological historical developments. Her data consisted of a series of cranial characteristics. Her results provided a series of intriguing hypotheses some of which, however, can be rejected on the basis of the archaeological sample that was used.

Variations and relationships within the mound populations provided hypotheses that require archaeologists to look to other avenues of research. With regard to the mound populations in general, the results indicated that all of those in the Upper Mississippi demonstrated closer genetic relationships to each other and to the historic populations than they did to the Illinois Hopewell sample (Ossenberg 1974: 36-37). Furthermore, all of the mound populations fell within Neumann's Lakotid (or Deneid) variety which included the Dakota, Assiniboin, Blackfoot and Cheyenne and which showed the closest affinities to populations northwest of Minnesota where they may have shared ancestral roots with other Deneids such as the Aleuts and Athabaskans (Ossenberg 1974: 37).
However, the osteological typology constructed by Neumann for the Plains is fraught with problems. The Prairie type, Lakotid, was characterized as a heterogeneous tri-hybrid blend of Lenapid (Northeastern Woodland), Deneid (presumably one of the last of the immigrating Siberian populations) and Walcolid (Southeastern United States) origins (Bass 1964: 119). The sample of crania upon which the definitive Lakotid traits were determined consisted of 63 undeformed male skulls which consisted of a preponderance of skulls from various Siouan ethnic groups such as Teton, Brule, Oglala, Sisseton, Yankton, Mandan and Crow, but it also included numerous surface samples with no provenience or ethnic identity which came from a variety of surface localities in Kansas, Nebraska, Colorado, Wyoming and North and South Dakota (Bass 1964: 119-120). The subsequent typology is suspect.

Ignoring the overall typology, Ossenberg's results, in terms of inter-mound relationships, indicated that the biological populations did not coincide with the archaeological units to which they had been assigned. For example, a comparison of the populations from two groups of Blackduck Horizon mounds revealed that the populations were not particularly close; the Northern Blackduck (BDN) sample was close to the historic Cheyenne while the Southern Blackduck (BDS) sample was close to the historic Dakota (Ossenberg 1974: 29-32). Furthermore, some of the different degrees of closeness were based on sex lines; Northern Arvilla (RRN) was hypothesized to be a coalescence, through marriage, of males of Northern Blackduck (BDN) populations and females of Southern Arvilla (RRLT) populations (Ossenberg 1974: 28-29). Such findings provide exciting avenues of research in terms of migration, interbreeding, and diffusion of traits such as pottery styles among populations. Unfortunately, her sophisticated model was built on a quagmire of poor archaeological data and misguided direction!

Despite her intriguing results, Ossenberg's analysis was hampered by inadequate sample sizes in some populations and the
lumping of mixed populations in other samples. These are two major limitations since each population is measured against every other population; therefore, an error in one population can affect all of the interrelationships. The limited sample size is best indicated by the Laurel materials in which she could use only four of the twenty-six diagnostic traits because the skulls were so badly crushed.

Her choice of populations were hampered by the archaeo orientation to which she had been exposed. Following Mac eish's advice, she assumed that all mounds along the Red and Assiniboine rivers and along the Pembina Valley could be lumped as a single "population" and that all of the mounds in the Melita Region belonged to a single population, the Melita Phase. Her Manitoba Phase (MAN) population included the Stott Mound which probably belongs to the Blackduck Horizon and the Lone, McGorman, Sims, Fidler, Arden and Star mounds most of which belong to the Devils Lake-Sourisford Burial Complex and additional mounds lacking diagnostic traits; thus, she incorporated two and possibly three or more populations as a single biological population and calculated this single population against all of the others. Her Melita Phase (MEL) population included all mounds in the region regardless of possible cultural affiliation, and her Devils Lake (DL) population included the mounds excavated by Montgomery plus the Bald Hill Mound, all of which were lumped on the basis of geographical proximity, regardless of artifactual association. The lumping together of the Lone Mound (#159) and Stott Mound (#157) because of their geographic proximity, despite little similarity in artifacts, raises serious questions about the results.

The technique that was used does hold promise. Now that the cultural complexity has been recognized, the mounds can be resorted on the basis of cultural identification rather than geographical proximity, and the reanalysis will undoubtedly produce exciting results that will raise new challenges for the archaeologists!
Conclusions

The section on cultural identification has been heavy on evaluation and criticism of previous efforts and on discussion of problems. It is important to be constantly aware of the biases and limitations of the data.

It is important to remember, however, that the problem of cultural identification of the mounds, on the basis of both artifactual and biological materials, is moving into a very exciting period. Now that we are starting to be aware of the complicated nature of the archaeological record and of the need to search for the processes that produced these patterns, the challenge and ultimate results will be very rewarding. Can we determine the impact of variables such as fluctuating strategies of resource utilization, changing population densities, environmental change, or changing intercultural relationships on the archaeological record in general and the mounds in particular? An initial set of premises and hypotheses have been presented (Syms 1976a, 1977) and more will undoubtedly be developed as the body of data increases and new perceptions are applied.

Many of the mounds, at least the Blackduck and Devils Lake-Sourisford specimens, were built during the middle part of the Late Woodland Period, A.D. 900-1400. Manitoba was being influenced by social, political and economic changes as far south as Illinois where the large Mississippian centres, such as Cahokia, emerged. The Manitoba mounds and burials contain artifacts that reflect the almost continent-wide trade networks that occurred: conch shell from the Gulf Coast,
catlinite from southern Minnesota, copper from Lake Superior and obsidian from Wyoming, to name some examples.

This research contract developed from a request to consider declaring a linear composite mound an historically significant site. There are numerous mounds to consider. There are, however, two types of mounds that should be considered: a) the linear composite mounds which are unparalleled in Canada, and b) the large, accumulative mounds which, while smaller than a few of the Ontario specimens, are nevertheless impressive monuments of prehistoric activities.

The composite linear mounds are unique, distinctive, and reflections of considerable effort and organization. Most, if not all, belong to the Devils Lake-Sourisford Burial Complex which is noted for its exotic burial items such as conch shell mask-gorgets, tubular stone pipes, unusual shell beads and pendants, etc. It can be tentatively dated to A.D. 900-1400. In order to build a mound 765 feet long and 20 feet wide with two circular burial mounds on the ends, a great deal of labour is required to dig the burial pits, cut the sod, and construct the monument using a bone and stone technology!

Several of these linear composite mounds still persist. The longest, Moore Group Mound C (#112), is no longer sufficiently visible to consider setting aside, but the second longest, Mound 11 (Fig. 12) with a length of 650 feet, has been preserved by the land owners and is now fenced off; this mound is the best surviving example.

Among the accumulative mounds, we find large tumuli greater than 10 feet in height. Two examples are noteworthy: a) Calf Mountain Mound (#142) because of its well-documented history of early observations, and b) the Westbourne Mound (#160) because of the attached grade as a possible effigy and because it is largely undisturbed (Figs. 10 & 11). Both mounds are also probably part of the Devils Lake-Sourisford Burial Complex.

Montgomery's (1910) excavations at Calf Mountain produced a
large quantity of typical materials. The Westbourne Mound is still relatively untouched although pot-hunters within the last 10 years have dug out limestone slabs, triangular projectile points and shell beads within the top three feet of the mound.

Whichever mound(s) are chosen, action should be prompt. Changing land owners, pot-hunters, and cultivation are all taking their toll. Soon there will be nothing to preserve as a symbol of these outstanding accomplishments.
Recommendations

The first choice must lie in which mound or mounds are to be selected for preservation. Following that decision, the mound should be purchased at the earliest possible date. Following or during the purchase of the mound, there should be continued research and development of the data.

Research Needs
The research strategy should include survey and excavations plus reanalysis of earlier materials.

Survey and Excavations
1) Extensive surveying in areas where mound concentrations occur to locate potential associated encampments.

2) Recording and analyzing local collections as well as synthesizing the data from all previous surveys such as those by Syms and Nash for the Melita Region. Local collections yield a wider variety of materials than do the brief survey collections of professionals because they include materials accumulated over many years.

3) Test excavations and block excavations of potential associated encampments to obtain definitive samples of materials, activities, dates, and distribution patterns.

4) Excavation of some of the remaining mounds that have not been looted and re-excavation of other mounds. Most of the
previous excavations have concentrated on digging out the centre to get to the central burial pit; many of the mounds will still have burials around the peripheries which can provide important biological, temporal and cultural data. Permission to do this may be difficult because it requires clearance from the Manitoba Indian Brotherhood and local band councils.

5) Excavation (test-trench) of several possible mounds to see if they are badger bush or erosional pseudo-mounds.

Re-Analysis of Earlier Efforts

1) The materials collected from Manitoba mounds and now located in the National Museum of Man, Royal Ontario Museum and Manitoba Museum of Man and Nature need to be described and analyzed using standardized traits.

2) The osteological data accumulated by Dr. Nancy Ossenberg need to be re-run using clusters of mounds based on cultural identification rather than geographical proximity.

3) In order to make truly comparative statements, the artifacts from mounds in other areas such as Minnesota need to be re-analyzed and each mound needs to be handled individually. Even the recent Minnesota works by Wilford and Johnson need to be studied with a new perspective since they have been presented with all of the earlier biases.

Development of Data

1) If Mound No. 11 is chosen then:
   a) the land needs to be purchased;
   b) a road needs to be built on the road allowance (no road there at present) to the north;
   c) the brush needs to be cleared to emphasize the magnitude of construction;
   d) the excavations need to be filled in so that people will not be prompted to look for their own mounds to dig;
e) an interpretive centre or large display panel needs to be erected, to emphasize:
   i) the antiquity,
   ii) the magnitude of work required, e.g. volume of earth moved using stone, bone and baskets,
   iii) the almost continent-wide sources of materials found in the Devils Lake-Sourisford Burial Complex;

f) a program should be developed whereby the mound is integrated with other sites in the region such as tipi rings, the Brockinton Site and the Snyder Mound, and with a scenic alternative to Highway 3-83, and

g) a brochure should be put out showing:
   i) scenes of mound construction,
   ii) the nature and location of various exotic items such as Valley vessel, conch shell mask-gorgets, catlinite tubular pipes, etc.,
   iii) the sacredness of the mounds.

2) If Westbourne or Calf Mountain mounds are chosen, then:
   a) purchase the land;
   b) build a small parking lot near-by;
   c) clear the brush to show the mound;
   d) build an interpretive centre or large display panel to emphasize the same items mentioned above;
   e) relate the mound to other mounds in the province, and
   f) produce a brochure similar to the above mentioned specimen.

There are a variety of interpretive steps that can be taken. Quality interpretation can only be achieved if the
features are available for interpretation and if adequate background research has been conducted.

Features such as Mound No. 11 are unique and reflect some of the poorly recognized but, nevertheless, outstanding accomplishments of Canada's original inhabitants and citizens. In order to plan and develop an interpretive program that truly reflects these past accomplishments, further field and museum research is an important step.
Endnotes

1. The numbers have been assigned to eliminate confusion with respect to duplication of names and numbers assigned to mounds in various reports.

2. These references include only articles and notes in journals and periodicals; there are also numerous articles in the newspapers that are on file in the Provincial Archives of Manitoba but a perusal of these clippings failed to uncover any additional data. They tended to be paraphrased versions of the other reports.

3. Exact dates of specific excavations are difficult to ascertain because of the vagueness of the published reports and paucity of field notes.


5. Cameron is Nancy Ossenberg's earlier name.

6. Despite the fact that Vickers was involved with archaeology only as a spare time activity, the above references are augmented by numerous articles in newspapers on archaeology, history and ethnography. He continued to write numerous articles on archaeology in the 1950s and early 1960s when he was an editor for the *Winnipeg Free Press*.

7. Vickers was a critical scholar who wondered why no historic materials had been found in Blackduck (Manitoba) components if they represented the historic Assiniboin; his affiliation was confirmed when Douglas Leechman of the National Museum identified a copper object from the lowest bone bed at the Stott Site as historic (Vickers
and Bird 1949). Unfortunately, Leechman's identification was based on a crude and inadequate chemical test that proved erroneous; this bed has been subsequently dated at A.D. 884 ± 36 (Syms 1976b).

8. The Melita Focus is never defined but appears to be given a separate name merely because of the geographic separation from the mounds in eastern Manitoba.

9. This is not an exclusive list of references; for a more complete list, see the bibliography in Ten Thousand Years: Archaeology in Manitoba (Hlady 1970b).

10. The term lay archaeologist is used here because this individual has little training and a less than scholarly record in terms of systematic excavation and record keeping but has been extremely enthusiastic and prolific in terms of articles and slide presentations at conferences, in addition to being the driving force behind the Manitoba Archaeological Society for many years.

11. I have some suspicion that Montgomery may have been seeing either ash beds or fire-altered earth; his techniques were so crude and his observations were so speculative that these observations need to be substantiated or refuted with rigorous samples.

12. Some of the earlier reports refer to these as the North and South Antler rivers but these terms no longer exist on maps nor are they used by local inhabitants.

13. Pilot Mound Hill is a high, local natural formation which has a small burial mound on it; many people have the mistaken notion that the whole feature is a burial mound.

14. Lewis reported 43 round mounds and 4 linear mounds for this site in 1886 (Wilford 1970: 70).

15. See Appendix 4, Postscript by D. Arthurs.
16. The terms complex (Syms 1976a, 1977), phase (Willey and Phillips 1958) and focus are synonymous in the sense that they are used to designate the remains of some ethnic group with a distinctive set of artifacts.

17. Vickers used the Midwestern Taxonomic terminology although he placed the units in a temporal framework.

18. The text says southeast Manitoba but it is an obvious typographical error.

19. These dates represent direct conversions from the B.P. dates; no corrections have been made for radiocarbon fluctuations.

20. This is named after Devils Lake Region of northeastern North Dakota and the Sourisford Locality of Manitoba which is the confluence of the Antler River and Gainsborough Creek with the Souris River.
APPENDIX 1. List of Probable and Possible Mounds, their previous and recent designations, and locations.

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APPENDIX 1.

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APPENDIX 2. Trait Lists of Manitoba Mounds.

Numerous mound traits have been discussed in the literature from Manitoba, Minnesota, Ontario and the Dakotas. Capes (1963) originally tabulated several series of traits on artifacts, burial mode and accompanying features. The following tables contain an expanded list of traits plus the addition of some mounds.

The mounds are listed by regions: Melita, Pembina Valley, Lower Red River, Arden-Westbourne and Central Assiniboine. Sheet 1 is the Melita region. Sheet 2 is the Red River, Pembina, Arden-Westbourne and Central Assiniboine regions.

The letter "x" is given to traits which are present in a particular mound. Letters "a" to "ii" are given to traits where there are explanatory footnotes.
APPENDIX 2. Footnotes for Region 1 (Melita). (Sheet 1)

a 4 perforations on gorget (Bryce 1904: 44)
b 3 spoons, each with notches (Montgomery 1908: 35)
c 2 urns with spiral design and stained red. 1 urn with vertical incised lines (fragments) (Montgomery 1908: 34-35)
d 2 cups (Bryce 1904: 42)
e 2 pipes (Bryce 1904: 44)
f copper frontlet in 3 pieces (Bryce 1904: 42)
g pot with 4 turtle designs (Nickerson 1914: 11)
h clay or stone marble (Nickerson 1914: 21)
i "pierced cowry shells" (Nickerson 1914: 20)
j "Unio" shell rings (Nickerson 1914)
k "Unio" tassel shaped pendant (Cameron 1962: A38)
l 9 beads (Bryce 1904: 42)
m 9 inch whistle with a green copper stain (Bryce 1904: 42)
n "bone conjurers tube" (Bryce 1904: 42)
o 2 polished bone and 2 flat bones with holes (Bryce 1904: 42)
p 2 polished bone
q 2 flat bone implements for "tanning" (Bryce 1904: 42)
r 2 stone hammers (Bryce 1904: 44)
s antler hook
t 3 whistles
u a rounded square with 5 notches on 4 sides (see Capes 1963: 125 for photograph)
v 2 copper stained whistles (Nickerson 1914: 24)
w triangular fluted fossil (Capes 1963: 26)
y flat beads, either bone or shell
z perforated
aa grooved bone tube (Nickerson 1914: 7)
bb worked metatarsal
cc birch bark basket that was reported to have contained "pipes and other small articles" (Nickerson 1914: 8)
dd  perforated birch bark (Nickerson 1914: 8)
ee  bison skeleton
ff  5 bison skeletons around adult human skeleton (Capes 1963: 31)
gg  child skeleton surrounded by 5 or 6 bison skulls
hh  mound fill?
ii  fire colored rock
## SHELL

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<th>VESSELS</th>
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<th>COPPER</th>
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<th>WATER</th>
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<td>medium</td>
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### Offering

- Bone
- Haft
- Bead
- Greenstone
- Stone
- Clay

### Mound List

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<td>g f h</td>
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### Notes

- "x" indicates the presence of the material.
- Other symbols indicate specific types or quantities of materials found in each Mound.
APPENDIX 2. Footnotes for Sheet 2.

Red River Region
a 15 beads
b 2 straight tubes
c 2 broken pipes
d gorget stained red with 2 holes on rim and in centre (Bell 1898)
e mollusc shell with perforations
f cups were reported by Gunn 1867, Bell 1898, Saylor 1975
g burned clay layer reported by Gunn 1867, Bell 1898, Saylor 1975
h clay lumps reported by Bell 1898 and Saylor 1975
i 2 steatite pipes (Bell 1898), 2 blue stone pipes (Gunn 1867) and "pipes" found by McCharles
j "women's" face gorget (Saylor 1975: 9 citing McCharles)
k gorget of yellow with 4 perforations on each end (Saylor 1975: 9 citing McCharles)
l red pipestone hatchet (Saylor 1975: 9 citing McCharles)
m 3 whistles
n 2 heron and 1 raven beak

Pembina Region
o 7 copper beads
p unidentified shell
q 27 shell rings
r hammered copper wedge
s gorget of red catlinite in the form of a hatchet
t tubular pipe

u circular shell necklets
v shell ornaments and limestone beads
w shell "trinkets"
y 7 points
Pembina Region (continued)
z 17 bison skulls
aa tanned hide; beaver fur
bb bones in ashy condition

Arden/Westbourne Region
cc human skeleton encased in clay

Assiniboine Region
dd 162 shell beads
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<td>Copper vs. Lithics</td>
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<td>Fresh vs. Marine Water Unid.</td>
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<tr>
<td>Clay</td>
<td>Unmodified shell, geometric design cup, miniature vessels</td>
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<tr>
<td>Type</td>
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<td>Copper</td>
<td>Bird bone, other, whistles, plain, bent bone, bracelet</td>
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<tr>
<td>Bone</td>
<td>Gorget, harpoon, perforator/awl/needle, flakker, flakers, spatula, antlerhaft, antler, handle, polished bone, smoother, other, breaks, turtle carapace, arrow socket (?)</td>
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<tr>
<td>Incisor</td>
<td>Beaver</td>
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<tr>
<td>Pigment</td>
<td>Orange, limestone, ochre, catlinite, notched flat disc, tablet</td>
</tr>
<tr>
<td>Grooved</td>
<td>Bone, plain, large, rectangular, sub-floor pit, bark</td>
</tr>
<tr>
<td>Scraper</td>
<td>Biface, flakes, side, end, side-notched triangular points</td>
</tr>
<tr>
<td>Lithics</td>
<td>Spear, fire/charcoal, cremation, wooden stakes, offering post, boulders covering pits, poles covering pits, large, rectangular, sub-floor pit, bark</td>
</tr>
<tr>
<td>Offering</td>
<td>Bison other, bison skull, other animal bones, hide and/or fur</td>
</tr>
</tbody>
</table>

APPENDIX 2. Sheet 2. Trait List of Other Regions.
APPENDIX 3. Problems Encountered During the Research.

There have been numerous difficulties with this research project. In addition to the variety of interpretive orientations and the difficulty in distinguishing burial mounds from some natural features, there were numerous problems in the available literature.

Relating excavators to particular mounds:
1. Did George Bryce actually dig one of the Fidler mounds or was the wife of the landowner confused when visited in later years? Bryce makes no reference to this mound. Did Bryce confuse this mound with another?
2. Which mounds did Bryce and Montgomery dig in the Melita Region?
3. Which materials from excavations belong to the various mounds? The paucity of field notes and the tendency for early published articles to be vague with respect to most mounds makes this task difficult. Cameron was unable to assign all of Montgomery's artifacts to various mounds. Vickers is of the opinion that some of Montgomery's artifacts that were assigned to the Rock Lake Mound actually came from Pilot Mound.

Locating mounds:
1. Capes identifies the Westbourne mound as 1½ miles west of the town, but Wettlaufer locates the mound 2 miles east and south of the town. Vickers reported the mound in P.L. 12 which is 1½ miles from the town of Westbourne.
2. From Wettlaufer's survey (1952) it is not clear whether he located the Westbourne Mound in the wrong locality or whether there is more than one Westbourne Mound.

3. Bryce sketches the linear mounds no. 11 and 12 in the wrong direction.


5. The Cypress River mounds have been reported but have not been located with precision.

Limited data on mounds:
1. Many mounds have not been excavated.
2. Many of the early "excavations" were conducted with little interest in recording data or studying contextual relationships.
3. Many trait lists apply to regions, not particular mounds; Bryce's "list of articles from the Souris mounds" does not specify which mounds (Bryce 1904: 42).

Questionable identifications:
1. Many burials identified as seated burials may have been flexed burials.
2. Cuts on birch bark can not be distinguished as being due to metal knives or lithic knives through cursory examination.
3. The identification of the non-local shells such as *Busycyon, Natica, Oliva* and *Olivella* should be checked by sending the materials to malacologists.

Erroneous impressions on the state of destruction of the remaining mounds:
1. The most conspicuous example is Capes' (1963: 61) description of the Westbourne Mound (160) which she described as "...partially demolished and rebuilt by Professor Henry Montgomery...its interior was used
as a root cellar." Upon visiting the mound, it was found to be largely intact; in fact, recent pot hunters had found a slab-covered burial within three feet of the top at the centre of the mound.

2. Many of the early efforts consisted of digging out the centre or trenching the centre; the peripheries of these mounds are still potential sources of important information.
APPENDIX 4. Reported and Recorded Burial Mounds in Northern Ontario, by David Arthurs (Ministry of Culture and Recreation, Historical Planning and Research Branch, Thunder Bay, Ontario) (Figure 23).

<table>
<thead>
<tr>
<th>Site</th>
<th>Location</th>
<th>Remarks</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minaki locality</td>
<td>north of Lake of the Woods</td>
<td>1 mound</td>
<td>Kenyon n.d.</td>
</tr>
<tr>
<td>Meek Site, DjKp 3</td>
<td>on an island in Tranquil Channel, Lake of the Woods</td>
<td>1 small circular mound</td>
<td>Reid 1977: Pt. 1, p. 13</td>
</tr>
<tr>
<td>Lake of the Woods locality</td>
<td>on an island in SE Lake of the Woods</td>
<td>1 large mound reported</td>
<td>A. Hunter, Manitou Rapids Reserve, pers. comm.</td>
</tr>
<tr>
<td>Mound Point</td>
<td>on a point on the N side of Rainy R. a few miles up-river from Hungry Hall Site</td>
<td>1 small circular mound</td>
<td>Kenyon 1971: 38</td>
</tr>
<tr>
<td>Stratton Island, DdKm 31</td>
<td>on a small island in the Rainy R., below town of Stratton</td>
<td>1 small circ. mound - heavy erosion - excavated by Kenyon but never reported</td>
<td>Arthurs 1976a</td>
</tr>
</tbody>
</table>
## APPENDIX 4.

<table>
<thead>
<tr>
<th>Site</th>
<th>Location</th>
<th>Remarks</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitou Mounds, Crown Land Reserve locality</td>
<td>located on and adjacent to sites in Manitou Mnds. Park Reserve at Long Sault Rapids and on Mission property to the west</td>
<td>a total of 15 mounds (2 lge.  circular, 3 lge. oval, 9 small circular, 1 small oval) mounds 7 &amp; 15 excavated by Kenyon, the latter never reported. Also possibility of an additional mound at DdKm 1, now destroyed</td>
<td>Kenyon 1960, 1964, 1966, 1970a; Wright 1961; Mountain 1972; Yarborough &amp; Arthurs 1973; McFee 1974; Arthurs 1976a</td>
</tr>
<tr>
<td>Sturgeon Creek locality</td>
<td>1 km east of Manitou Mounds, on Rainy R.</td>
<td>at least 5 circ. &amp; linear? mounds reported but unsubstantiated to date</td>
<td>Kenyon 1960: 73; Yarborough &amp; Arthurs 1973: 15-16; A. Hunter, pers. comm.</td>
</tr>
<tr>
<td>Pithers Point, DdKi 1</td>
<td>at Pithers Pt. at exit of Rainy R. from Rainy Lake</td>
<td>1 circ. mound approx. 25 ft. diam; destroyed, &amp; excavated by Kenyon, R.O.M. Site &amp; mound destroyed during bulldozing operations for park development</td>
<td>Kenyon 1959</td>
</tr>
<tr>
<td>Oakpoint Island, DdKd 1</td>
<td>on Oakpoint Is. at east end of Rainy Lake</td>
<td>1 small circ. mound. Historic material but no skeletal material recovered - perhaps not a burial mound?</td>
<td>Kenyon 1971: 38</td>
</tr>
</tbody>
</table>
## APPENDIX 4.

<table>
<thead>
<tr>
<th>Site</th>
<th>Location</th>
<th>Remarks</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lady Rapids locality</td>
<td>on portage around Lady Rapids, Namakanan River</td>
<td>1 large mound reported, 1 small circ. mound documented</td>
<td>Wheeler et al. 1975: 51</td>
</tr>
<tr>
<td>McCluskey Site, DbJm 2</td>
<td>north side of Whitefish Lake, SW of Thunder Bay</td>
<td>1 &quot;linear&quot; (ovoid) mound</td>
<td>Dawson 1974</td>
</tr>
<tr>
<td>McGillivray Site, DbJm 3</td>
<td>Bishop Island, Whitefish Lake, SW of Thunder Bay</td>
<td>1 mound, C-14 date A.D. 20 ± 200 (GaK 1492)</td>
<td>Dawson 1974: 87</td>
</tr>
<tr>
<td>Martin-Bird DbJm 5</td>
<td>Bishop Island, Whitefish Lake, SW of Thunder Bay</td>
<td>1 small circ. mound</td>
<td>Dawson 1974: 91</td>
</tr>
<tr>
<td>Mound Island DbJl 2</td>
<td>on an island at E end of Whitefish Lake</td>
<td>1 mound</td>
<td>N.C. Region Site files</td>
</tr>
<tr>
<td>Pine Bay locality</td>
<td>reported to be near mouth of Pine River, on Pine Bay, Lake Superior</td>
<td>1 mound reported but not verified</td>
<td>Fox, pers. comm.</td>
</tr>
<tr>
<td>Gull Bay locality</td>
<td>reported to be Gull Bay, W side of Lake Nipigon</td>
<td>mound reported but not verified</td>
<td>Arthurs, pers. comm.</td>
</tr>
<tr>
<td>Wolf River locality</td>
<td>reported to be on N side of Wolf R. 1 km up from mouth in L. Superior</td>
<td>possible oval mound recorded</td>
<td>Merits 1977; Arthurs, pers. comm.</td>
</tr>
<tr>
<td>Micabanish Site DgHu 3</td>
<td>on N facing point on W shore of Brunswick Lake. Adjacent to New Brunswick House Post, DdKm 1</td>
<td>1 small circ. mound. Historic, may not be a burial mound</td>
<td>Arthurs 1976c:2</td>
</tr>
</tbody>
</table>
Figure 23. Location of burial mounds in northern Ontario.  
(Drawn by K. Walton)
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