

Natural Inquirer



Learning Objectives

Students will:

- Learn about various species native to their area.
- Recognize that a wide range of life forms and habitats are threatened by global warming, rising sea levels, forest fires, extreme weather events, and other phenomena associated with climate change.
- Understand the potential impacts of climate change on biological diversity
- Realize that the survival of many species depends on their ability to relocate or adapt to shifts in seasons, weather, temperatures, and habitat.



Method

Students will research and conduct a mock interview with a local animal or plant species affected by climate change, then use the information they collect to write an illustrative article.



Materials

- Writing materials
- Reference materials (digital and print)
- [Species at Risk Public Registry](#)
- Video equipment (optional)

Background

In the past, climate change occurred so slowly that wild plants and animals had time to adjust. Today, shifts in temperature, seasons, and weather are happening too fast for some species to adapt. Instincts developed over thousands of years are becoming useless. Key habitat elements — food, water, shelter, and space — are declining or disappearing.

Climate change is already having an impact on all kinds of wildlife. Many species are shifting their ranges, migrating sooner, and bearing young earlier than in the past. In the future, the fate of many species will depend on their ability to move from unfavourable climatic conditions to ones that meet their survival needs.

Those that are endangered, slow-moving or isolated in fragmented areas could find themselves stranded. Physical barriers, like mountain ranges and human settlements, may prevent some creatures from moving to suitable habitats. Migrators whose arrival and departure dates are no longer in sync with the rhythms of nature may miss the food sources they need to survive, the warm weather they need to breed, and the wind and ocean currents they need to travel.

Some species may adapt and flourish as a result of climate change, but wild plants and animals that cannot adapt may become extinct.

For additional resources visit:

CanadianWildlifeFederation.ca/Education

Each species has adapted to live within its particular ecosystem. As a result, when one species within the system is impacted, it affects several others within the same ecosystem. This renders the threat of climate change to the diversity of habitats and wildlife immeasurable.

In Advance

Using the Species at Risk Public Registry of Canada, create a list of sensitive species that are native to your province that may be affected by the impacts of climate change, such as rising temperatures, heavier snowfalls, and shifting vegetation zones. Students will use this list in the following activity.

Activity

Part I: Research

1. Break students into pairs and provide each pair with a copy of the local species list you created in advance.
2. In their pairs, have students select a native animal or plant species from the list to research and conduct a mock interview with.
3. Students should draft a list of pertinent interview questions to ask their species. Their interview questions should:
 - Examine their species' current habitat needs and condition.
 - Explore how their species may be impacted by climate change.
 - How might climate change alter their species' habitat?
 - How might climate change impact their species' life cycle?
 - Speculate on their species' future state 50 to 100 years from now.
 - What could impact the livelihood of their species?
 - What could be done to preserve the health of their species?
4. Using reference materials, field guides, the internet and other available resources, students will then conduct research to develop answers to their interview questions.

Part II: Interview

1. Using their list of questions and resulting research, each pair will now conduct a mock interview with their chosen species. Students can either:
 - Record their interview on camera.
 - Document their interview by taking notes and pictures.
 - Conduct their interviews live in front of the class.

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2. Have students decide who will play the role of interviewer and interviewee.
 - The interviewer will ask the questions in the style of a reporter.
 - The interviewee will answer the questions as their chosen animal or plant, using their research.
3. Have students conduct their interviews

Part III: Report

1. After conducting their interview, have students organize their information and use it to write an illustrated news piece about their species.
2. Once they have completed their articles, students can present them in one of the following ways:
 - Reading their articles aloud.
 - Publishing their works in a print magazine or an online blog.
 - Making a research project poster for a gallery walk.
3. After each group has presented, hold a class discussion about the diversity of species threatened by climate change and the risk of an extinction crisis.
 - Ask each student to share their thoughts and feelings of the situation.
 - Discuss individual and collective actions you could take to lessen your climate footprint and support wildlife conservation in your area.

Extensions

- Take your students on a trip to a zoo, aquarium, or a local wildlife centre to learn more about endangered species.
- Conduct a nature walk or BioBlitz with your students to encourage them observe and learn more about local plants and wildlife in their area. Students can become citizen scientists by submitting their observations to [iNaturalist.ca](https://www.inaturalist.ca) – a global species data sharing platform used by researchers and conservation organizations.