



Grade 6 Field-trip; Teacher's Guide "Trees and Forest Diversity"

Website: theweaselhead.com

E-mail: education@theweaselhead.com

Thank you for your participation in our Grade 6 Weaselhead Education Program!

The following items are included in this Teacher's Guide:

- behavioural expectations
- a map of the Weaselhead
- field-trip program outline
- background information on the Weaselhead area

Pre-trip preparation:

- Please have the students broken into 5 groups per class prior to field trip.
- Students will need journals and/or copies of the worksheets available for download here: <http://theweaselhead.com/wp-wh/assets/Grade-4-Weaselhead-Student-Worksheets.pdf>
- If possible, bring one adult leader (parent volunteer) per student group.
- View the Weaselhead Field-trip Introduction with students, available for download here: <http://theweaselhead.com/education/outdoorprograms/>

Participants should bring:

- appropriate clothing for the weather (dress in layers)
- two water bottles (students will need at least a litre of water for a full day trip)
- a snack, and a waste-free lunch for a full day field-trip
- pencils (crayons, markers or paint are optional)
- journal and/or worksheets with something hard to write on (e.g. cardboard stapled to paper, or a clipboard)
- something to put on the ground to sit on if wanted (e.g.: a carrier bag with folded newspaper or a magazine in it and taped shut)

NOTE: This entire program is held outside with no indoor facilities, students must be prepared for all weather and conditions. They will be hiking up to 5km on dirt trails and should be wearing appropriate footwear. Lunch is held outside with no benches. Students will be sitting on the ground. The only washrooms available are in the parking lot – there are none in the Weaselhead itself.

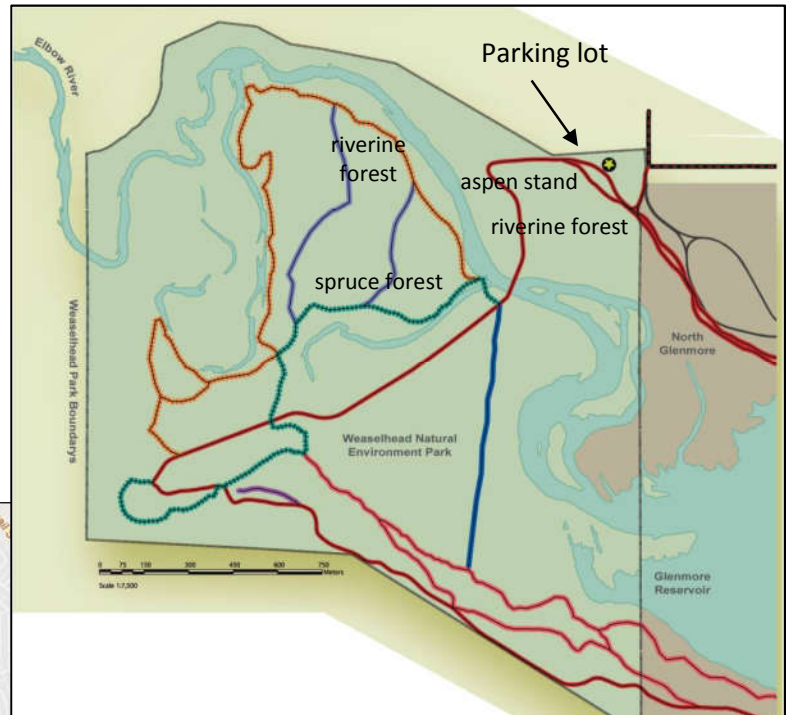


Behavioural expectations of all group members (adults and students):

- Remain in the assigned group and keep in sight of supervisors at all times. Ensure there is always an adult leader in the lead and at the end of the group.
- NEVER remove natural items from the area, including stones, sticks etc. Vegetation, insects, animals – all life is to be treated with respect and unharmed.
- All garbage, even biodegradable items, must be packed out.
- Behaviours such as tripping, wrestling, and teasing is unacceptable and may result in withdrawal from the activity.
- Cooperation by listening, participating in group discussions, observing and recording is expected.
- Every adult is expected to participate in the activities and to provide due safety and care of the students.

Map of the Weaselhead:

Naturalist leaders will decide where to take grade 6 students based on their level of learning, the time available, weather, and their speed in hiking. Students will pass through areas of spruce, balsam poplar, and aspen forest, grasslands, and patches dominated by shrubs.



Field-trip Program Outline: *full-day, 9.30 am to 2.30pm*

Meet the Naturalists at the grey parking shed found in the northwest corner of the Weaselhead parking lot <https://goo.gl/maps/1ggTLnYTTS3e6q2P6>. Please look out for the signs at the entrance of the parking lot at the intersection of 37th St. and 66th Ave SW and do not enter North Glenmore Park.

Please note: Naturalist leaders may adapt this program outline to suit the day's needs. If more than one class is participating, classes will follow different routes and cover topics in a different order than described below.

Weaselhead Parking Lot 37th St and 66th Ave SW (approx. 15 min.):

- introduction, park regulations and behavioural expectations
- washroom visit (*Please note: there are no washrooms in the Weaselhead, and the Portapotties in the parking lot are only accessible at the beginning and end of the field-trip*)

Walking down pathway (approx. 25 min.)

- Naturalists will identify the area's plants and wildlife as they are encountered, noting the differences between two of the native deciduous tree species in the park. Students will observe changes in tree and shrub species as they walk into the river valley.
- Aspen Stand: trembling aspens are introduced; Naturalists and students discuss the characteristics of this tree species.
- Riverine Forest: this richly diverse forest habitat is one of the most valuable ecosystems in urban areas across North America. Students will be introduced to the characteristics of Balsam Poplars

Elbow River (15 min.):

- SNACK
- Examine and discuss the adaptations of tree and shrub species growing along the banks of the Elbow River.

Meadow (approx. 10 min.):

- At a suitable point students will study the structure of a tree (phloem, xylem etc)
- Forest succession is discussed through the observation of different stages of forest growth.
- Students observe juniper, and understand conifers can be low shrubs as well as tall trees.

Spruce forest (approx. 20 min.):

- White spruce is the only coniferous tree species found in Calgary's Elbow River valley, and the third and final native tree species discussed on the field-trip..
- Students will learn about reproduction of trees and shrubs.

Lunch break (approx. 30 min)

Tree Study/Tree Detective - at suitable spot along trail (approx. 45 min):

- Students divide into groups and choose one of the three native tree species to study.

- Students will learn the vocabulary we use to describe different leaf shapes, leaf arrangements, etc.
- Students will present their findings to the rest of the class.
- **Plant Key:** If time allows students will use a key to identify woody shrubs and trees for themselves.

Back to the Top of the Hill

- final questions
- if there is time play a game (*'Weaselhead Theatre'*)
- if the *'Take a Stand'* activity has been requested and has not already taken place elsewhere during the field-trip, this will take place. (This activity takes about 45mins. so time allowed for other activities as described above will be reduced.)

Weaselhead History

It is not known exactly how the Weaselhead area received its name – however it has nothing to do with weasels, nor a weasel's head – the City's website says it was likely named after the Tsuut'ina Chief Weaselhead who was in power at the time of European contact, but Hal Eagletail, a Tssut'ina elder told the Society it was named it after a Cree man called 'Weaselhead' who was murdered in the valley. The area was part of the Tsuut'ina Nation's lands until 1931 when it was sold to the City prior to construction of Glenmore Reservoir. For a long time (since 1913) the Weaselhead was used as a training ground by the military, until being made a park in the early 1980's. Today, the Weaselhead Natural Environment Park covers approximately 237 hectares and receives the highest level of protection available to a Calgary park. The area consists of the Elbow River, the north and south escarpments of the river valley, the river floodplain and the delta where the river flows into Glenmore Reservoir.

The river was formed by the melt waters from the glaciers at the end of the last glaciation period approximately 10 thousand years ago, although the valley itself predates that glaciation. Today's floodplains hold many signs of the past movement of the river across its floodplain evident in the numerous old and new oxbow wetlands. Fossils dating back 35 million years can be seen in the sandstone deposits along the cliffs and there are numerous indigenous archaeological sites, including buffalo runs and hunting campsites that can be dated as recently as 1887.

The flora of the area is rich and varied: coniferous white spruce can be found next to deciduous balsam poplar in the moist floodplain; patches of tall shrubs such as red-osier dogwood and saskatoon grow between stands of trembling aspen on drier slopes; wildflowers bloom in the remnant fescue grassland above the valley... There are numerous aquatic habitats ranging from riverine wetlands, to beaver ponds, to the river itself, all supporting a variety of aquatic plant life.

The flora of the area is made up of some 480+ species. Some of these species are endangered or threatened such as the western wood lily.

The varied plant life supports a diversity of wildlife. There are untold numbers of invertebrates both aquatic and terrestrial. At least ten species of fish are known, with several being sought by sport fishers. Amphibians live here - boreal chorus frogs and wood frogs, and now rarely, tiger salamanders. Few reptiles inhabit Alberta, but garter snakes are common here. Over 200 species of birds, from waterfowl, to songbirds, to raptors use the park. Some of these use the region as a stopover during fall and spring migrations, others nest in the Weaselhead during the summer only, still others live here all year round. For mammals like the shrews, hares, deer, and beaver, the Weaselhead provides a permanent home. Other species, including moose, black bear, and cougar are known to use the park on a seasonal basis.

REMEMBER: Never remove anything from the area. Fossils, archeological remains and certain plant species are protected in Alberta.