



Impact the Invasive Species Curve Educator Guide



Impact the Invasive Species Curve

Non-native, alien and **exotic** are terms we use to describe life forms dwelling outside their natural geographic range. Some of these species are benign. Others are harmful and take a huge toll on wildlife and human habitat. Any non-native species that lives and grows where it is unwelcome and causes ecological harm is considered **invasive**.

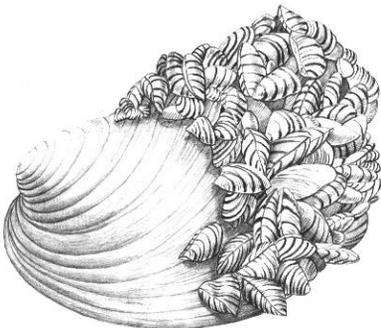
Educating youth about invasive species is a critical part of national conservation efforts to raise awareness about this issue, curb the spread of invasive species, and restore native species. The learning activities in this kit do just that, with hands-on, inquiry-based experiences and an avenue for students to learn basic skills and deepen knowledge of academic subjects, including geography, history and language arts.

We trust that your students will take these lessons to heart and become lifelong conservationists who make responsible decisions and help meet the challenges of invasive species and other ecological threats.

Learning Outcomes

Students will:

1. Distinguish between invasive, non-native, and native species.
2. Become aware of the ecological value of native animals and plants.
3. Understand that invasive species are affecting ecosystems nationwide and harming native wildlife and habitats.
4. Identify invasive animals and plants in their region and understand their ecological impacts.
5. Trace the origins of non-native species, how they entered Canada, and how they spread from one region to another.
6. Recognize how human actions can encourage or discourage the spread of invasive species.
7. Develop a sense of ecological stewardship through hands-on conservation projects.
8. Grasp the significance of the “restoration cycle,” from awareness to action to recovery of areas damaged by invasive species.



For additional resources visit:

CanadianWildlifeFederation.ca/Education

Learning Journey

This kit is patterned after the **restoration cycle** – from gaining awareness of invasive species, to assessing their impacts in your region, to taking action to curb their spread, to conserving and restoring native wildlife and habitat. While you and your students may benefit most by using the unit as suggested, feel free to adapt the resources in ways that best meet your needs.

1. Lead students through the activity [Friends or Foes?](#) where students will compare and classify native and non-native species, then participate in a classroom debate about the differences between these species, their positive and negative effects, and whether their populations should be conserved or controlled.
2. Next, have students investigate historical relationships between Indigenous groups and native wildlife, as well as intentional introductions of non-native animals and plants to North America by explorers and settlers through the activity [An Unnatural History](#). Students will trace historical and geographical origins of non-native species and share their findings.
3. Through the activity [Accidental Travelers](#) students can then play a card-matching activity to learn how human activities accidentally transport invasive species into ecosystems. They then explore the introduction and spread of a specific individual animal or plant in greater depth.
4. Now that students have a deeper understanding of the human factors impacting the spread of invasive species, have student take part in the activity [Assess the Mess](#). Students will research the presence of native and non-native species in their area, survey a local nature site and discuss the effects of non-native species on local wildlife and habitat.
5. This unit ends with an activity to encourage students to take action! Through the activity [Set the Restoration Cycle in Motion](#), students will develop and take steps to implement a strategic plan to prevent the introduction and spread of non-native species, control their populations, monitor their presence, and restore native wildlife and habitat.



Vocabulary

Alien species, awareness, biodiversity, containment, control, competition, eradication, exotic species, habitat, indigenous species, invasion curve, invasive species, niche, monitoring, monoculture, native species, naturalized species, non-native species, prevention, range, restoration, restoration cycle.

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