ARCH 2: North Lauder locale

http://archives.brandonu.ca/en/permalink/descriptions12079

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Series
Series Number:	2
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1997 to present
History / Biographical:	

ARCH 2: North Lauder Locale

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.

Environment of the Lauder Sandhills
The North Lauder locale is part of the greater Lauder Sandhills area. The glaciers that covered this region began to recede approximately 11,000 years ago leaving a large lake known as glacial Lake Hind. The Souris River, the Lauder Sandhills and the Oak Lake Aquifer are remnants of the environmental and geological forces that shaped the region.

The Lauder Sandhills region is characterized by a landscape of sand sheets and stabilized sand dunes interspersed with a variety of wetlands. This complex topographic and hydrological situation favoured the development of an island mosaic of mixed forest, wetland and meadow, surrounded by mixed grass prairie. The result was a large, isolated ecotone which provided a rich variety of subsistence resources for hunter-gatherers.

Research in the Lauder Sandhills
Archaeologists from Brandon University have been conducting research in the Lauder Sandhills since 1991. Research in the North Lauder locale has focused on the Atkinson site, a 6,500 year old hunter-gatherer site and Flintstone Hill.

The Atkinson site
The Atkinson site is one of the oldest excavated sites in Manitoba and has been Radiocarbon dated to 6,500 years before present. The Atkinson site is located on the bank of the Souris River and was discovered when a hearth (fire pit) was seen eroding out of the bank. 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.

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. Flint Stone 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.

The North Lauder locale Borden designations of Atkinson site DiMe-27 and Flintstone Hill site DiMe-26.

Borden System

Archaeological sites in Canada are identified by the Borden system, which is a uniform site designation system. The country is divided into grids based on latitude and longitude in blocks of 10 x 20 minutes. The first 4 letters indicate the block and the following numbers indicate the actual site. For example the area of the Lauder Sandhills in southwestern Manitoba is identified by the letters DM and the North Lauder locale within that area is DiMe. The Atkinson site is DiMe-27 and the Flintstone Hill site DiMe-26. As new sites are discovered they will be numbered sequentially.

Scope and Content:

The Series has been divided into two sub-series, including (1) Atkinson site DiMe-27 and Flintstone Hill site DiMe-26.

Name Access: North Lauder locale

Subject Access: Archaeology
Atkinson site DiMe-27

Arrangement:

Series is arranged by site and by year of field work.

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

2.1.1.3.5__N_Wall_XU1.pdf

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Atkinson site 2003 - Crew on river bank

http://archives.brandonu.ca/en/permalink/descriptions12175

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.1.5
Item Number:	2.1.1.5.5
Accession Number:	1-2010
GMD:	graphic
Date Range:	2003
Physical Description:	600 x 450 (273 KB)
Material Details:	JPEG

History / Biographical:

Photograph taken during 2003 Brandon University Archaeology excavations at Atkinson site.

Scope and Content:

Atkinson site 2003. Mike Evans, Holly Alston and Shayne Kolesar.

Name Access:	Atkinson site 2003 - Crew on river bank
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson site 2003 photographs

Images

Atkinson site 2003 - crew on river bank

http://archives.brandonu.ca/en/permalink/descriptions12181

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.1.5
Item Number:	2.1.1.5.12
Accession Number:	1-2010
GMD:	graphic
Date Range:	2003
Physical Description:	600 x 450 (322 KB)
Material Details:	JPEG

History / Biographical:

Photograph taken during 2003 Brandon University Archaeology excavations at Atkinson site.

Scope and Content:

Atkinson site 2003. Crew on the bank of the Souris river.

Name Access:	Atkinson site 2003 - Crew on river bank
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson site 2003 photographs

Images

Atkinson site 2004 - crew on river bank

http://archives.brandonu.ca/en/permalink/descriptions12209

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.2.5
Item Number:	2.1.2.5.4
Accession Number:	1-2010
GMD:	graphic
Date Range:	2004
Physical Description:	1024 x 768 (344 KB)
Material Details:	JPEG

History / Biographical:

Photograph taken during 2004 Brandon University Archaeology excavations at Atkinson I site.

Scope and Content:

Shayne Kolesar and Sarah Graham on bank of river.

Name Access:	Atkinson site 2004 - crew on river bank
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson site 2004 photographs

Images

Atkinson site 2004 - XU 7 north wall profile

http://archives.brandonu.ca/en/permalink/descriptions12217

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.2.5
Item Number:	2.1.2.5.13
Accession Number:	1-2010
GMD:	graphic
Date Range:	2004
Physical Description:	2048 x 1536 (1501 KB)
Material Details:	JPEG
History / Biographical:	

Photograph taken during 2004 Brandon University Archaeology excavations at Atkinson site.

Scope and Content:

Excavation unit 7, north wall profile.

Name Access:	Atkinson site 2004 - XU 7 north wall profile
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson site 2004 photographs

Images

Atkinson II site 2004 - profile of the north wall of XU 13

http://archives.brandonu.ca/en/permalink/descriptions12253

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.3.5
Item Number:	2.1.3.5.13
Accession Number:	1-2010
GMD:	graphic
Date Range:	2004
Physical Description:	768 x 1024 (607)
Material Details:	JPEG
History / Biographical:	

Photograph taken during 2004 Brandon University Archaeology excavations at Atkinson II site.

Scope and Content:

Profile of the north wall of excavation unit 13 at the Atkinson II site 2004.

Name Access:	Atkinson II site 2004 - profile of the north wall of XU 13
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson II site 2004 photographs

Images

Crepeele site 2005 - XU 14 north wall profile

http://archives.brandonu.ca/en/permalink/descriptions11767

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	1.2.3.5
Item Number:	1.2.3.5.5
Accession Number:	1-2010
GMD:	graphic
Date Range:	2005
Physical Description:	2063 x 2750 (1,193 KB)
Material Details:	JPEG
Scope and Content:	

XU 14 north wall profile

Name Access:	Crepeele site 2005 - XU 14 north wall profile
Subject Access:	Archaeology Crepeele locale Crepeele site DiMe-29 Crepeele site 2005 Crepeele site 2005 - photographs

Images

Atkinson site 2006 - hearth 3 north profile

http://archives.brandonu.ca/en/permalink/descriptions12269

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.4.5
Item Number:	2.1.4.5.3
Accession Number:	1-2010
GMD:	graphic
Date Range:	2006
Physical Description:	1024 x768 (769)
Material Details:	JPEG
History / Biographical:	

Photograph taken during 2006 Brandon University Archaeology excavations at Atkinson site.

Scope and Content:

Photograph of hearth 3, unit 19 north profile.

Name Access:	Atkinson site 2006 - hearth 3 north profile
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson site 2006 photographs

Images

Atkinson site 2006 - north wall of hearth 5

http://archives.brandonu.ca/en/permalink/descriptions12278

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.4.5
Item Number:	2.1.4.5.12
Accession Number:	1-2010
GMD:	graphic
Date Range:	2006
Physical Description:	2560 x 1920 (1067)
Material Details:	JPEG

History / Biographical:

Photograph taken during 2006 Brandon University Archaeology excavations at Atkinson site.

Scope and Content:

North wall of hearth 5.

Name Access:	Atkinson site 2006 - north wall of hearth 5
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson site 2006 photographs

Images

Atkinson site 2006 - north wall profile of XU18

http://archives.brandonu.ca/en/permalink/descriptions12282

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.1.4.5
Item Number:	2.1.4.5.10
Accession Number:	1-2010
GMD:	graphic
Date Range:	2006
Physical Description:	768 x 1024(395)
Material Details:	JPEG
History / Biographical:	

Photograph taken during 2006 Brandon University Archaeology excavations at Atkinson site.

Scope and Content:

North wall profile of excavation unit 18

Name Access:	Atkinson site 2006 - north wall profile of XU18
Subject Access:	Archaeology North lauder locale Atkinson site DiMe-27 Atkinson site 2006 photographs

Images

Flintstone Hill 1997 - students on top of the bank

http://archives.brandonu.ca/en/permalink/descriptions12313

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.2.1.5
Item Number:	2.2.1.5.10
Accession Number:	1-2010
GMD:	graphic
Date Range:	1997
Physical Description:	1118 x 790(489)
Material Details:	JPEG
History / Biographical:	

Photograph taken during 1997 Brandon University Archaeology survey at Flintstone Hill.

Scope and Content:

Students watching the bison skull recovery from the top of the bank.

Name Access:	Flintstone Hill 1997 - students on top of the bank
Subject Access:	Archaeology North lauder locale Flintstone Hill DiMe-26 Flintstone Hill 1997 - students on top of the bank

Images

Flintstone Hill 1998-2000 - Test Unit 3 north profile

http://archives.brandonu.ca/en/permalink/descriptions12318

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.2.2.5
Item Number:	2.2.2.5.5
Accession Number:	1-2010
GMD:	graphic
Date Range:	1998-2000
Physical Description:	528 x 792(311)
Material Details:	JPEG

History / Biographical:

Photograph taken during 1998-2000 Brandon University Archaeology survey at Flintstone Hill.

Scope and Content:

Test Unit 3 north profile, 125 cm deep.

Name Access:	Flintstone Hill 1998-2000 - Test Unit 3 north profile
Subject Access:	Archaeology North lauder locale Flintstone Hill DiMe-26 Flintstone Hill 1998-2000 - Test Unit 3 north profile

Images

Flintstone Hill 1998-2000 - Test Unit 4 north profile

http://archives.brandonu.ca/en/permalink/descriptions12319

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.2.2.5
Item Number:	2.2.2.5.6
Accession Number:	1-2010
GMD:	graphic
Date Range:	1998-2000
Physical Description:	536 x 792(244)
Material Details:	JPEG
History / Biographical:	

Photograph taken during 1998-2000 Brandon University Archaeology survey at Flintstone Hill.

Scope and Content:

Test Unit 4 north profile, 150 cm deep.

Name Access:	Flintstone Hill 1998-2000 - Test Unit 4 north profile
Subject Access:	Archaeology North lauder locale Flintstone Hill DiMe-26 Flintstone Hill 1998-2000 - Test Unit 4 north profile

Images

Flintstone Hill 1998-2000 - Test Unit 5 north profile

http://archives.brandonu.ca/en/permalink/descriptions12320

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Item
Series Number:	2.2.2.5
Item Number:	2.2.2.5.7
Accession Number:	1-2010
GMD:	graphic
Date Range:	1998-2000
Physical Description:	536 x 796(247)
Material Details:	JPEG
History / Biographical:	

Photograph taken during 1998-2000 Brandon University Archaeology survey at Flintstone Hill.

Scope and Content:

Test Unit 5 north profile, 150 cm deep.

Name Access:	Flintstone Hill 1998-2000 - Test Unit 5 north profile
Subject Access:	Archaeology North lauder locale Flintstone Hill DiMe-26 Flintstone Hill 1998-2000 - Test Unit 4 north profile

Images

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

North Lauder locale Radiocarbon Report I

http://archives.brandonu.ca/en/permalink/descriptions12327

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub sub series
Series Number:	2.5.1
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1997-2000
Physical Description:	2 pages
Material Details:	Radiocarbon date reports have been scanned in multi-page PDF files.

History / Biographical:

North Lauder Radiocarbon Date report by IsoTrace Laboratory for Atkinson II site #TO-11882.

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: Atkinson site and Flintstone Hill.

Name Access:	North Lauder locale Radiocarbon Report I
Subject Access:	Archaeology North Lauder locale North Lauder locale Radiocarbon Report I

Documents

2.5.1_Atkinson_RC14_TO-11882.pdf

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North Lauder locale Radiocarbon Report 2

http://archives.brandonu.ca/en/permalink/descriptions12328

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub sub series
Series Number:	2.5.2
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1997-2000
Physical Description:	2 pages
Material Details:	Radiocarbon date reports have been scanned in multi-page PDF files.

History / Biographical:

North Lauder Radiocarbon Date report by IsoTrace Laboratory for Atkinson site #TO-10640.

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: Atkinson site and Flintstone Hill.

Name Access:	North Lauder locale Radiocarbon Report 2
Subject Access:	Archaeology North Lauder locale North Lauder locale Radiocarbon Report 2

Documents

2.5.2_Atkinson_RC14_TO-10640.pdf

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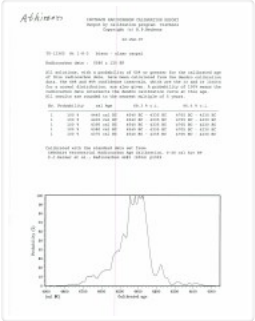


North Lauder locale Radiocarbon Report 3

http://archives.brandonu.ca/en/permalink/descriptions12329

Part Of:	RG 7 Beverley Nicholson fonds
Description Level:	Sub sub series
Series Number:	2.5.3
Accession Number:	1-2010
GMD:	multiple media
Date Range:	1997-2000
Physical Description:	1 page
Material Details:	Radiocarbon date reports have been scanned in multi-page PDF files.
History / Biographical:	

North Lauder Radiocarbon Date report by IsoTrace Laboratory for Atkinson site #TO-13365.

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.

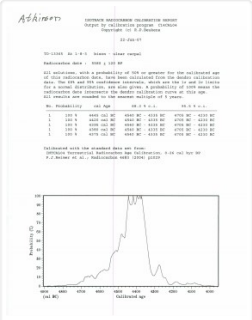
Scope and Content:

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

Name Access: North Lauder locale Radiocarbon Report 3

Subject Access: Archaeology
North Lauder locale
North Lauder locale Radiocarbon Report 3

Documents



2.5.3_Atkinson_RC14_TO-13365.pdf

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North Lauder locale Radiocarbon Report 4

http://archives.brandonu.ca/en/permalink/descriptions12330

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub sub series

Series Number: 2.5.4

Accession Number: 1-2010

GMD: multiple media

Date Range: 1997-2000

Physical Description: pages 5-7

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

History / Biographical:

North Lauder Radiocarbon Date report by Beta Analytic Inc. for Flintstone Hill #109529 and #109530.

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: Atkinson site and Flintstone Hill.

Name Access: North Lauder locale Radiocarbon Report 4

Subject Access: Archaeology
North Lauder locale
North Lauder locale Radiocarbon Report 4

Documents

2.5.4_FSH_RC14_Beta-109529_109530.pdf

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