

The Head-Smashed-In Buffalo Jump Archaeological Project

2022 Field School

Archaeological Field School Information Session

- ▶ Project Overview
- ▶ Course Components
- ▶ Excavations in Action
- ▶ Excavation Schedule
- ▶ Application Procedure
- ▶ Course Requirements
- ▶ Risks, Safety, and Responsibility
- ▶ Costs
- ▶ Website: <http://people.uleth.ca/~bubest>

Field School Instructors



Shawn Bubel

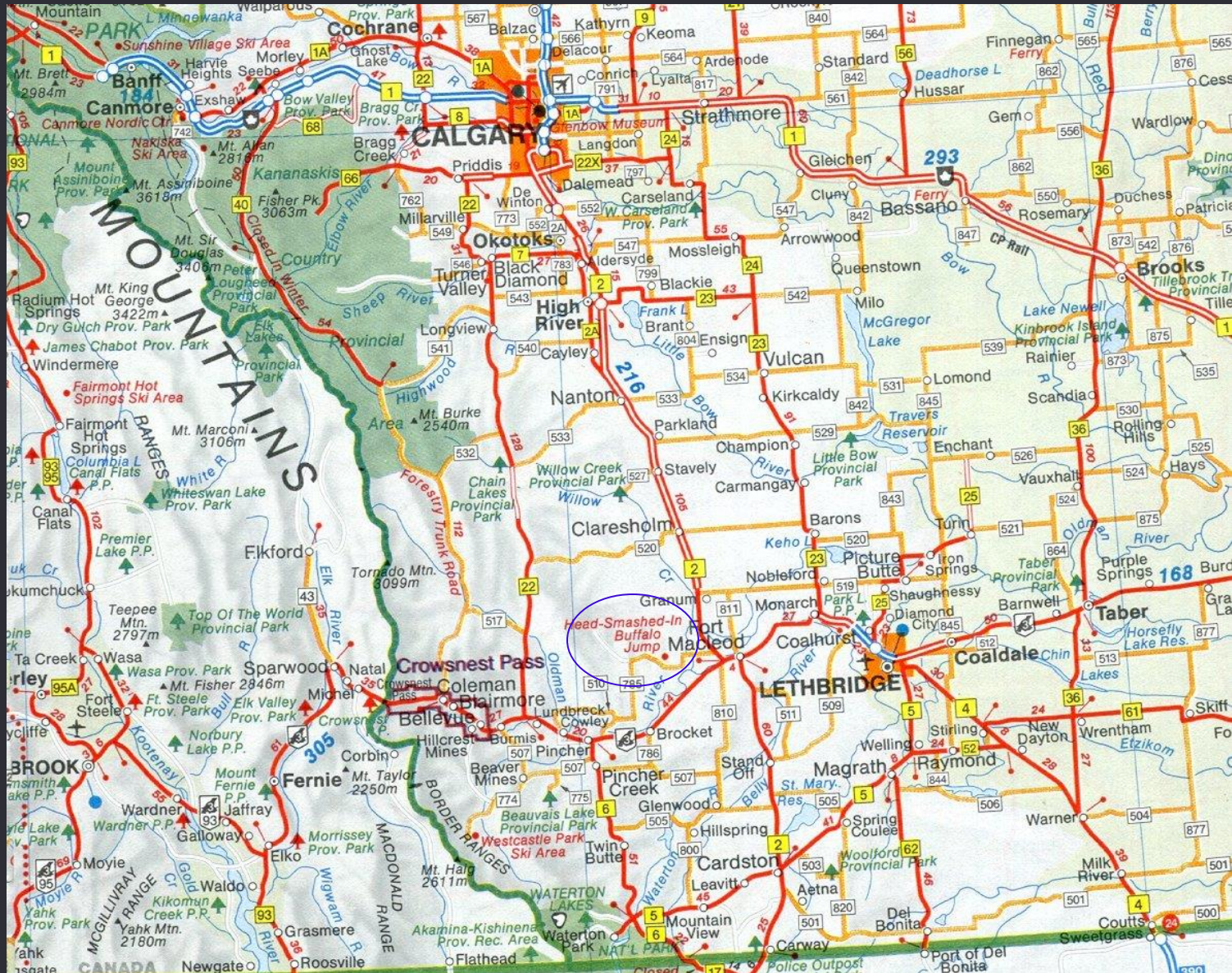


Kevin McGeough



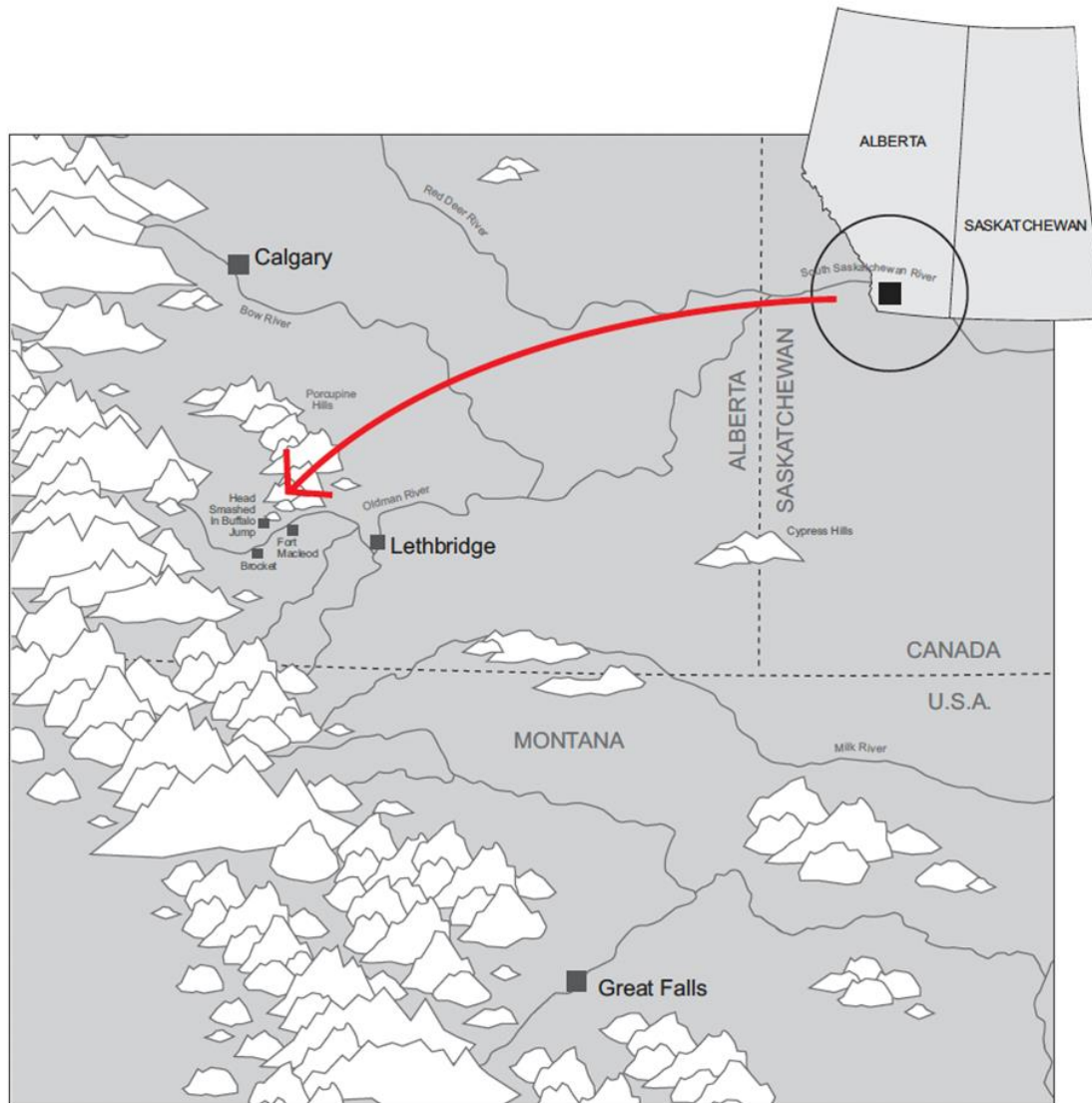
Bob Dawe

Site Location



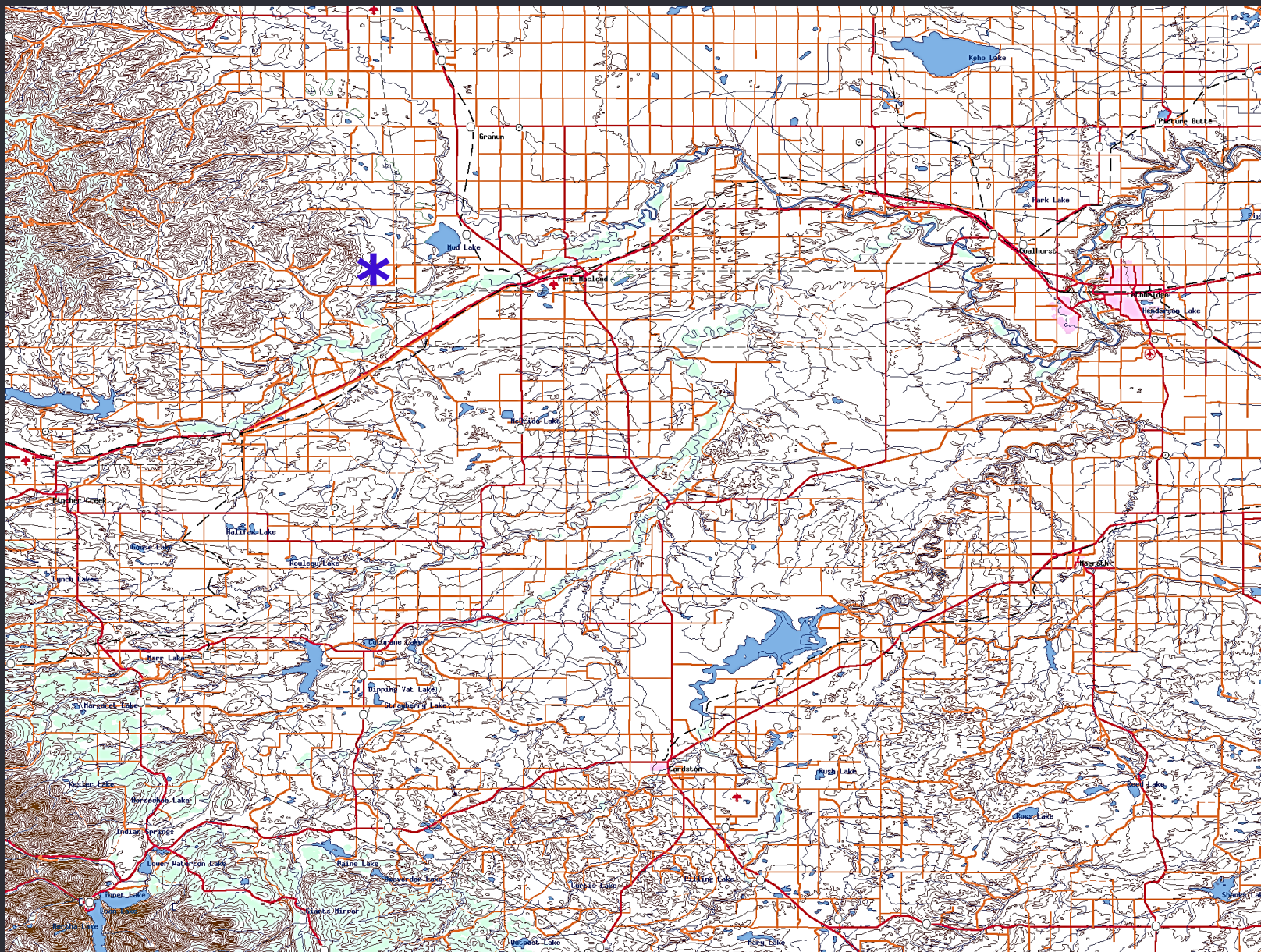
Location of Head-Smashed-In Buffalo Jump.

Site Location



Location of Head-Smashed-In Buffalo Jump.

Site Location



Location of Head-Smashed-In Buffalo Jump.

Site Landscape and Environment



Cliff face of Head-Smashed-In. Calderwood in the distance. View N.

Site Landscape and Environment



Cliff edge of Head-Smashed-In. View N.

Site Landscape and Environment



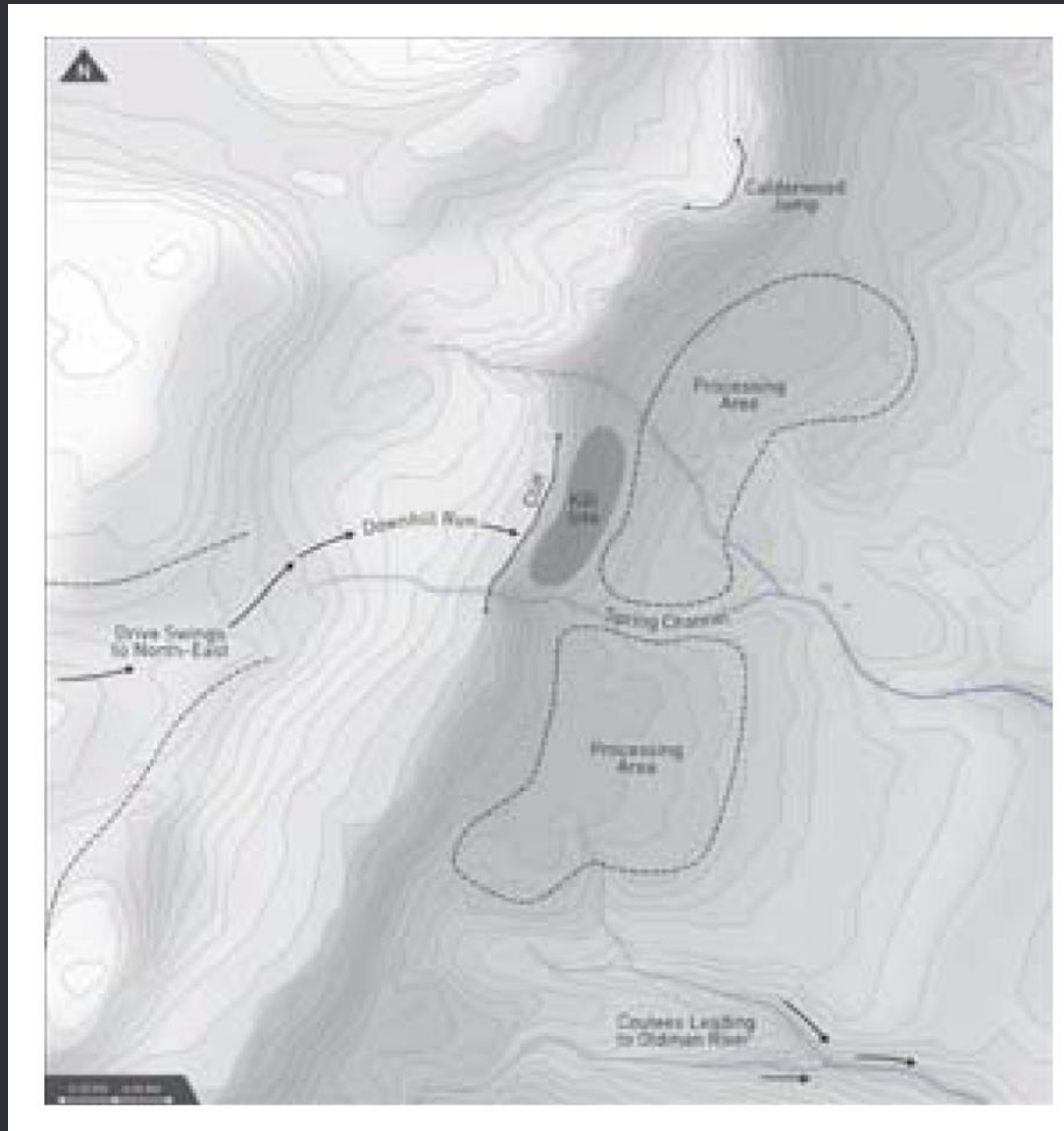
View from the top of the cliff towards the horizon. View E.

Site Landscape and Environment



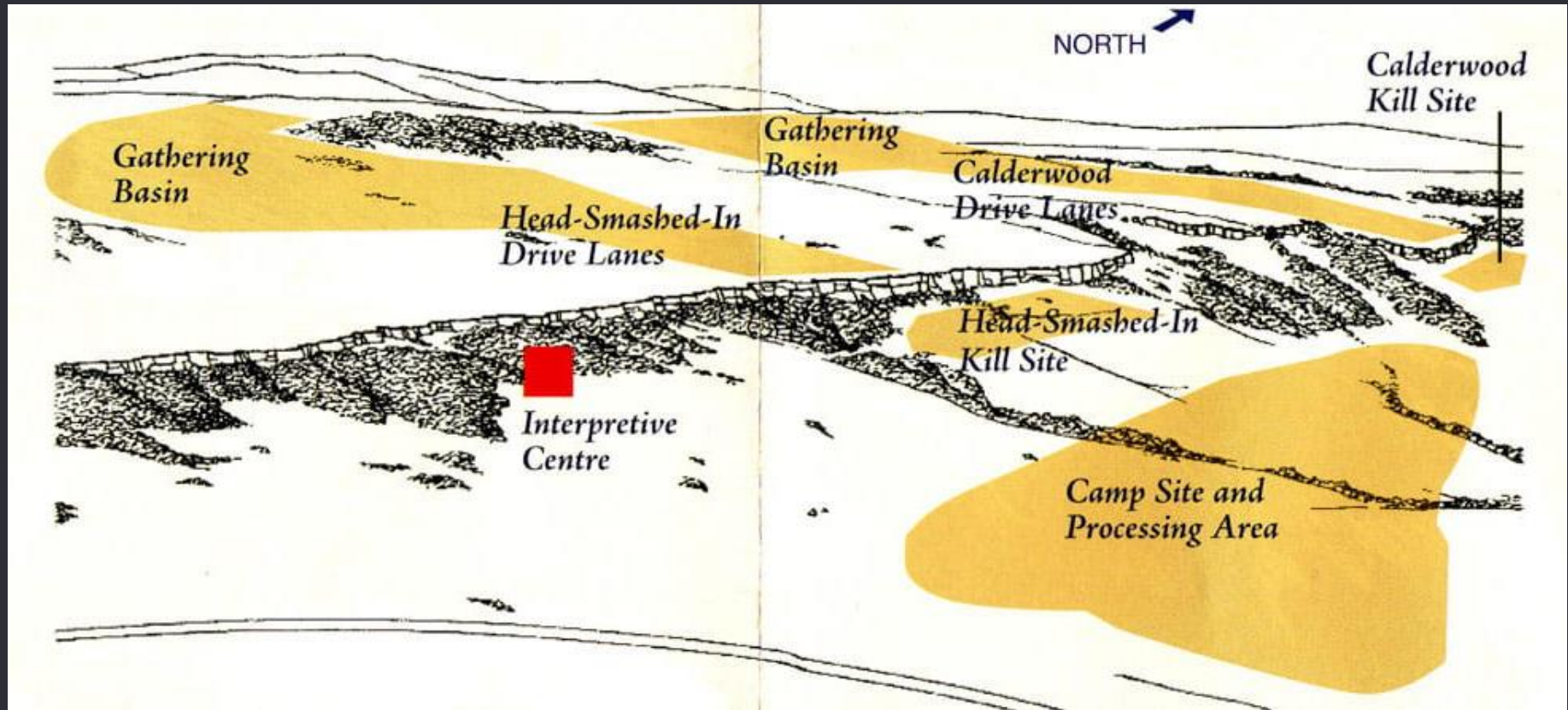
Campsite and processing area. View N.

Site Landscape and Environment



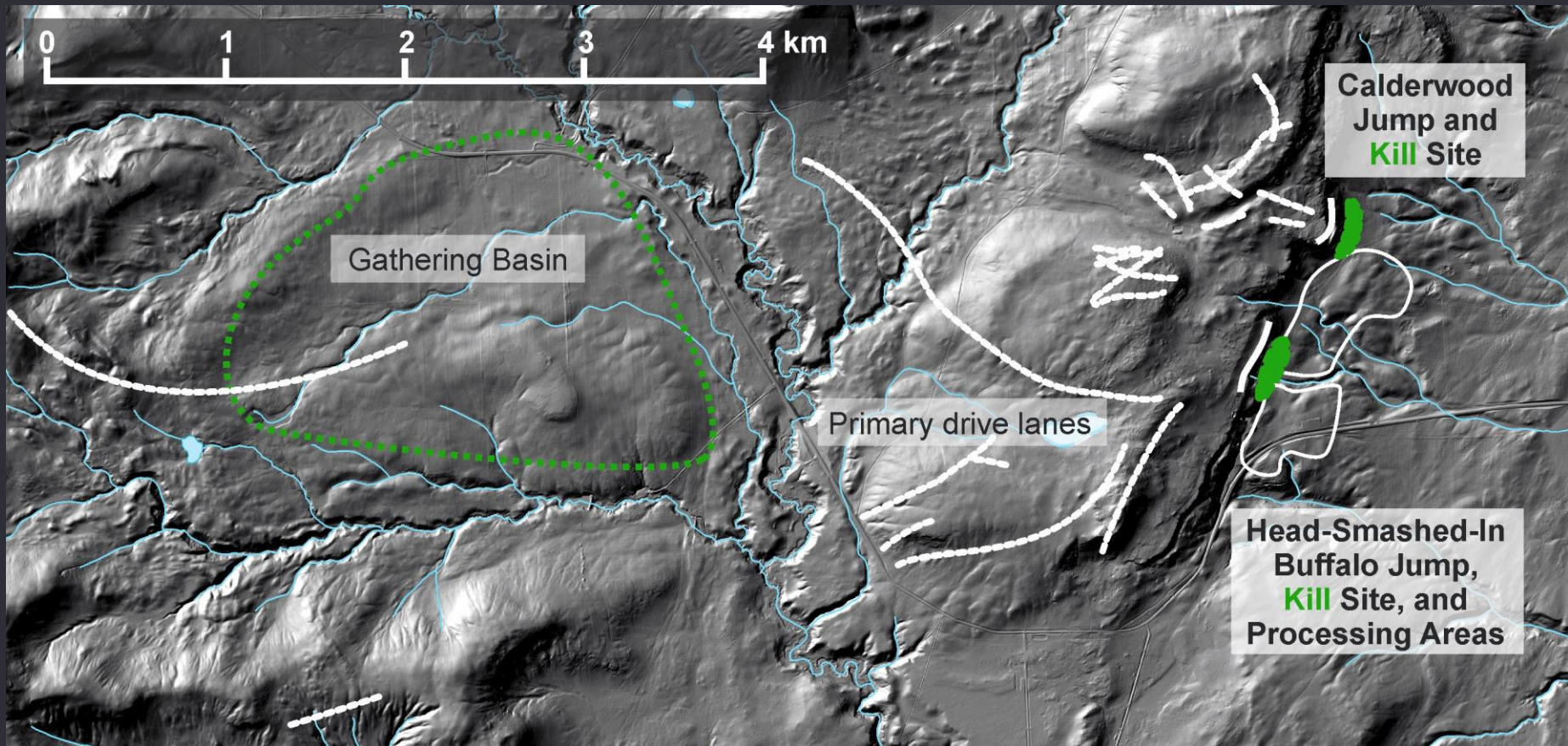
**Topographic map of the site areas, including the drive lanes.
From Brink 2008: 146.**

Site Areas



Major areas of Head-Smashed-In Buffalo Jump.

Site Areas



Major areas of Head-Smashed-In Buffalo Jump.

Interpretive Centre



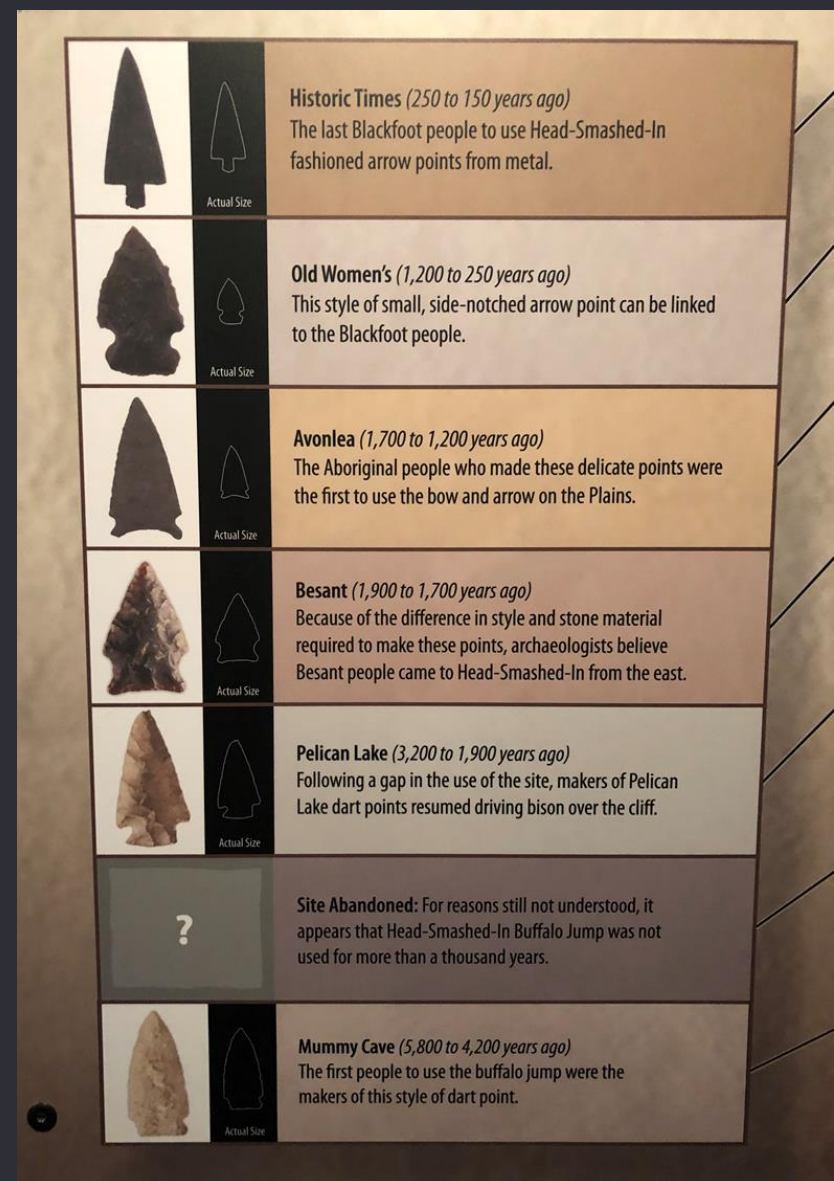
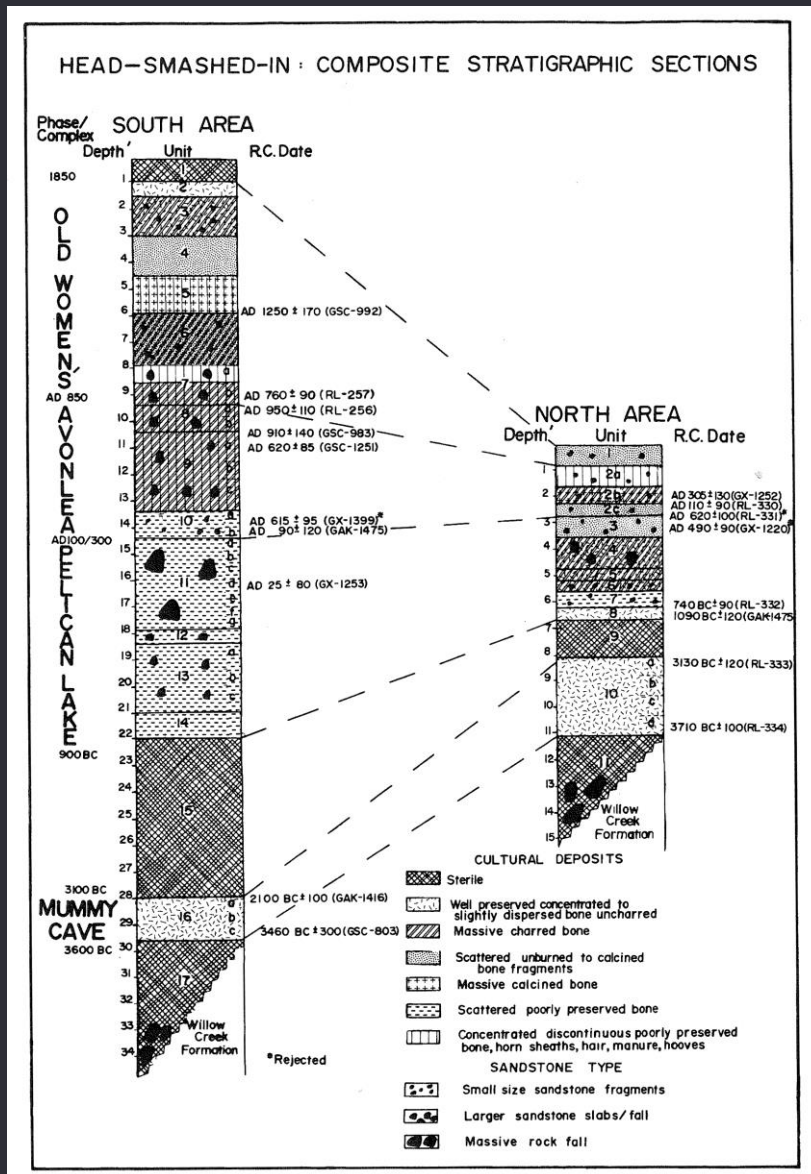
Entrance of the Interpretive Centre. View W.

Previous Excavations – Kill Site



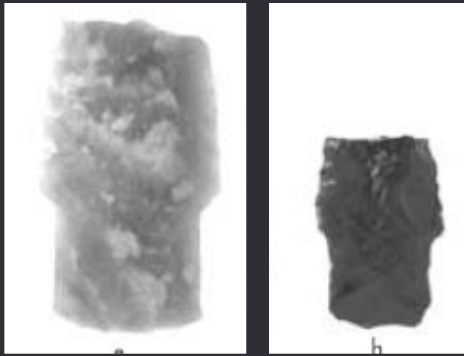
Barney Reeves' excavations at the kill site.

Previous Excavations – Kill Site

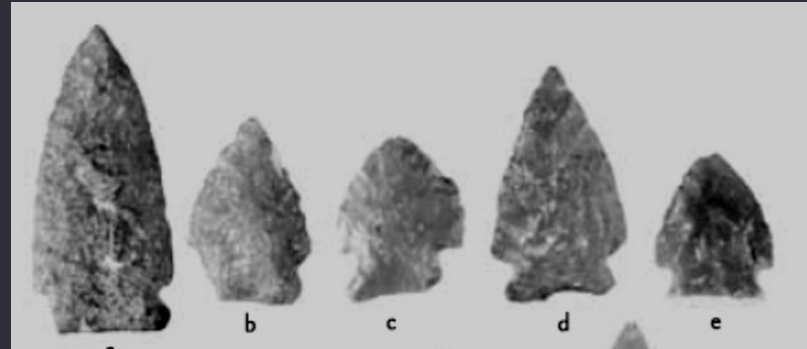


Site stratigraphy at the kill site. Profile map from Reeves 1983. Projectile point types from the Interpretive Centre display.

Previous Excavations – Projectile Point Types Discovered



Scottsbluff points (Peck 2011:81)



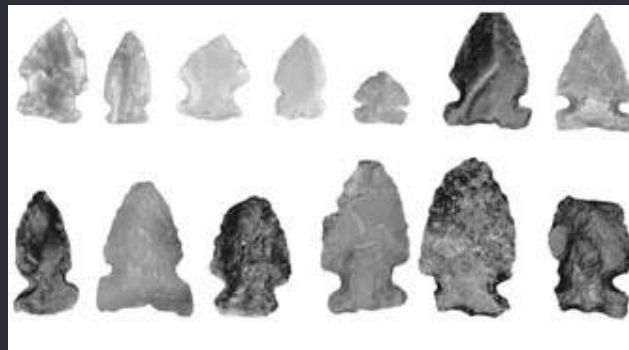
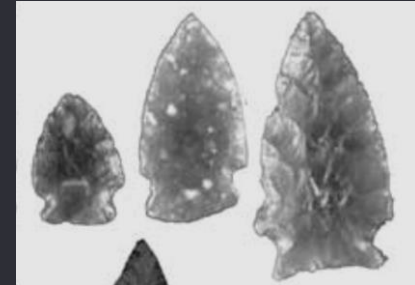
Calderwood points (Peck 2011:155)



Avonlea points
(Peck 2011:342)



Outlook (left) and
Sonota (right)
(Peck 2011:243; 313)



Cayley Series points
(Peck 2011:380)



Highwood points
(Peck 2011:409)

Selection of Projectile points found at Head-Smashed-In.

Previous Excavations – Processing Area



Excavating units around the roasting pit.

Previous Excavations – Processing Area



Exposing the edges of the roasting pit.

Previous Excavations – Processing Area



Casting the roasting pit.

Previous Excavations – Processing Area



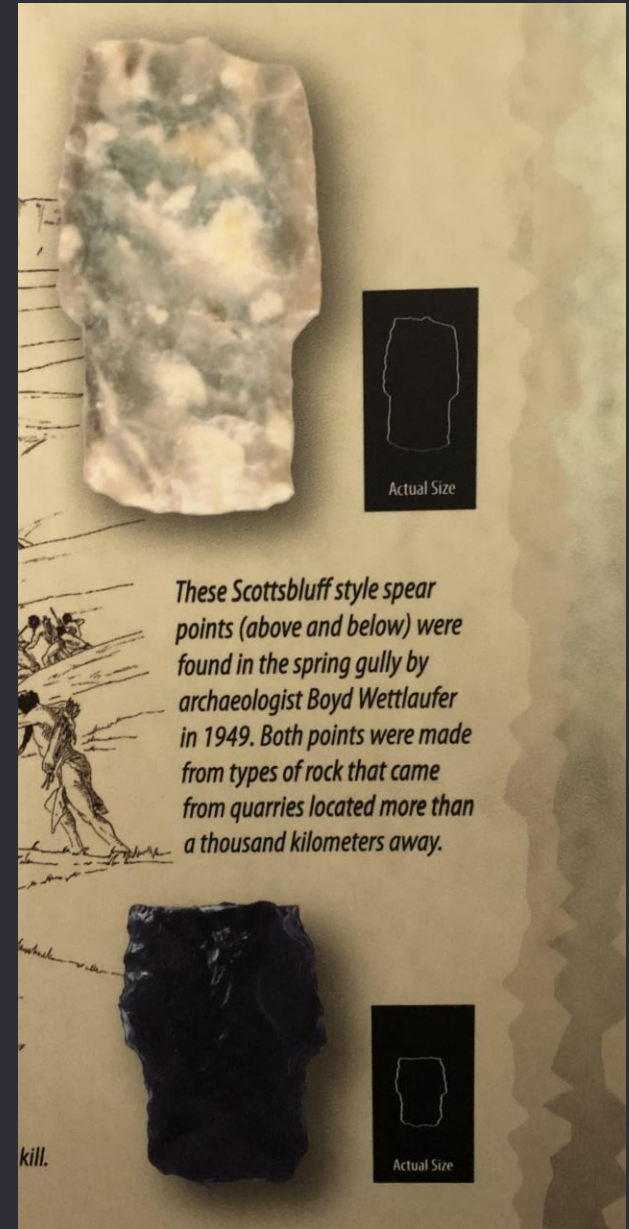
Removing the roasting pit.

Previous Discoveries – Spring Channel Area



1912 photograph of Boyd Wettlaufer's field camp at the site (left).

Two Scottsbluff projectile points he found on the backfill of a water dugout for cattle (right).



These Scottsbluff style spear points (above and below) were found in the spring gully by archaeologist Boyd Wettlaufer in 1949. Both points were made from types of rock that came from quarries located more than a thousand kilometers away.

Current Excavation Project Site Areas



**We will focus our excavations in two main areas:
The Processing Area (A) and the spring channel (B).**

Time permitting, we will auger and shovel test at the toe of the slump block (C), relocate Reeves' excavation trench (D), map cobble features (E), and locate Wettlaufer's excavations (F).

Objective of the Research Components of the Project

1. Continue our excavations in the processing area (Area A) to investigate older occupation levels, research prompted by the recently discovered cultural materials below previous excavation levels.
2. Continue our excavations in the spring channel area (Area B), where two Scottsbluff spear points (dating to the Early Prehistoric period) were found on a dam fill spoil pile many years ago and a bonebed of unknown age was exposed when leveling the dam fill.
3. Investigate the area next to the toe of the slump block (Area C) to locate the occupation surface prior to 6,000 BP and establish if there is *in situ* material beneath it.
4. Time permitting, locate previous excavation areas in order to create a comprehensive map and guide to previous research at the site.

Current Excavation Project Site Areas



Processing area. View W.

Current Excavation Project Site Areas



View of the Spring Channel from the cliff edge. View E.

The Field School: Component 1 – Online Course



Zoom meetings together for the first two weeks.

The Field School: Component 2



**Meeting in person after the online course!
About to depart for basecamp.**

Blessing Ceremony with the Elders



The team being painted and blessed by the Elders.

Workshops and Field Trips



Learning how to map and record the excavations (above left). Guest lectures (above right). Field trip to Women's Buffalo Jump (below).

Excavation Methods



Establishing the excavation grid.

Excavation Methods



Removing the backfill.

Excavation Methods



Fun discoveries in the backfill.

Excavation Methods



Fun discoveries in the backfill.

Excavation Methods



Establishing the excavation grid.

Excavation Methods



Excavating 1 x 1 meter units in a checkerboard pattern.

Excavation Methods



Excavating 1 x 1 meter units in a checkerboard pattern.

Excavation Methods



Excavating 1 x 1 meter units in a checkerboard pattern.

Excavation Methods



Excavating into lower deposits, below previously excavated levels.

Excavation Methods



Screening all excavated sediment through a 1/4" mesh.

Excavation Methods



Auguring in the Spring Channel area.

Excavation Methods



Excavating 1 x 1 meter units in a Wheeler-box method.

Excavation Methods



Excavating 1 x 1 meter units in a Wheeler-box method.

Excavation Methods



Excavating 1 x 1 meter units in a Wheeler-box method.

Excavation Methods



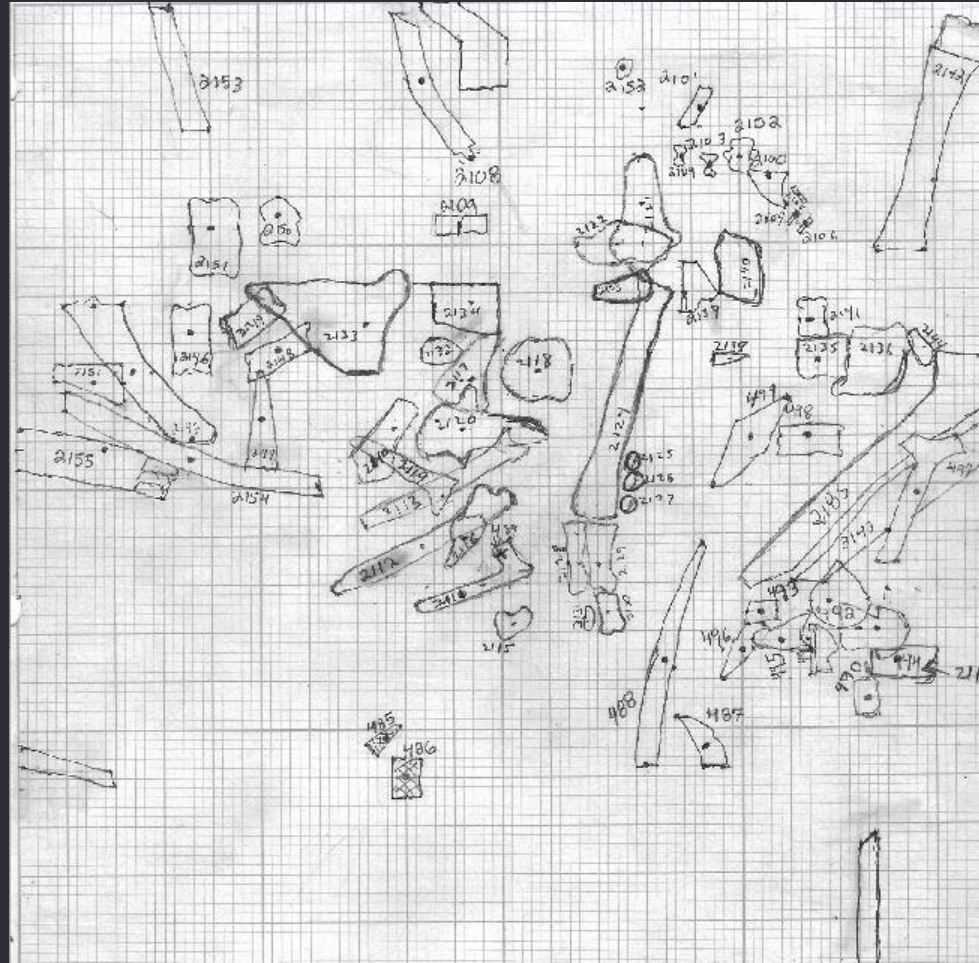
Preservation conditions varied.

Excavation Methods



Three-dimensional recording of the cultural material.

Excavation Methods



Mapping remains at a 1:5 scale.

Surveying Methods



Surveying for evidence of previous excavation projects and mapping rodent disturbance locations.

Public Outreach



Students explain the project to visitors.

Field Work at the Site



It is hard work and the conditions are not always the best!

Exciting Discoveries



Base of a Mummy Cave projectile point.

Exciting Discoveries



Base of a Boss Hill projectile point.

Exciting Discoveries



Base of an Alberta projectile point.

Exciting Discoveries



Body and tip of a Besant projectile point.

Exciting Discoveries



Rich bison bone bed with rock feature.

Exciting Discoveries



Iniskim (buffalo calling stone).

Exciting???



Bears, cows, and a grass fire!

Backfilling the Excavation Areas



Laying down the landscape fabric and backfilling.

The Field School: Component 3 – Laboratory Work



Laboratory work at the Westcastle field station in Castle Mountain Provincial Park, Rocky Mountains.

The Field School: Component 3 – Laboratory Work



Carrying out laboratory work at the Westcastle field station.

The Field School: Component 3 – Laboratory Work



Carrying out laboratory work at the Westcastle field station.

Camp Life



Camp Life



Camp Life



Teamwork



Teamwork



Teamwork



Schedule for the Field School

May 9 – June 26

- ▶ May 9 Online course begins, self-isolation period
- ▶ May 22 Move to and set up the field camp
- ▶ May 24 Field excavations begin
- ▶ June 18 Last day of excavations
- ▶ June 19 Pack up camp and move to Westcastle
- ▶ June 20 Laboratory analysis at Westcastle
- ▶ June 26 Pack up artifacts and equipment, transport everything back to Lethbridge

Daily Schedule for the Field School

► Typical Excavation Day – Subject to change!

- 7:30 Rise and shine
- 7:45 Breakfast and pack lunches
- 8:30 Travel (carpool) to the site
- 8:45 Morning excavations begin
- 12:00 Lunch on site
- 12:30 Afternoon excavations
- 2:30 Afternoon snack
- 5:00 Pack up equipment
- 5:30 Return to camp; unload artifacts
- 6:00 Workshops and camp chores
- 7:15 Dinner time!
- 10:00 Lights out

- A similar schedule will be followed while at Westcastle
- Field trips will be all-day activities (likely once a week)
- One day off a week to catch up on assignments and chores

Course Requirements

- ▶ Arky 1000 (and preferably a 3000-level Arky course)
- ▶ Registration
 - Only those accepted to the field school will be able to register for Arky 3000, 3300/4500, and 3400
- ▶ Grade assessments for the courses are based on the quality of your field work, lab work, notebooks, assignments, and examinations.
- ▶ Hard work and teamwork!

Risks, Safety, and Responsibility

- Field School risks
 - Weather
 - Plants
 - Animals (deer, bears, cows, snakes, and other animals)
 - Spiders, wasps, bees, mosquitos, and more
 - Sharp equipment
 - Dust and dirt
 - Land travel
 - General risks
- Students must complete a risk and safety session and complete liability waivers.
- Students are responsible for their own personal safety
- Students are required to conduct themselves accordingly and to respect their teammates.

Costs and Funding

- ▶ Tuition - \$2,099.98
 - Three summer session courses (Arky 3000, 3300/4500, and 3400)
- ▶ Field School Costs - \$1500
 - Cost for room and board while at the field camp
 - Field Supplies and Equipment
- ▶ Not Included in the Field School Costs
 - Textbooks if you want a physical copy
 - Personal supplies, snacks, and drinks

Student Loans

- ▶ Students can apply for student loans to cover the tuition, books, supplies and equipment, and room and board costs.
- ▶ Please contact the Student Finance office for help with your application forms.

Application Procedure

- Those interested in the field school must fill out an application and provide the following by April 25, 2022.
 - Application form
 - Medical Form
 - Transcripts
 - Essay
 - Letter of reference
 - Deposit (\$200)
- The forms can be downloaded from Dr. Bubel's web site at: <http://people.uleth.ca/~bubest>
- A maximum of 16 U of L students will be selected to participate in the Head-Smashed-In Field School.
- Field school applicants will be notified by May 2.

Fun and Adventure

- ▶ Working on an archaeological project is a lot of work but it is also a lot of fun.
- ▶ You will:
 - Learn how to excavate, survey, and process the archaeological remains recovered
 - Discover the past first-hand
 - Work outside and be physically active
 - Experience camping in southern Alberta
 - Work as part of a team
 - Make new friends
 - Challenge yourself

It is a fantastic educational experience!

2021 Field School Team



2022 Field School Team?