



INVASIVE SPECIES COUNCIL of BC

Education Activity - Seeking Invaders and How They Got Here! - A Play Clean Go Activity

Grade levels: Grades 5 - 8
Subject Areas: Science: Life Systems, Ecosystems, Impacts
Duration: 1-2 periods



Description:

Issues relating to invading species and their vectors of spread come alive for students as they investigate key characteristics that make invasive plants successful at spreading, then look for, and document, invasive species in their own community, and try to figure out how the plants got there in the first place.

Background:

One of the greatest problems with invasive plants is their aggressive spread from one area to another. Many of these plants are spread by humans, either through industry (logging, mining), recreation, horticulture and/or agriculture. A major way that plant seeds get around is through our recreational activities: seeds attach to our clothing, our camping gear, bike and hiking boot treads, our pets and our vehicles. By cleaning our gear of any seeds and burrs before we move to another location, we can help prevent the spread of invasive species.

Learning Objectives:

Students will:

- explore different characteristics that help invasive plants spread
- investigate invasive plants in their community
- Discuss what recreational activities move invasive species around
- Describe what can be done to limit or stop the movement of invasive species.

Materials:

- Pictures of adaptive features that make invasive plants successful (see Resources section below)
- Clipboards, pencils
- Copies of the Invasive Plant Tally sheet
- Field guides to native / invasive plants (weed guides)
- Download the recent BC Weed Guide here: <http://bcinvasives.ca/resources/publications/field-guide-to-noxious-weeds-and-other-selected-invasive-plants-of-BC>
- Download information sheets and photos here: <http://bcinvasives.ca/resources/tips/>

Procedure:

1. Before starting the lesson, select an area for students to search for evidence of invading species; school yard/boundary, park, trail, natural area etc.
2. Tell students that they will be exploring ways that invasive plants move around, and then doing some investigative fieldwork in their community to look for and report invading species, and try to figure out how they got here in the first place.

3. Class Discussion:

Ask the students “Name some ways that humans have brought or can bring invasive species into a community.” Write the answers on the board.

(Answers may include; garden plants, boats, recreation equipment, seeds mixes, agriculture, clothing, pets)

Ask: “What industries move invasive species around, once they are established?”

(Answers may include; logging, mining, road construction, home building, recreation - fishing and hunting, camping, tourism industry)

4. Show the students some pictures of invasive plants (see *Resources* section below). Ask: What do you think make invasive plants so successful at getting around?

5. Introduce the concept of “getaway vehicles.” One of the problems with trying to stop invasive plants from spreading is that they have so many getaway vehicles that they use to spread. Brainstorm ways that plants might spread around.

Outdoor Activity: To do in the spring / early summer or early fall season:

1. Review the Invasive Plant Tally Sheet with students. Provide each team of students with a clipboard, Tally sheet, pencil, and field guide (weed guide / plant guide)

2. In teams of two – three, have students walk around the school grounds, a neighbourhood park or local green space, to search for plants that may be invasive. 3. Have them look for and note the characteristics listed on the tally sheet.

 Their seeds spread by wind

 They are protected by spines or prickles

 Their seeds spread by burrs

 They have prickly seedheads and/or flowers

 They have sticky seeds

If possible, have students take a picture of each plant they discover.

3. At the end of the session, collect student data forms. Share the slogan: **Play Clean Go** with students and have them discuss what it refers to. Discuss as a class some of the ways to prevent invasive plants from spreading; for example:

- Check vehicle and bike tires for plant pieces or their seeds that may be attached
- Stay on marked trails so you don’t walk through patches of plants
- Check equipment, socks and backpacks for seeds/ burrs
- Do not plant invasive plants
- Dispose of invasive plants at the landfill
- Clean all recreation equipment (including boats, camping and fishing gear and backpacks)
- Check pet fur and horses mane, tail and legs for seeds / burrs, and remove them at the site. Clip or pull invasive plants so they don’t go to seed

Invasive Plant Tally Sheet

Characteristics of invasive plants:

- Their seeds spread by wind
- They are protected by spines or prickles
- Their seeds spread by burrs
- They have prickly seedheads and/or flowers
- They have sticky seeds

Non-native Species: Name	Location (approximate)	Characteristics: Colour, height, description	Significant Features for dispersal (e.g. how does it get around?)	Other observations: how it may have arrived; size of patch

Resources: Ways that Plants Move about



Millions of seeds (burrs!)



Knotweed roots



add picture of boat trailer with milfoil on it

add:

Picture of a plant whose seeds spread by wind

a plant protected by spines or prickles

a plant whose seeds spread by burrs

a plant with prickly seedheads/flowers