

Archaeology 3000 and 3300: FORT VERMILION ARCHAEOLOGICAL PROJECT in northern Alberta

July 23 – August 21, 2016

Instructors: *Dr. Shawn Bubel*, University of Lethbridge
Dr. Heinz Pyszczyk, Royal Alberta Museum



INTRODUCTION

The year is 1799. The Canadian based North West Company (NWC) had already established their line of fur trade posts from Lake Athabasca up the Peace River to today's Fort St. John, British Columbia. For the next 22 years they would dominate the trade along the river and LaFleur's Post – later to become Fort Vermilion – would be an integral part of that trade network. With the union of the NWC and Hudson's Bay Company (HBC) in 1821, changes came to the trade at those Peace River posts that would have a profound effect on traders and First Nations people. With the deaths of traders at Fort St. Johns in 1823 by the hands of local Beaver First Nations, fear and anger gripped the employees of the HBC. As a result Fort Dunvegan down river was closed in 1825. More posts were closed and abandoned along this long stretch of the Peace River. By 1826, Fort Vermilion was the last post still standing on the Peace River. This site is the subject of this project.

Fort Vermilion is an ideal site to investigate the geopolitical, social, and cultural dynamics of the fur trade. Small research campaigns have been carried out at the site since its discovery in 1998. These excavations revealed stratified layers of occupation, making it one of the first stratified fur trade sites ever identified in Alberta. Among the buried remains were structural elements, mammal and bird bones,

shells, nails, metal containers, lead shots and balls, gunflints, beads, ceramic sherds, pipes, and lithic artifacts. By applying insights gained through archaeological, anthropological, and historical research, the current expedition is shedding new light on the people that lived and traded there.

This summer (2016), students from Canada, the United States and elsewhere will come together to learn the many aspects of archaeological field and laboratory research: excavations methods and techniques, surveying, data acquisition and recording, artifact cataloguing, and cultural contextualizing. The main research objectives of this excavation project are to expose and study the structures of the ancient fort, to link the archaeological remains to specific cultural activities that were carried out, and to delimit the occupation phases at the site. We will explore the cultural changes that took place at the site over the three decades it was occupied. The excavation work is especially pressing because the site is in danger of being eroded by the Peace River. We will also conduct a survey in the area to locate and test prehistoric sites.

This area of northern Alberta is stunningly beautiful. Students get to experience the Canadian wilderness with many camp comforts. There is nothing better than watching the Northern Lights dance across the night sky after a great day of field work.

COURSE OBJECTIVES

The main objective of this field school is to expose students to the archaeological process, from excavation to analysis, and the importance of rigorous yet adaptable excavation and recording techniques. Through hands-on learning, students gain experience in excavating and field documentation. They will also be introduced to the intellectual challenges presented by archaeological research, including the need to adjust field strategies as discoveries are made and theories change. Unlike many field schools, students will have the opportunity of combining the historic fur trade documentary record with the archaeological evidence, for a more in-depth understanding of Canadian history. Furthermore, students receive training in laboratory analysis and have the opportunity to process and catalogue the cultural remains they find. The broader context of their archaeological finds, the site, and the fur trade in North America will be explained as well. By the end of the field school, students will have a solid understanding of archaeological field methods, recognize the value of detailed excavation records, and an appreciation for the process. They will also know how their efforts and discoveries contribute to the academic goals of the research project.

COURSE REQUIREMENTS AND GRADING

This is a two-course (6-credit) field school in northern Alberta. Students must register in both courses. Students are expected to arrive at the campsite in the early afternoon on Sunday, July 24. There will be an orientation session in the late afternoon. The excavations begin on Monday, July 25 and run until Friday, August 19. On Saturday, August 20 we will finish packing up the equipment, supplies, and cultural remains. Students are free to return home later that day.

We work at the site and in the camp laboratory six days a week. We have breakfast together at 8:00 am and leave for the site at 8:45 am. We excavate at the site from 9:00 am until 4:30 pm. Upon our return to the camp, we unload the equipment and the archaeological remains collected that day. Dinner is served at 6:30 pm. Formal lectures are held right after dinner (7:00 pm). A number of task-related workshops take place in the field and the laboratory. Additional mini-workshops are given as particular cultural remains are excavated.

When the students finish excavating a 1 x 1 meter unit they spend the next day in the camp laboratory processing the cultural remains they collected. They clean, catalogue, and typologically identify each remain from 9:00 am until 5:00 pm. They are also expected to help with other camp tasks during that day. On Saturday, the off-day, students and staff do laundry, shopping, catch up on course readings, etc.

Students are required to participate in all elements of the field school. Student success is correlated with work ethic, engagement, and attitude. Students must come equipped with sufficient excitement and adequate understanding that the archaeological endeavor requires real, hard work in a camp environment. Students will get dirty, sweaty, tired, and have to work closely with others.

Students are graded on the quality of their field and lab work, their field records and notebooks, a final exam and their participation. Students are required to participate fully in all course components. Dedication and team work are vital for student success.

Excavations: Students will participate in guided excavations at Fort Vermilion (1798-1836). The excavations will focus on discovering and exposing architectural components of the ancient fur trading post and unearthing their cultural remains. Since the site is uniquely stratified due to frequent overbank flooding, the excavations will also involve the separation of the fort's occupation levels. The site will be excavated using the Wheeler-box method. Students will be assigned to 1 x 1 meter units and will learn how to excavate the cultural deposits within their units. They will be taught how and when to use a shovel, small pick, trowel, brush, sieve, and other tools. They will become proficient with these tools and others by the end of the field school. Students will also be made aware of how different screening and sieving methods can potentially bias the recovery of archaeological remains.

Recording: Students will learn how to draw level plans, measure and record the provenience of archaeological finds, document the matrix surrounding the cultural remains, and draw stratigraphic profiles. They will also learn how to fill out feature and sediment (locus/layer) forms.

Laboratory Analysis: Scheduled laboratory workshops on historical artifacts (points, metal pieces, ceramics, beads, etc.), architectural remains, zooarchaeology, paleobotany, and sediment analysis will take place throughout the field school. Students will learn how to process the cultural remains they excavate from their units. They will clean, catalogue, and typologically identify each remain with guidance from the senior researchers of the project.

The grade breakdown for each course is as follows:

Archaeology 3000: Historical Archaeology

Assignment 1:	10%
Assignment 2:	20%
Assignment 3:	10%
Note books:	40%
Final Examination:	20%

Archaeology 3300: Archaeological Field Work - Alberta

Quality of Field Work:	40%
Quality of Laboratory Work:	30%
General Camp Work:	10%
Final Examination:	20%

Field work. Students will be assessed on the quality of their field work (i.e. their ability to effectively use the excavation tools, correctly articulate a cultural feature, trim a baulk, measure the provenience of an artifact, bag and tag artifacts, draw scaled level plans, draw sections, etc.).

Laboratory work. Students will also be assessed on the quality of their laboratory work (i.e. how effectively they clean and label the cultural remains they find, their catalogue records and their ability to typologically identify the remains).

Camp work. Students will be assessed on their participation in camp related tasks and activities.

Assignment 1 – Field Mapping. Students will identify site features and map them to scale. They will do this at the site level and at the unit level.

Assignment 2 – Site Surveys. In survey teams, students will look for prehistoric and historic remains to the north and south of the Fort Vermilion site. Each team will create survey maps of the area, noting the cultural remains they discovered.

Assignment 3 – Identification of Historic Cultural Remains. Students will classify and discuss a subset of archaeological remains.

Field Notebook. Students are required to record their finds in a field notebook that must be submitted to the project at the end of the field school. The notebook must include a scaled sketches, provenience records, and notes on the day’s excavation activities. Students must also note the significance of their finds as they learn more about them and the Fort Vermilion site.

Final Examination. Students will take an exam in the last week of the field school. They will be tested on excavation techniques, the laboratory process, recording methods, and the context of the cultural remains they recovered at the site. They are expected to be able to link the lectures and readings to their field and laboratory work. Students will also be tested on their ability to typologically identify Historical remains.

Grading Scheme

A+ 95-100	B+ 77-79	C+ 67-69	D+ 57-59
A 85-95	B 73-76	C 63-66	D 50-56
A- 80-84	B- 70-72	C- 60-62	F 0-49

COURSE COSTS

The cost for this field school is approximately **\$2,000** plus tuition (**\$1,200**). This includes room and board, field and laboratory supplies, and local transportation costs. Personal spending money amounts are not included.

COURSE RISKS

Due to the fact that the field school takes place off campus there are a number of risks that may be encountered, including sun exposure, heat stroke, dehydration, insect bites, falling or getting hurt using equipment, and travel accidents. These risks will be minimized and monitored by the instructor; however, students are responsible for their own safety. Waivers of liability must be signed by all participants.

Some days will be hot, temperatures can reach 30°C (85°F) and other days will be cold and rainy. The evenings will be cool to cold. Work will continue at the site unless conditions are stormy. Layered clothing and rain gear are recommend. Sunscreen, a hat, and sturdy, closed-toe footwear are required on site. Daily travel to the excavation site requires walking through the forest and crossing the Peace River in boats. Students are required to stay with the group at all times and must wear a lifejacket in the boat. Wildlife, including bears, cougars, wolves, coyotes, deer, spiders, bees, misquotes, and other animals living in the region are encountered in the excavation area and at the campsite. For safety

reasons, no student is permitted to leave the site or campsite without permission from a senior staff member

ACCOMMODATIONS

During the field school the students and staff live at the field campsite about 3 km south of the excavation site, on the opposite side the Peace River. Students must bring their own tent, sleeping bag, therma-rest, towels, and other personal items (shampoo, soap, etc.). A shower facility, kitchen, lecture room, a lab building, and two outhouses will be constructed at the campsite. Students and staff will take turns cleaning and caring for the campsite. Coin laundry is available in the town of La Crete and a nearby gas station.

The camp cook prepares well-balanced, nutritious meals twice a day (breakfast and dinner) in the kitchen building. Since these are group meals, individual dietary needs cannot be accommodated, although the students are typically provided with a number of meat or dairy, vegetable, and starch (rice, potatoes, bread, etc.) choices. Lunches are packed in the morning and are taken to the site along with water containers.

EQUIPMENT LIST

- Excavation backpack
- Marshalltown pointing trowel (4 or 5")
- Sunscreen
- Wide brim hat
- Sturdy, closed-toe footwear
- Rain coat and pants
- Personal tent
- Sleeping bag
- Therma-rest
- Towels
- Any prescription medicine

A detailed packing list will be sent to students accepted to the field school.

COURSE SCHEDULE

July 23-24

Travel from Lethbridge to the field camp near the town of La Crete in northern Alberta.

July 24

3:00 pm: Preliminary introductions, course overview

6:30 pm: Group dinner

Weekdays (Sunday – Friday) – Excavation on site

7:00 am: Rise-and-shine

8:00 am: Breakfast

8:45 am: Travel to the excavation site

12:30 pm: Lunch break on site

4:30 pm: Return to campsite

5:00 pm: Unpack artifacts and equipment at camp

5:30 pm: Shower break

6:30 pm: Group dinner

7:00 pm: Evening lecture

Weekdays (Sunday – Friday) – *Laboratory work* on the day following the completion of an excavation unit

7:00 am: Rise-and-shine
8:00 am: Breakfast
8:45 am: Clean up camp kitchen and help with other camp work
9:30 am: Work in the camp laboratory
12:30 pm: Lunch break at camp
5:00 pm: Help unpack artifacts and equipment at camp
6:00 pm: Group dinner
7:00 pm: Evening lecture

Off-day (Saturday) – Laundry, shopping, camp chores, catch-up, and free time

8:00 am: Rise-and-shine
9:00 am: Breakfast
9:30 am: Camp chores
12:30 pm: Lunch break at camp
1:00 pm: Travel into La Crete to do laundry and shopping
6:00 pm: Group dinner
7:00 pm: Evening lecture

Workshops, Lectures, and Activities in Week 1

Camp Safety, Orientation, and Responsibilities
Site Safety, Orientation, and Responsibilities
Site Introduction
Excavation Grid and Unit Layout
Excavation Tool Use
Excavation Methods
Excavation Recording (Field Notebooks)
Unit Mapping
Provenience Recording

Assignment 1

Lecture – Overview of the Fort Vermilion Project
Lecture – Fort Vermilion in Context
Lecture – Alberta and Western Canadian History
Lecture – Overview of Week 1

Workshops, Lectures, and Activities in Week 2

Excavation Unit Profile Drawings
Survey Methods and Mapping
Assignment 2 part 1
Laboratory Safety and Procedures
Cleaning, Labelling, and Bagging Historical remains
Cataloguing Historical remains
Typologically Identifying Historical remains
Lecture – Historical Archaeology
Lecture – Fur Trade Archaeology Part I
Lecture – Historical Artifacts
Lecture – Overview of Week 2

Workshops, Lectures, and Activities in Week 3

Faunal Analysis
Paleobotany
Glass Artifacts
Metal Artifacts
Beads and Shell Artifacts
Ceramics
Architecture of Historic sites
Geoarchaeological Sampling
Radiocarbon samples

Assignment 2 part 2

Assignment 3

Lecture – Geoarchaeology at Fort Vermilion
Lecture – Use of GIS for Archaeological Analysis
Lecture – Overview of Week 3

Workshops, Lectures, and Activities in Week 4

Site Photography
Excavation Unit and Area Clean-up
Equipment Cleaning and Packing
Artifact and Excavation Records Curation
Artifact Packing and Transfer to Storage
Lecture – What We Have Learned This Season at Fort Vermilion

Final Exam

Farewell Party

Saturday morning depart for Lethbridge

REQUIRED READINGS

The required readings listed below will be posted on the field school Moodle website.

Brink, John W.

2001 Carcass Utility Indices and Bison Bones from the Wardell Kill and Butchering Sites. In *People and Wildlife in Northern North America*, S. Craig Gerlach and Maribeth S. Murray (eds), pp. 255-273. BAR International Series 944.

Bundy, Barbara E., Allen P. McCartney, and Douglas W. Veltre

2003 Glass Trade Beads from Reese Bay, Unalaska Island: Spatial and Temporal Patterns. *Arctic Anthropology* 40 (1):29-47.

Cannon, Aubrey

1983 The Quantification of Artifactual Assemblages: Some Implications for Behavioral Inferences. *American Antiquity* 48(4):785-92.

Carter, Sue

2012 Artifact Typologies, the Issues. *Heritage Daily*.

Casteel, Richard W.

1977 Characterization of Faunal Assemblages and the Minimum Number of Individuals Determined from Paired Elements: Continuing Problems in Archaeology. *Journal of Archaeological Science* 4:125-34.

Deetz, James F.

1968 Material Culture and Archaeology - What's the Difference. In *Historical Archaeology and the Importance of Material Things*, Leland Ferguson (ed), pp. 9-12. Chelsea House Publishers, New York.

Forsman, Michael and Joseph G. Gallo.

1979 Approaches to Fur Trade Archaeology, Project 77-22 in Part. In *Archaeology in Alberta, 1978*, J. M. Hillerud (ed), pp.159-188. Alberta Culture, Historical Resources.

Garth, Thomas, R. Jr.

1947 Early Architecture in the Northwest. *The Pacific Northwest Quarterly* 38 (July):221-22.

Ives, John W.

1993 The Ten Thousand Years Before the Fur Trade in Northeastern Alberta. In *The Uncovered Past: Roots of Northern Alberta Societies*, Patricia A. McCormack and R. Geoffrey Ironside (eds), pp. 5-33. Circumpolar Research Series Number 3. Canadian Circumpolar Institute, University of Alberta.

Peach, Kate

1993 Ethnicity and Ethnic Markers: A Fur Trade Example. *Manitoba Archaeology Journal* (3):1-21.

Pyszczyk, Heinz W.

1984 Site Occupation Length as a Factor in Artifact Assemblage Variability and Frequency. In *Archaeology in Alberta, 1983*. Occasional Paper No. 23, D. Burley (ed), pp. 60-76. Archaeological Survey of Alberta, Edmonton.

1988 Consumption and Ethnicity: An Example from the Fur Trade in Western Canada. *Journal of Anthropological Archaeology* 8:213-49.

1989 Prehistoric and Historical Archaeology: Fort Vermilion, Alberta. In *Proceedings of the Fort Chipewyan and Fort Vermilion Bicentennial Conference*, Patricia A. McCormack and R. Geoffrey Ironside (eds), pp. 45-52. Boreal Institute for Northern Studies, University of Alberta.

1992 The Architecture of the Western Canadian Fur Trade: A Cultural - Historical Perspective. *Society for the Study of Architecture in Canada, Bulletin* 17:32-41.

1993 A "Parchment Skin" is All: The Archaeology of the Boyer River Site, Fort Vermilion, Alberta. In *The Uncovered Past: Roots of Northern Alberta Societies*, Patricia A. McCormack and R. Geoffrey Ironside (eds), pp. 33-44. Circumpolar Research Series Number 3. Canadian Circumpolar Institute, University of Alberta.

1997 The Use of Fur Trade Goods by the Plains Indians, Central and Southern Alberta, Canada. *Canadian Journal of Archaeology* 21(1): 45-84

2015 *Last Fort Standing: Fort Vermilion and the Peace River Fur Trade 1798-1830*, Volume 14 Occasional Papers of the Archaeological Society of Alberta.

RECOMMENDED READINGS

Brown, Jennifer

1980 *Strangers in Blood: Fur Trade Company Families in Indian Country*. Vancouver: University of British Columbia Press.

Campbell, Marjorie Wilkins

1983 *The North West Company*. Douglas & McIntyre, Toronto.

Deetz, James F.

1977 *In Small Things Forgotten: The Archaeology of Early American Life*. Garden City, New Jersey, Anchor Press.

Dempsey, Hugh

1973 *A History of Rocky Mountain House*. Occasional Papers in Archaeology and History No. 6. Canadian Historic Sites. Department of Indian Affairs and Northern Development, Ottawa, Ontario.

Devore, Stephen

1992 *Beads of the Bison Robe Trade: The Fort Union Trading Post Collection*. Friends of Fort Union Trading Post, Williston, North Dakota.

Francis, Daniel and Michael Payne

1993 *A Narrative History of Fort Dunvegan*. Watson and Dwyer.

Innis, Harold A.

1975 *The Fur Trade in Canada*. University of Toronto Press, Toronto.

Kennedy, Margaret A.

1997 *The Whiskey Trade of the Northwestern Plains*. Peter Lang, New York.

Klimko, Olga and John Hodges

1993 *Last Mountain House. A Hudson's Bay Company Outpost in the Qu'Appelle Valley*. Desktop Publishing, Western Heritage Services Inc., Saskatoon, Saskatchewan.

Losey, T. C., Heinz Pyszczyk, Lan Chan, Karie Hardie, Peter Seto, and Peter Bobrowsky

1978 Archaeological Investigations Fort George, 1977. Manuscript on file, the Archaeological Survey of Alberta, Edmonton, Alberta.

Pyszczyk, Heinz W.

1978 *The Fort Victoria Faunal Analysis: Considerations of Subsistence Change of the Fur Trade Era in North Central Alberta*. M.A. Thesis, Department of Anthropology, The University of Manitoba, Winnipeg.

1980 *Identifiable Bone Weights for Determining Taxonomic Elements, Minimum Numbers, and Variety*. M.S. on file, Archaeological Survey of Alberta, Edmonton.

1983 *Archaeological Investigations at 1805-1878 Fort Dunvegan, Alberta*. Permit 82-096. Archaeological Survey of Alberta, Edmonton, Alberta.

1985 *The Role of Material Culture in the Structure of Fur Trade Society. Status, Structure and Stratification*, Proceedings of the Sixteenth Annual Chacmool Conference, Marc Thompson, Maria Teresa Garcia and Francois J. Kense (eds). Calgary, Alberta

1987 *Economic and Social Factors in the Consumption of Material Goods in the Fur Trade of Western Canada*. Ph.D. Thesis, Department of Archaeology, Simon Fraser University, Burnaby.

Williams, Glyndwr

1983 *The Hudson's Bay Company and the Fur Trade: 1670-1870. The Beaver (Autumn)*.