# Environmental Education: Invasive Species

# What's In Your Yard?

# **Background Information**

Invasive species are plants or animals that are not native to a region. They often out-compete native species for available resources such as, space, water, nutrients, sunlight, or food. They often form dense populations and dominate ecosystems. After habitat loss, invasive species are considered to be the second greatest threat to global biological diversity. Humans cause the most spread of invasive species.

People often transport invasive species to environments where they previously did not exist. This may occur deliberately, for example when ornamental plants are imported for gardens, or accidentally, such as when ships discharge ballast water containing shellfish larvae. We may even move them as seeds in the tread of our hiking boots, on our dog's fur, or in our vehicle's tire tread. Although only a small percentage of species introduced into new areas are able to survive, those that do, can cause serious problems. Invasive species can impact human health, and cause economic and environmental damage. Working to prevent the spread of invasive species is our shared responsibility.

There are some invasive plant species that are very well-established in our region and are likely here to stay, these are called **established species**. They were introduced many years ago, some in the late 1800s. You may be familiar with some established species such as English ivy, Scotch broom, and Himalayan blackberry. Local land managers often try to manage these established invasive species in high priority areas such as parks and sensitive ecosystems. When possible, it is important to manage these species.

There are also invasive species that are relatively new to our region — these ones we hope to eradicate before they take hold and cause problems. **Priority invasive species** are those that pose the greatest threats or impacts, those species new to a region, or that haven't spread too far and can be controlled or eradicated. Prevention, early detection and rapid response are the most important actions to successfully manage invasive species and their impacts. Finding, reporting and managing these species is critical to prevent their spread! Some invasive species pose health risks and some need professional management.

#### Activity types in this lesson:

Warm-Up: Brainstorming

Hands-On: Find invasive species!

Video: How to Weave Plant Material (tutorials)

Listening: Podcasts Expand and Connect

#### Warm-Up

Discuss the following questions verbally, or write your ideas down on a piece of paper.

What invasive species do you already know about — in the wider world, in the capital region? What invasive species do you think may be in your yard? How many to you think there are? Are they spreading to your neighbour's property, or an adjacent natural area? How did they arrive in your yard?

#### Information and Resources

For established species, review the resources below to learn how to identify and remove them:

High priority species in the capital region High Priority Species Alert Sheet

District of Saanich Controlling Invasive Plants on Your Property

Habitat Acquisition Trust (Victoria's local land trust) Invasive Plant Guide



#### Hands-On

#### 1. Yard Exploration

Review invasive species identification guides and resources under the "Information and Resources" section. Choose one or more of the resources to help you on your exploration. Walk around your yard, your neighbourhood or observe from your window or porch. Do you see any invasive species? Which ones?

If you have any high priority species help out by reporting them through the Province of BC's Report Invasives app.

Do you have any established species? If you can, safely remove them. Do some research first. Some you can remove yourself and some will need professional management. If you are removing them yourself be mindful not to allow any seeds or plant material to be left behind.

**CAUTION**: Some invasive species can cause skin or respiratory irritation. Make sure you research the plants you will be touching first and wear appropriate protective equipment such as gloves and safety glasses.

#### 2. Weedy Scavenger Hunt (K-2)

Invasive species often have special characteristic that make them successful invaders. Use this <u>scavenger hunt</u> from the Central Kootnay Invasive Species Society to explore invasive species, their many shades of green, seed adaptations, interesting smells and more.

#### 3. Run a Family Weed Pull

Gardens are a beautiful refuge however, if invasive species are planted or not managed they can quickly spread from your property to your neighbours' and then to natural areas. Horticulture (growing of garden crops, such as fruits, vegetables, flowers and ornamental plants) has been identified as one of the main human pathways that cause the spread and introduction of invasive species. You can help!

Grab your gloves, hand tools and garbage bags and head into the yard to hand pull or dig out those annoying invasive plants. Spring is the perfect time to remove invasive plants like Scotch broom. Removing plants in the spring allows you to get to the plants before flowering and seed production, preventing further spread. Be sure to follow directions in the resources provided here and make sure you know how to dispose of invasive species in your municipality.

**Important information:** How you dispose of invasive species matters. Please don't add these species to your compost, as plants and seeds may continue to grow and spread. Check with your local municipality for specific guidelines based on where you live.

# **Expand and Connect**

Weave a wreath or basket with invasive species. English ivy, Scotch broom and Himalayan blackberry can be used in weaving projects. Use the following videos for ideas on how to soften and prepare your plant material, methods and instructions for different projects.

- Himalayan Blackberry Basket (17:59) <a href="https://www.youtube.com/watch?v=NpJXpkhWHyq">https://www.youtube.com/watch?v=NpJXpkhWHyq</a>
- Scotch Broom Basket (40:11) <a href="https://www.youtube.com/watch?v=aLaQtTV5cjw">https://www.youtube.com/watch?v=aLaQtTV5cjw</a>
- <u>Vancouver Park Board's Urban Weaver Project</u> details what species can be used, weaving terminology
  and tools, etc. Get some inspiration from the Vancouver Parks Board's project to connect weavers with invasive species material. Earrings, wall art, baskets, belts, bracelets.
- <u>The Urban Weaver Project</u> connecting weavers with nature.
- EartHand Gleaners Society has various videos sharing different projects and plant processing methods.

Ask your local greenhouse and gardening store to become <u>PlantWise</u> certified to ensure that they are not selling or displaying invasive species.

Plant a native plant and watch it grow. Record your observations every week. Draw a picture every week, take a photo with a ruler beside your plant, write down observations (height, amount of water, number of leaves, etc.).



Study an animal invasive species found in the region. What is their life cycle? How were they introduced? Why do you think they are successful here?

What type of plants are in your neighborhood? Identify different types of plants around your house or neighbourhood. Some resources to help identify different plant species include:

- Tree Book: Learning to Recognize Trees of British Columbia by Roberta Parish
- <u>Index of Trees</u> BC Ministry of Forest, Lands and Natural Resources Operations.
- <u>Leafsnap</u> field guide app for iPhone
- <u>iNaturalist</u> Android and iPhone app that helps you identify plants and animals around you
- Plantnet Android and iPhone app to identify, explore and share your observation of wild plants

## **Listening**

**Podcasts** 

#### Stuff You Should Know

Please note: this podcast is not specifically made for children. While they do give warnings before any episodes that may not be suited for younger audiences, please listen in advance to make sure it is appropriate for your students.

What is an Invasive Species? (56 min) [https://www.iheart.com/podcast/105-stuff-you-should-know-26940277/episode/what-is-an-invasive-species-29467318/]
 "Invasive species can mean a lot of things, from fungus to feral pigs and European starlings to kudzu vines. Basically, it's anything brought to a place, either by humans or nature, that didn't originate there. They aren't always a problem, but many times they can wreak havoc on the local ecosystem. Learn all about these invaders today."

Ear Snacks — A musical podcast for kids about the world.

• Seeds (22:50) [https://radiopublic.com/ear-snacks-8QdPO6/s1!8796f] "Tell me: what do you know about seeds? Andrew & Polly's friends from Austria, Australia, Pennsylvania and Massachusetts invite you into their homes and gardens to discover what kinds of seeds there are and where they live."

Brains On! — An award-winning audio show for kids and families.

• Do plants have feelings? (35:03) [https://www.brainson.org/shows/2020/03/31/do-plants-have-feelings] "There's more to plants than meets the eye. They detect sounds, they defend themselves against insect attacks and they can even send each other secret messages through the wind! Our leafy, green friends sense and interact with the world in their own, planty way. We'll learn all about it in this episode, plus we'll find out why some plants like to grow in spots where other plants have died."

#### Still Curious?

### CRD <u>Invasive</u> Species

Invasive Species Council of BC - quizzes, word searches, booklets and more.

Invasive Species Council of BC <u>Grow Me Instead</u> — info on invasive species and alternative plant suggestions.

# **Quick Tips:**

- Know what you grow avoid purchasing known invasive plants.
- Be suspicious of exotic plants or plants promoted as "fast-spreaders" or "vigorous self-seeders" they are often invasive species.
- Control and dispose of invasive plants prior to flower or seed development.
- Check with your local municipality for specific disposal guidelines based on where you live.

If you have any questions about invasive species in the region, or are looking for ideas on how to connect this topic with other learning opportunities, please contact us at education@crd.bc.ca

