Ottawa-Carleton Wildlife Centre

BIODIVERSITY

A booklet of self-guided activities for your nature walk

NATURE...DISCOVER, ENJOY, PROTECT

More info at www.wildlifeinfo.ca

Trail Activities

I Spy

Learn about the plants and animals you see and hear on your nature walk.

The Centre is home to 21 species of mammals, 131 species of birds, 14 species of reptiles and amphibians, and 250 species of insects.

How many will you see?

Name the Tree

Looking to challenge yourself and learn more about the trees of the Ottawa region?

Follow the dichotomous key to identify five trees found along the trail.

What Animal Lives Here?

We can learn a lot about animals even when we can't see them. Explore the marked habitats to identify which creatures call them home.

Common Sightings at the Centre

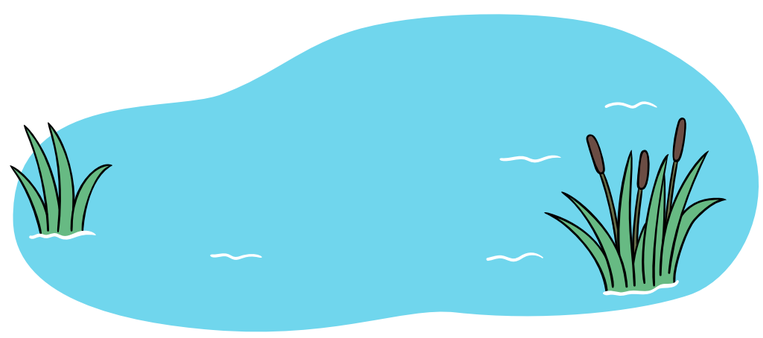
Images and descriptions of species you will likely encounter during a nature walk at the Centre.

I Spy

Throughout your trail walk you will come across fields, wetlands, forests, and stormwater ponds. Each offers a unique habitat for wildlife. Keep eyes and ears open for a chance to spot new flaura and fauna along the trail.

- EASTERN CHIPMUNK
- WHITE-TAILED DEER
- COMMON RACOON
- DOWNY WOODPECKER
- KILLDEER

- RED-WINGED BLACK BIRD
- CATTAILS
- DRAGONFLIES
- MALLARD



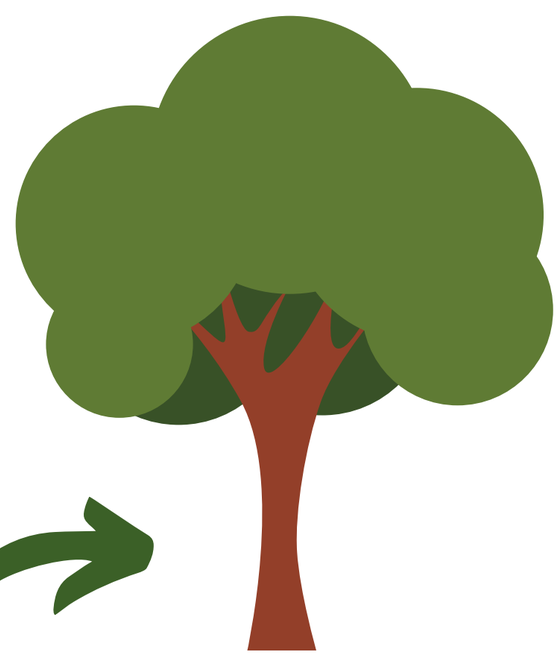
- BEAVER
- GREAT EGRET
- SNAPPING TURTLE
- PAINTED TURTLE

Name the Tree

Throughout your trail walk you will come across 5 trees marked with different coloured signs. Your goal is to identify each tree type using the dichotomous key provided. Once you think you have identified the species of tree, flip to the corresponding coloured info sheet to learn more about the tree in front of you.

Crown:
the branches, twigs, leaves/needles etc. of a tree. The shape of the crown gives clues as to which tree species you are observing.

Leaves:
the colour, shape, size, and texture of leaves can aid in distinguishing similar tree species. Simple leaf structure is defined as a single leaf to stem; whereas, compound leaves have a number of leaflets and one stem.



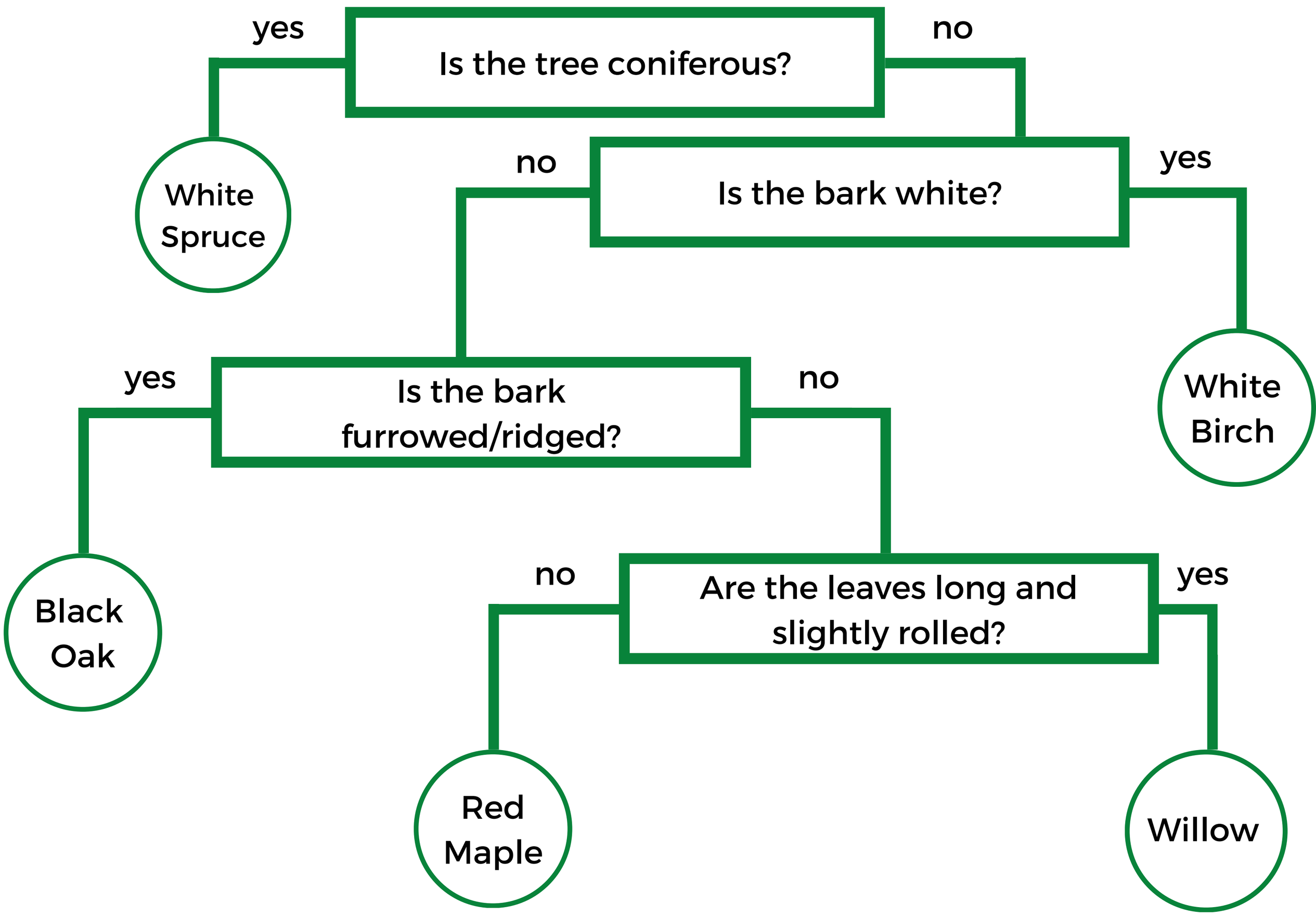
Bark:
arborists look at both the colour and texture of the bark to identify species.

Leaf Arrangement:
leaves can grow on twigs in three ways. Alternate arrangement
means the leaves switch sides on the twig. Opposite arrangement has leaves growing in the same place on both sides of the twig. Lastly, whorled growth
indicates the leaves are growing in a circular fashion around the twig.

Location:
Tree species have different levels of tolerance for shade. The location of the tree can be a clue based on the amount of direct sunlight it receives.

Using a Dichotomous Key

A dichotomous key consists of a series of choices that allow you to identify a species. Based on your observations, select the answer that best suits the tree you are studying.



Black Oak

Black Oak trees have lobed leaves. Their bark is dark grey and becomes furrowed with age. It can be distinguished from Red Oaks as it has fewer lobes and more drastic U shaped leaves. Black Oaks have acorns with a slightly hairy cup. Their inner bark was used as yellow dye in the 1940s. Their bark is also a source of tannins for the leather industry.

White Birch

White Birch trees have large, doubled toothed oval leaves. They are shade intolerant but can grow in almost any soil. White Birch trees have white bark that peels off in strips. The black patches of bark are caused by fungus. The White Birch has been used to make canoes.

Red Maple

Red Maple trees differ from Sugar and Silver Maples as they have fewer lobes. Additionally, Red Maple leaves have sharp V lobes that can grow to be 5-15cm long. Their light grey bark becomes ridged with age. Red Maples will grow red flowers in the spring before leaves sprout.

Willow

There are 26 species of willow trees and shrubs in Ontario. Willows grow in moisture rich soil, often found near bogs and marshes. Their interlacing roots aid in preventing errosion. Willow wood is soft and ideal for basket weaving.

White Spruce

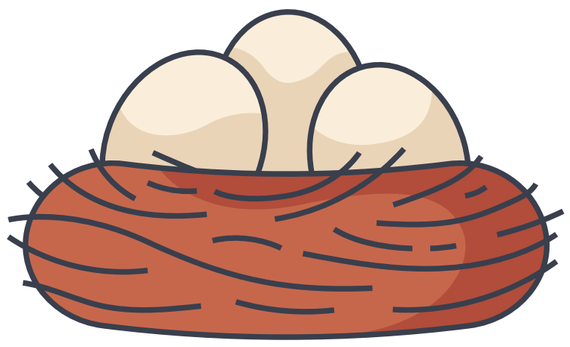
White Spruce trees are coniferous trees with single, needle-like leaves. They can be identified by their bluish-green needles and pale brown cones. Another name for White Spruce is Canadian Spruce. These trees are often used for Christmas trees.

What Animal Lives Here?

It is possible to identify the type of animals living around the Centre without seeing the animal itself. Wildlife are often afraid of humans or are nocturnal, making them difficult to see during a nature walk. Many animals live throughout the forest and wetland you'll be walking through today. Look out for the 11 listed habitats and analyze them for clues as to which animals make their home in each location.

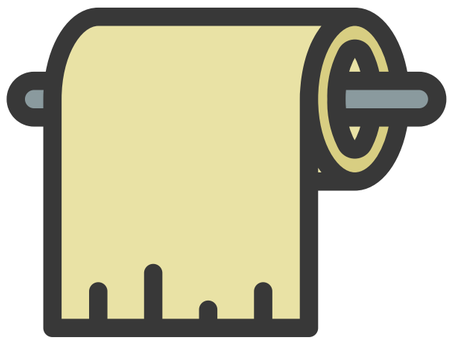
Animal Tracks

When analyzing animal tracks, it is important to consider the size and shape of the tracks. Are the tracks made by paws or hooves? How many toes can you count?



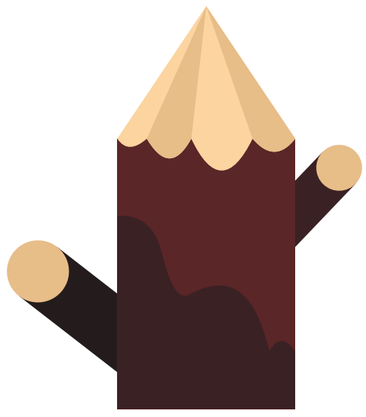
Type of Home

Just like humans, wildlife live in all kinds of different homes that include nests, burrows, and dens. Nests can be found in trees, near the water in wetlands, or on the ground. Some animals make their homes in tree cavities or dead logs.



Droppings

Scat, or animal droppings is another useful tool to identify animals in the area. Shape, size, and quantity are all traits scientists use to predict the species.



Animal Habits

Some species enjoy performing unique activities that can leave behind clues that they've been in the area. Examples include holes in trees left behind by woodpeckers or trees cut down by beavers.

Habitats


Nesbitt St
Borden St
Crystal Bay
11
Carling Ave
James Cummings Ave
Cyrus Ct
Carling Ave
Myrle Ave
Murmansk Run Rd
Murmansk Run Rd
59
38
Moodie Dr
Ottawa-Carleton
Wildlife Centre
*
1
3
2
4
5
6
7
8
9
10
Bomber Stream Rd
Bomber Stream Rd
Moodie Dr
59

Habitat Hints

1 Log with Mushrooms

Nursery logs are dead and rotting trees. They are home to a diverse number of species. As the tree begins to decay, it provides nutrients for fungi, lichen, and plants. Seedlings will often sprout from nursrey logs. Insects such as beetles will seek shelter in the log. Foxes and other mammals have been known to use nursery logs as dens.

2 Nest in a Tree

Grey Squirrels will build nests, called dreys, in trees. Dreys can be distinguished from bird's nests as they are larger and appear as a clump of leaves and branches.

3 Tree Cavity

Tree cavities are the result of injury to the tree trunk. Injuries may be a caused by weather or animal interactions. Woodpeckers are referred to as primary excavators as they create or enlarge cavities. Woodpeckers, smaller birds, and squirrels are all known to build nests in tree cavities. They are also home to numerous insects seeking shelter from the elements.

4 Burrow

Many animals at the Centre will dig burrows including the Eastern Chipmunk, Red Fox, and American Mink. Based on the size and location of this burrow opening, which animal do you think lives here?

5 Emerald Ash Borer Track

The wood on this tree appears to have been destroyed or eaten by an insect. Although it may look like a path made by a worm, these marks are actually made by an Emerald Ash Borer. This invasive species feeds on ash trees and lives beneath the bark.

6 Woodpecker Holes

A strong and sharp beak enables woodpeckers to dig holes in trees. The size and location of holes is dependent on the species of woodpecker. Smaller woodpeckers are able to dig in twigs and stems that are too small to sustain the weight of large woodpeckers.

7 Milkweed

Milkweeds are used by Monarch butterflies for food and as the site to lay their eggs. When larvae hatch, their main purpose is to grow. Caterpillars only eat milkweed; whereas, adult Monarchs can get sugar from many flowers. Monarchs are the only animals that eat milkweed because it produces glycoside toxins. Monarchs are able to eat milkweed as they have evolved immunity against the toxin overtime.

8 Wetland

Wetlands provide habitat for 400 species of plants, animals, and insects in Canada. Some of the species that can be found at the Centre include Red-winged Blackbirds, American Mink, Voles, and Painted Turtles.

9 Water

The water found in wetlands is non-moving and rich in nutrients. It is home to billions of microscopic organisms. Furthermore, the water in wetlands acts as a nursery for many species of insect larvae. There are also frogs, snails, and snakes that call rely on the water of wetlands.

10 Meadow

Fields with high grass and other vegetation provide shelter for many smaller animals. Foxes, mice, and rabbits have all been known to dig burrows in fields. Birds of prey will use this area for hunting. Fields are also important for pollinators as wildflower populations are diminishing in urban areas.

11 Stormwater Pond

The Centre advocated for the restoration of the wetlands and stormwater ponds on campus. The pond is home to many animals such as beavers, great egrets, and turtles. The shallow water and nearby vegetation lends itself to a strong ecosystem.

Common Sightings at OCWC

Red-winged Blackbird

Male Red-winged Blackbirds can be identified by the red epaulettes on their shoulders, while females are brown. They are ground foragers that like to eat seeds, grains, fruit, and insects. They live in nesting shrubs built close to the water. Nesting shrubs look like woven cups lined with marsh vegetation and grasses. The birds are often seen resting on cattails.

Great Egret

Great Egrets are tall white birds with black legs and a pointed yellow beak. They can grow up to 3ft tall and are often seen slowly walking through marshes, ponds, and tidal flats. Great Egrets like to eat fish, crustaceans, frogs, and other aquatic animals. They use their beak to catch their prey in the water. Great Egrets can fly up to 25 km/h and often build their nest on a platform of sticks and twigs.

Northern Leopard Frog

Northern Leopard Frogs live near ponds and marshes. As an adult, they can grow to be 5-9cm in length. Northern Leopard Frogs are carnivores. They eat beetles, ants, worms, even smaller frogs and birds! They are nocturnal, meaning they are most active at night. During the winter, they hibernate at the bottom of waterbodies that do not fully freeze. A group of Northern leopard Frogs is called an army.

Killdeer

Killdeer live in grasslands and are often seen running across fields as the birds have adapted to running quickly on their long legs. Killdeer build their nests in a depression on the ground. This can be dangerous as gravel, their favourite material, is often found near roadways. They are foragers that enjoy eating insects. Killdeer employ diverse tactics to keep predators away from their nests. They will pretend to have a broken wing to lure a predator away or will charge at a large animal that may step on their eggs.

Snapping Turtle

Snapping Turtles are the largest freshwater turtles in Canada. They measure between 20-36cm and can live up to 70 years. Their shells are black or brown and will often have algae growing on them. Snapping Turtles are omnivores; they eat aquatic plants, fish, and frogs. They play an important role in wetlands and lakes by eating vegetation and dead matter. Unlike other turtles, Snapping Turtles are unable to withdraw into their shell for protection. Their distinct snapping jaws habit was developed to compensate for this lack of defense.

Downy Woodpecker

Downy Woodpeckers are considered primary excavators meaning they chip away at wood to form or expand cavities. Not only does this process give them access to food, it also provides shelter for their nests. Downy Woodpeckers are the smallest North American woodpecker. They eat small fruits and insects. Downy Woodpeckers take part in mixed species flocks in the winter. Males can be identified by the red patch on their head.

Eastern Chipmunk

Eastern Chipmunks live in burrows. They will dig tunnels beneath rocks, logs, or brush to provide shelter from predators. They collect food in their cheek pouches before storing it in their burrows for winter. They may have to dig through 1m of snow to leave their burrows in the spring. Chipmunks have four front toes and five back toes. Their calls are often mistaken for bird chirps.

White-Tailed Deer

White-Tailed Deer live in forested and bushy areas that provide shelter from storms. Their diet mainly consists of leafy material. They are able to eat leaves, twigs, buds, among other roughage due to their additional stomach compartments. Much like cows, they have four stomach compartments to aid with digestion. White-Tailed Deer will leave fawns unattended for hours. The fawns are almost scentless. If you come across a fawn, it is best to leave it alone unless it is showing clear signs of distress..

Grey Squirrels

Squirrel comes from the latin Sciurus which was derived from two Greek words: skia meaning shadow and oura meaning tail. Squirrels were named because they sit in the shadow of their own tail. They can reach speeds of 25 km/h on land. Grey Squirrels can lose their tail sheath and part of their tail bone to escape a predator. Grey Squirrels appear with both black and grey fur.

Red Fox

Red Foxes have a shy and nervous disposition. Not all members of this species are red, they can be brown and black. Red Foxes live in dens which can consist of abandoned woodchuck burrows, caves, hollow logs, or holes under bush and buildings. Their tail makes up 1/3 of their body length. Red Foxes will bury their food to consume later. They are able to hunt for animals burrowing below ground thanks to their heightened hearing.

Photo Credit: S. Hansen

American Beaver

Beavers' teeth grow their entire life; gnawing on trees prevents them from becoming too long. They are the largest rodent in North America and can stay underwater for 15 minutes. Beavers' tails help them balance when carrying large logs. Their favourite trees are aspen, poplar, willow, and birch. Through the construction of dams, beavers actively change an ecosystem. They are capable of blocking rivers, creating new lakes, and floodplanes. Beavers are a keystone species, and integral to the ecosystems they live in.

Yellow Warbler

There are over 50 species of Warblers in North America. Yellow Warblers live in open woodlands. Their diet consists of insects and berries. Yellow Warblers build their nests in trees. Cowbirds often lay their eggs in warbler nests. To combat these pests, Yellow Warblers will build another nest directly on top of the eggs. This process can result in a several tiers of warbler nests at one location.

Red Squirrel

Red squirrels live in forested areas and can often be heard "clucking." They build dreys (nests) in trees. Red squirrels store large quantities of food as they do not hibernate. Their main food sources are nuts and seeds; however, as omnivores they will also eat eggs, bugs, and mice. They are very territorial and will protect their nests by flicking their tail, chattering, and stomping their feet.

Blanding's Turtle

Blanding's Turtles are a threatened species with a yellow throat and chin. Their doomed shell resembles an army helmet. They like to live in shallow water, such as wetlands. Like other reptiles, Blanding's Turtles are cold blooded. They can be seen basking on rocks in order to regulate body temperature. Blanding's Turtles are omnivores. They hibernate in the mud and do not have teeth.

Photo Credit: M. Seidel