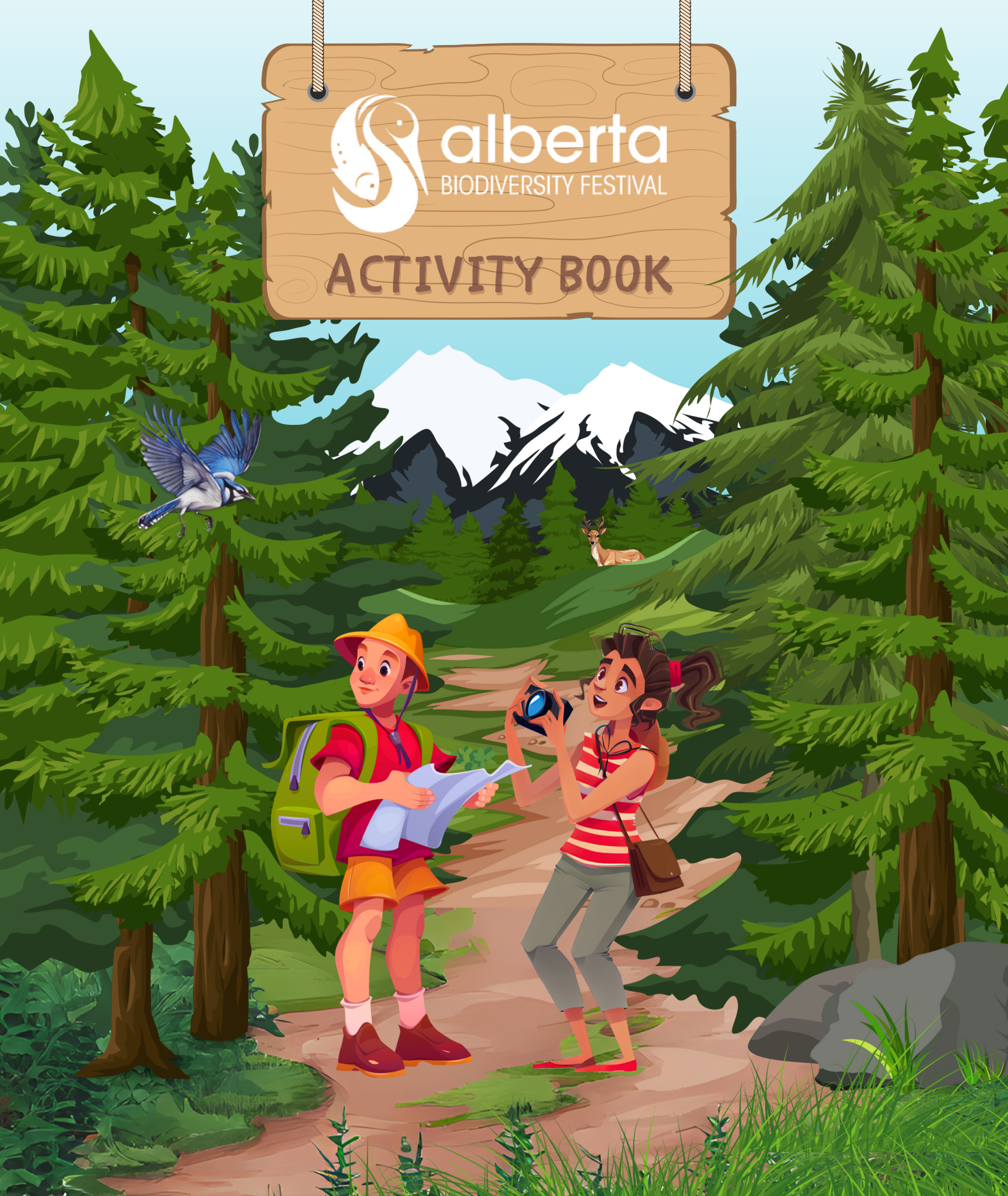


alberta
BIODIVERSITY FESTIVAL
ACTIVITY BOOK





From the beautiful grasslands to the iconic boreal forests, Alberta's natural landscapes are both diverse and captivating. This festival aims to empower individuals with the knowledge, tools, and inspiration needed to think, plan, and take action while keeping Alberta's aquatic life, water resources, wildlife, and diverse ecosystems at the forefront of their efforts. This collaborative endeavor is made possible through a partnership between the Wilder Institute/Calgary Zoo and Bow Habitat Station, a Government of Alberta environmental learning centre. Join us annually to celebrate the rich variety of life in our province and discover what can be done to protect and nurture these diverse ecosystems.

Natural Regions of Alberta

Are you ready for a family-friendly adventure that will take you deep into the heart of Alberta's incredible natural world? Join us at the Alberta Biodiversity Festival, where the wonders of our province's diverse landscapes and incredible wildlife come to life through fun, educational, and interactive activities that the whole family can enjoy.

Natural Regions of Alberta

Grasslands

- Dry Mixedgrass
- Mixedgrass
- Fescue

Parkland

- Parkland

Rocky Mountain

- Alpine
- Subalpine
- Montane

Foothills

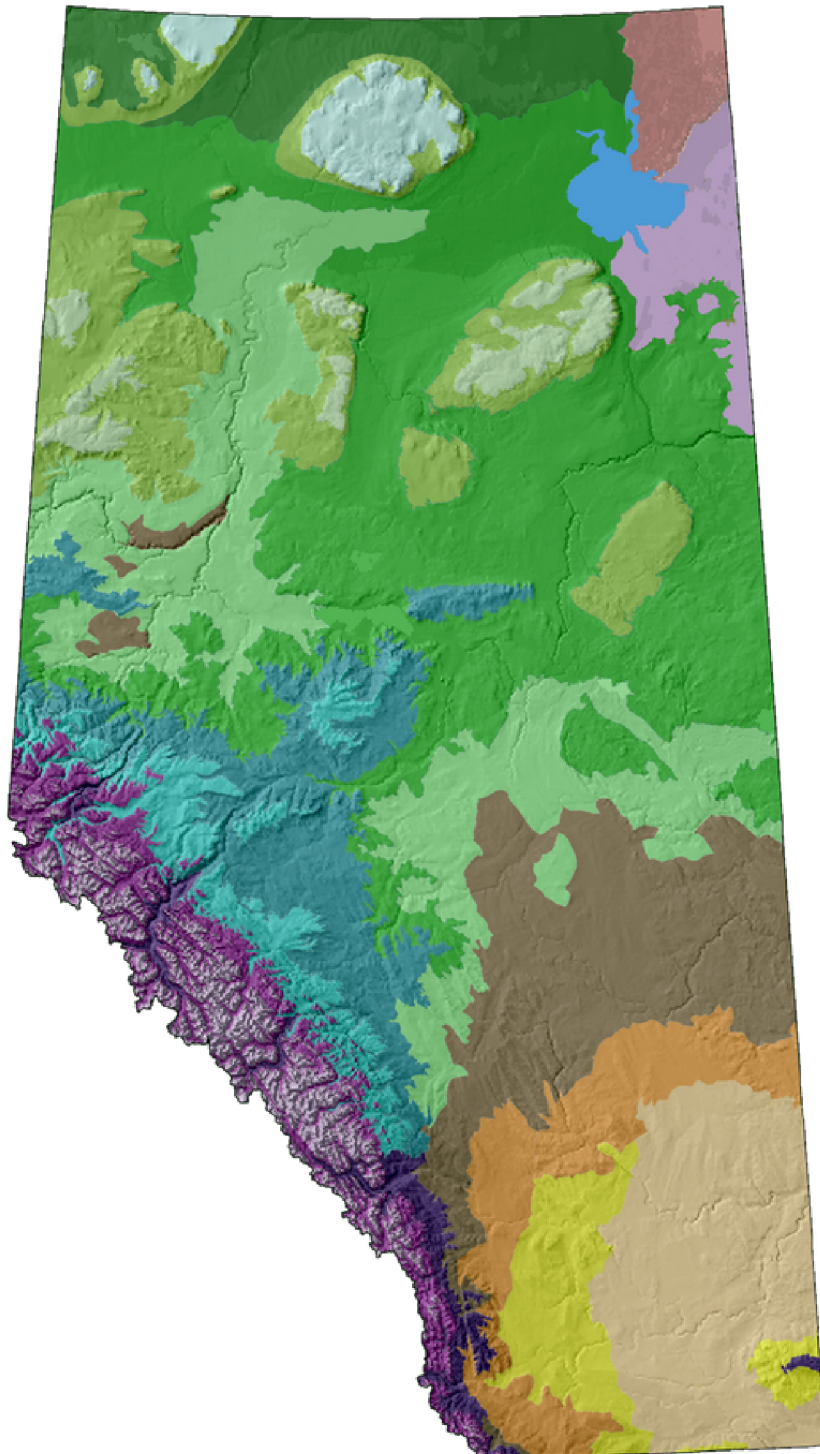
- Lower Foothills
- Upper Foothills

Boreal Forest

- Dry Mixedwood
- Central Mixedwood
- Northern Mixedwood
- Boreal Subarctic
- Peace-Athabasca Delta
- Lower Boreal Highlands
- Upper Boreal Highlands
- Athabasca Plain

Shield

- Kazan Uplands



Wilder Institute/Calgary Zoo: Conservation Programs

Learn about the Wilder Institute/Calgary Zoo's conservation programs!
Find and circle all of the direction words that are hidden in the grid.

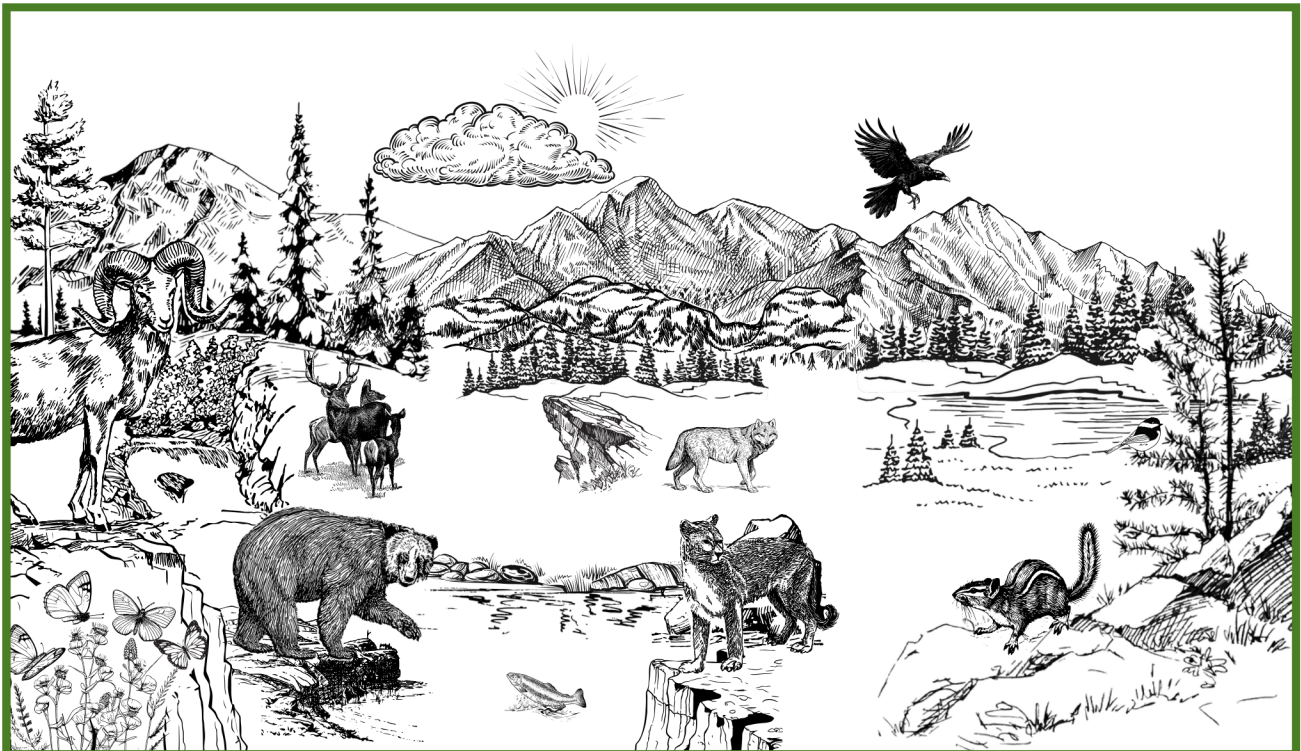
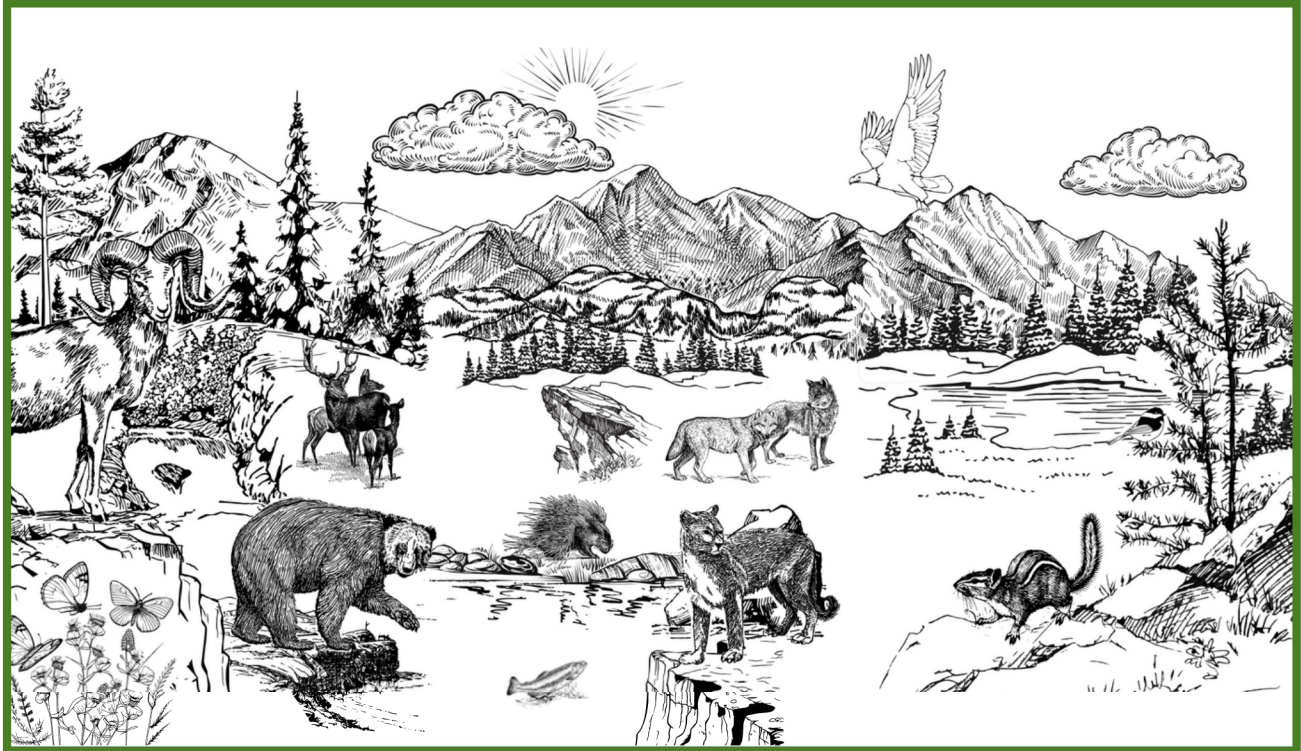
A B W H O O P I N G C R A N E C T O O
C U U F O A Y G O F P O N N Y V E R C
O R X V B P E Z G A G V O V E S K J W
N R U P R L C E W S R I C Z U O N S B
S O D P E Q X Y N G T R F O G U K N H
E W N L K F Y M Y A Y V R I D Y B F Z
R I Q Y W W V B C S U G M N X Q R X G
V N G A I J Y O L H E P K O H D R A E
A G X D C T L K O G C O M M U N I T Y
T O V T Z S K F A S W I F T F O X N O
I W G F N K J S I L O R U J Z N X H T
O L B A N R R F F U V U G F M Q Z M E
N O R T H E R N L E O P A R D F R O G
W T Y Q T T R K D S J A M U Z J L J H
M K L A L Z D K K N H W W Y A S I V K
S O E J X Q Z R P N E T P O H D W D I
X R B L A C K F O O T E D F E R R E T
G R E I N T R O D U C T I O N R B S W
J O X T B L D E R A N F Y J M X Z U F

1. Swift fox
2. Burrowing owl
3. Greater sage-grouse
4. Northern leopard frog
5. Whooping crane
6. Black-footed ferret
7. Conservation
8. Reintroduction
9. Translocation
10. Community

The Wilder Institute/Calgary Zoo is a leading authority on wildlife conservation, reintroducing threatened species to the wild and empowering communities to conserve their own natural resources to positively impact both nature and people.

Connecting with the Boreal Forest

Examine the two images carefully to identify six differences between them. Circle the differences you spot. Pay close attention to details such as animals, plants, and their surroundings. Once you've found all the differences, consider how these animals and elements are part of the Boreal Forest ecosystem.



ANSWER KEY: 1. Eagle switch to a raven, 2. Second cloud missing, 3. Two wolves to one wolf, 4. Missing porcupine, 5. Extra Butterfly, 6. Inverted trout in water

Connecting with the Rocky Mountains

Match the animal tracks with the correct animal found in the Rocky Mountains. Use the provided images and descriptions to help you make the matches. Have fun exploring the wildlife of the Rocky Mountains!

1



GRIZZLY BEAR

Bear tracks can be distinguished by five toes at the front in a line with deep claw marks. The hind foot is larger than the front foot. Grizzly bears have larger paws with longer claw marks compared to black bears.

2



GREY WOLF

Wolf tracks look very similar to dogs, but are much larger. They have four visible toes on each foot, both front and back, and have visible claw marks. Wolves use their claws for traction when running.

3



DEER

Deer walk on two hooved toes that are pointed towards the front. The two deer species in Alberta, the Mule Deer and White-Tailed Deer, have almost identical tracks and it is almost impossible to tell them apart.

4



PIKA

Pikas have four toes on their front feet and five on their hind feet, with claw marks often visible. Their tracks are small and can be seen in a hopping pattern, as pikas move by leaping. Unlike other small mammals, their hind feet are only slightly larger than their front feet.

5



LYNX

Lynx tracks have four toes visible on their front and hind tracks. Their front paws are slightly bigger than their hind paws. The tracks are larger than those of a domestic cat, measuring approximately two inches in size.

6

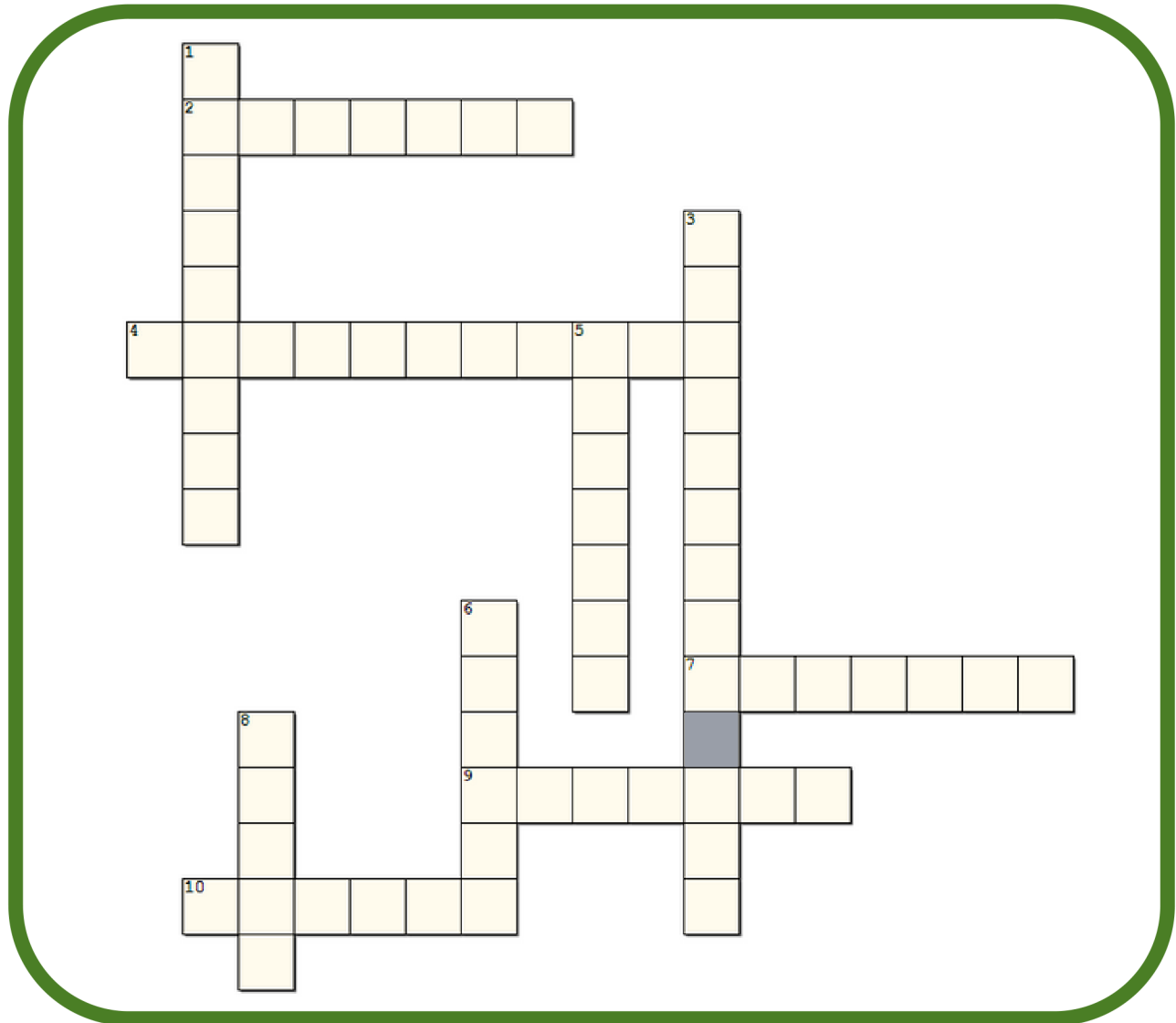


RED SQUIRREL

Squirrel tracks have four visible toes on the front and five visible toes on the back, both with visible claw marks. The front paws have two small dots behind the palm: these are additional paw pads.

Connecting with the Grasslands

Fill in the crossword grid with words based on the given clues. Words can be placed horizontally or vertically. Each word fits only once. Use provided descriptors for help. Enjoy exploring Alberta's grasslands!



ACROSS

2. Canadian province known for having six natural regions
4. Insect known for its jumping ability
7. Feeding on grass in the open
9. Warm, dry wind in the Rocky Mountains
10. Wild canine native to North America

DOWN

1. Aromatic shrub common in grasslands
3. Small owl species that nests underground (Two words)
5. Wide grassy plain
6. Type of grass commonly found in prairies
8. Large North American mammal

Connecting with the Parklands & Foothills

Native wildflowers found in Alberta's parkland and foothills natural regions:



GIANT HYSOP
Agastache foeniculum



LONG-HEADED ANEMONE
Anemone cylindrica



PRICKLY WILD ROSE
Rosa acicularis



ALPINE ASTER
Aster alpinus



STREAMSIDE FLEABANE
Erigeron glabellus



ANNUAL SUNFLOWER
Helianthus petiolaris



SILKY SCORPION WEED
Phacelia sericea



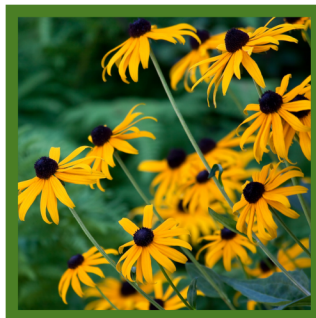
SILVERY LUPINE
Lupinus argenteus



SHOWY JACOBS LADDER
Polemonium pulcherrima



LANCE-LEAVED STONECROP
Sedum lanceolatum



BLACK-EYED SUSAN
Rudbeckia hirta



PARRY'S TOWNSENDIA
Townsendia parryi

Connecting with the Parklands & Foothills

Did you know... native wildflowers use less water, require less maintenance, and can survive better in Calgary's climate? Alberta's wildflowers have evolved to thrive in this exact environment, compared to other species of flowers that are better adapted to living in different parts of the world.

Take back your garden with wildflower seed bombs! These are easy to grow seeds that don't require anything special to grow other than water during the first year, and most will germinate in weeks to months, while some need a season to grow. Throw the seed bomb in your garden and see what native wildflowers grow!

1

COLLECT SOIL

Use the ice cream scoop to get a ball of soil.



2

ADD A SPRITZ OF WATER

Add a bit of water to help the soil stick to itself and the seeds.



3

FORM THE SOIL INTO A BALL

Use your hands to form the soil into a ball with small dent in the middle.



4

ADD A PINCH OF SEEDS

Add a pinch (20-30) seeds to the dent in the ball and cover them with soil.



5

LET DRY AND PLANT!

Once at home, throw your seed bomb into your garden and water it. Wait and see which wildflowers bloom!

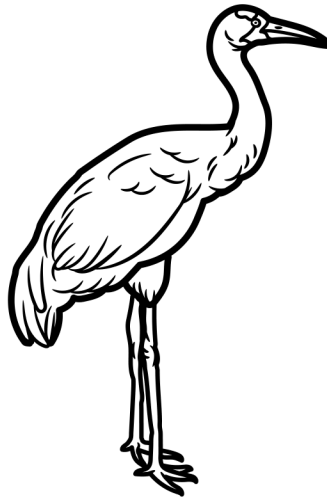


Connecting with Wetlands

Wetlands are mesmerizing pockets of nature found across Alberta's landscapes. The sounds, smells, and sights are unlike any other ecosystem. Wetlands provide many ecological services and are integral to the health of Alberta. They cover approximately 21.7% of Alberta's total area and are found primarily in the north of the province. Colour some animals found in Alberta's wetlands!



Muskrat



Whooping Crane



Northern Leopard Frog

WHOOPING CRANE CONSERVATION PROGRAM

DID YOU KNOW?

Whooping cranes have a wing span of 7.5 feet (2.286 metres)!



The Wilder Institute/Calgary Zoo wants to better understand the problems faced by whooping cranes. By researching new ways to help move them and improving how they reproduce in captivity and in the wild, we hope to create stable and strong whooping crane populations in nature that can survive on their own and handle environmental challenges.

Connecting with the Canadian Shield

The Canadian Shield in Alberta is a region of rugged natural beauty, characterized by its ancient, Precambrian rock formations and vast boreal forests. This area, part of one of the world's oldest geological formations, offers a stunning landscape of rocky outcrops, sparkling lakes, and dense woodlands. This region is rich in minerals and home to diverse wildlife.

MINERAL OR ROCK SORTING GAME

Below are 12 different types of rocks or minerals found in the Canadian Shield region of Alberta. Write 'A' or 'B' beside the name to indicate if it is a rock or mineral.

A MINERAL

A solid material with a specific chemical composition and structure. Minerals are the building blocks of rocks and have unique properties like color, hardness, and crystal shape.

B ROCK

A solid material made up of one or more minerals. Rocks form the Earth's outer layer and come in different types like igneous, sedimentary, and metamorphic.



1) Gneiss _____



2) Sandstone _____



3) Limestone _____



4) Granite _____



5) Pyrite _____



6) Basalt _____



7) Quartz _____



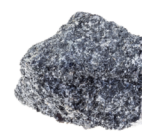
8) Gabbro _____



9) Copper _____



10) Dolomite _____



11) Amphibolite _____

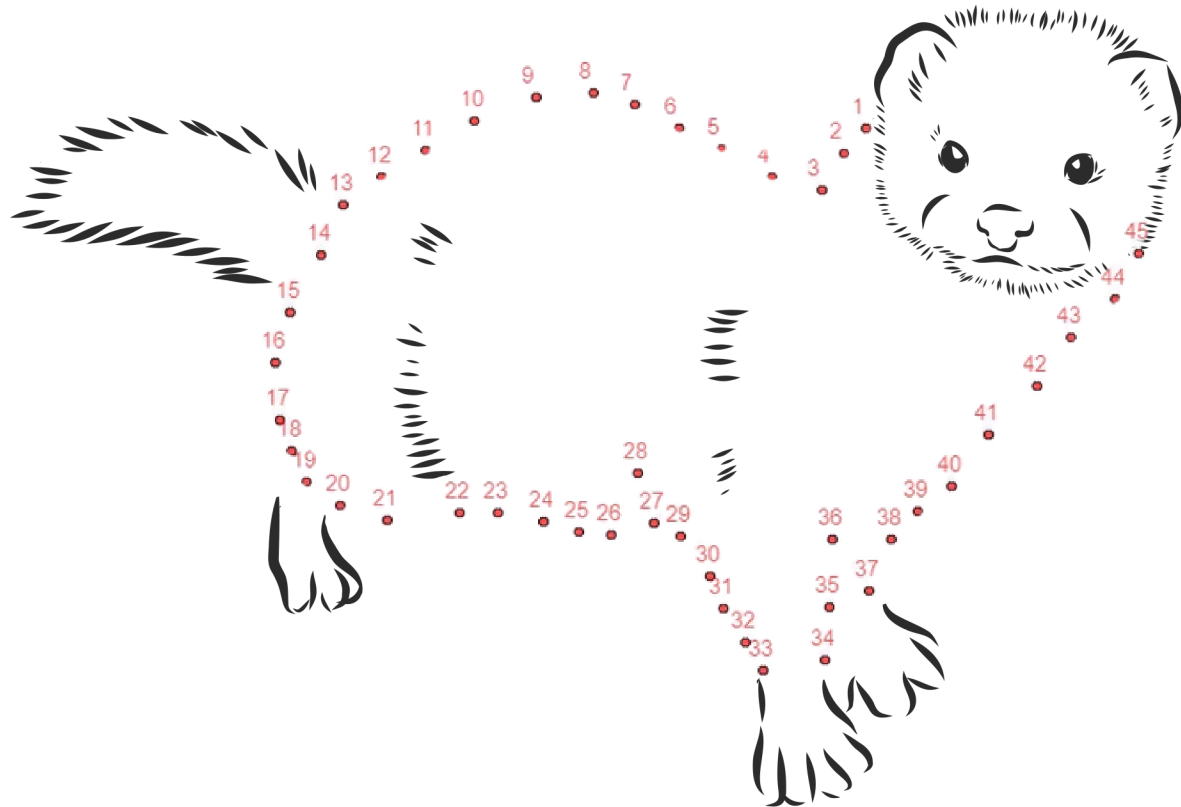


12) Gold _____

Connecting with the Canadian Shield

The Government of Alberta's Kazan Wildland Provincial Park protects a large portion of Alberta's Canadian Shield natural region (6,600 km²). This unique environment not only showcases the geological history of our planet but also highlights the importance of conservation in preserving its pristine beauty and ecological significance.

CONNECT THE DOTS: MINK EDITION






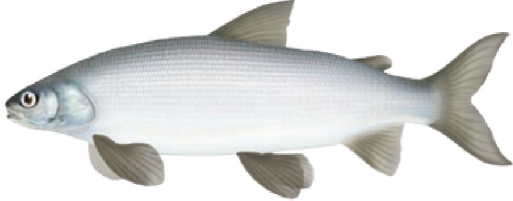

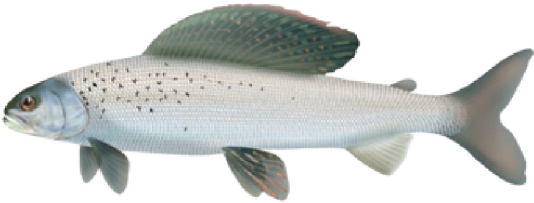
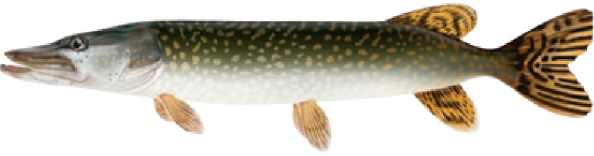
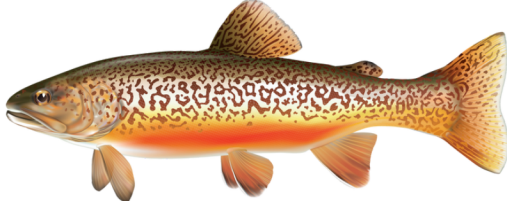
DID YOU KNOW?

Mink must eat at least 1/3 of their body weight in food every day to survive!
Their diet includes fish, birds, amphibians, and small mammals.



Connecting with Rivers & Lakes

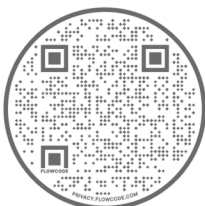
Alberta is home to over 65 different fish species within its lakes and rivers. Explore the links below to learn about different fish species in Alberta, species at risk, and the prevention of aquatic invasive species. Below, circle the fish that are native to Alberta.

<p>Athabasca Rainbow Trout</p> 	<p>Bull Trout</p> 
<p>Prussian Carp</p> 	<p>Lake Whitefish</p> 
<p>Brook Trout</p> 	<p>Arctic Grayling</p> 
<p>Northern Pike</p> 	<p>Tiger Trout</p> 

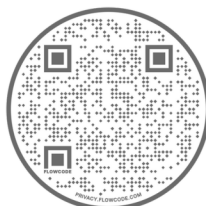
Images adapted from Government of Alberta



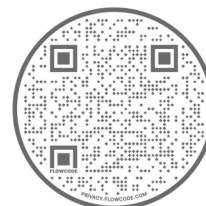
Fish Identification Video



Environmental Learning Centre in Calgary



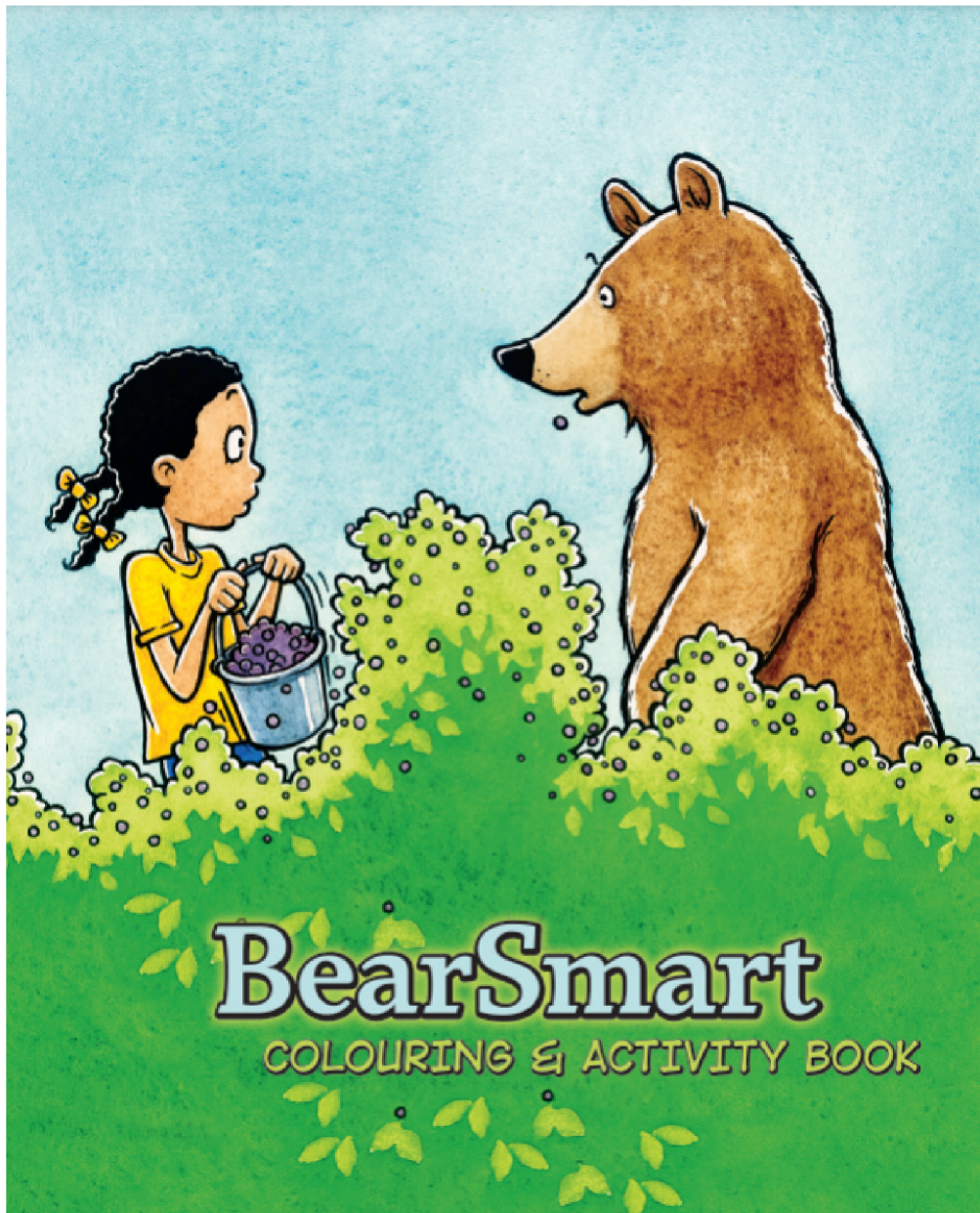
Alberta's Fish Species



Connecting with Nature

Scan the QR code below to access the Government of Alberta's BearSmart Colouring and Activity Book. The BearSmart program is a public awareness program which aims to reduce conflict between bears and people.

ALBERTA BEARSMART PROGRAM



Alberta

