

S. J. McKee Archives



Crepeelee 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 Crepeelee 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 units contained cultural material and indicated several areas for further examination including the Crepeelee 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 x 1m units excavated. The Crepeelee 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 Crepeelee 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.

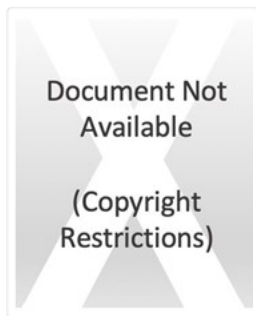
Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to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

Name Access:	Crepeelee locale Radiocarbon Dates
Subject Access:	Archaeology
	Crepeelee locale
	Crepeelee locale Radiocarbon Dates



Atkinson site 2003 - site record north wall XU 1

<http://archives.brandonu.ca/en/permalink/descriptions12169>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.1.3

File Number: 5

Accession Number: 1-2010

Physical Description: one page

Material Details: PDF

History /

Biographical:

Record of excavation unit 1 north wall profile at the Atkinson site 2003.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2003 - site record north wall XU 1

Subject Access: Archaeology
North Lauder locale
Atkinson site DiMe-29
Atkinson site 2003

Documents





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 $\pm$ 70 R.C.Y. (BETA 109529); a butchered atlas bone 4090 $\pm$ 70 R.C.Y. (BETA 109990); and bone fragments accompanied by Swan River Chert and Knife River Flint lithic flakes 5350 $\pm$ 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.

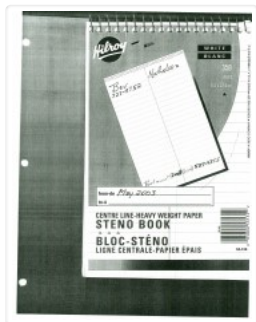
Extensive paleo-environmental research has been conducted at the site. Dr. Running, a geomorphologist from the University of Wisconsin – Eau Claire, participated in the Study of Cultural Adaptations in the Prairie Ecozone (SCAPE) Project and he and his students tested the site for several years. He was 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



Atkinson site 2003 - Beverley Nicholson field journal

<http://archives.brandonu.ca/en/permalink/descriptions12160>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.1.2.

File Number: 1

Accession Number: 1-2010

GMD: textual records

Date Range: 2003

Physical Description: 9 pp.

Material Details: PDF

History /

Biographical:

Field journal of Bev Nicholson. First 9 pages on the Atkinson site and the rest Crepeele site.

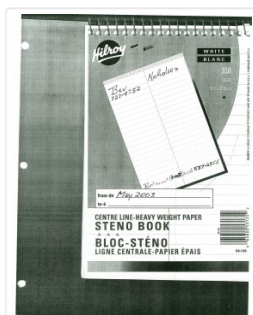
Scope and Content:

Record of excavation methods, items recovered, features, local environment and weather noted by director.

Name Access: Atkinson site 2003 - Beverley Nicholson field journal

Subject Access: Archaeology
North Lauder locale
Atkinson site DiMe-29
Atkinson site 2003

Documents



2.1.1.2.1_BN_journal.pdf

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Atkinson site 2003 - Holly Alston field journal

<http://archives.brandonu.ca/en/permalink/descriptions12161>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.1.2

File Number: 2

Accession Number: 1-2010

GMD: textual records

Date Range: 2003

Physical Description: 37 pp.

Material Details: PDF

History /

Biographical:

Field journal of Crew Chief Holly Alston.

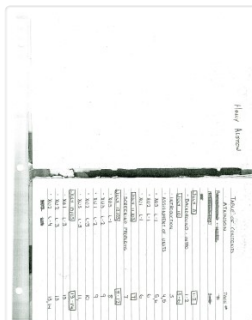
Scope and Content:

Record of excavation methods, items recovered, features, local environment and weather noted by crew chief.

Name Access: Atkinson site 2003 - Holly Alston field journal

Subject Access: Archaeology
North Lauder locale
Atkinson site DiMe-29
Atkinson site 2003

Documents



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Atkinson site 2003 - Andrea Richards field journal

<http://archives.brandonu.ca/en/permalink/descriptions12162>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.1.2

File Number: 3

Accession Number: 1-2010

GMD: textual records

Date Range: 2003

Physical Description: 30pp.

Material Details: PDF

History /

Biographical:

Field journal of Andrea Richards.

Scope and Content:

Record of excavation methods, items recovered, features, local environment and weather noted by teaching assistant.

Name Access: Atkinson site 2003 - Andrea Richards field journal

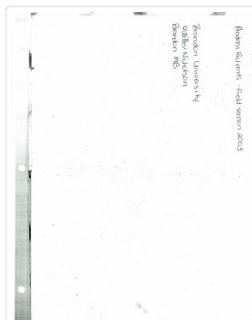
Subject Access: Archaeology

North Lauder locale

Atkinson site DiMe-29

Atkinson site 2003

Documents



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Atkinson site 2003 - site record XU 1

<http://archives.brandonu.ca/en/permalink/descriptions12164>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.1.3

File Number: 1

Accession Number: 1-2010

Physical Description: 21 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 1 at the Atkinson site 2003.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2003 - site record XU 1

Subject Access: Archaeology

North Lauder locale

Atkinson site DiMe-27

Atkinson site 2003

Documents

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Atkinson site 2004 - site record XU 2

<http://archives.brandonu.ca/en/permalink/descriptions12199>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.2.3

File Number: 2

Accession Number: 1-2010

Date Range: 2004

Physical Description: 12 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 2 at the Atkinson site 2004.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2004 - site record XU 2

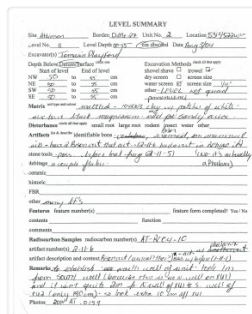
Subject Access: Archaeology

North Lauder locale

Atkinson site DiMe-29

Atkinson site 2004

Documents



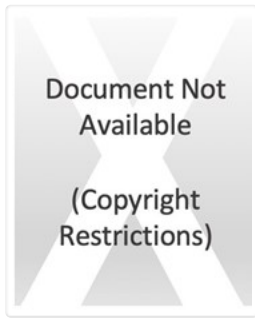
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Atkinson site 2004 - site record XU 3

<http://archives.brandonu.ca/en/permalink/descriptions12200>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.2.3

File Number: 3

Accession Number: 1-2010

Date Range: 2004

Physical Description: 6 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 3 at the Atkinson site 2004.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2004 - site record XU 3

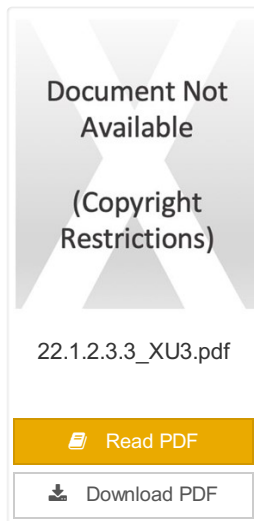
Subject Access: Archaeology

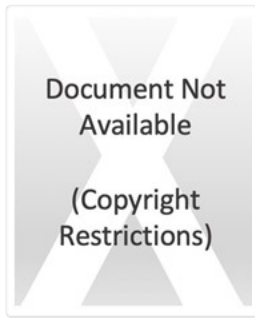
North Lauder locale

Atkinson site DiMe-29

Atkinson site 2004

Documents





Atkinson site 2004 - site record XU 4

<http://archives.brandonu.ca/en/permalink/descriptions12201>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.2.3

File Number: 4

Accession Number: 1-2010

Date Range: 2004

Physical Description: 6 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 4 at the Atkinson site 2004.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2004 - site record XU 4

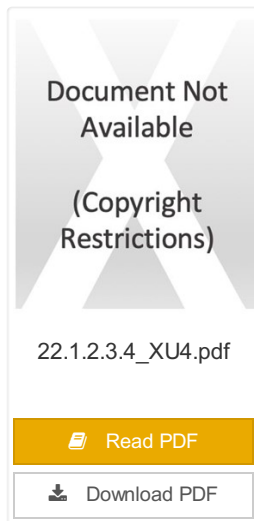
Subject Access: Archaeology

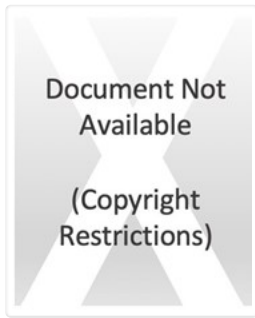
North Lauder locale

Atkinson site DiMe-29

Atkinson site 2004

Documents





Atkinson site 2004 - site record XU 5

<http://archives.brandonu.ca/en/permalink/descriptions12202>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.2.3

File Number: 5

Accession Number: 1-2010

Date Range: 2004

Physical Description: 24 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 5 at the Atkinson site 2004.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2004 - site record XU 5

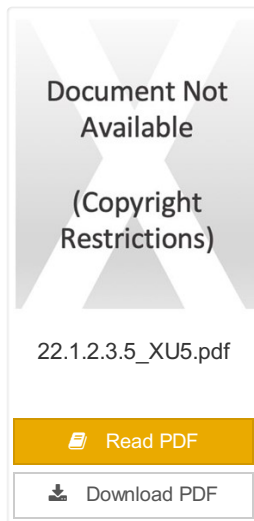
Subject Access: Archaeology

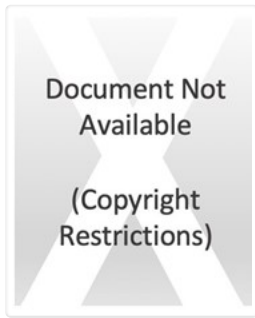
North Lauder locale

Atkinson site DiMe-29

Atkinson site 2004

Documents





Atkinson site 2004 - site record XU 6

<http://archives.brandonu.ca/en/permalink/descriptions12203>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.2.3

File Number: 6

Accession Number: 1-2010

Date Range: 2004

Physical Description: 28 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 6 at the Atkinson site 2004.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2004 - site record XU 6

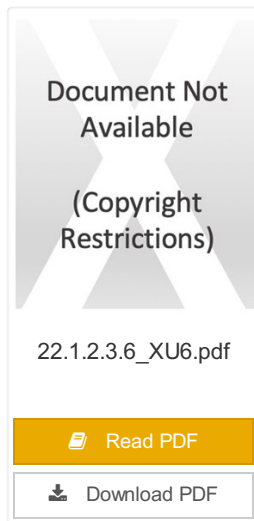
Subject Access: Archaeology

North Lauder locale

Atkinson site DiMe-29

Atkinson site 2004

Documents





Atkinson site 2004 - site record XU 7

<http://archives.brandonu.ca/en/permalink/descriptions12255>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.2.3

File Number: 7

Accession Number: 1-2010

Date Range: 2004

Physical Description: 36 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 7 at the Atkinson site 2004.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2004 - site record XU 7

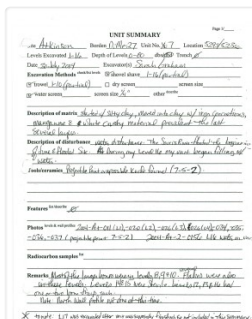
Subject Access: Archaeology

North Lauder locale

Atkinson site DiMe-29

Atkinson site 2004

Documents



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Atkinson site 2006- site record XU 18

<http://archives.brandonu.ca/en/permalink/descriptions12259>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: File

Series Number: 2.1.4.3

File Number: 1

Accession Number: 1-2010

Date Range: 2006

Physical Description: 25 pages

Material Details: PDF

History /

Biographical:

Record of excavation unit 18 at the Atkinson site 2006.

Scope and Content:

Site excavation records of excavation units may include: level summaries, floor plans, feature sheets, wall profiles, unit summaries and any other additional information relating to the unit.

Name Access: Atkinson site 2006 - site record XU 18

Subject Access: Archaeology

North Lauder locale

Atkinson site DiMe-29

Atkinson site 2006

Documents

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