

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



T.R. Wilkins collection

<http://archives.brandonu.ca/en/permalink/descriptions4298>

Part Of: RG 1 Brandon College fonds
Description Level: Sub-series
Series Number: MG 1 1.4
Accession Number: 3-2016
GMD: textual records
Date Range: 1911?-1940
Physical Description: 7 cm

History /

Biographical:

Thomas Russell Wilkins was born in Toronto in 1891. He received his B.A. from McMaster University in 1912, and became the Science Master at Woodstock College the following year. In 1916, he and his wife Olive moved to Chicago, where Wilkins was an instructor of Physics at the University of Chicago. The next year he served as a master signal electrician in the U.S. Signal Corps. During World War I, Wilkins completed pioneer research for the United States Navy, which led to the development of pulse sonar devices in the 1920s. He had also been researching the possibilities of a wireless telephone.

Wilkins and his wife moved to Brandon in 1918, where he took up the position of Professor of Physics. During his time at Brandon College, Wilkins introduced the latest technology to classrooms, designed the original Science Building, and along with the Brandon Citizen's Committee, secured building funds for the Citizen's Science Building.

Receiving his Ph.D. from the University of Chicago in 1921, Wilkins resigned from Brandon College in 1925 to pursue postgraduate study at Cambridge University. In 1926, he began research at the University of Rochester, where he also took up the position of Professor of Physics. From 1930 to 1938, he acted as the Director of the Institute of Optics.

Widely known for his work in the fields of cosmic rays and atomic disintegration, in April 1939, Wilkins announced the perfection of a camera that was able to record the "footprints" of invisible atoms after they collide. In October 1939, he received a medal from the Royal Photographic Society of Great Britain recognizing his work regarding the use of photographic emulsions in the study of radium. The following year, Wilkins perfected a camera that could determine the energy levels inside the nuclei of stable chemical elements. He received a grant from Sigma Xi, the National Society for the Promotion of Scientific Research, in November of 1940.

Wilkins married twice. The first marriage, to Olive Angles Cross took place on June 17, 1913. Olive Wilkins died suddenly on May 13, 1937, at the age of 45. Wilkins married Susan Gwendolyn Whidden, the daughter of former Brandon College president Dr. H.P. Whidden, in 1938.

Thomas Russell Wilkins died suddenly of a heart attack on December 10, 1940, on his way back to his laboratory after a faculty meeting. He was 49 years old.

Custodial History:

Records were accessioned by the McKee Archives in 1998. Prior custodial history is unknown.

Scope and Content:

T. Russell Wilkins' records contain correspondence between himself and Mrs. Wilkins and Dr. Whidden concerning their employment with Brandon College. There are letters between the two men regarding the building of the Science Building in 1920. There is also a copy of the Canadian Baptist. Besides programmes and a picture, there is also correspondence between various people. Dr. Wilkins kept the papers he had written for various classes at McMaster University in the years 1911 and 1912. There is a "toast to the ladies" that he delivered at a banquet of some sort, that gives an interesting view on how Wilkins, and possibly other men of his time, viewed women. There are numerous newspapers clippings, and several pages taken from journals such as Popular Mechanics, Popular Electricity and others. Dr. Wilkins was at the top of his field of study. He was an extremely bright man who managed to create some very useful tools of science. His papers are interesting and informative to read.

Notes:	History/Bio information taken from Campus News May 1990
Name Access:	Olive Wilkins Thomas Wilkins H.P. Whidden
Subject Access:	science building science scientific development
Storage Location:	2016 accessions