



Weaselhead Grade 3 Outdoor Program Teacher's Guide Biodiversity and Ecosystems

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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

Program Objectives

Students investigate natural areas, learning about plant and animal interactions and the importance of healthy water systems. They learn about the impact of different activities (human, plant and animal) on soil and the ecosystem in general and what they can do to be good stewards.

Curriculum Connections

Science: Students analyze and describe how plants and animals interact with each other and within environments; Students relate investigation to building knowledge; Students analyze changes in Earth's surface and explain how its layers hold stories of the past.

Social Studies: Students examine natural resource use in Alberta; Understanding local, national, and global issues empowers individual and collective action toward an inclusive society.

Guiding Questions

Science

Earth Systems

- How do plant, animal and human activities change the surface of the land?
- Why is soil important and how do different activities impact it?

Living Systems

- How do plants and animals interact?

Social Studies

- How is water used by people in the City of Calgary and how does that impact other living things?
- How does water management in the Elbow River affect other living things?

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.

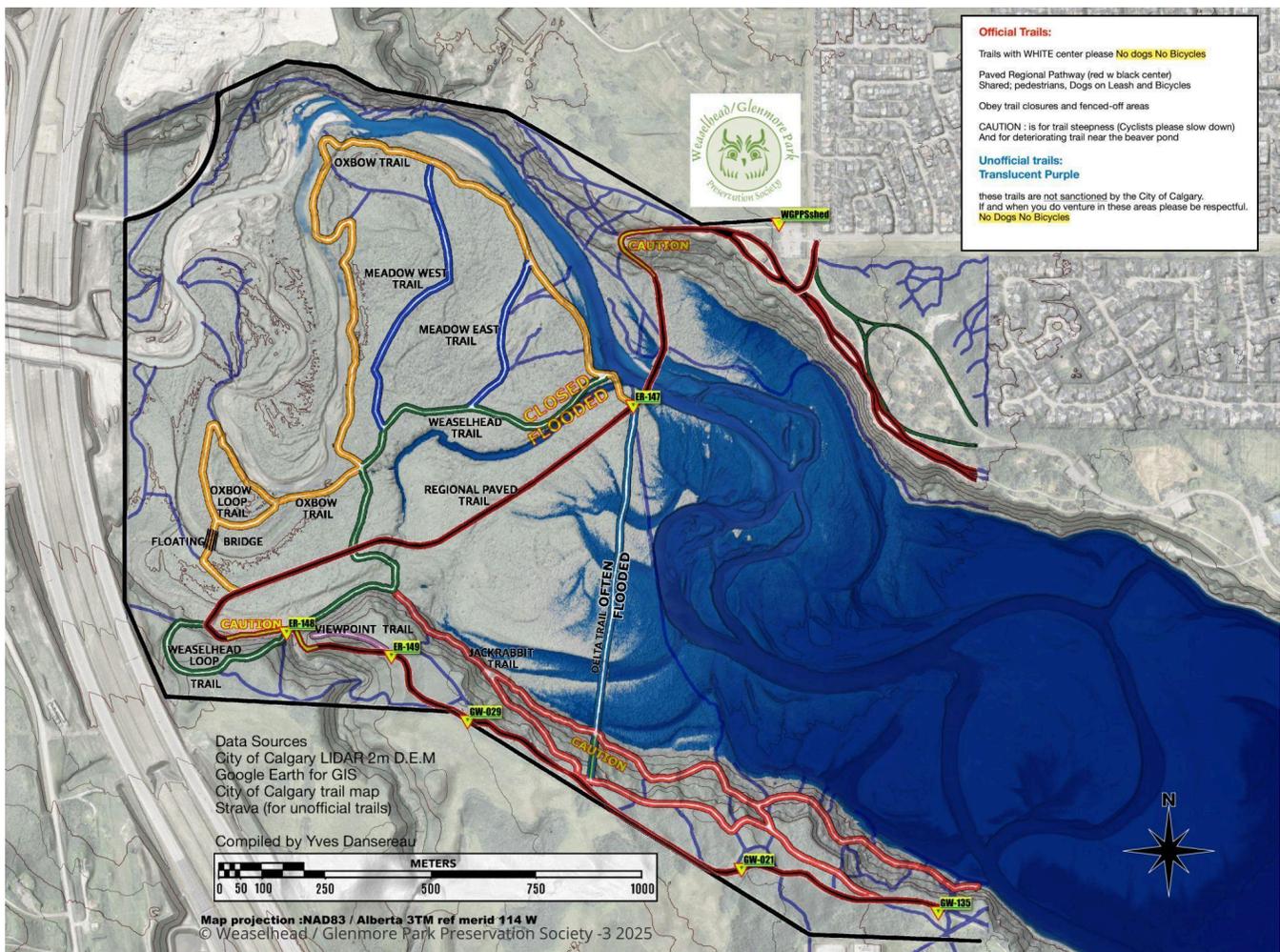
Behavioural expectations

- 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.

- Cell phones are only to be used if taking pictures or in case of emergency for all field trip participants including parent volunteers

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"> Learning how different activities alter soil and the surface environment Activity: Soil compaction
10:30 – 10:40 am	<ul style="list-style-type: none"> Snack break
10:40 – 11:40 am	<ul style="list-style-type: none"> Hike with a focus on learning about different flora and fauna and how their activities affect the land Activity: Pond dip to highlight animal interactions and interconnections. This activity is season and location dependent.
11:40 am – 12:10 pm	<ul style="list-style-type: none"> Lunch
12:10 – 1:45 pm	<ul style="list-style-type: none"> Hike with a focus on animal life cycles Animal life cycle activity - draw a life cycle for one animal or play the web of life game to see how different living things relate to each other. Activity - Forest five
1:45 – 2:30 pm	<ul style="list-style-type: none"> Walk back to field near parking lot Wrap Up Discussion: Review all the different things that were discussed and how they all relate. Highlight the importance of looking at interconnections and relate this back to traditional Indigenous world views.

Activities

- Nature walks to observe and identify local flora and fauna and learn about interconnections
- Recreational impact activity: soil compaction experiment. Students learn how the properties of soil change under different pressures. They will test how compacted the soil is on a human use trail, in a beaver cut area and in a forested area not impacted by beavers.
- Pond dip to focus on interactions between living things and how changes in water shape biodiversity
- Life cycle drawings or web of life game; an interactive game where students each represent a living thing and they try to find connections to other students to build a web of life.
- Forest five - five minutes of quiet to listen and observe the world around them. Students are encouraged to identify sounds and see if they can figure out where and who they are coming from.

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.