



Weaselhead Grade 3 Field Trip Teacher's Guide Rivers and Wetlands

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Thank you for your participation in our Grade 3 Weaselhead Education Program! This program is specifically designed to meet cross curricular learning outcomes focused on the new Alberta Science and Social Studies curriculums. Our program is led by a Weaselhead Naturalist who brings their own expertise and personal experiences to your program.

The following items have been enclosed in this Teacher's Guide package:

- Curriculum Connections
- Program Objectives
- Participant Guidelines
- Behavioural Expectations
- A Map of the Weaselhead
- Field Trip Program Outline
- Activities
- Background Information on the Weaselhead Area

Curriculum Connections

Science: Students investigate ecosystem interactions and explore the water cycle; Students investigate and analyze how materials have the potential to be changed with a focus on water; Students analyze changes in Earth's surface and explain how its layers hold stories of the past as seen through changing river courses; Students analyze and describe how plants and animals interact with each other and within environments; Students relate investigation to building knowledge.

Social Studies: Students examine natural resource use in Alberta; Students explore civic actions.

Guiding Questions

Science

Matter

- What does water look like in different forms?
- How does the water cycle work in the Weaselhead?

Earth Systems

- How do rivers changing course affect the surrounding environment?

Living Systems

- How do plants and animals interact?
- What can you discover with your senses?

Scientific Method

- How can investigation help to deepen understanding in science?

Social Studies

Systems

- How is water used and stored in Alberta?

Citizenship

- How can Albertans make an impact in their communities?

Program Objectives

Students investigate ecosystem interactions in rivers and wetlands. They observe and learn how the Earth's surface changed over time with the view of the landscape stretching from the Glenmore Reservoir to the mountains and aerial images of the Elbow River over time.

Before the Trip

Pre-trip Preparation

- Please have students divided into 4 or 5 groups per class prior to the field trip.
- Students should bring a journal or set-up a field trip journal on a clipboard with blank paper.

Participants should:

- dress for the weather; dress in layers and wear appropriate footwear.
- bring a snack, lunch, and plenty of water for a full day field trip.
- bring pencils or pens.
- bring a field journal OR blank paper on a clipboard.
- bring a plastic bag OR mat, if the student does not want to sit on the ground. (Optional)

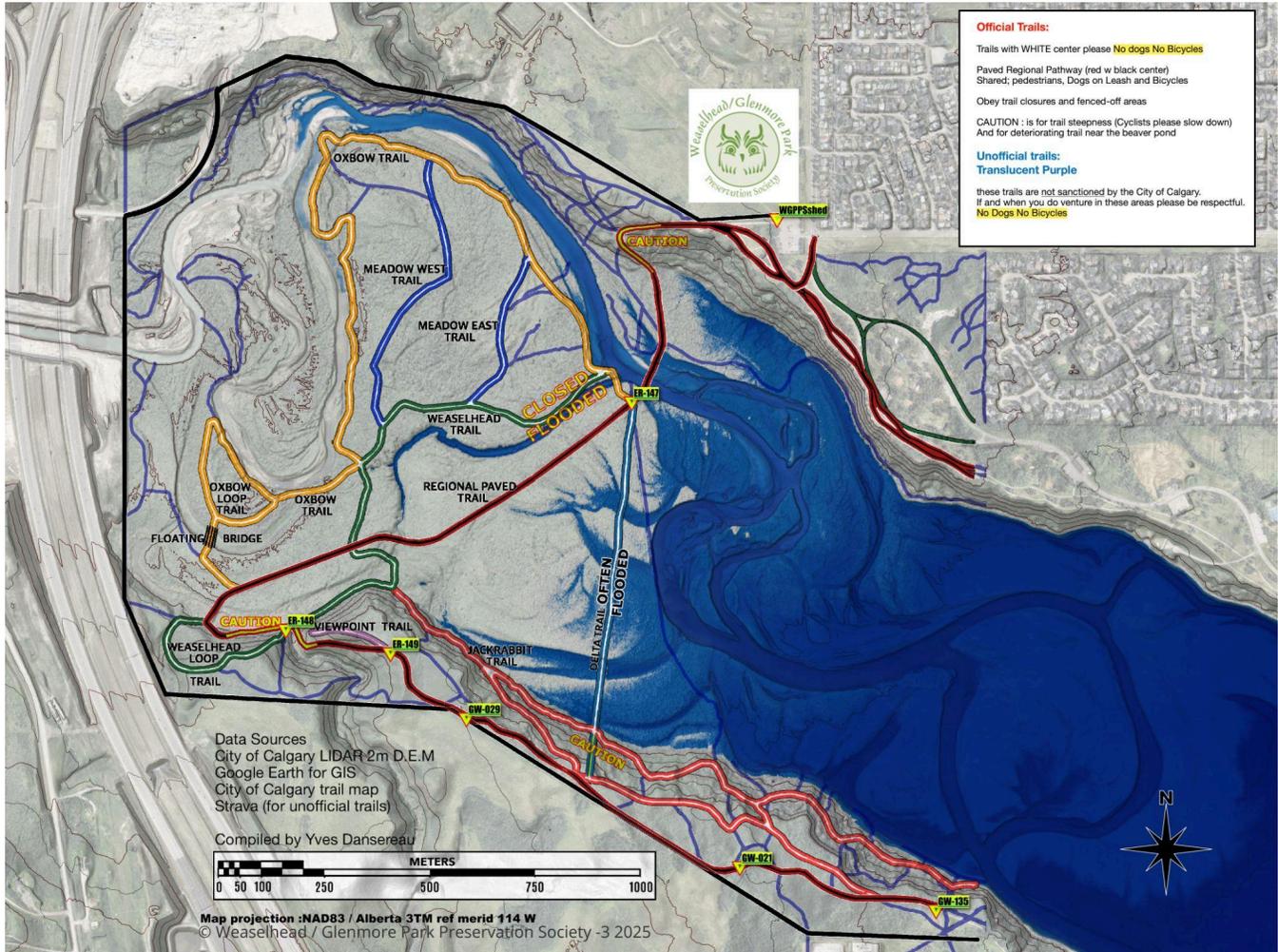
NOTE: This entire program is held outside with no indoor facilities. Students must be prepared for all weather and conditions. They will be hiking approximately 3-5 km on dirt trails. Appropriate footwear is a safety requirement.

Behavioural Expectations

- Remain with the group and keep in sight of supervisors at all times.
- There is always an adult leader at the front of the group and at the end of the group.
- Never remove natural items from the area. Vegetation, insects, mammals, birds, and amphibian life is to be respected and left in the natural habitat.
- Leave no trace of our visit. All litter must be brought back out.
- Unsafe behaviour such as tripping, wrestling, fighting, and teasing is unacceptable and may result in withdrawal from the activity.
- Cooperation by listening, participating in group discussions, observing, and recording is expected during the learning experience.
- Each adult is expected to participate in the activities and to provide due safety and care for each of the students.
- No headphones or earbuds are allowed. This is for the safety of the participants.
- **Parents and teachers: please keep cell phones away unless taking pictures or in case of emergency.**

Map of the Area

Your group will be starting their hike at the 37th Street Parking Lot. Meet your Naturalist leader at the shed located in the NW corner of the parking lot. We will hike into the Weaselhead down the hill to cross the bridge and explore the area. Depending on conditions, we may also be using the fields and the Aspen Forest in North Glenmore Park.



Field Trip Program Outline: FULL DAY

9:30 am	<ul style="list-style-type: none"> ● Meet your Naturalists at the grey shed in the NW corner of the parking lot at 37th Street.
9:30 – 9:45 am	<ul style="list-style-type: none"> ● Introduction, Land Acknowledgement, park rules, and expectations ● Washroom visit
9:45 – 10:30 am	<ul style="list-style-type: none"> ● From the south facing escarpment, students view and discuss the Earth's surface and how it has been shaped over time. ● Activity: Landscape pencil drawing
10:30 – 10:40 am	<ul style="list-style-type: none"> ● Snack break
10:40 – 11:40 am	<ul style="list-style-type: none"> ● Water cycle investigation and discussion ● Activity: Build a swallow nest (building a swallow nest might get messy, if you prefer to keep clean kids, let your Naturalist know!)
11:40 am – 12:10 pm	<ul style="list-style-type: none"> ● Lunch
12:10 – 12:50 pm	<ul style="list-style-type: none"> ● Pond/River dip to explore different aquatic organisms and how they survive. ● Activity: Draw a Food Chain
12:50 – 2:15 pm	<ul style="list-style-type: none"> ● Walk to places to view how the Elbow River has eroded and shaped the Weaselhead flats. View aerial photos and maps of the area that show how the river has changed course and shaped the landscape over time. ● Activity: if there is time, put together maps of the Weaselhead over time
2:15 – 2:30 pm	<ul style="list-style-type: none"> ● Walk back to parking lot ● Wrap up

Please Note: This outline is adjusted by each Naturalist leader to accommodate distances between the classes. If there are 2 or 3 classes coming, we will be visiting different places at different times and may not see each other during the day. The above is just an example of a typical outline.

Activities

- Landscape pencil drawing: In Journals, or on paper they have brought, students will sit with a view of the river valley extending west to the mountains with an opportunity to draw the gentle rolling hills and landscape features with a focus on the river. As they sketch, your Naturalist leader will lead a discussion on how the Earth's surface in their view and drawings has changed over time from both natural and human caused events. They will discuss impacts and interactions in the watershed.
- Water cycle investigation and discussion: Students have the opportunity to touch the trees that lift the water from the ground, transpiring from their leaves. They learn how the Elbow River they cross on their visit evaporates and turns into clouds. They investigate how riparian plants and vegetated hillsides impact the landscape, protecting it in runoff and heavy rains. Participants investigate how water molecules change from gas, liquid and solid forms throughout the seasons and through the water cycle.

- River/Pond dip: At the edge of the Elbow River or in one of the Park's wetlands students will explore the aquatic invertebrates living in our watershed and learn how they interact with each other and the surrounding ecosystem
- Draw a Food Chain: Students will draw an example of a local food chain in their journals. They may do this activity before, during or after their pond study.
- A map is viewed, bringing focus into our location in Treaty 7, with the province's treaty locations and indigenous names.
- Forest Five & Soundscape: Naturalists may guide groups into 5 minutes of complete silence in nature. It is recommended that each participant is separated from other members. This activity is used to encourage participants to be more immersed in nature and to use auditory sense to identify natural occurrences.

Weaselhead History

The Weaselhead area has a name shrouded in mystery. Like so many Indigenous stories, how the Weaselhead got its name has been lost over time. What we do know is that, although there are weasels that call this area home, the name has nothing to do with actual weasels! Weaselhead is a traditional Blackfoot last name, so the name may be related to someone from the Blackfoot Confederacy. There is written history of a man with the name Weazel Head on the Tsuut'ina reserve as well, but little is known about where he originated. Early settler Sam Livingston, whose house is now part of Calgary's Heritage Park, was the first European to settle in the Elbow River valley, now known as the Weaselhead.

Between 1910 and 1990, Tsuut'ina reserve and parts of the Weaselhead were used for military training exercises. Foxholes and signs warning of ordinances possibly left behind remind us of this history, even today. The last time an exploded device was found was during the floods of 2013.

The City of Calgary bought what is now the Weaselhead from the Tsuut'ina Nation in 1929 to build the Glenmore Reservoir, which still provides roughly 40% of Calgary's drinking water.

Today, this protected area spans 404 hectares (989 acres) and is bursting with diverse habitats. Wander through dense White Spruce forests, leafy Balsam Poplar groves, and colourful wildflower meadows. The Elbow River winds through it all, with floodplains, beaver ponds, and wetlands teeming with life.

As you explore, you'll uncover clues to the area's rich history. Fossils in sandstone cliffs date back 35 million years, and traces of ancient river paths still shape the landscape. You can find evidence of Indigenous campsites and buffalo hunts, as well as remnants of a military training base that once operated here.

With over 480 plant species, including rare ones like the Western Wood Lily, the Weaselhead is a wildlife haven. Frogs, salamanders, and more than 200 bird species thrive here, while larger animals like moose, bears, and even cougars visit throughout the year.

The Weaselhead is a living tapestry of Calgary's natural and cultural history, offering a rich, engaging experience for all who visit.

REMEMBER: This is a natural area park. It is illegal to remove anything from the area. Fossils and certain plant species are protected in Alberta.