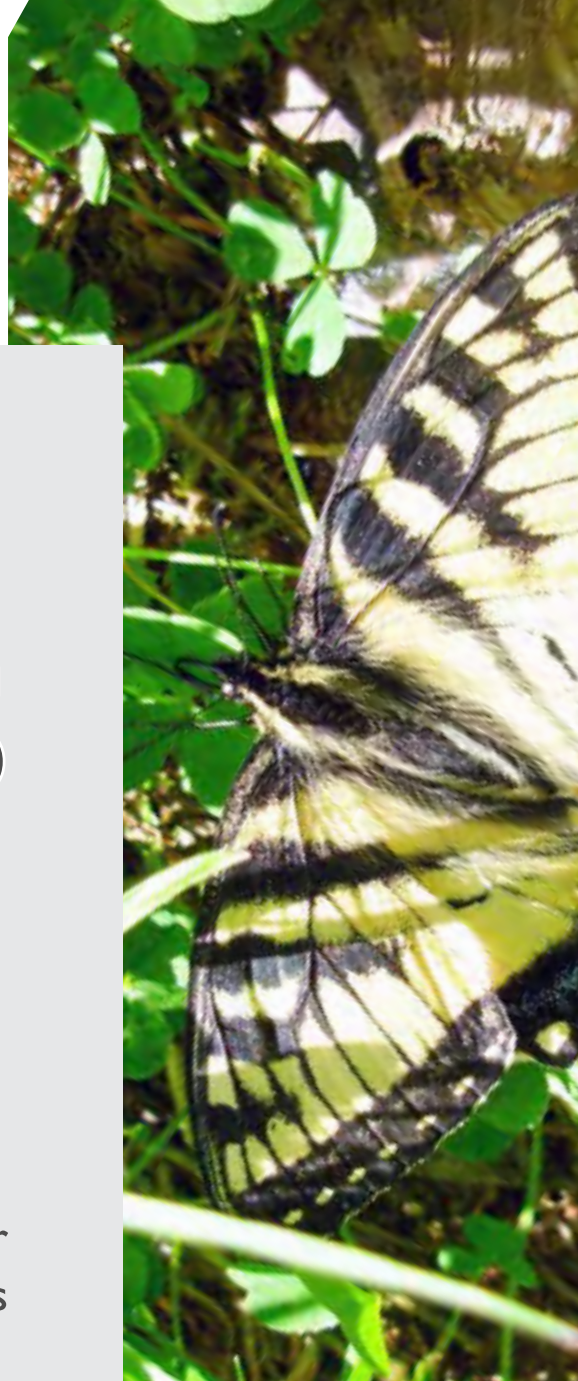


HIDDEN WORLDS

A teacher-conducted field study for
Kindergarten students



FISH CREEK
ENVIRONMENTAL LEARNING CENTRE

FishCreek.Education@gov.ab.ca

www.Fish-Creek.org



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 the kindergarten program statement as set out by Alberta Learning and also reflects the priority actions 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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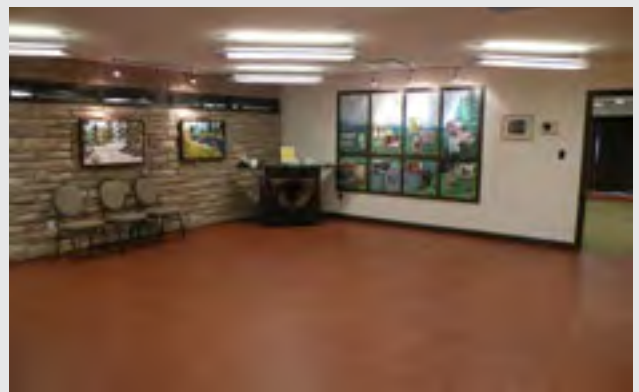
Facility & Rules

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, 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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SNACK 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 or by clicking [HERE](#). 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, half-day programs start between 9:30- 10:00 am and finish between 11:30 and 12:30 pm.



3. Field Trip at a Glance

Group Orientation (10 minutes)	Overview of park rules, safety and behaviour expectations for the day
Student Snack Break Parent Volunteer Orientation (10-15 minutes)	Overview of program activities, equipment and trail safety for parent volunteers.
Educational Activities	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.
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.

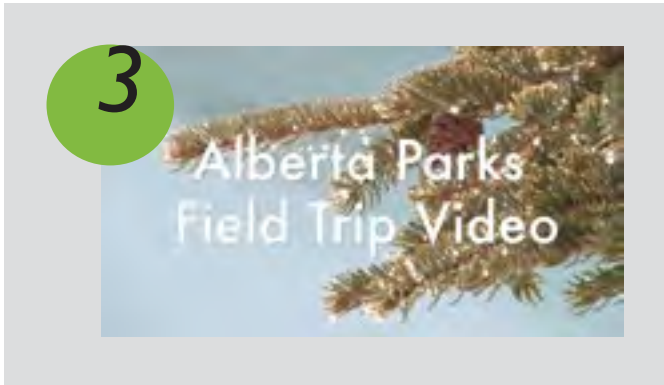
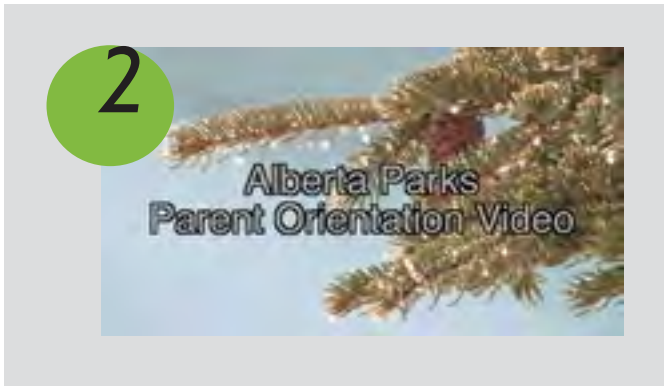
2 Parent Orientation Video

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.

2 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.

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 Vocabulary *Worksheet: No*

Ensure that your students are familiar with the meaning of the following terms.

- adaptation - physical characteristic or behaviour which helps a plant or animal live successfully where it does. For example, grasshoppers have strong legs for jumping to escape predators.
- camouflage - body colour or markings that help an animal hide from its predators (enemies).
- predator - animal that hunts other animals for food.

2 Anthills *Worksheet: Yes*

One of the on-site activities teaches the students about wood ants and their anthills. These are quite different than the anthills in gardens and playgrounds. If possible, show your students an anthill in the school grounds.

Discuss the size, shape and materials that the hill is made from. Look for entrance holes and allow the students to observe the activity of the anthill.

If possible, encourage the students to observe the size and colours of the ants in the playground or garden.

Print off the A-Mazing Ant worksheet and challenge the students to solve the maze. After, encourage the students to colour the background and draw more ants for the nest.

3 Magnifying Glasses *Worksheet: No*

On the day of your fieldtrip, the Learning Centre will provide a mini magnifying glass for each of your students. These tools allow students to explore the very small and hidden world of insects. To enhance the success of these activities, ensure students know how to correctly use a magnifying glass and allow them classtime to practice.

4 Insects and Spiders *Worksheet: No*

Use a picture of an insect and a picture of a spider to help the students understand and learn the following information.

An insect is an animal that has 3 distinct body parts (head, thorax, abdomen), 3 pairs of legs attached to the thorax and a pair of antenna. Not all insects have wings. In comparison, a spider has 2 body parts (cephalothorax and abdomen), 4 pairs of legs and no antennae. Not all spiders spin webs.

To strengthen the understanding of insect anatomy, try this song with your students (to the tune of Head, Shoulders, Knees and Toes)

Head, thorax, abdomen, abdomen (*Touch head, waist, and touch and wiggle hips.*)

Head, thorax, abdomen, abdomen (*Touch head, waist, and touch and wiggle hips.*)

Two antennae, two eyes (*Use the pointer fingers to make antennae on top of the head. Point to eyes*)

Four wings, six legs (*Hold out two fingers on each hand at shoulder height and pretend to fly. Then make six legs by holding three fingers from each hand at the waist.*)

SOURCE: Fontenelle Nature Association - Science in the Early Years—Natural Science Programming for the Very Young

5 Student Journals *Worksheet: Yes*

The student journal is a tool the students, teachers and parent volunteers will use to record and reflect on what they are learning through their multidisciplinary exploration of the natural world.

Once you have selected the activities you will do for the field study day, create a master copy of the journal by printing the appropriate pages from those included at the end of this package.



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 *Kindergarten Hidden Worlds* 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 Bug Catchers

With the assistance of parent leaders, students will capture invertebrates to closely examine their physical and behavioural adaptations.

3 Dental Mirrors

Students will use dental mirrors to explore fallen logs, carpenter ant holes and underneath shrubs.

Students will use the mirror to reflect light into shades to reveal more creatures.

4 Rope Lasso

Parent leaders will create a large “rope lasso” on the ground. The students will then find, examine and describe the creatures found inside.

5 Magnifying Glasses

Students will use the magnifying glasses to examine their captured invertebrates.

Students will use the magnifying glasses to investigate bark beetle tunnels and ant nests.

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.

1 Insect Lasso *Worksheet: Yes*

- Students will get up close and personal with the habitat (the ground/grass) of many invertebrates.
- Students will observe and identify invertebrates and compare and contrast insects vs. arachnids (spiders).

2 Shrub Shake *Worksheet: Yes*

- Students are encouraged to observe, describe, and compare the types of invertebrates that inhabit the leaves and stems/branches of a shrub.
- Students will discuss the function of camouflage, as it relates to invertebrates.

3 Under *Worksheet: Yes*

- Students will discover and uncover the vast array of invertebrates that live under things (like logs, rocks, leaf litter, etc.).
- Students will describe the creatures that they find.

4 Into the Looking Glass *Worksheet: Yes*

- Students will discover the hidden worlds in the park by using a dental hand mirror.

5 Tree Truck Tales *Worksheet: Yes*

- Students will examine the tunnels left by bark beetles on tree branches and trunks.

6 Anthills *Worksheet: Yes*

- Students will explore the activity that takes place at an anthill; they will also examine what the anthill is made of, including noting its shape and size.

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*

Distribute the student journals and explain, page by page, what the students could draw. Use the adult journals as references if the students require some assistance. Page 8 provides space for the students to do a fall picture of the Park. Invite the students to share their completed journals with their classmates either verbally during a sharing circle or by adding them to the class "library" so others could look at them any time.

Beetle Blitz *Worksheet: No*

(Otherwise known as Cootie or Beetle)

In small groups of two to six children, distribute paper, pencils and a 6 sided die. Each student will roll the die, with each number of the die representing a different body part of the insect.

Below are what the die numbers represent and the number of body parts needed to complete the drawing of the insect.

1. The body (abdomen) (1)
2. The thorax (1)
3. The head (1)
4. One eye (2)
5. One feeler (2)
6. One leg (6)

When the player rolls a number that (s)he needs, (s)he is able to add that part to the body. For easier playing, the head and the body do not have to be connected by the thorax before adding parts.

Circulate throughout the group to facilitate discussions on how many body parts and legs are needed for an insect and assist the students in ensuring fair play. The winner is the first one to complete the drawing of the insect.

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Important Invertebrates *Worksheet: No*

Through class discussion compile a list of the many different ways invertebrates affect the environment and people.

Some possible answers are:

- pollinate plants (including crops that are important food sources for people)
- food source for many other animals
- as scavengers they "clean-up" the environment
- provide honey and silk for people
- are enjoyable to hear and watch
- can carry germs and diseases

Insects have an important role in helping humans. Allow the students to choose their favorite "Human Helper" to write a thank you card to that insect. Write one sentence on the board for each insect that the students can copy, or print these off before the activity.

For example: *Thank you busy bees for making honey!* Encourage the students to draw the insect and how it helps humans.

Build a Bug *Worksheet: No*

Discuss different habitats in which insects live (forests, gardens, water, grasslands) and the ways the insects are adapted for those areas.

Come up with silly habitats (outer space, backpack, toy store) where insects might live.

Allow the students to draw the insects that may live there and their adaptations.

Same and Different *Worksheet: No*

Compare the *Hidden World* of Fish Creek Provincial Park and your school yard by taking your students outside.

Investigate the insects that may be hiding in the grass, shrubs and anthills in the school yard. If your school has a naturalized area, explore the animals that live there.

What insects are the same as those in Fish Creek Park? Which ones are different? Why?

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 \$2.00 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:

- 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!

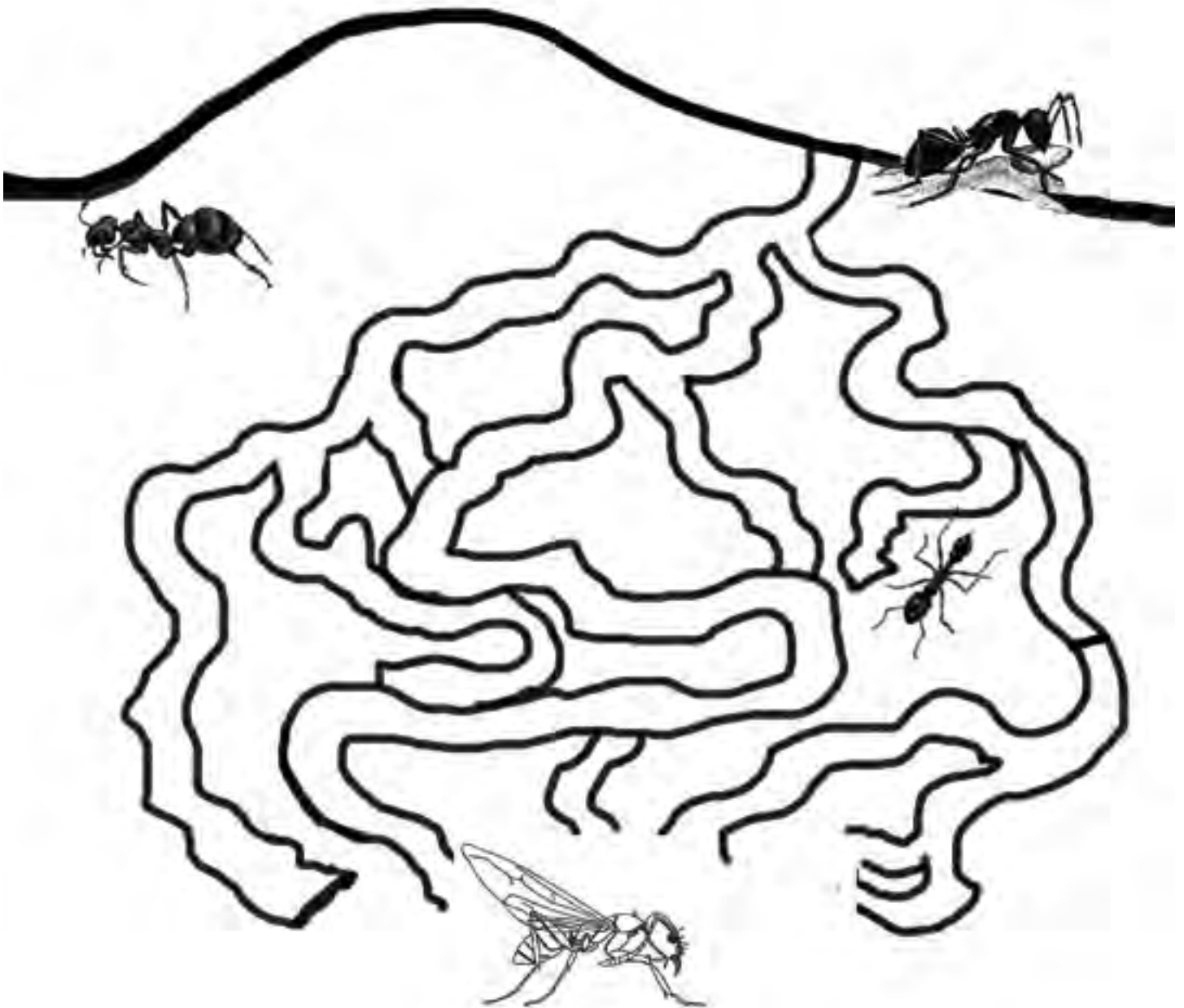
Thank you again, we are very excited to see you in the park soon.
Warmest regards,

Environmental Education Team



A-Mazing Anthills!

Help the ant bring food back to the Queen inside the anthill.



**Hidden Worlds of
Fish Creek Provincial Park**

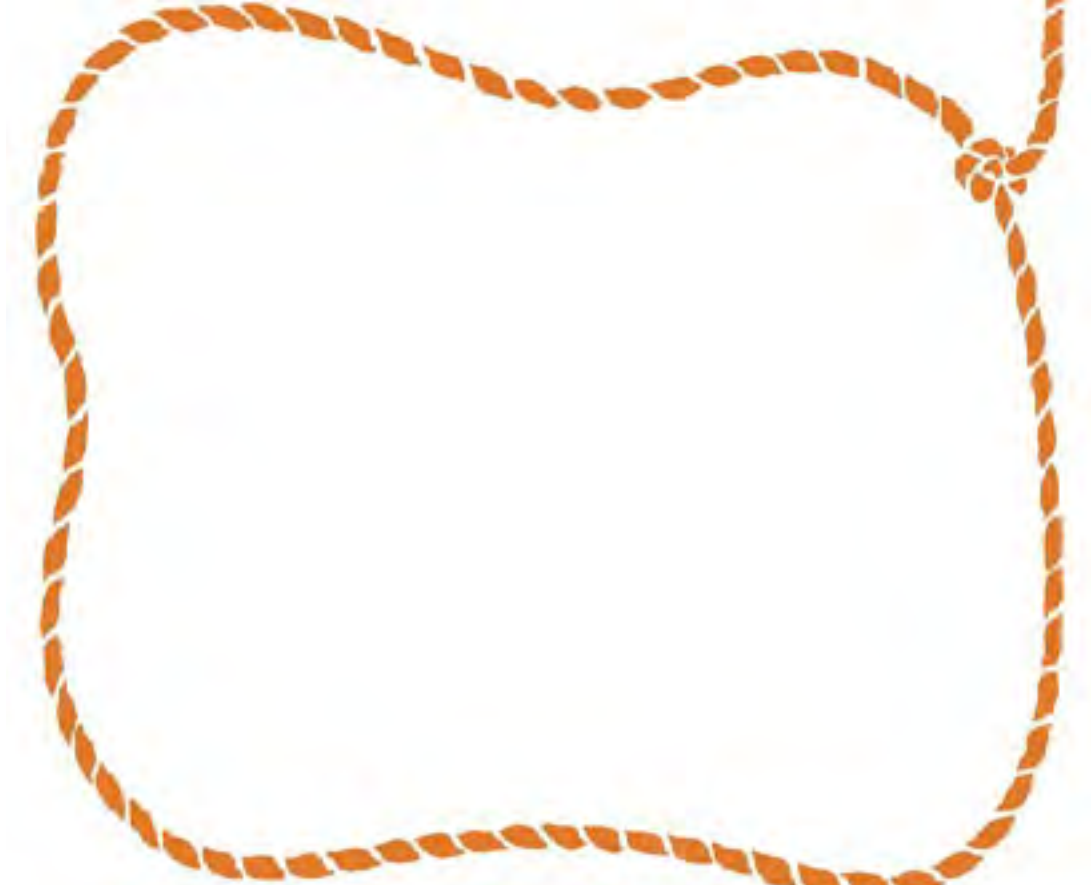
Hidden Worlds



Name: _____

CREATURE LASSO

Draw the creatures that you find within your lasso.



2

ANTHILLS

Draw the anthill you may find in a school yard.

Draw the anthill you found in Fish Creek Provincial Park.

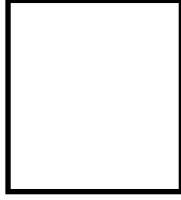
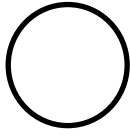
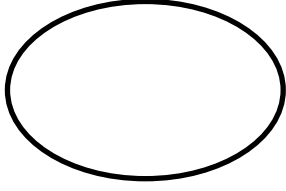
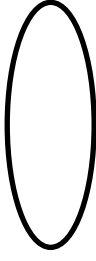
7

TREE TRUNK TALES

Rub the SIDE of your pencil on a bark beetle tunnel to record the patterns on paper.

SHRUB SHAKE

Complete the shapes by adding legs and wings to make the insects you find!



UNDER

Draw the creatures you discovered *under* the objects in the picture below.



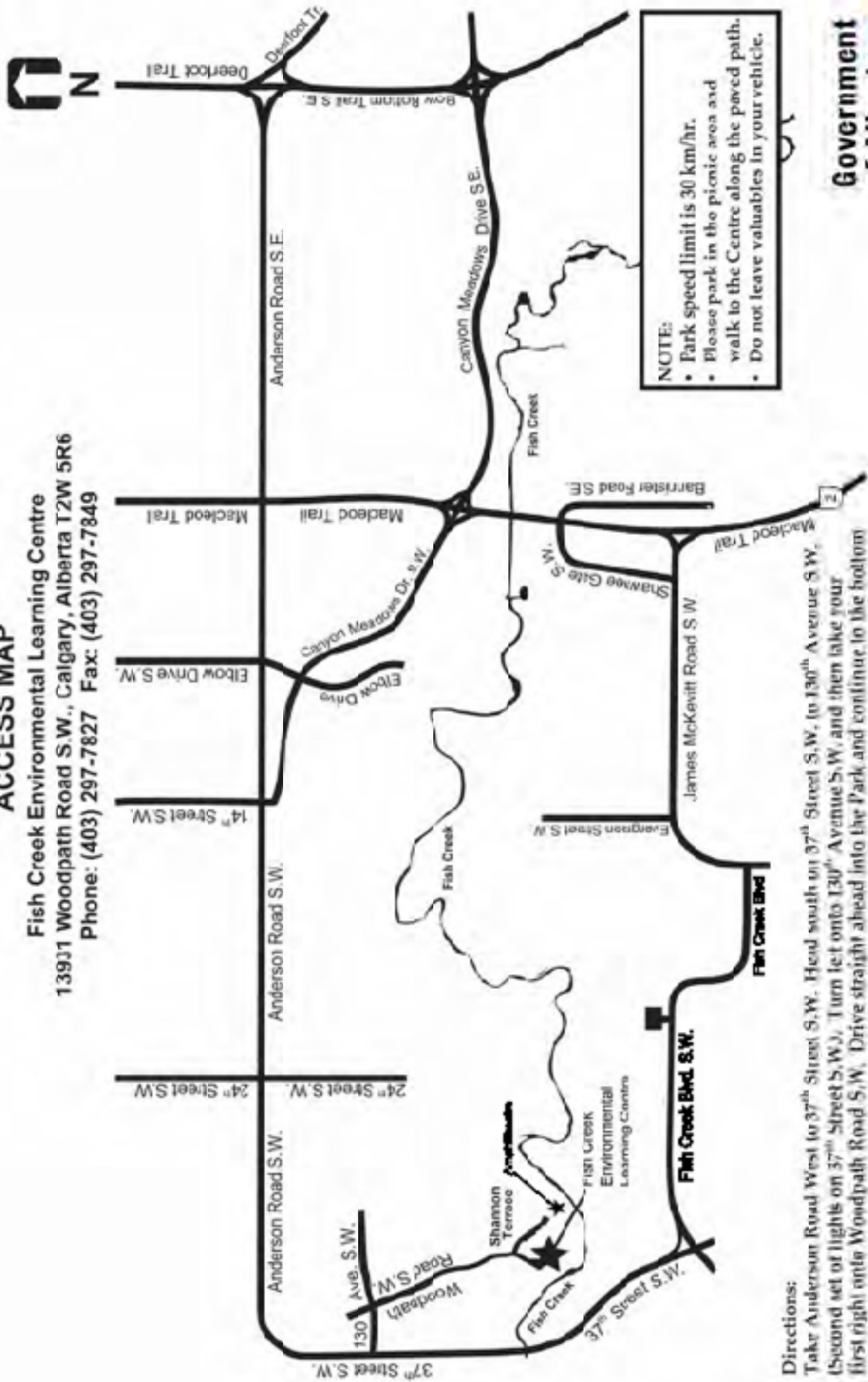
INTO THE LOOKING GLASS

Draw the creatures that you saw using the mirror!

Directions Map

ACCESS MAP

Fish Creek Environmental Learning Centre
13931 Woodpath Road S.W., Calgary, Alberta T2W 5R6
Phone: (403) 297-7827 Fax: (403) 297-7849



Directions:
 Take Anderson Road West to 37th Street S.W. Head south on 37th Street S.W. to 130th Avenue S.W. (second set of lights on 37th Street S.W.). Turn left onto 130th Avenue S.W. and then take your first right onto Woodpath Road S.W. Drive straight ahead into the Park and continue to the bottom of the hill. The Environmental Learning Centre is on the right hand side (watch for signs).

Trail Map

Program Trails at the Fish Creek Environmental Learning Centre

PLEASE STAY IN ASSIGNED AREAS!
It is important that park staff know where you are at all times.

- Washrooms
- Picnic Sites (with fire pits)
- Amphitheatre
- Public Parking
- School Group Parking Only
- Bench
- Fence
- Asphalt Trail
- Shale Trail
- Dirt Path

