

# 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



## 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-European contact prompted the decision to test the Crepeelee locale. The survey was named in recognition of the Casselman family, the original landowners.

Archaeological testing began in the Crepeelee locale in May 2003 on property now owned by the Crepeelee 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 constraints, 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 Crepeelee, 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  
Crepeelee locale  
Casselman survey