Agriculture, Invasive Species and the Cariboo—Take Action!
Youth Activity Guide

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Agriculture, Invasive Species and the Cariboo—Take Action!

Agriculture is an important industry in the Cariboo, and invasive species are a big problem to producers. A changing climate may increase their spread, and even allow new species to move into the region. These activities explore invasive species, their impacts, and actions we can take to prevent their spread!

Some definitions

A native species is one that has lived in an area for thousands of years and is part of the natural ecosystem, like Saskatoon berry or ponderosa pine.

Non-native species are animals and plants introduced from other parts of the world, usually by humans. Not all non-native species are invasive! Many introduced plants won’t survive outside of our gardens, and others such as tomatoes and wheat are important food resources.

Invasive species are plants, animals, or diseases that are not native to an ecosystem and are likely to cause harm to the environment, economy or society.

How do invasive species affect me and my community?

We are all affected by invasive species. Invasive plants grow quickly, as there are no insects or diseases from their home countries to keep them under control, some are poisonous to cattle and horses, and plants like thistles and burdock injure pets and wildlife. Invasive insects attack crops and trees, and invasive fish outcompete native fish in our lakes and streams.

How do invasive species get around?

Some invasive plants like thistles produce thousands of seeds that blow in the wind like parachutes. Other plants like knapweeds and knotweeds have creeping roots that spread quickly and choke out native plants, while burrs from burdock and hounds-tongue stick to clothes and animals. Invasive plant seeds stick to tires and clothing, get mixed into crops and hay, and some are even still sold in nurseries! Insects can get transported in firewood and people release pets like goldfish and turtles into the wild when they don’t want them anymore.

There is a lot we can do to stop the spread! Have fun completing these activities, and check out the ISCBC website for more resources: bcinvasives.ca

Don’t forget to download the FREE Report-Invasives phone app — it’s a great field guide to help you identify invasive species and report them so they can be managed!

www.gov.bc.ca/invasive-species
A WEEDY SCAVENGER HUNT!

Agriculture is an important industry in the Cariboo, and invasive species are a big problem to producers. A changing climate may increase their spread, and even allow new species to move into the region!

There may be invasive plants in your own backyard, school ground, field or favourite park! Go on a scavenger hunt and see how many of these clues you can check off!

1. Find at least five different plants.
2. Find a plant whose seeds are spread by the wind.
3. Find a plant that has spines, hairs or thorns.
4. Find a plant whose seeds are spread by burrs (hairy or sticky seeds).
5. Find a plant that has a seed or fruit that might be eaten by an animal.
6. Find a plant that smells good.
7. Find a plant that smells bad.
8. Find a plant that grows alone – has no other plants growing next to it.
9. Find a plant growing on rocky or dry sandy ground.
10. Find a plant with yellow flowers.

Clues and explanations:

» A healthy ecosystem has many different plant species growing in an area. Invasive plants often take over from native plants and create an area where there is only one type of plant growing… the invasive one! Some invasive plants like spotted knapweed produce a chemical that prevents other plants from growing nearby. (#1 and #8)

» Invasive plants have lots of seeds, and the seeds are very good at getting around! E.g. thistle seeds that blow in the wind or burrs that stick to your socks. (#2 and #4)

» Some invasive plants have spines or thorns that stop animals from eating them, like prickly thistles, or blueweed that has a hairy stem. (#3)

» Animals and birds can spread plants by eating their fruit and then depositing the seeds in their droppings, or carrying the seed to store for later. (#5)

» Plants that smell good or bad attract different kinds of insects that eat them and often pollinate them: bees are attracted to flowers that smell sweet, while flies may be attracted to flowers that smell unpleasant (#6 and #7). Many invasive plants have yellow flowers (#10) – try and identify the plants you find!

» Invasive plants are very adaptable and can grow in many different habitats: weeds that grow in dry areas include diffuse knapweed, blueweed and burdock. Invasive plants that like wet areas include purple loosestrife, yellow flag iris, and marsh plume thistle. (#9)

DID YOU KNOW?

There are already dozens of invasive species in the Cariboo region? Be an “Invasive Detective” — report them using the FREE Report Invasives phone app: www.gov.bc.ca/invasive-species
INVASIVE SPECIES ON THE MOVE!

Agriculture is an important industry in the Cariboo, and invasive species are a big problem to producers. A changing climate may increase their spread, and even allow new species to move into the region.

Agricultural activities can also spread invasive species around—can you circle at least 10 ways that invasive species are being introduced and spreading?

Answers:
- Hay on truck being delivered
- Armyworm crawling out of hay bale
- Armyworm crawling out of basket of corn
- Seeds on the ground
- Seeds on mountain bike tires
- Burrs and seeds on horse
- Brown marmorated stink bug crawling out of basket of apples
Answers:
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TRUE ARMYWORM LIFE CYCLE

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Keep your eyes open for the invasive true armyworm!
Its larvae damages grass, hay, cereal, and corn crops by eating the leaves. During late spring, true armyworm moths migrate from the southern United States and Mexico to Canada on wind currents. Find some photos of this pest at https://bit.ly/2UJ6Z4t or by scanning the QR code.

Take Action! Report sightings using the FREE Report Invasives phone app – check it out at www.gov.bc.ca/invasive-species

Learn about the true armyworm life cycle by drawing the stages below!

EGG
Small, white, round – laid in rows on leaves of host plants such as corn. They are less than a millimeter big, about the size of a poppy seed!

ADULT
The moth is light brown, has four wings, and a little white spot on each forewing (the wings closest to the top).

LARVAE
The caterpillar body is light brown with dark stripes along its length, light orange head with brown net pattern, and a dark band above each leg.

PUPA
Brown oval-shaped shell with moth growing inside, found just under the soil surface.

DID YOU KNOW?
The Cariboo produces hundreds of agricultural products, including livestock, root vegetables, grain and silage crops.
Agriculture is an important industry in the Cariboo, and invasive species are a big problem to producers. A changing climate may increase their spread, and even allow new species to move into the region! Keep your eyes open for these invasives!

Guess the invasive species below by reading through the clues on each *Who Am I?* card!

1. I have blue flowers and a hairy stem, and I love to live in dry pastures & sandy roadsides. I can produce up to 2000 seeds!

2. I have pink or white flowers named after a helmet worn by a policeman(!) and my exploding seed pods can scatter seeds up to 7 metres away!

3. My bamboo-like stems and plumes of small white flowers make me very attractive, but beware! My roots can grow up to 20 metres and burst through roads and house foundations!

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5. I look like a barnyard animal, but can destroy crops, spread disease, dig up roots and even attack goats and sheep!

6. I grow in pastures and rangeland to about 1 metre tall with small purple flowers, spiny wings all up my stem, and seeds like parachutes that blow in the wind.

7. I am a common fishbowl pet, but get released into ponds and lakes by people who no longer want me. I compete with native fish as I can grow up to 40 cm and weigh 2 kg!

8. People like planting me in their water gardens for my pretty yellow flowers and long green leaves, but I am poisonous and can grow so densely that I reduce habitat for wildlife and fish.

9. I have a spreading root system, bushy stems, and lots of pinkish purple flowers on top of small "pinecone-like" green bases, and am poisonous to horses.

Invasive species can be seen all around us—it is important to report them if you see one, and be sure not to spread it anywhere else! Can you guess what these invasive species look like in real life? You can get a hint by looking at species photos on our website BCINVASIVES.CA!

- Mountain bluet
- Feral pig
- Brown marmorated stink bug
- Black henbane