

Virtual Festival
Follow Up Activity



Where Have all the Species Gone?

Theme: Water Science

Curriculum:

- Understanding Life Systems, Grade 2 (Growth and Change in Animals)
- Understanding Life Systems, Grade 4 (Habitats and Communities)

Activity Overview:

Students will investigate the ways habitat loss can impact species at risk in southern Ontario through the creation of a poster, newspaper article, google slideshow etc.

Key Messages:

- While the smallest region in Canada, the Carolinian Life Zone also has the highest population causing wide scale habitat loss and fragmentation.
- Habitat loss and fragmentation along with other human caused factors such as pollution and invasive species have lead to a greater number of species at risk in this region than any other region in Canada.

Background Information:

The Carolinian Life in the extreme south of Ontario is dominated by habitats and ecosystems including forests, tallgrass prairies and savannas, wetlands, streams, shorelines and other aquatic habitats. Many species of plants and animals reach their northern limits in this region. Even though Carolinian Canada is quite small compared with other Canadian vegetation zones, making up only 1% of Canada's total land area, it boasts a greater number of both flora and fauna species than any other ecosystem in Canada. TVDSB is fortunate to exist within this unique zone.



Even though it is the smallest Life Zone in Ontario, it has the highest number of species at risk in Canada. There are a total over 150 species officially designated as being at risk in this region. And 11 species are extirpated and no longer exist in Ontario.

Habitat loss is one of the biggest threats to local species at risk. In addition, other factors may be involved such as pollution, invasive species and over-harvesting.

Habitat loss and degradation continue to be the most devastating impact on species risk. Loss of natural spaces and the fragmentation of remaining natural habitat have impacted a species' ability to meet its

basic habitat requirements of food, water, shelter and space impacting its survival and ability to reproduce. Little remaining habitat and large distances between those habitats make encounters with humans more common. Roadways lead to high mortality of many species.

Vocabulary:

Species at Risk – Any native plant or animal that is at risk of extinction or of disappearing from the province.

Procedure (What Will I Be Doing?):

1. Review background information about the Carolinian Life Zone, habitat loss and species at risk.
2. Have students select a species at risk in the Carolinian Life Zone that lives in or is reliant upon water (ie. wetlands, lakes, streams etc.). Students can go to <https://www.ontario.ca/page/species-risk-ontario> to find their species. Note: that website lists all species in Ontario, so students should verify they are selecting a species from southern Ontario.
3. Students will research and create a poster, presentation using Google slides, newspaper article etc. highlighting the characteristics of their species including habitat, threats to its existence and how the species can be protected/conserved.
4. Review the following principles with students regarding the content of their poster:
 - Use simple and clear language.
 - Consider using bullet points. This makes it easier for the reader to skim and quickly digest content.
 - Use clear visuals to illustrate your messages. Ensure the pictures you choose are self-explanatory (or are explained clearly).
 - Only include visuals that complement the message you are trying to convey.
 - Use headings to break up text. Headings posed as statements or questions can add to your content rather than simply taking up space.
5. Have students present their final product to the class.

Reflection and Extension:

- Ask students what humans can do to minimize their impacts on wildlife species and prevent any from becoming extinct (connect habitat areas through habitat corridors for wildlife to travel on, help create more habitat, good city planning practices that allow both wildlife and humans to co-exist, educate people on the importance of species at risk and the threats they face, etc.).
- As an alternate activity, students could create “Wanted” posters for invasive species found in Ontario.