SIGNS OF FALL

A teacher-conducted field study for Grade 1 students

FISH CREEK ENVIRONMENTAL LEARNING CENTRE

FishCreek.Education@gov.ab.ca
www.Fish-Creek.org

Alberta Parks
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 1 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.

Table of Contents

FACILITY & RULES
- The Facility 3
- Lunch Break Procedures 4

BEFORE THE VISIT
- Preparation Materials 5
- Orientation Videos 6
- Pre-field Trip Activities 7

PARK ACTIVITIES
- Program Equipment 8
- Information Booklets 9
- Field Trip Activities 10

POST-FIELD TRIP
- Post-field Trip Activities 11

RESOURCES
- Preparation Checklist 12
- Parent Recruitment Letter 13
- Blank Tree Template 14
- Animal Sign Language 15
- Salt Colour Painting 16
- Student Journals 17

MAPS
- Access map 21
- Map of program trails 22
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.**

Return to Table of Contents
**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

1. 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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Orientation (15 minutes)</td>
<td>Overview of park rules, safety and behaviour expectations for the day</td>
</tr>
<tr>
<td>Student Snack Break</td>
<td>Overview of program activities, equipment and trail safety for parent volunteers.</td>
</tr>
<tr>
<td>Parent Volunteer Orientation (10-15 minutes)</td>
<td>Students explore the park in small, parent-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.</td>
</tr>
<tr>
<td>LUNCH BREAK</td>
<td>Environmental Educator will circulate and answer questions, show nature biofacts and ensure that the program is going smoothly.</td>
</tr>
<tr>
<td>Educational Activities</td>
<td>Students continue to complete curriculum-connected activities with their parent leaders.</td>
</tr>
<tr>
<td>Groups return to Learning Centre for Program Wrap-up</td>
<td>Final washroom break, head count, inventory and return equipment borrowed from the park, gather personal belongings.</td>
</tr>
</tbody>
</table>

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.

2 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.

3 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 practice 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.

1. Why Do Leaves Change Colour? Worksheet: No

In the fall, the leaves on some plants start to lose their green colour. The other colours that are always in the leaves start to appear when the green fades.

Instruct students to carefully tear up fresh green leaves and put them in a jar in the front of the classroom. Carefully add rubbing alcohol to the jar. Have the students count how many mashing motions it takes to mix up the solution. Cover the jar with plastic wrap. Put the jar in a bowl and pour hot water in the bowl.

Read a story to the students (30 minutes). Carefully place a strip of coffee filter inside the jar. Wait for the colours to come up the filter paper (60 minutes).

As we know, Chlorophyll gives leaves their green colour and is so dominant it hides the other colours in the leaves. But in the fall, chlorophyll in the leaves breaks down allowing the other colours to finally shine through and show their beautiful reds, yellows, and oranges.

Experiment adapted from How We Learn. For more information, pictures and materials list, please visit: http://www.howwelearn.com/science-experiments-for-kids/

2. Classroom Tree Worksheet: Yes

This art project will be a collaborative effort of the students. Using the template provided or by drawing your own tree, encourage your students to carefully put their thumb prints on the branches of the tree. Stamp pads or non-toxic paints work best. Direct the students to label their thumb print with their name. Hang the picture in the classroom and refer to it when discussing seasonal changes.

Adapted from: http://bonniekathryn.com/2013/11/21/

3. Window Field Trip Worksheet: No

Go on a “Window Field Trip” to develop students’ observation and inference skills. On a sheet of large drawing paper, ask the students to draw what they see out their window. This could be done at home or at school. Guide their observations and inferences with some questions:

- Is it hot or cold out today?
- Where is the sun?
- Are there any shadows?
- Is it windy? Can you tell from which direction the wind is blowing?
- Are there clouds in the sky?
- Do the shapes of the clouds remind you of anything?
- Can you see the moon?
- Can you see any buildings?
- Can you see any animals?

As a class, discuss their field trip to the window and share their observations and inferences. Repeat the process a week later and compare the results. Discuss why some things have changed and others did not.

4. Salt Colour Painting Worksheet: No

This preparatory art project explores colour mixing. Students will create designs on construction paper with glue, then add salt to the glue. With a small amount of diluted food colouring or watercolour paint, students will add colour to the salt, causing the colours to spread.

Encourage your students to create the shapes of fall or what they may see on their visit to Fish Creek Provincial Park. Examples could include: leaves, cones, clouds, bushes, trees, berries, etc.

For detailed instructions, see the back.
Adapted from: http://busymommymedia.com/firework-salt-painting/
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:

1. **Seasonal Scavenger Hunt**
   Students will seek signs of the changing season with kinesthetic, 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.

2. **Red Squirrel Picture**
   Students will observe and learn about the ways that red squirrels prepare for winter in the fall.

3. **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.

4. **Magnifying Glasses**
   Students will use the magnifying glasses to examine signs of squirrels and (such as tracks, evidence of feeding, droppings).

   Students will use the magnifying glasses to investigate leaves and signs of fall.
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.

The program focuses on the students using their senses to explore the natural world. These activities enhance the students’ success with the seasonal exploration activities. Students will use their four senses to help them discover the signs of spring.

1. Colour Search Worksheet: Yes
   - Students will identify colours in a variety of natural objects; compare, contrast and order those colours and describe changes that result when primary colours are mixed.
   - Time: 20 minutes

2. Orchestra Worksheet: Yes
   - Students will listen for, and then describe different living and non-living things.
   - Time: 15-20 minutes

3. Smells Worksheet: Yes
   - Students will compare and contrast different smells (dead grass/living grass, cone/needles, bark/sap, coniferous/deciduous trees, buds on different bushes, damp/dry soil).
   - Time: 15 minutes

4. Touch Worksheet: Yes
   - Students will compare and contrast how different items feel (texture, dry/wet, heavy/light, etc.)
   - Time: 10 minutes

5. Forest Faces Worksheet: Yes
   - Students will compare leaf shapes and colours (fallen leaves and leaves on the trees).
   - Students will explore a branch and examine the areas where leaves were attached.
   - Time: 20-30 minutes

6. Seasonal Changes Worksheet: Yes
   - Students will identify and describe examples of plant and animal changes that occur on a seasonal basis (changes in form, appearance, location, and activity).
   - Time: 15-20 minutes per habitat

7. Wanted: Dead or Alive Worksheet: Yes
   - Students will discuss the value and role of leaves and how other animals use the leaf litter as shelter.
   - Students will brainstorm lists to explain what leaves do alive and what they provide when dead.
   - Time: 15-20 minutes

8. Sleeping Bags Worksheet: Yes
   - Students will discover the function of a plant bud.
   - Students will draw their bud as observed through their magnifying glass.
   - Time: 15 minutes
Post-field Trip Activities

In addition to a class discussion about trip highlights and favourite activities, students may need class time to complete data sheets or to share information about their discoveries.

Student Journals Worksheet: Yes

1. Students may need class time to go through the journal and ensure each page has been completed as thoroughly as possible.

2. Organize the student journals into a “classroom library”. They could then sign out the journals they wanted to read.

3. Select activities from the journal and apply them back at school. For example, ask them to make a classification tree of all the items in their desk.

4. Make comic strips, dioramas, posters, etc. about their trip to the park that use their journals as resource information.

5. Design and construct a bulletin board that posts all the journals once they are fully completed.

Drama Worksheet: No

Have the students dramatize something of the fall “happenings” they discovered at the park. Using creative movement and their imaginations, can they transform themselves into:

- a leaf dancing in the wind
- a squirrel storing cones for the winter
- a migrating bird
- a hitchhiker seed
- a ground squirrel going into hibernation
- a tightly curled bud

Experience Chart Worksheet: No

Develop a class experience chart. Have each student contribute something they experienced at the Park to the list. Begin by asking “What did you see, hear, smell and touch at the Park?”

Reinforce the concept of seasonal change by asking each student, when they give their responses, to indicate how their discovery would change as the seasons change.

To support the math curriculum, have the students, using the Experience Chart, classify their discoveries in a variety of ways. Possibilities for categories include: senses used, colour, size, natural or man-made, living or non-living.

Sign Language Review Worksheet: Yes

Explain to your students that humans use senses to communicate (mouth makes sounds for ears to hear, sense of touch to hug or high-five friends to comfort them, facial expressions and body language are seen with our sense of sight).

However, not everyone uses their five senses in the same way. Using images in this manual and the internet, teach your students a few of the sign language signals for seasonal changes or animals that they saw in the park.
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
- Discuss how Fish Creek Provincial Park is a wild environment. 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.
- Discuss behavioural expectations. Explain that the field study will be another school day, just at a different place. All the school rules apply.
- Discuss the purpose of provincial parks and protected areas. 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 mindfulness. 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
Animal Sign Language

Bird

Dog (Coyote)

Deer

Hare

Squirrel

For more information and for Image Credit, visit Baby Sign Language
http://www.babysignlanguage.com/flash-cards/
Salt Colour Painting

MATERIALS:

• White Glue
• White pencil crayons/ crayons
• Food Colouring
• Plastic-reusable containers
• Table salt
• Paintbrushes
• Black or blue construction paper
• Two large trays or bins

INSTRUCTIONS:

1. Using a white writing utensil, write the name of the participant on the back of the black piece of paper.

2. Dip the paintbrush in the white glue. Draw swirls, stars or planets on the black piece of paper with the white glue.

3. Carefully walk with your painting to the Salty Station. Gently place your painting in the tray and shake the salt on to the glue.

4. Shake off any excess salt into the second tray.

5. Using the paintbrushes and water colours at the tables, carefully add a SMALL amount of colour to the salt painting.

6. Shake off any extra salt in the second tray before you leave. Enjoy your artwork!
Art in the Park

Draw a picture of your favourite plant or animal in Fish Creek Provincial Park!

Signs of Fall

Name: ____________________________
Orchestra

Draw or write about the sounds of fall below.

Sleeping Bags

Draw buds on the branch!
Marsh

Draw signs of fall at the marsh. Can you find a cattail seed? Can you see the insects in the water?

Colour Search

Draw your discoveries that match the colours below.

B  Green  Y
Smells

Draw or write about the smells of spring below.

Wanted!

Dead leaves do this:

Alive leaves do this: