Lovstrom Block A - summary

http://archives.brandonu.ca/en/permalink/descriptions12451

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.2
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1987

History / Biographical:

Block A was the most southern site in the locale. The excavation block consisted of 12 contiguous 1m2 units dug in a 3m x 4m rectangle. The block was the least productive of cultural materials, and bone preservation was the poorest. Under the sod, the black loam layer appeared at 5 cm below surface, and the glacial clay at 25 cm below surface. Excavators described the soil matrix as gritty and silty, and it became concrete hard when dried.
The occupation or bone layer extended from 10 to 25 cm below surface and consisted of a contiguous scatter of FCR and unidentifiable large ungulate bone which was heavily processed and intensively scavenged by carnivores. Most cultural materials were recovered within this layer. Fire cracked rock (FCR) and small burnt bone fragments were present but no intact hearths or processing features were evident.
Non-cultural materials included limestone and other natural pebbles derived from the parent till. (These small limestone pebbles were apparent in the occupation layers in other blocks as well). Root and rodent disturbance was extensive throughout Block A. Most units were excavated to gravelly clay till. Nine of the twelve units were dug to level 4b, which ended at 40 cm b.s.
No further excavations were done at this site. No C14 dates were taken.

Scope and Content:

Sub-sub-sub series contains: Summary information of field methology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access:	Lovstrom Block A - summary
Subject Access:	Archaeology Lovstrom locale Lovstrom Block A

Lovstrom Block B - summary

http://archives.brandonu.ca/en/permalink/descriptions12479

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.3
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1987

History / Biographical:

Block B consisted of 20 contiguous 1m2 units excavated to 30 cm below surface. (except unit 58 which was excavated to 35 cm bs to obtain extended soil profile). The block is situated in recent oak and poplar forest at the head of a ravine leading to Jock's Creek, adjacent to an area cleared for market gardening. As was the case with Block A, the understory is heavily overgrown with hazelnut, chokecherry, saskatoon, and a poison ivy/sarsaparilla ground cover.

The soil levels below the sod in Block B consisted of a black, silty, and gritty loam layer from 5 cm to 23 cm below surface, a yellow and sandy clay from 23 cm to 30 cm below surface, and glacial till at 30 cm below surface. As in Block A, limestone cobbles were found throughout the occupation level around the bone. It is evident that bioturbation – primarily tree roots and rodent burrowing – have significantly altered patterns of original deposition of lithics, ceramics and small bone.
The faunal layer lay close to the surface, situated entirely in the black loam 5 cm – 23 cm below surface. The 23 cm depth also marked the end of the dark silty loam. At 10 cm below surface, a discernible patterning of the bone appeared. Concentrations of bone in narrow rows ran in an irregular pattern from the northwest to the southeast part of the block. This pattern was most apparent in the north end of the block which is the highest point in the block. In the same 1m2 unit, patches of weathered, very poorly preserved bone would be found lying close to patches of well preserved bone. It is believed that this variability in preservation results from uneven rates of burial due to taphic activities of pocket gophers or other agents of bioturbation. The same pattern of uneven preservation occurs over much of the locale but is most evident in Block B.

Diagnostic lithics included eleven projectile points that were predominantly Plains or Prairie Side-notch types, but included two unnotched triangular points. Cord-wrapped impressed rim sherds and body sherds were recovered. The ceramics are variants of the Woodland Blackduck horizon.
RC dates: XU49 – 675/80 BP XU 59 – 705/75BP.

Scope and Content:

Sub-sub-sub series contains: Summary information of field methology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access:	Lovstrom Block B - summary
Subject Access:	Archaeology Lovstrom locale Lovstrom Block B

Lovstrom Block C - summary

http://archives.brandonu.ca/en/permalink/descriptions12517

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.4
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1987

History / Biographical:

Block C was situated in sparse oak forest with an understory of saskatoon, hazelnut and a thick ground cover of poison ivy and sarsaparilla. The block measured 3m and 3m and contained nine excavation units. All units were excavated to 35cm below surface. The soil horizons were much like the other blocks, except for a rusty brown stain in the first level, giving the upper black loam a mottled appearance. The brown patches were clay mixed with loam and were harder than the surrounding matrix. No definitive interpretation of these phenomena was attempted but this effect may be the result of natural brush or forest fires. Under the 5cm so d/humus (Ah) layer, the loam horizon extended approximately 5cm – 25 cm below surface, and averaged 20 cm thick. Bone was concentrated within this horizon between 10 cm – 20 cm below surface.

Block C was notable for its concentrations of articulated bison bone. Most noteworthy was an articulated unit composed of lumbar vertebrae, pelvis, and sacrum. Several thoracic vertebra/proximal rib end concentrations were also recovered. There were more vertebrae and rib sections recovered in the units in proportion to other bones. A few sherds, some debitage and a single Prairie Side-Notched point fragment were among the recoveries. Based on the quantity of bone, the density of the bone layer, and the articulated butchering units the area has been interpreted as a bone midden.

Faunal material was analysed by Jessica MacKenzie for her Honours Thesis: "A reconstruction of butchering processes in Block C from the Lovstrom site DjLx-1 in Southwestern Manitoba."

Radiocarbon date: 850/115BP XU 79.

Scope and Content:

Sub-sub-sub series contains: Summary information of field methology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access:	Lovstrom Block C - summary
Subject Access:	Archaeology Lovstrom locale Lovstrom Block C

Lovstrom Block E - summary

http://archives.brandonu.ca/en/permalink/descriptions12567

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.6
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1987 - 1991

History / Biographical:

This site is situated in a naturally sheltered area with a low rise to the east and south partly encircling a flat area open to the west. Present natural vegetation is an open oak forest with a light understory of saskatoon, hazelnut, poison ivy and sarsaparilla. It is situated on the till plain at the upper end of a ravine leading to Jock's Creek.

Two test units six meters apart were excavated in 1987 and produced cultural materials which warranted a block excavation, so seven contiguous 1m2 units were then opened. These units proved to be very productive of cultural remains. Subsequent excavations in 1988 increased the number of excavated units to 21. In 1991 a further eight units were excavated for a total of 29 excavations and two test units. Excavations went deeper in this block than in Blocks C or B. Remains from the block included bison bone, bone tools, fire-cracked rock, ceramics, lithics including tools and debitage and a hearth. Another occupation was recovered in 1991 containing a hearth and living floor.

Radiocarbon samples have produced two distinct sets of radiocarbon dates from 1987 and 1988 excavations. There appears to be two or possibly three cultural horizons definable within this block.
An upper cultural horizon, located between 14-21 cm below surface, contains large bison bone and fire-cracked rock dating to 465/100B.P from XU 128.
A lower horizon in the 20-25 cm level contained FCR, bison bone and lithic scatter that was dated to 675/70 B.P. from XU 122 and 715/110 from XU 114.

Scope and Content:

Sub-series has been divided into sub sub series including: Lovstrom Block E 1987, Lovstrom Block E 1988 and Lovstrom Block E 1991.

Name Access:	Lovstrom Block E - summary
Subject Access:	Archaeology Lovstrom locale Lovstrom Block E

Lovstrom Block F - summary

http://archives.brandonu.ca/en/permalink/descriptions12617

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.7
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1988
History / Biographical:	

In 1988 four 1m2 units were excavated in this Block F. The forest cover is identical to that of Block E, with an open oak forest with a light understory of saskatoon, hazelnut, poison ivy and sarsaparilla.
Underneath the litter mat (Ah) is a shallow, 15-20 cm “A” horizon of dark grey/brown silty loam with a high representation of pebble size clasts. The glacial clays, encountered at 20 cm below surface, consist of a matrix of light tan sandy clays containing rounded pebble to cobble size rocks.

The recoveries from this block consisted of a few ceramics, including Vickers Focus rim sherds, four lithic tools and a number of small bison bone fragments. There was no discernible cultural stratigraphy in the four 1m2 units and the limited deposits of bone, ceramics and lithics were dispersed randomly throughout the 25 cm of cultural matrix. The lithic materials frequencies were similar to those in Block E with local cherts and KRF being the most abundant categories. A small amount of fire-cracked rock and a few large identifiable bison bones were recovered – all distributed randomly with little evidence for any pattern of clustering.

No RC dates.

Scope and Content:

Sub-sub-sub series contains: Summary information of field methology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access:	Lovstrom Block F - summary
Subject Access:	Archaeology Lovstrom locale Lovstrom Block F

Lovstrom Block H - summary

http://archives.brandonu.ca/en/permalink/descriptions12638

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.9
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1988 - 1991

History / Biographical:

The vegetation in block H is similar to other areas in the locale with an open oak forest with a light understory of saskatoon, hazelnut, poison ivy and sarsaparilla.

The excavations of the eight 1m2 units in 1988 resulted in the recovery of over 650 ceramic fragments including 20 rim sherds from at least four vessels, a grooved maul, fire-cracked rock, lithic debitage and a reworked Avonlea projectile point. A large amount of bison bone, including a number of axial elements and a fragmented skull were also recovered.

Based on the 1988 recoveries at the site further excavations took place in 1991. Nine excavation units were opened next to the previous excavations. Another 250 ceramic sherds were recovered in 1991. Nine vessels have been identified based on rim sherds. Vickers Focus and Woodland vessels have been identified and two vessels similar to Scattered Village Complex were recovered.

The lithic material assemblage is intermediate between Blocks G and E with KRF being the most frequent material category followed by local cherts.
Two features, a hearth and a curvilinear arrangement of rock were recovered. The high numbers of ceramic fragments suggests a habitation area, rather than hunting or butchering behavior. However, the separation of occupations at the site is difficult to establish and there may be different uses of the site by successive occupations.
Radiocarbon dates from this block indicate two occupations separated in time by some 300 years. XU 181 – 405/110 BP and XU 184 – 780/110 BP.

Scope and Content:

Sub-series has been divided into sub sub series including: Lovstrom Block H 1988 and Lovstrom Block H 1991.

Name Access:	Lovstrom Block H - summary
Subject Access:	Archaeology Lovstrom locale Lovstrom Block H

Lovstrom Block G 1988 - summary

http://archives.brandonu.ca/en/permalink/descriptions12628

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.8
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1988
History / Biographical:	

In 1988 four units were excavated in Block G. The vegetation is similar to other areas in the locale with an open oak forest with a light understory of saskatoon, hazelnut, poison ivy and sarsaparilla.

Excavations recovered artifacts between 0 cm – 15 cm b.s. The cultural deposits are very shallow and it is quite possible that what appears to be a single occupation may in fact represent multiple occupation compressed deposits as a result of deflation or the lack of sedimentation in this raised area. This latter view is supported by the ceramics which appear to be a mixture of Blackduck and Vickers Focus wares.

The frequency and distribution of cultural material from block G contrasts with that of other sites in the locale. While the diagnostic materials are similar, the nature of the background debris and the associated lithic assemblage suggests that this area was utilized for a different set of activities.

Unlike Blocks E and H, there is very little in the way of ceramics, fire-cracked rock or bison bone, yet a significant amount of lithic debitage and six Plains/Prairie Side-notched projectile points were recovered. No unifaces or scrapers were recovered. This may be an area where activities such as manufacture and hafting of projectile points; hunting activities, butchering and refuse disposal took place.

No RC dates were taken.

Scope and Content:

Sub-sub-sub series contains: Summary information of field methology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access:	Lovstrom Block G 1988 - summary
Subject Access:	Archaeology Lovstrom locale Lovstrom Block G

Lovstrom survey

http://archives.brandonu.ca/en/permalink/descriptions12407

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	3.1
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1985-1986

History / Biographical:

The Lovstrom surface collection came from small fields cleared within, and adjacent to, the major portions of the site which were excavated. The Lovstroms initial collection has since been added to by field personnel from Brandon University. The initial collections consisted of lithics and ceramics. A collection of faunal remains from the cultivated area was made by a Brandon University zooarchaeology class in 1986 which yielded specimens of elk, canid, mussels, and sucker, in addition to an expected abundance of bison. Since these materials were in a surface context, it may be that some of the faunal remains were historic.

The high biodiversity and evidence of pre-Europeon contact prompted the decision to test the Lovstrom locale. Nine 1m2 units were excavated in 1985 and, in 1986, an additional 15 1m2 units were excavated for a total of 24 test units. This testing indicated the presence of a large precontact locale with lithics, woodland ceramics and large amounts of reasonably well-preserved faunal materials.

The lithics indicated a late Prehistoric occupation (Nicholson 1986:35). However, the ceramics were more useful in that they identified the presence of Late Woodland cultures (Blackduck and Duckbay) and a single Middle Missouri vessel. It is believed that the Middle Missouri vessel was imported since the paste and construction/decorative technology differ distinctively from that of all other vessels recovered from the site. It was on the basis of an examination of these surface finds that the decision to test the Lovstrom site was made. These test excavations were conducted during the summers of 1985 and 1986.

Field investigations through shovel tests, excavation units, and examination of rodent mounds, indicated that the cultural deposits at the Lovstrom locale extend approximately 500m north from the edge of the Souris channel and eastward for over two hundred meters from the escarpment along Jock’s Creek. The presence of dense forest vegetation covering much of the locale, and the subsurface nature of the archaeological deposits obscured surface indications.

Radiocarbon dates: Test Unit 4: 1215/320 BP and Test Unit 8 1280/190 BP

Scope and Content:

Sub-series has been divided into sub sub series including: Lovstrom survey 1985 and Lovstrom survey 1986

Name Access:	Lovstrom survey
Subject Access:	Archaeology Lovstrom locale Lovstrom survey

Crepeele locale Radiocarbon Dates

http://archives.brandonu.ca/en/permalink/descriptions11966

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	1.5
Accession Number:	1-2010
GMD:	textual records
Date Range:	2003-2008
Material Details:	Radiocarbon date reports have been scanned in multi-page PDF files.

History / Biographical:

The Crepeele locale is located within the larger Lauder Sandhills area, located in southwestern Manitoba. The area is a complex region of high biodiversity made up of stabilized sand dunes and wetlands that encourage the development of mixed forest and grass prairie. This area provided a variety of subsistence resources for pre-European hunter-gatherers. At the present time the grass prairie is now farm land but the areas of vegetated sand dunes have not been cultivated and have revealed numerous pre-contact archaeological sites.

Archaeological surveying was conducted in 2003. The results of the 2003 Casselman survey showed over 300 test uints contained cultural material and indicated several areas for further examination including the Crepeele site DiMe-29, Sarah site DiMe-28 and Graham sites DiMe-30.

From 2003 to 2008 field work took place at the locale with 75 - 1m x1m units excavated. The Crepeele locale is a complex region of high biodiversity made up of stabilized sand dunes and wetlands that encourage the development of mixed forest and grass prairie. This area provided a variety of subsistence resources for pre-European hunter-gatherers. At the present time the grass prairie is now farm land but the areas of vegetated sand dunes have not been cultivated and have revealed numerous pre-contact archaeological sites.

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepeele locale.

Radiocarbon dating
The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.

Scope and Content:

Sub sub series contains radiocarbon dates from: Crepeele, Sarah and Graham sites.

Name Access: Crepeele locale Radiocarbon Dates

Subject Access: Archaeology
Crepeele locale
Crepeele locale Radiocarbon Dates

Casselman survey

http://archives.brandonu.ca/en/permalink/descriptions11706

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub-series

Series Number: 1.1

Accession Number: 1-2010

GMD: multiple media

Date Range: 2003-2008

History / Biographical:

The high biodiversity and evidence of pre-Europeon contact prompted the decision to test the Crepeele locale. The survey was named in recognition of the Casselman family, the original landowners.

Archaeological testing began in the Crepeele locale in May 2003 on property now owned by the Crepeele family. The locale covers over 6 sections or approximately 3,800 acres of land in an area of stabilized sand dunes and wetlands covered with mixed forest and prairie grass. Given the terrain, the size of the crew and time constrains, an area of approximately 60 acres was chosen for the survey. The survey used the established archaeological methodology of walking the selected area and using a shovel test surveyed grid. The use of GIS technology to locate the exact test spot and record the information into a GIS database was a significant advance and was one of the advantages of the integration of multi-disciplinary techniques encouraged by the SCAPE project. Over one half of the test pits resulted in the recovery of cultural materials. The results of the Casselman survey indicated several areas for further examination including areas that became the Crepeele, Sarah and Graham sites.

Scope and Content:

Sub sub series has been divided into five sub sub sub series including: (1) Summary information; (2) Field journals; (3) Site records; (4) Artifact catalogues; and (5) Photographs.

Name Access: Casselman survey

Subject Access: Archaeology
Crepeele locale
Casselman survey

North Lauder locale Radiocarbon Dates

http://archives.brandonu.ca/en/permalink/descriptions12326

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub-series

Series Number: 2.5

Accession Number: 1-2010

GMD: textual records

Date Range: 1997-2000

Material Details: Radiocarbon date reports have been scanned in multi-page PDF files.

History / Biographical:

The North Lauder locale has a long archaeological and geological history that is important for understanding the forces that shaped the region. Archaeological research in the locale shows that the area has been occupied by humans for at least the past 6,500 years. Environmental forces provided an area of diverse resources that attracted early peoples.

Archaeologists from Brandon University have been conducting research in the North Lauder locale that has focused on the Atkinson site, a 6,500 year old hunter-gatherer site and Flintstone Hill.

The geomorphology of the glacial Lake Hind Basin over the past 11,000 years is known primarily through the study of a cut bank along the Souris River. Flintstone Hill contains the most complete stratigraphic record for the post-glacial period on the northern plains. The site has been extensively studied by geoarchaeologists, geologists and paleoenvironmentalists over many years and their findings have contributed to our understanding of the region.

Radiocarbon dates were obtained from the Atkinson site and Flintstone Hill.

Radiocarbon dating
The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.

Scope and Content:

Sub sub series contains radiocarbon dates from: the Atkinson site and Flintstone Hill.

Name Access: North Lauder locale Radiocarbon Dates

Subject Access: Archaeology
North Lauder locale
North Lauder locale Radiocarbon Dates

Sarah site DiMe-28

http://archives.brandonu.ca/en/permalink/descriptions11829

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	1.3
Accession Number:	1-2010
GMD:	multiple media
Date Range:	2003-2004

History / Biographical:

The Sarah site was chosen for excavation based on the results of the Casselman survey. The survey recovered significant amounts of faunal remains, some ceramics and lithics from the test pits. Excavations took place in 2003 at Crepeele West (Units 1-5) and Crepeele East (Units 6-9). The site was subsequently renamed the Sarah site DiMe-28. In 2004 another 9 units were excavated (Units 10-18).

Based on the recoveries it was determined that the Sarah site is a stratified site with woodland ceramics in the upper occupation and late woodland points in both of the upper occupations. These upper occupations produced abundant bison bone including foetal bone. The lower occupations produced less bone and no foetal bone, although absence of foetal bone in the lower occupations does not necessarily indicate a warm season occupation. This could be due to sample error or perthotaxic factors such as scavenging of the fragile bone by dogs or other carnivores.

The dates from the Sarah site include 550+/-40 B.P.; 1430+/-80 B.P; 2810+/-80 B.P.; 3120+/-130 B.P. The lower occupations did not yield any diagnostic materials although debitage was abundant. These occupations were most productive at the edge of the large sand dune at the southern edge of the excavations. It is assumed that the major portion of these occupations have been overridden by the dune in the past 3000 years. Heavy earthmoving equipment would be required to remove this overburden which limits the possibility of future excavation.

Environment
The Sarah site is a large area located at the eastern end of the Crepeele locale. Ground cover is a mosaic of aspen poplar groves and patches of mesic grass prairie. Excavation profiles indicate that this has been the situation since early precontact times, although as local climatic conditions change (primarily rainfall), the relative size of these areas and where they may have occurred also changed. The soil is aeolian sand sheet derived from delta outwash deposits along the western edge of glacial Lake Hind. The present topography is a variable dune landscape reworked by aeolian activity that creates a mosaic of microhabitats. These include forested patches in the lee of sand dunes with grassland on the southern and western exposures and small damp lowlands that support balsam poplar, willows, red osier dogwood, high-bush cranberry and water birch. There is no permanent water source in the area although a small seasonal stream meanders through a damp lowland to the east of the Sarah site.

Scope and Content:

Sub-series has been divided into sub sub series including: Sarah 2003 and Sarah 2004,

Name Access:	Sarah site DiMe-28
Subject Access:	Archaeology Crepeele locale Sarah site DiMe-28

Graham site DiMe-30

http://archives.brandonu.ca/en/permalink/descriptions11886

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub-series

Series Number: 1.4

Accession Number: 1-2010

GMD: multiple media

Date Range: 2004-2008

History / Biographical:

The Graham site is a located adjacent to the Crepeele site towards the western end of the Crepeele locale. The Graham site was initially designated as a separate site early in the testing of the Crepeele locale due to what appeared to be a distinction between Early and Late Woodland ceramics. Subsequent testing has shown that this distinction was premature and that the cultural mosaic represented in the western section of the Crepeele locale may not readily separate in this manner. However, due to the records management that was already in place, the original separate designations have been retained.

Environment
Ground cover is a mosaic of aspen poplar groves and patches of mesic grass prairie. Excavation profiles indicate that this has been the situation since early precontact times, although as local climatic conditions change (primarily rainfall), the relative size of these areas and where they may have occurred also changed. The soil is aeolian sand sheet derived from delta outwash deposits along the western edge of glacial Lake Hind. The present topography is a variable dune landscape reworked by aeolian activity that creates a mosaic of microhabitats. These include forested patches in the lee of sand dunes grassland on the southern and western exposures and small damp lowlands that support balsam poplar, willows, red osier dogwood, high-bush cranberry and water birch. There is no permanent water source in the area although a small seasonal stream meanders through a damp lowland along the eastern margin of the Crepeele locale.

Excavations at the Graham site took place from 2004 to 2008. Analyses of the recoveries shows that, with two exceptions, all of the occupations that have been tested produced bison foetal bone. The presence of foetal bison is a strong indicator of wintering occupations...The absence of foetal in some area does not necessarily indicate warm season occupations since these excavation series are small and the absence could be due to sample error or perthotaxic factors, such as scavenging of the fragile bone by dogs or other carnivores.

From this evidence the Graham site has been interpreted as being primarily a wintering area. This is consistent with the lack of surface water (snow would serve as a substitute in winter) and the abundance of wood for fuel – a critical requirement for winter occupation. Cultural occupations date from Mortlach circa 250 B.P to woodland circa 580 B.P.

Scope and Content:

Sub-series has been divided into sub sub series including: Graham 2004, Graham 2005, Graham 2006 and Graham 2008

Name Access: Graham site DiMe-30

Subject Access: Archaeology
Crepeele locale
Graham site DiMe-30

Atkinson site - DiMe-27

http://archives.brandonu.ca/en/permalink/descriptions12080

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	2.1
Accession Number:	1-2010
GMD:	multiple media
Date Range:	2003-2006

History / Biographical:

The Atkinson site was named for the landowners Ken and Karen Atkinson who were very helpful to the archaeology and geoarchaeology crews that worked at the site. Their support made the project possible.

The Atkinson site story begins with the discovery of a charcoal lens eroding from the north bank of the Souris River in the summer of 2002. Study of Cultural Adaptations on the Prairie Ecozone (SCAPE) project geoarchaeologist Dr. Garry Running was exploring the stratigraphic layering in the bank when he noted the lens and reported it to Dr. Bev Nicholson. Upon closer examination, a tiny pressure flake was observed on the lens exposure and it was decided to collect a charcoal sample for radiocarbon dating.

The resulting date of 5250B.P cal. 4225 B.C. placed the site in the early Archaic period. A second date on bone collagen of 5580B.P. cal. 4500 B.C. confirmed the earlier date and gave an averaged date of circa 4400 B.C or 6,500 years ago.

The Atkinson site is one of the oldest excavated sites in Manitoba. Based on the date of the site and the kind of lithics (stone tools) present it is considered a Gowen occupation. The Atkinson site is evidence that bison hunters were active on the northern plains at a very early date. Similar sites have also been found on the High Plains in the U.S. and are referred to as the Mummy Cave Complex.

The Atkinson Site is of great importance as it is the first undisturbed site of this type to be excavated in Manitoba and extends the range of these sites south and east from the type-sites in central Saskatchewan. Based on the date and sample evidence further excavations were conducted by Dr. Nicholson's team. in 2003, 2004 and 2006.

Scope and Content:

Sub series has been divided into three sub sub series including: (1) Atkinson 2003, (2) Atkinson 2004; (3) Atkinson 2006

Name Access:	Atkinson site DiMe-27
Subject Access:	Archaeology North Lauder locale Atkinson site DiMe-27

Flintstone Hill - DiMe-26

http://archives.brandonu.ca/en/permalink/descriptions12283

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series

Series Number: 2.2

Accession Number: 1-2010

GMD: multiple media

Date Range: 1997-2000

History / Biographical:

Flintstone Hill is located on the north bank of the Souris River. It is a deeply stratified lacustrine, fluvial and aeolian soil profile that has been exposed by the river through stream-bank erosion. This section is thought to be the most complete middle to late Holocene exposure on the northeastern plains. While the value of the site is primarily for paleo-environmental research and reconstruction, cultural deposits have been identified at the site. Local collectors have picked up lithic materials as they eroded out of the bank for the past several decades and it was they who had named the site. Mr. Bruce Timms from Lauder first drew the Flintstone Hill site to the attention of Dr. Nicholson of Brandon University.

During the mid 1990's to the early 2000's archaeological testing took place on Flintstone Hill. In 1998, an archaeological field crew dug a series of overlapping trenches down the slope of the profile and produced a schematic drawing. A peat layer at the bottom of this profile, dated from the top at 9,400 RCY and at the bottom to 10,400 RCY, has provided details of marsh plant and insect communities at this time.

Subsequent archaeological investigations at the site recovered several cultural deposits including: a hearth dating to 3250+/-70 R.C.Y. (BETA 109529); a butchered atlas bone 4090+/-70 R.C.Y. (BETA 109990); and bone fragments accompanied by Swan River Chert and Knife River Flint lithic flakes 5350+/-50 (BETA 109530). While no diagnostic tools were recovered, these dates suggest that this occupation, which is contemporary with the Atkinson site, may be a Gowen occupation.

Extensive paleo-environmental research has been conducted at the site. Dr. Running, a geomorphologist from the University of Wisconsin – Eau Claire, participated in the Study of Cultural Adaptations in the Prairie Ecozone (SCAPE) Project and he and his students tested the site for several years. He was joined in this effort by Dr. Havholm, Dr. Boyd, Dr. Wiseman, Dr. Beaudoin, and other SCAPE researchers in the interpretation of the paleo-environment of the Glacial Lake Hind basin. The following article is recommended reading.

Running, Garry L., Karen G. Havholm, Matt Boyd and Dion J. Wiseman
2002 Holocene Stratigraphy and Geomorphology of Flintstone Hill, Lauder Sandhills, Glacial Lake Hind Basin, Southwestern Manitoba. Geographie Physique et Quaternaire 56(2-3):291-303.

Scope and Content:

Sub series has been divided into two sub sub series including: (1) Flintstone Hill 1997 (2) Flintstone Hill 1998-2000

Name Access: Flintstone Hill - DiMe-26

Subject Access: Archaeology
North Lauder locale
Flintstone Hill - DiMe-26

Duthie site DiMe-16

http://archives.brandonu.ca/en/permalink/descriptions10216

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub-series
Series Number:	4.1
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1992-2002

History / Biographical:

The Duthie site is the first site identified in the Makotchi-Ded Dontipi locale. It was reported to Dr. Bev Nicholson by Doug Jackson, a local collector who had observed archaeological materials that had been exposed during the construction of Maple Hill Road northwest of Lauder. The site is named after the landowner, Randy Duthie.

The initial inspection of the exposed materials indicated that the eastern half of the site had been severely impacted by raising a road grade using an elevating grader. However, an undetermined amount of the site remained to the west, flanked by a low sand dune. Testing and preliminary excavations were conducted in 1992-93. In 1994 a field school added to the excavated sample. The undisturbed portion of the site, west of Maple Hill Road was situated at the base of a low sand dune and had an aspen and willow forest cover. The water table was approximately one meter below surface at the time of excavation. A rising water table has since prevented further excavations.

Two dates on bone collagen were obtained during excavations. These were 880+/-80 B.P. (Beta 62705) and 970+/-40 B.P. cal. 1030 A.D. (TO 13366). These dates are consistent with an Initial Middle Missouri cultural assignment. The site occupation is identified by the distinctive ceramics found there. Ceramics at the Duthie Site are tool impressed with incising and lip modeling with fabric impressions on most vessels. Jill Taylor analysed the ceramics from the site for a Specialist thesis, Brandon University (1994) and a Masters of Arts degree from the University of Saskatchewan. (Taylor 1995).

Analysis of residue from Duthie site pottery by Matthew Boyd recovered corn (Zea mays) phytoliths and bean (Phaseolus sp.) starch grains indicating consumption of these domesticates at the Duthie site. (Boyd 2006)

The occupation of this site indicates a migration of people from the south who were well acquainted with horticultural farming. These people had previously migrated to South Dakota following river valleys into the central plains from the eastern woodlands during late Hopewell times. It appears that they later migrated well to the north into southern Manitoba but there is no evidence that they remained there for more than a single year.

Boyd, M., C. Surette and B.A. Nicholson. 2006 Archaeobotanical Evidence of Prehistoric Maize (Zea mays) Consumption at the Northern Edge of the Great Plains. Journal of Archaeological Science 33: 1129-1140.

Taylor, J. 1994 An analysis of the ceramics recovered during 1992 and 1993 at the Precontact Duthie Site (DiMe-16). Specialist thesis, Brandon University.

Scope and Content:

The Series has been divided into seven sub-series, including (1) Duthie site (2) Jackson site (3) Twin Fawns site (4) Vera site (5) Schuddemat site (6) Bradshaw site (7) Hollow B site.

Name Access:	Duthie site DiMe-16
Subject Access:	Archaeology Makotchi-Ded Dontipi locale Duthie site DiMe-16