# ANIMALS IN WINTER

A teacher-conducted field study for Grade I students



FishCreek.Education @ gov.ab.ca

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## Introduction

This is a curriculum-connected, full day field study with multidisciplinary preparatory and post-visit activity support. The intent is to offer a natural world experience for students that reflects the outdoor field study components of Topic B: Seasonal Changes and Topic D: Needs of Plants and Animals from the Grade I. Alberta Elementary Science Curriculum and the vision of Alberta's Plan for Parks.

Fish Creek Provincial Park is one of Canada's largest urban provincial parks, stretching from the western edge of the city to the Bow River. The park has a strong vision within its visitor services program plan to support and foster environmental and cultural education.

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# Facility & Rules

## THE FACILITY

The Fish Creek Environmental Learning Centre, located at the west end of the Park off of 37 Street SW, offers five indoor classrooms, an outdoor picnic area and access to an extensive variety of natural ecosystems: an old spruce forest, grasslands, riverine, creek and pond wetlands and disturbed (urban) areas.

The Fish Creek Environmental Learning Centre offers you the following facilities and services:

- 1. Each teacher will be given a classroom to use as a home base for the day's activities.
- 2. Some equipment for the day's activities will be available at the Park. It is your responsibility to count all equipment and return it at the end of the day. There is a fee charged for lost or broken equipment.
- 3. Washrooms and water fountains are located in the building. There are no vending machines or coffee available.
- 4. A short orientation (about 15 minutes) will be provided to the entire group upon arrival to welcome and introduce everyone to the park, its rules, the program for the day and what the students may discover outside.
- 5. Parent volunteers will have a separate orientation (about 10 minutes). This will introduce them to the equipment provided, to a map of the activity area (maps provided), to the general flow of the day, and will answer any questions that they may have.
- 6. A washroom and snack break will take place after the group orientation and during the parent volunteer orientation. Please ensure that the students are supervised during this time.
- 7. There are NO indoor activities available. Please bring your own activities and/or DVDs when planning for inclement weather.





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## LUNCH BREAK PROCEDURES

Your class may eat inside the facility, within their assigned room. Please ensure that the students understand the following:

#### INSIDE THE BUILDING

- Students must be supervised by an adult while they are in the building (classrooms and washrooms).
- Classes from other schools may be in the facility at the same time. Please respect
  them and keep noise to a minimum, especially in the washrooms, hallways and
  other common areas.
- Help us keep the classrooms clean. There are garbage containers in the brown cabinets by the classroom doors.
- Recyclable containers go into the brown cabinet labelled "Juice boxes, cans and bottles". Do the students know what recycling is, how it conserves resources and how it helps the environment?
- Leftover fruit and vegetable materials, such as banana peels and apple cores, are collected in a white compost bucket in each room.

## **OUTDOOR FACILITIES**

There is a picnic area just to the north of the Fish Creek Environmental Learning Centre, about two minutes walk up the trail, with plenty of picnic tables.

There are several picnic tables and a fire pit behind the Fish Creek Environmental Learning Centre. This area is available on a first-come, first-served basis.

When using the fire pit area be sure to:

- Provide your own roasting sticks and firewood. Do not use branches or deadfall from the park.
- Have a bucket of water nearby before the fire is lit. Check that the fire is out before you leave.
- Do not feed or disturb wildlife.

# Preparation Materials

## I. Preparation Checklist

A full, detailed teacher checklist for your field trip preparation is available at the back of this resource package. These are general guidelines to assist you in planning your field trip.

## 2. Program Start and End

Program start and end times are flexible to accommodate bus availability and travel distance to the park. In general, programs start between 9:30- 10:00 am and finish between 1:45- 2:00 pm.



## 3. Field Trip at a Glance

Group Orientation	Overview of park rules, safety and			
(15 minutes)	behaviour expectations for the day			
Student Snack Break	Overview of program activities,			
Parent Volunteer Orientation	equipment and trail safety for parent			
(10-15 minutes)	volunteers.			
Educational Activities	Students explore the park in small, parent-			
Educational Activities	led groups. Environmental Educator will be available to answer questions and provide support during your lunch break and at the end of the day and is always available should the need arise at the Learning Centre.			
LUNCH BREAK	Environmental Educator will circulate and answer questions, show nature biofacts and ensure that the program is going smoothly.			
Educational Activities	Students continue to complete curriculum-connected activities with their parent leaders.			
Groups return to Learning Centre for Program Wrap-up	Final washroom break, head count, inventory and return equipment borrowed from the park, gather personal belongings.			

Program Wrap-up should take place at least 15-20 minutes prior to the scheduled bus departure.

# Orientation Videos

Attending a teacher orientation prior to your class visit is essential for familiarizing yourself with the facilities and the surrounding trails. Returning teachers are not obligated to attend the workshop, but are certainly welcome to come for a "refresher" course. Dates for the teacher orientations will be sent to you via email so you can register for an orientation on a date of your choice.



## 1

## Teacher Orientation Video

Prepare yourself by watching a brief video about field trip logistics, resources and helpful tips.

If you have any additional questions, comments or concerns about the field trip after watching the video, please contact the Environmental Educator.



## Parent Orientation Video

Whether your program is a guided hike with our Education staff, a custom program or a teacher-led field study, parent volunteers are an essential part of our programs.

When recruiting volunteers, please ensure that the adults are aware that they will be outside in the park for a majority of the day. Knowledge of nature is not a requirement, but ability to supervise and work with students is key.



## Student Orientation Video

Prior to your field trip, you can show your students the orientation video that reviews proper field trip attire and the role of parks in Alberta.





# Pre-field Trip Activities

Preparatory activities are essential to the success of your trip! The preparatory activities described here will introduce the field study day to your students and will allow them to practise the skills to be used during the field study day. Honing the students' senses is essential to the success of your program.

Feel free to use your own activities and the ones described in this package. Within the activities you select and present to your students be sure to consider other curriculum areas and explore how all subject areas can be connected to your field study day.



## Animal Senses Worksheet: Yes

At the back of the program manual is a template of the deer head. Discuss the senses with your students and add the sensory organs to the deer to elaborate on the adaptations of the deer as components. (i.e. discuss excellent sense of smell and have a student attached the muzzle of the deer with tape).

**Smell:** very important for safety, feeding, raising young. Deer have 297 million olfactory receptors, humans have only five million! Their nose is 60X better than ours!

**Hearing**: allows deer to detect danger and communicate with one another. Mule deer have large ears that help improve their hearing.

**Sight**: Deer have eyes on the side of their heads to see a great range of area behind them. This protects them from predators. Deer have special rods in their eyes that allow them to see better in low light.

**Taste:** Deer eat 1-3 kg a food a day. That's about 3% of their body weight. Deer love the taste of leaves and buds of woody shrubs, grasses and other plants.

Once the students have finished "pinning the senses on the mule deer," challenge them to cut out animal pictures of their favourite species and research how that animal uses its senses.



## Create a Creature Worksheet: No

Review the five senses and what these senses look like in different animals. Ask the class to draw an animal that had the following special senses:

- · excellent hearing (large ears)
- poor eyesight (small eyes)
- good sense of taste (long tongue)
- antennae for touching (lots of bristles)
- excellent sense of smell (large snout)

Display the finished products around the classroom and encourage students to share their ideas.



## What's That Sound? Worksheet: No.

Coyotes have an excellent sense of hearing. They listen for movement underneath the snow and will pounce on the mice and voles hiding below. This game hones the hearing of the students.

Direct students to sit in a circle and close their eyes. Select one or two students to hide in the classroom and make squeaking mouse sounds. The students in the circle that can detect the mice the fastest are successful coyotes. They are the next to hide.



## Dress for Success Worksheet: Yes

The focus of this exercise is to discuss how humans prepare for winter. Students will compare winter and summer clothing. Using the worksheet at the back of the resource package, encourage students to review the words of the different layers of clothing.

Instruct your students to colour the clothing and change the student in the picture to reflect what they look like. Depending on the skill of your students, direct them to cut out the articles of clothing and glue them to the student. Use this as an opportunity to discuss what they should wear when they visit the Park for their field trip.



## Preparatory Test Worksheet: Yes

This preparatory and post test is designed to evaluate learning associated with this field study experience, not the entire science unit. For maximum benefit, students should do this activity first and again after the field trip. By comparing the changes in their scores, it's possible to gain insight to the impact of the field excursion on learning.



# Program Equipment

The Learning Centre will provide your students with equipment and resources to utilize throughout the day.

**PLEASE NOTE:** There is an additional fee for lost, stolen or broken equipment.

For the Grade 6 Tree Tales program, your students will be provided with the following:



Seasonal
Scavenger Hunt

Students will seek signs of the changing season with kinestetic, auditory and visual objectives. This is not meant to be a competition, rather it is a fun way for students to hone their observation skills.



Touch Bag

Students will feel different textured items that are rough, prickly, smooth, spongy, stickey and soft. Students will then find matching textures in nature.



Colour Palette

Students will work in pairs to match the colours on the palette to the shades in nature.

If desired, students can fill the circles on the journal page with the hues discovered in nature.



Magnifying Glasses

Students will use the magnifying glasses to examine signs of squirrels and snowshoe hare (such as tracks, evidence of feeding, droppings).

Students will use the magnifying glasses to investigate snow and signs of winter.

# Field Trip Activities

## Information Booklets



The Learning Centre will provide your adult chaperones with an information booklet with all of the Field Trip Activities outlined and explained in full detail. These booklets will have pictures and information that will support and enhance your students' learning.

Each page of the information booklet will have guiding questions on the bottom to help facilitate curriculum-connected discussions and inquiry.

NEW to our programs, these booklets will be printed and laminated for your field trip use. A copy of the Information Booklet was provided to you at the time of booking. If you have not received the booklet, please ask us to resend it.

## Important Notes:

- Please do not print these booklets for your adult chaperones. By providing laminated copies, we hope to reduce the amount of wasted paper.
- Please do not distribute the information booklet PDFs to other teachers. These resources are developed for use within our programs.
- We greatly appreciate all feedback to strengthen our resources; please let us know if you have any recommended changes

# Field Trip Activity Summary

The following Field Trip Activities are curriculum-connected. You are certainly welcome to change, remove or follow the activities to suit the needs of your students.



## I Spy Worksheet: Yes

- Students will observe the natural world through magnifying glasses and binoculars. They will then draw and record their favourite things that they saw in their journals.
- Time: 10 minutes



## I Heard Worksheet: Yes

- Students will listen for different sounds, noting the direction and the proximity of the sound.
   They will then draw and record the sounds that they heard.
- Time: 10 minutes



## Feels Worksheet: Yes

- Students will search for items in nature that feel similar to the objects they pull out of the "Touch Bag"
- Time: 15 minutes



## Scratch 'N Sniff Worksheet: Yes

- Students will explore the natural area using their sense of smell. They will then draw pictures of the objects that had smells and compare the strengths of different odours.
- Time: 10 minutes



## Winter Colours Worksheet: Yes

- Students will search for colours in nature using the Colour Palette provided. They will then draw the objects that they found.
- Time: 10 minutes



## Insects Worksheet:Yes

- Students will look for insect galls and discuss why and how insects create protective casings to survive the winter.
- Time: 15 minutes



## Animal Signs Worksheet: Yes

- Students will search for the signs and evidence of animals eating, their movements and their shelter.
- Time: 30-40 minutes



## Birds Worksheet: Yes

- Students will search for birds and discuss the different ways that birds survive the winter.
   Students will draw a picture of the bird they observed and identify the food it eats.
- Time: 15 minutes



## We Discovered Worksheet: Yes

- Students will reflect upon what they observed and experienced throughout the field day. The group leader will review key concepts and vocabulary with the students.
- Time: 5-10 minutes

## Planning your Field Study in the Park: Teacher Checklist

Give every driver—including the bus driver—a copy of the route map.

Make sure all drivers know you are coming to the west end of the Park, near Woodbine!

## Prepare yourself

- Read the teacher package thoroughly: phone 403-297-7926 if you have any questions.
- Modify the activities to fit your lesson plans, students' skill levels and time in the park
- Check student health forms, looking for allergies to bee/wasp stings.

## Prepare the students

- <u>Discuss how Fish Creek Provincial Park is a wild environment</u>, Discuss the difference between wild and tame animals and environments (coyotes vs. pet dogs, Fish Creek Provincial Park vs. school yard, etc.)
  - Do not feed or disturb wildlife: Quietly observe all wildlife from a comfortable distance.
  - Leave only footprints: Share discoveries, but leave everything as they found it.
  - Pitch in: Litter should be placed in the rubbish bins provided or in a pocket.
- <u>Discuss behavioural expectations</u>. Explain that the field study will be another school day, just at a different place.

  All the school rules apply.
- <u>Discuss the purpose of provincial parks and protected areas</u>. Have the class make a list of ways they can show respect for living things during their visit to the park. *Possibilities include*:
  - Stay well back from the banks of Fish Creek
  - Leave ant hills, nests and rotting logs alone and intact. They are animal homes.
  - Walk with care and mindfullness. When leaving the trails to complete program activities take care to minimize your impact.
- Discuss outdoor safety. Students need to:
  - Stay where an adult can see them at all times.
  - Walk, do not run.
  - Keep feet on the ground: no climbing.
  - Leave dead branches on the ground: they do not make safe walking sticks.
- Discuss what to wear on the field trip
  - Hats, sunscreen, insect repellent.
  - Runners (not sandals).
  - Dress in layers: the forest can be cool in the morning.
- There is nowhere to buy anything here so bring plenty to eat and drink.
- Complete some preparatory activities, either the ones in the next section of this package or some of your own.

## Prepare the adults

- Please follow the recommended ratios as outlined in your school board regulations. Divide your class into working groups.
- Review the park rules with the adults, send the link to the orientation video.
- Emphasize the following: there is nowhere to buy anything anything here, including coffee.
- The adults' role is to lead the activities with the same small group of students all day..

## Bring

- A cheque made payable to the Government of Alberta for \$4.00 per student (no charge for adults).
- Student booklets (or journals), pencils.
- · A few bandaids with each adult and your first-aid kit.

## Dear Adult Chaperone,

Thank you for volunteering for a field trip to Fish Creek Provincial Park! This excursion allows students to explore, discover and learn in one of the largest urban parks in North America.

Here are a few tips that may help you enjoy your visit:

- Pack a hearty and healthy lunch (snacks and water too!). There are no vending machines or stores onsite to purchase food
- Please dress appropriately for the weather. We will run our programs rain, snow or sunshine
- Ensure that you are aware of what part of Fish Creek the program is taking place. We host educational programs at the WEST end (near Woodbine) and the EAST end (near Deer Run)
- Take a minute to watch this orientation video here

Our staff will be available throughout the day to ensure that you and your group have a safe and educational experience in the park.

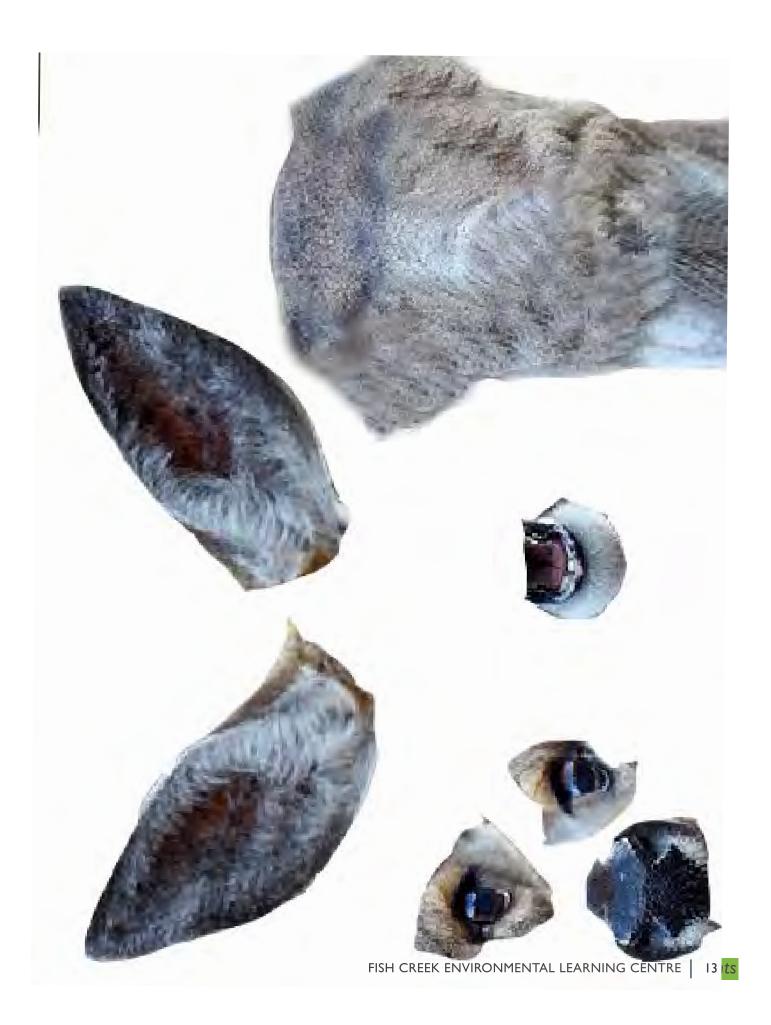
You are not expected to be a naturalist or science expert, but a positive attitude goes along way!

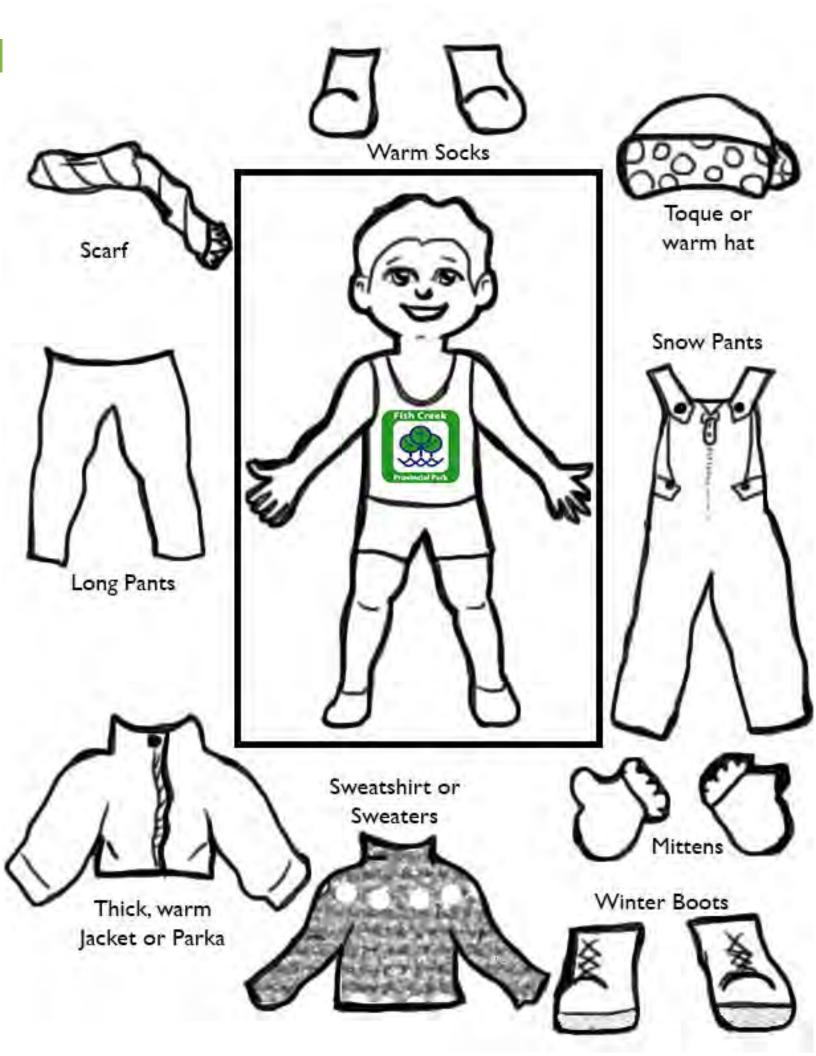
Thank you again, we are very excited to see you in the park soon. Warmest regards,

**Environmental Education Team** 









## **Animals and Winter Quiz**

Name **Date** 

**Circle** the pictures that describe your five senses:



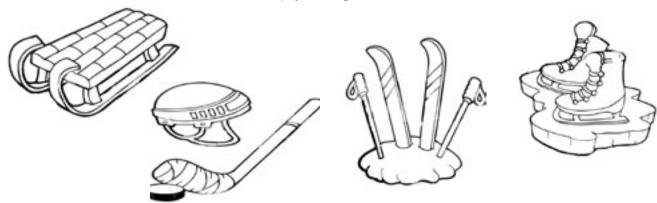
**Colour** the animals that stay and adapt to survive the winter.



Write to explain the changes between fall and winter for these three words:

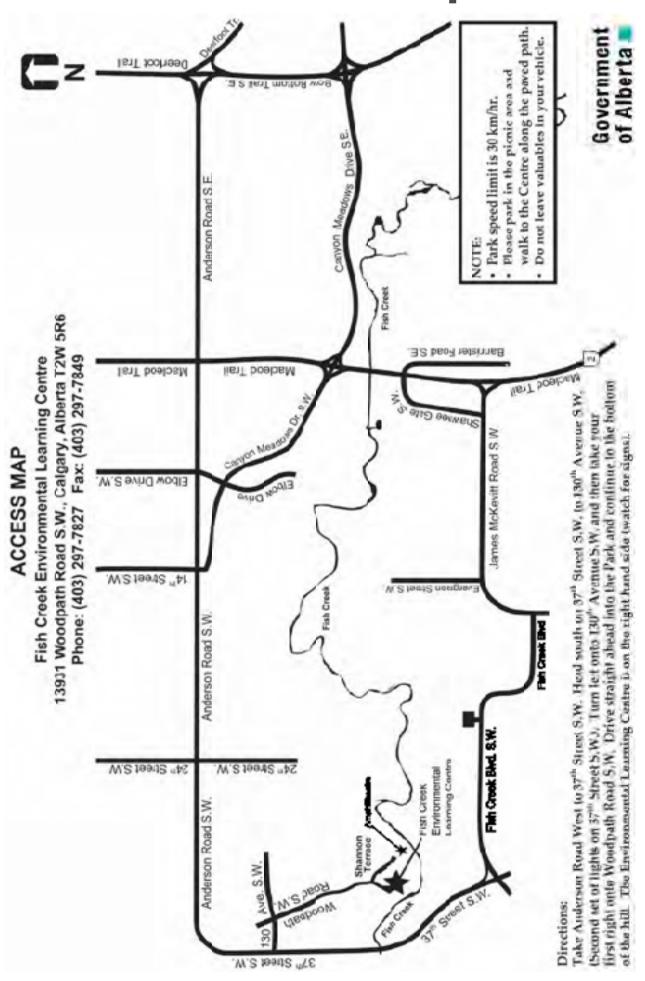
a. temperatu	^e:	 	 <del> </del>
b. weather: _		 	 · · · · · · · · · · · · · · · · · · ·
c. sunlight:			

Circle the activities that YOU enjoy doing in the winter. Winter is fun!



Help our deer mouse find his way through the tunnels in the snow down to the subnivean layer below!

# **Directions Map**



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