

S. J. McKee Archives



Crepelee locale Radiocarbon Report I

<http://archives.brandonu.ca/en/permalink/descriptions11968>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub sub series

Series Number: 1.5.1

Accession Number: 1-2010

GMD: multiple media

Date Range: 2003-2008

Physical Description: 3 pages

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

History /

Biographical:

Crepelee locale Radiocarbon Dates. C14 report by IsoTrace Laboratory for Crepelee site 2005 XU 8.

From 2003 to 2008 field work took place at the Crepelee locale with 75 - 1m x1m units excavated.

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepelee 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: Crepelee, Sarah and Graham sites.

Name Access: Crepelee locale Radiocarbon Report I

Subject Access: Archaeology
Crepelee locale
Crepelee locale Radiocarbon Dates

1.5.1_Crepeele05_RC1
4.pdf

Read PDF

[Download PDF](#)



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