Assess Your Habitat’s Health

Learning Objectives
Students will:
• Identify their ecozone.
• Explore how human development is impacting the health of their ecozone.
• Identify ways they can support habitat in their schools and communities.

Method
Students identify their ecozone, assess its general health, then prescribe “treatments” to cure any negative “symptoms” they identify.

Materials
• Access to the internet and/or other research materials
• Map of your region
• Map of the ecozones of Canada

Background
Wildlife and ecosystems ignore geographical boundaries. To make it easier to study the vast diversity of natural communities in Canada, scientists have divided the country into 15 terrestrial and five marine ecozones.

These 20 ecozones are geographic areas that contain distinct ecosystems and species. Knowing your ecozone can help you recognize the natural features, including native plants and animals of your area.

Within these ecozones, wolverines prowl, bats swoop, insects buzz, and reptiles slither. Some area are hale and hearty, but others are critically ill. It's important to know what’s going on within your ecozone because its health affects all the organisms living within them, including you.
Activity

1. On a map of your region, have students identify their city or town, and any protected areas nearby, such as:
   - Provincial or national parks
   - National wildlife areas
   - Biosphere reserves

2. Next have students research and identify their ecozone. If feasible, students can also consult with experts like local naturalists and biologists.

3. Have students research and document the overall health of their ecozone. Encourage them to consider the following questions:
   - Is your ecozone mostly urban or rural?
   - How healthy was your ecozone before the first settlers arrived? Were there more forests? Grasslands? Other natural areas?
   - What kinds of human activities have taken place in your ecozone? Mining? Farming?

4. After assessing the overall health of their ecozone, students should then explore any “symptoms” their ecozone may have by investigating the following questions.
   - Have any animals or plants declined in numbers or disappeared?
   - Have alien species pushed out any native species?
   - How healthy are the lakes, rivers and wetlands?
   - Have industries caused any harm?
   - Is your ecozone heavily populated with humans?
   - Does the population density affect its health?

5. On the basis of their research, have students form a “medical opinion” about the health of their ecozone.
   - Do they think it will survive?
   - If not, how long would they give it to live?

6. Have students consult with their “colleagues” – other students and teachers – to come up with a prescription for their ecozone. Encourage students to think about what habitat projects might help their patient. Guide youth towards developing a realistic project plan that includes a statement on why and how their project will help wildlife, as well as diagrams and estimated costs.