OTHER RESOURCES:


Especially For Children

Owl, Chickadee, Ranger Rick, National & International Wildlife, and National Geographic magazines contain excellent articles and photographs on animals.
ANIMAL SCRAMBLE
1. ELK
2. WHITE-TAILED DEER
3. SPIDER
4. BEAR
5. BEAVER
6. GREAT HORNED OWL
7. CATERPILLAR
8. COYOTE
9. PORCUPINE
10. HARE
11. SQUIRREL
12. POCKET GOPHER
13. RED ANT
14. FLICKER

ANIMAL EVIDENCE WORD SEARCH
SECRET MESSAGE: Animal evidence super sleuth of today.

NATURE CROSSWORD PUZZLE

MATCH THE SCATS AND TRACKS
This Take-home booklet will help you identify some of the animal signs you may have discovered here in Kananaskis Country. Animal signs are traces or clues that animals leave behind which tell you what they’ve been doing. For example, if you found a sign on a muddy beach which looked like this:

you would know that a human had been around. If you looked at the sign more closely, you might be able to tell how big the person was, which way they were going and maybe even how fast they were traveling. Signs like these on the ground would also tell you a person had been around. Upon closer inspection, you could tell what sort of food that person had eaten and maybe even how long ago it was eaten. By being observant, you can find out something about that person without ever seeing him or her.

We can find out about other animals in the same way. We are often lucky enough to view animals, yet even if we don’t see them, we can still know they are around by the signs they leave behind. The trick is to be able to recognize and read these signs.

This booklet will help you in your investigations of animal signs. Use it here and then take it home with you to use when you go for other hikes. This booklet also provides space to complete the activities recommended in the It Remains to be Seen Activity Booklet. There are also puzzles for you to do at home.

TRAVEL SAFELY AND HAVE FUN!
<table>
<thead>
<tr>
<th>ANIMAL</th>
<th>SIGN</th>
<th>GENERAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTHERN POCKET GOPHER</td>
<td><img src="image1.png" alt="Image" /></td>
<td>Pocket Gophers are seldom seen, but their piles of excavated dirt are easily recognized. They eat the roots and shoots of flowers. They have external cheek pouches, and lips which close behind their teeth to keep the dirt out as they dig.</td>
</tr>
<tr>
<td>Thomomys talpoides</td>
<td><a href="image2.png">Image</a></td>
<td>23 cm long including tail</td>
</tr>
<tr>
<td></td>
<td>Look for piles of freshly dug earth. A small plug, covering the hole entrance, can sometimes be seen.</td>
<td></td>
</tr>
<tr>
<td>GREAT HORNED OWL</td>
<td><img src="image3.png" alt="Image" /></td>
<td>Owls are most active at night when they hunt for rodents, hares and birds. The Great Horned Owl is one of the largest of the owls in this area. Listen for its deep hoo, hoo-hoo-hoo, hoo call.</td>
</tr>
<tr>
<td>Bubo virginianus</td>
<td><a href="image4.png">Image</a></td>
<td>50 cm long</td>
</tr>
<tr>
<td></td>
<td>4-11 cm long</td>
<td>Owl pellets are regurgitated bundles, made up of the bones and fur of the owl's prey.</td>
</tr>
<tr>
<td>COMMON FLICKER</td>
<td><img src="image5.png" alt="Image" /></td>
<td>Look for the nest hole of the Flicker which is approximately 5 cm in diameter and is located 3-10 metres off the ground in a dead tree. Flickers prefer open forests. They eat ants or insects found on or under the bark of trees.</td>
</tr>
<tr>
<td>Colaptes auratus</td>
<td><a href="image6.png">Image</a></td>
<td>27 cm</td>
</tr>
<tr>
<td></td>
<td>nest hole</td>
<td></td>
</tr>
<tr>
<td>RUFFED GROUSE</td>
<td><img src="image7.png" alt="Image" /></td>
<td>Known by its mating or drumming call in the spring: Put-put-put-put-purr! and its loud flutter of wings when startled. Grouse browse on buds, leaves and twigs. In winter they bury themselves entirely in snow to keep warm.</td>
</tr>
<tr>
<td>Bonasa umbellus</td>
<td><a href="image8.png">Image</a></td>
<td>10-15 cm foot</td>
</tr>
<tr>
<td></td>
<td>foot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>scat</td>
<td></td>
</tr>
</tbody>
</table>

NATURE CROSSWORD PUZZLE

Answers are on page 22 of this booklet.
19 **Clues in Nature Crossword Puzzle**

**ACROSS**
1. Elk, bear, squirrels and coyotes are a few types of ____________.
4. Bears find these useful for digging up food.
7. A body of water associated with beavers.
8. Animal whose fur turns white in winter and is called the Snowshoe ____________.
9. A beaver lodge and an ant hill are types of animals’ ____________.
10. A bird’s home.
12. A coyote or bear’s home.
13. Bony structure found on elk and deer.
14. Bears ____________ trees in order to mark their territory.
15. Large member of the deer family, often seen in herds.
18. Animals which build dams and lodges.
20. Small relative of the elk.
22. Signs of woodpecker activity.
24. Seeing an animal often is ____________, but finding signs is common.
25. Small animal with 6 legs, common in summer.
26. Used to make casts of animal tracks.
27. Home of these numerous, ground-dwelling insects.

**DOWN**
1. Favourite food of elk.
2. Squirrel’s refuse pile.
3. Droppings left behind by various animals.
4. Beavers have to do a lot of ____________ to chop down trees.
5. Bird with a strong beak.
6. Thin, papery home of one type of insect.
7. Tracks are easy to find in muddy areas ____________, water.
8. One type of animal sign.
9. Not an insect because of two body parts and 8 legs.
10. Elk and deer droppings are ____________-shaped.
11. Large animal whose tracks have claw marks visible.
12. One of the ways tracks are identified is by ____________.
13. Tracks are also identified by ____________.
14. What this crossword puzzle is all about: animal ____________.

**ANIMAL**  **SIGN**  **GENERAL INFORMATION**

<table>
<thead>
<tr>
<th>ORB-WEAVER SPIDER</th>
<th>Tetragnatha spp.</th>
<th>up to 10 mm long</th>
<th>Web</th>
<th>Webs are spun with silk which is produced by the spider. The webs are used to capture prey such as insects which the spider then paralyzes with venom. Spiders are very helpful in controlling insect populations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED ANTS</td>
<td>5-10 mm</td>
<td>carpenter ant galleries</td>
<td>ant hill</td>
<td>Red ants build their nests in the ground. They carry the grains of soil to the surface and deposit them in a pile. Carpenter ants build their nest in old logs. The tunnels made by the ants provide homes for the colony and a place to raise their young.</td>
</tr>
<tr>
<td>CARPENTER ANTS</td>
<td>up to 20 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATERPILLAR</td>
<td>up to 50 mm</td>
<td>chewed leaves and cocoons</td>
<td></td>
<td>There are many types of caterpillars and other animals which are responsible for chewing leaves in the forest. See if you can discover which caterpillars are responsible for chewing the leaves you find.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**GENERAL INFORMATION**

A variety of insects are responsible for the formations of galls on the stems and leaves of plants. For example, aphids form Spruce galls and a type of wasp forms the Rose gall. Galls are swellings, growths or discolourations on leaves and stems of plants. Somehow the insect disrupts the normal growth of the plant and the plant grows around the insect. The gall provides the insect with food and protection.
During the berry season, bear scat often looks more like cowpies full of berries. The scats shown above are approximately 3.5 cm in diameter.

Coyote scats are often filled with small bones and hair.

Coyote scats are often filled with small bones and hair.

See if you can find all the words hidden below. They may run forwards, backwards, horizontally, vertically, or diagonally. Circle the letters of each word carefully. When you have found all the words on the list, read through the word search from left to right, top to bottom and place all the unused letters you find in sequence in the spaces below. These letters will spell out a secret message. (Answer is on page 22 of this booklet.)

**ANIMAL EVIDENCE WORD SEARCH**

<table>
<thead>
<tr>
<th>ANIMAL</th>
<th>TRACK</th>
<th>SCAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLACK BEAR</td>
<td>[Image]</td>
<td>During the berry season, bear scat often looks more like cowpies full of berries. The scats shown above are approximately 3.5 cm in diameter.</td>
</tr>
<tr>
<td>Ursus americanus</td>
<td>Front</td>
<td>Hind</td>
</tr>
<tr>
<td>males 160 cm long</td>
<td>[Image]</td>
<td>18-20 cm</td>
</tr>
<tr>
<td>COYOTE</td>
<td>[Image]</td>
<td>Coyote scats are often filled with small bones and hair.</td>
</tr>
<tr>
<td>Canis latrans</td>
<td>Front</td>
<td>Hind</td>
</tr>
<tr>
<td>120 cm long including tail</td>
<td>[Image]</td>
<td>6-7 cm</td>
</tr>
<tr>
<td>8.5 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMERICAN BEAVER</td>
<td>[Image]</td>
<td></td>
</tr>
<tr>
<td>Castor canadensis</td>
<td>Front</td>
<td>Hind</td>
</tr>
<tr>
<td>105 cm long including tail</td>
<td>[Image]</td>
<td>7 cm</td>
</tr>
<tr>
<td>17 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-5 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PORCUPINE</td>
<td>[Image]</td>
<td></td>
</tr>
<tr>
<td>Erethizon dorsatum</td>
<td>Front</td>
<td>Hind</td>
</tr>
<tr>
<td>77 cm long including tail</td>
<td>[Image]</td>
<td>8 cm</td>
</tr>
<tr>
<td>2.5 cm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECRET MESSAGE:** __ __ __ __ __ __ / __ __ __ __ __ __ __ __ / __ __ __ __ __ __ __ __ __ / __ / __ __ __ __ __

**ANIMALS**

- ANTHILLS
- ANTLERS
- BEAVERLODGE
- BONES
- BROWSE
- BURROWS
- COYOTE
- DEER
- ELK (2)
- FEATHER
- FUR
- GALLS
- GAME TRAIL
- GROUND
- HOLES
- MIDDLE
- NEST
- OWL PELLETS
- PORCUPINE
- REMAINS
- SCAT
- SIGN
- SOUNDS
- SQUIRREL
- TRACKS
- TREE
- WEB
- WOODPECKER

**HOMES**

- ANIMALS
- ANTLERS
- BEAVERLODGE
- BONES
- BROWSE
- BURROWS
- COYOTE
- DEER
- ELK (2)
- FEATHER
- FUR
- GALLS
- GAME TRAIL
- GROUND
- HOLES
- MIDDLE
- NEST
- OWL PELLETS
- PORCUPINE
- REMAINS
- SCAT
- SIGN
- SOUNDS
- SQUIRREL
- TRACKS
- TREE
- WEB
- WOODPECKER
ANIMAL SCRAMBLE

Unscramble these letters to discover the names of some of the animals you may have seen today, either in person or from their signs (answers are on page 22 of this booklet.

1. LEK
2. TILERATEWHIDEED (3 words)
3. DERIPS
4. AREB
5. EVBARE
6. NOREATGROWLHED (3 words)
7. PETARLIACLR
8. CEYOTO
9. CRINEPPUO
10. REHA
11. QRILESUR
12. GOOPKETHERCP (2 words)
13. TARDEN
14. RILEFCK

<table>
<thead>
<tr>
<th>FOOD</th>
<th>HOME</th>
<th>GENERAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants include grasses, sedges, berries and nuts. Animals include ants, grasshoppers, fish, small mammals, and the decaying flesh of dead animals.</td>
<td>Found in wooded areas and alpine meadows. They den in any protected area such as a cave, under a log or in a hollow.</td>
<td>Bears like to scratch and rub up against trees. Look for claw marks on trees which have been used for this purpose.</td>
</tr>
<tr>
<td>Coyotes hunt for small rodents and hares. They also scavenge for meat left by other animals, and eat some vegetable matter.</td>
<td>Coyotes can be found in open woodlands and in cultivated areas. They den in the ground or under other forms of shelter.</td>
<td>One way to tell a coyote from a dog is by watching it run. A coyote holds its tail down when it runs. Coyotes are mostly nocturnal (active at night). Listen for their yips and howls at night.</td>
</tr>
<tr>
<td>Beavers eat the bark and twigs of aspen, balsam, poplar, birch and willow.</td>
<td>Look for the beaver lodge along stream banks or beside the pond formed by the beaver dam.</td>
<td>Beavers are usually nocturnal. Listen for their loud warning tail-slap on the water. The ponds that beavers create with their dams provide homes for many types of plants and animals.</td>
</tr>
<tr>
<td>Porcupines eat buds, small twigs and the inner bark of trees. They are also very fond of salt and therefore chew axe handles, car tires or the salty leather of hiking boots left outside.</td>
<td>Porcupines are usually found in forested areas. They can sometimes be seen perched in trees. They den in hollow trees or caves.</td>
<td>Porcupines are most active at night. If you see trees with the bark stripped from the upper branches, it usually means that a porcupine has been feeding there.</td>
</tr>
</tbody>
</table>
## ANIMAL TRACKS

<table>
<thead>
<tr>
<th>ANIMAL</th>
<th>TRACK</th>
<th>SCAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED SQUIRREL (Tamiasciurus hudsonicus)</td>
<td>Hind</td>
<td>Front</td>
</tr>
<tr>
<td>31 cm lon including tail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNOWSHOE HARE (Lepus americanus)</td>
<td>Hind</td>
<td>Front</td>
</tr>
<tr>
<td>48 cm long including tail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHITE-TAILED DEER (Odocoileus virginianus)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>190 cm long</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MULE DEER (Odocoileus hemionus)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180 cm long</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HOME SWEET HOME

Spider Web Patterns
Draw your spider web pattern here:

![Spider Web Pattern](image)

#### Haiku Poem
Write your Haiku poem here:

**title**

5 syllables

7 syllables

5 syllables
HOME SWEET HOME

Score Card

first sign ....................................10 points
each additional sign .................5 points

<table>
<thead>
<tr>
<th>Player's Name</th>
<th>Player's Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs</td>
<td>Signs</td>
</tr>
<tr>
<td>Points</td>
<td>Points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Player's Name</th>
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<td>Signs</td>
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<tr>
<td>Points</td>
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<table>
<thead>
<tr>
<th>Player's Name</th>
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<tbody>
<tr>
<td>Signs</td>
<td>Signs</td>
</tr>
<tr>
<td>Points</td>
<td>Points</td>
</tr>
</tbody>
</table>

FOOD

Squirrels feed on seeds, nuts, eggs, fungi, insects and other small animals. They often have caches of cones or fungi. They may have a favourite feeding stump which is easily identified by the pile or midden of cone flakes around it.

Hares feed on succulent vegetation in the summer and on twigs, bark and buds in winter. When eating, the hare nips off its food at a neat 45° angle.

Whit-tailed Deer prefer twigs, shrubs, grasses, flowers and fungi. Shredded stem ends are clues that deer have been around.

Mule Deer prefer to eat twigs, shrubs, grass and flowers. They tend to graze more on grasses in the summer than do Whit-tailed Deer. They tear these plants off leaving ragged edges behind.

HOME

Red squirrels are usually found in pine and spruce forests. They nest either in a hole in a tree or they build nests in the branches. The nests are made of leaves, twigs and shredded bark.

Snowshoe Hares can be found in both coniferous and deciduous forests. They take shelter under logs, in thickets or under trees.

Whit-tailed Deer can be found in forests and in open bush areas.

Mule Deer can be found on the edges of open mountain forests. They find shelter in thick bush.

GENERAL INFORMATION

Listen for their chattering as you walk through the woods.

Hares are nocturnal (most active at night). They turn white in winter and brown in summer. They have large hind feet which help them travel on top of the snow.

When the Whit-tailed Deer is frightened, it sticks its tail up like a flag and runs off with a rocking-horse gait. They are mostly active at dawn and dusk. Their antlers branch like a tree.

The Mule Deer has a black-tipped tail and very large ears. When frightened, it keeps its tail down and gallops off with a stiff-legged bouncing motion. Their antlers branch into a Y and each Y branches into another Y.
What animals made these signs and why?

1. Sawdust on the ground and holes in the trunk of the tree.

2. Three to five lines scratched in the bark two to four metres off the ground.

3. Bark rubbed off the young aspens from one to two metres off the ground.

4. Patches of bark stripped off the tree a few metres off the ground.

5. A series of carved galleries or tunnels under the bark of a dead tree. (Please be sure to put the bark back as you found it.)

6. A large pile of cone scales covering the ground next to a tree or log.

7. The ends of the shrubs have been chewed off, leaving ragged edges.

8. The ends of the shrubs have been chewed off, leaving neat 45 angle cuts.

Write a story about the events which led up to the making of any one of these signs.

___________________________________________________________

___________________________________________________________

___________________________________________________________
FOOD                  HOME                  GENERAL INFORMATION
Favourite foods include grasses, flowers, twigs and bark. Elk are usually found in semi-open forest in the foothills and in valleys. They are often seen in herds. Elk are most active in the mornings and evenings. During the rut (fall mating season), the males produce a high-pitched bugling call.
**TRACKING THE TRACKS**

To make a positive cast of your track, lay the cast on a flat surface with the track facing up. Cover the surface of the track with a thin coating of cooking oil.

Fit a plastic collar around the cast so that it sticks up 3 cm above the cast.

Mix up some plaster of Paris according to the instructions on the box (plaster of Paris can be purchased at most hardware stores).

Pour the plaster over the track.

Let it set and then carefully separate it from the track.

You will now have an impression of the track as you first saw it in the ground.

---

**LIFE IN THE POND**

How many of the beaver signs in this picture can you find in or near the pond? Check off the things you find.

![Beaver pond scene with various signs marked]

Compare the signs at the beaver pond to signs in our human community?

<table>
<thead>
<tr>
<th>BEAVER POND</th>
<th>HUMAN COMMUNITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g., chewed stumps</td>
<td>trees felled by loggers</td>
</tr>
<tr>
<td>submerged branches</td>
<td></td>
</tr>
<tr>
<td>beaver lodge</td>
<td></td>
</tr>
<tr>
<td>beaver pathway</td>
<td></td>
</tr>
<tr>
<td>beaver dam</td>
<td></td>
</tr>
</tbody>
</table>