

WHOSE HOME?

An interactive game introducing species at risk.

This “scavenger hunt” style game will introduce students to some examples of species at risk in Canada and their habitat needs. A script is provided as a guide for introducing and debriefing the game, as well as additional information to support a more in-depth discussion of species at risk.

TIME REQUIRED:

45-60 minutes
(game and short de-brief)

GRADE LEVELS: 1-4

CURRICULUM CONNECTIONS:

- Needs of Living Things
- Animal Growth & Changes
- Habitats and Communities
- Biodiversity
- Diversity of Living Things

PREPARATION

Print out the 10 photos of species at risk (pages 10-29). Please choose double sided printing with landscape orientation so that the name of the animal prints on the back of the correct image. Laminate the photos and attach them to trees, posts, or any stationary object in the area where you will be playing the game.

Print and cut out the clues (pages 6-9). When printing, make sure to print single sided from pages 6-9. If you think you will play this more than once, you may want to laminate the clue cards.

Please use this legend for animal clues.

- Animal A - Barn Owl
- Animal B - Polar Bear
- Animal C - Monarch Butterfly
- Animal D - Little Brown Bat
- Animal E - Rusty Patched Bumble Bee
- Animal F - Western Chorus Frog
- Animal G - Blanding's Turtle
- Animal H - Red-headed Woodpecker
- Animal I - Massasauga Rattlesnake
- Animal J - Channel Darter



Animal B – CLUE 2:
I live at the edge of sea ice patches where I can hunt.

Animal C – CLUE 2:
Without milkweed, I cannot survive.



INTRODUCTION

Use the following script to introduce the game

Does anyone know what “species at risk” means?

- An animal that is having a hard time surviving in the wild, maybe struggling to find food or a place to live.
- Species at risk can be classified different ways – for example, **endangered** means there aren't as many in the wild as we'd like to see, or that there should be.
- **Extirpated** means the animal no longer lives in a certain area, but can be found elsewhere.
- An animal that is **extinct** no longer exists anywhere on earth (like dinosaurs).

HOW TO PLAY

We're going to play a game to learn some of the species at risk in Canada and find out where they live (their habitat). For this game, you'll need a partner.



The goal of the game: is to figure out what Canadian animal you are.

Posted around this area are 10 pictures of animals that are at risk (their name is written on the back). I'll give you a clue describing where you (the animal) live, and you'll have to figure out which animal you are, and find the matching picture.

If you need more information, come back and I will give you a second clue. Once you think you know who you are, come back to me with the name of the animal - leave the picture where it is. If you're right, I'll give you another clue for another animal. There are 10 animals in total – see if you can get them all!

Note: you may choose to make this competitive, students racing to find and correctly identify all 10 animals. Alternatively, students can identify as many as they are able or interested to find, then pick one as the focus of a more in-depth study.

DEBRIEF

Once the hunt is over, facilitate a group discussion using the following questions.

1. What were some of the animals that we learned about? Why do you think it's important that we learn about where these animals live?

Guide the conversation towards a discussion of the importance of habitat for animals in order for them to thrive. In the same way that we all need a safe place to live and find food, animals need habitat that meets their needs in order to survive.

2. Why do you think species become at risk? What causes animals to become endangered?

Have students discuss in pairs, then pool their thoughts in a whole class discussion ("think-pair-share"). You may like to use some of the following topics to start or feed a discussion.

- Habitat loss (development & deforestation)
- Lack of food
- Disease
- Climate change & extreme weather events
- Pollution
- Invasive species (competition for resources)
- Changing sea levels and currents
- Pesticides and insecticides (neonicotinoids)
- Overharvesting (fishing, hunting, whaling)
- Lack of genetic diversity (fewer mate options)

3. Why does it matter if species become "at risk"?

Everything is connected! If one species becomes extinct, it can create problems elsewhere. For example, the timber rattlesnake is extirpated in Ontario (that means it no longer lives here but it exists somewhere else in the world) and they eat ticks! Ticks are an unfriendly bug, and some of them can carry Lyme disease. Ticks are becoming a larger problem in Ontario, but if we still had the timber rattlesnake, it would help to control the tick population.

Extension: play the game **Habitat Lap Sit** or **Web of Life** to reinforce the concept. Explore further using the "**Why does it matter?**" resource.

4. Is there anything we can do to help?

YES! Get involved in an action project individually or as a whole class.

FIRST: find something that interests you

Is there a specific species you are interested in? What is at risk in your region? Or, is there an issue that threatens species in your region more than others - habitat destruction for example? Or pollution - for example, if you're on the coast, perhaps the plastic problem concerns you.

THEN: find a program you can take part in

- Sign up for a Citizen Science program that helps track the status of species at risk OR
- Participate in a program that helps to improve habitat of endangered species. For example, planting native plants, habitat clean-up, shelter building (bat boxes, bird boxes, native bee condos, etc.)

LINKS FOR ACTION PROJECTS

CITIZEN SCIENCE

Government of Canada Citizen Science Portal

http://science.gc.ca/eic/site/063.nsf/eng/h_97169.html

BatWatch

<https://batwatch.ca/>

Bird Studies Canada

<https://www.birdscanada.org/>

E Bird

<https://ebird.org/canada/home>

E Capelin

<https://ecapelin.ca/>

Journey North

<https://journeynorth.org/>

Mission Monarch

<http://mission-monarch.org>

MonarchWatch

<https://www.monarchwatch.org/>

Nature Watch

<https://www.naturewatch.ca/>

Polar Bears International

<https://polarbearsinternational.org/>

HABITAT CONSERVATION PROJECTS

The Butterflyway

<https://davidsuzuki.org/take-action/act-locally/butterflyway/>

The Great Canadian Shoreline Cleanup

<https://www.shorelinecleanup.ca/>

In The Zone

<http://www.inthegonegardens.ca/>

ADDITIONAL BACKGROUND INFORMATION

Depending on how many animals are left in the wild, all species can be divided into the following six categories.

No Risk:	a species which is not currently experiencing any threats to its existence
Special Concern:	a species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats
Threatened:	a species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction
Endangered:	a species that is facing imminent extirpation or extinction
Extirpated:	a species that no longer exists in the wild in Canada, but exists elsewhere in the wild
Extinct:	a species that no longer exists anywhere on earth

OTHER USEFUL DEFINITIONS

Habitat:	the area or type of site where an individual or wildlife species naturally occurs, or depends on in order to carry out its life processes, OR where it formerly occurred, and has the potential to be reintroduced.
Critical habitat:	the habitat that is necessary for the survival or recovery of a listed wildlife species, and that is identified as the species' critical habitat in the recovery strategy, or in an action plan for the species.
Species at risk:	an extirpated, endangered or threatened species or a species of special concern
Wildlife species:	a species, subspecies, variety or geographically or genetically distinct population of animal, plant or other organism (other than a bacterium or virus) that is wild by nature and is native to Canada; OR a species that has extended its range into Canada without human intervention and has been present in Canada for at least 50 years

GAME CLUES

Please cut along the dashed line and cut out each clue. There are 2 clues per animal.

Animal A – CLUE 1:

I need orchards, grasslands, meadows, farmlands, and fields to hunt.

Animal A – CLUE 2:

I live in trees or holes in cliffs. I can also live in barns or abandoned buildings.

Animal B – CLUE 1:

My fur is white but my skin is black, which helps keep me camouflaged and warm in the winter.

Animal B – CLUE 2:

I live at the edge of sea ice patches where I can hunt.

Animal C – CLUE 1:

I live in different places at different stages of my life: at first I need meadows or gardens with lots of wildflowers, but eventually, I need forests.

Animal C – CLUE 2:

Without milkweed, I cannot survive.

Animal D – CLUE 1:

I live in buildings, caves, trees, rocks, and woodpiles.

Animal D – CLUE 2:

I eat insects, and can eat as much as my own bodyweight in one night.

Animal E – CLUE 1:

I can be found in open places such as farmland, cities, open woods and sand dunes.

Animal E – CLUE 2:

I need flowers – and flowers need me!

Animal F – CLUE 1:

I live in forest openings around woodland ponds but can also be found in damp meadows, marshes, and swamps.

Animal F – CLUE 2:

In the winter I hibernate under logs. My body contains special chemicals so that I don't freeze solid.

Animal G – CLUE 1:

I live in shallow water, usually in large wetlands and shallow lakes with lots of water plants.

Animal G – CLUE 2:

In native legends they say I have the sun under my chin.

Animal H – CLUE 1:

I live in open woodlands and can be found in dead trees where I nest. I dig holes in wood to find insects.

Animal H – CLUE 2:

I love to eat insects but I also eat seeds and berries. Sometimes I hide my food then go and find it later.

Animal I – CLUE 1:

I live in tall grass prairie, bogs, marshes, shorelines, and forests. I need open areas to warm myself in the sun.

Animal I – CLUE 2:

In winter, I hibernate underground in rock crevices, swamps, tree root cavities and animal burrows.

Animal J – CLUE 1:

I live in clean streams and lakes with sandy or gravel bottoms.
I mostly eat aquatic insect larvae from the bottom of the stream.

Animal J – CLUE 2:

During the day I like to swim in deeper water, at night I will move to shallow water.



Barn Owl

(Endangered)



Polar Bear

(Special Concern)



Monarch Butterfly

(Special Concern)



Little Brown Bat

(Endangered)



Photo of the rusty patched bumble bee in Minnesota (2016), The Xerces Society/Sarah Foltz Jordan

Rusty Patched Bumble Bee

(Endangered)



Western Chorus Frog



Blanding's Turtle

(Threatened)



Red-headed Woodpecker

(Special Concern)



Massasauga Rattlesnake

(Threatened)



Channel Darter

(Special Concern)