

# Invasive Species Educational Activities

June 2015

PRIMARY: Grades K-2 / Ages 4-8



This guide contains a range of activities suitable for students in grades K-2, Ages 4-8 but can be adapted to suit almost any age and audience. Activities are designed to engage students and help them investigate invasive species and associated impacts in BC and explore ways to help prevent further introduction and spread. Activities can be used by teachers in formal school programs as well as by leaders in informal youth groups, camps and recreation programs.

Activities are provided by the Invasive Species Council of BC, Regional Committees, the Girl Guides of Canada, WeedsBC, and the Royal BC Museum.

## Table of Contents

BC Ministry Prescribed Learning outcomes .....	3
Science .....	3
Social Studies .....	3
Math .....	4
List of General Activities.....	4
Non-formal Education Activities.....	6
Scavenger Hunts.....	6
Active Games .....	6
Creative Activities .....	6
Discovery Activities .....	7
Invasive Species Education Resources & Links.....	8

# Primary Activities: Grades K-2 / Ages 4-8

## BC Ministry Prescribed Learning outcomes

### Science

#### Kindergarten

- describe features of local plants and animals
- demonstrate the ability to observe their surroundings
- describe features of their immediate environment

#### Grade 1

- classify living and non-living things
- describe how the basic needs of plants and animals are met in their environment
- describe the basic needs of local plants and animals (e.g., food, water, light)
- use the five senses to make observations
- compare common animals
- compare local plants
- describe features of local plants and animals (e.g., color, shape, size, texture)
- demonstrate the ability to observe their surroundings
- describe features of their immediate environment
- describe changes that occur in daily and seasonal cycles and their effects on living things

#### Grade 2

- use their senses to interpret observations
- ask questions that foster investigations and explorations relevant to the content
- infer the probable outcome of an event or behaviour based on observations
- classify familiar animals according to similarities and differences in appearance, behaviour, and life cycles
- describe how animals are important in the lives of Aboriginal peoples in BC
- describe some changes that affect animals (e.g., hibernation, migration, decline in population)
- describe ways in which animals are important to other living things and the environment

### Social Studies

#### Grade 1

- use picture maps to identify familiar locations in the school or community
- identify strategies to address relevant school-based problems
- identify characteristics of different environments
- demonstrate responsible behaviour in caring for their immediate and school environments
- participate co-operatively in groups
- identify characteristics of different local environments

## Grade 2

- interpret simple maps using cardinal directions, symbols, and simple legends
- create simple maps representing familiar locations
- use simple maps to interpret and present information
- identify changes that occur in the school and community throughout the year
- describe their responsibility to the local environment
- select a solution to a classroom or school problem
- formulate a response to a relevant classroom, school, or community problem or issue

## Math

### Grade 2

- gather and record data about self and others to answer questions
- construct and interpret concrete graphs and pictographs to solve problems

## List of General Activities

### 1. We Are Being Invaded! An Active Game about Invasive Species Spread

(Primary / Elementary Activity: Ages 5-12)

A fun, active game that demonstrates how invasive species can spread.

**Source:** ISCBC and The Girl Guides of Canada

**Websites:** [http://bcinvasives.ca/documents/Education\\_Teacher\\_Resources\\_FINAL\\_06-02-2014.pdf](http://bcinvasives.ca/documents/Education_Teacher_Resources_FINAL_06-02-2014.pdf) & <http://bc-girlguides.org/web/Documents/BC/program/AlienInvaders.pdf>



### 2. Weedy Scavenger Hunt

(Primary / Elementary / Intermediate Activity: Ages 5 – 12)

Also a good “buddy” class activity. Students go on a scavenger hunt to look for things specifically related to invasive plants.

**Source:** ISCBC and Oregon Natural Resources Education Program (ONREP)

**Websites:** [http://bcinvasives.ca/documents/Education\\_Teacher\\_Resources\\_FINAL\\_06-02-2014.pdf](http://bcinvasives.ca/documents/Education_Teacher_Resources_FINAL_06-02-2014.pdf) & [http://weedinvasion.org/pdfs/Facts/weedy\\_scavenger\\_hunt.pdf](http://weedinvasion.org/pdfs/Facts/weedy_scavenger_hunt.pdf)



### 3. Bionic Bob to the Rescue Activity book

(Primary / Elementary Activity: Ages 4 – 12)

This is a fun, cartoon-filled 20-page activity book that highlights some of the main invasive plants in BC and their characteristics. Colouring pages, mazes, puzzles, crosswords and word searches abound in this resource.

**Source:** Project coordinated by Val Miller, MFLRNO

**Website:**

<https://www.for.gov.bc.ca/hra/Plants/biocontrol/downloads/BionicBob.pdf>



### 4. Invader Rangers

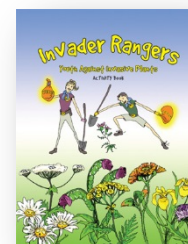
(Primary Activity: Ages 3-6)

This activity book includes fun activities that involve learning about invasive plants through coloring, word searches, a crossword, weedy widget, dodecahedron, and more!

**Source:** ISCBC

**Website:**

[http://bcinvasives.ca/documents/Youth\\_Activity\\_Book\\_07\\_18\\_2014.pdf](http://bcinvasives.ca/documents/Youth_Activity_Book_07_18_2014.pdf)



### 5. Native/Non-native Plant Collage

(Primary / Elementary / Intermediate grades: Ages 6-14)

A fun art activity where students create collages of native and non-native plants.

**Source:** Education Activities & teacher Resources (ISCBC)

**Website:** [http://bcinvasives.ca/documents/Education\\_Teacher\\_Resources\\_FINAL\\_06-02-2014.pdf](http://bcinvasives.ca/documents/Education_Teacher_Resources_FINAL_06-02-2014.pdf)

### 6. Invasives: Plants on the Move

(Primary –Secondary Activities: Ages 4-19)

This curriculum is a U.S. - based, on-line resource, adaptable to the BC Prescribed Learning Outcomes. It is designed for teachers who want to integrate the topic of invasive weeds in the classroom, develop weed awareness and provide students in grades K to 12 with an understanding of the serious problem of invasive weeds. Includes seven lesson units and incorporates a Student Weed Journal and Weed Warrior Worksheets.

**Source:** Oregon Natural Resources Education Program **Source:** Oregon Natural Resources Education Program (ONREP)

**Websites:** <http://www.weedinvasion.org/> and for a pdf

[http://www.weedinvasion.org/pdfs/extras/about/about\\_curriculum.pdf](http://www.weedinvasion.org/pdfs/extras/about/about_curriculum.pdf)



## Non-formal Education Activities

### Primary Activities: Ages 5-8 (Sparks & Brownies)

**Source:** Alien Invaders Challenge

**Website:** <http://bc-girlguides.org/web/Documents/BC/program/AlienInvaders.pdf>

Note: these activities, although developed for Girl Guides, can also be adapted for all kids aged 5-8. Older kids to adults can also participate by helping younger kids in these activities.

### Scavenger Hunts

1. **Biodiversity ABC Scavenger Hunt:** Practice observation skills and get to know your local “natural” neighbourhood or park.
2. **Weedy Scavenger Hunt:** This is a great bridging activity, to help younger girls with the scavenger hunt.
3. **Invasive Plant Photo Scavenger Hunt:** Using a camera to capture invasive plants in the field.

### Active Games

1. **From Here, From Away:** Activity that helps kids understand the difference between introduced and native species.
2. **Invader Tag:** Kids take turns tagging each other as they play invasive plants that spread.
3. **Nests:** Another form of tag wherein Kids playing invasive birds (i.e. European starlings) try to capture the nests of others playing native Lewis Woodpeckers.
4. **Algae, New Zealand Mud Snail, Trout:** This activity is similar to Rock, Paper, Scissors

### Creative Activities

1. **No Hitchhikers! Aquatic Invasive Species Role Play:** Kids role-play the either play the part of lake inhabitants or the aquatic exotics that displace native species. Props are used to help demonstrate how aquatic exotic species enter a lake or river system, the negative effect they have on native species and things people can do to stop the spread of aquatic species.
2. **Invasive Plant Dress up & Fashion Show:** Kids create their own make believe species, using dress-up clothes and accessories (e.g. hats or gloves). They put on an Invasive Species fashion show to highlight some of the characteristics that make a plant invasive.
3. **Invader Creator:** kids brainstorm about the things that make a plant species invasive and then create their own species using crafts.
4. **Invader Puppet Show:** Kids create their own invasive species puppets and develop a narrative/dialogue for the puppets to show how aninvasive species is successful because they reproduce rapidly, aggressive and can outcompete the native species for resources (e.g. water, food, sunlight, etc.).

5. **Make-Believe Weeds:** Kids use scientific terms and concepts to brainstorm and create imaginary or make-believe invasive plants. Bring in concepts of plant parts, habitats, adaptations and invasive characteristics that help these plants thrive and spread.
6. **Invasive Species Sing-a-long:** Kids write a song, poem, or rap song about invasive species!
7. **“Alien Invasion” Invasive Species Interview:** Kids work in groups each taking turns to act as a news reporter, invasive species and native species. They create a skit to act out a live news hour report showcasing the interview.
8. **Invasive Bake Off Competition:** Kids create a pie or similar with edible invasive plants (i.e. Himalayan Blackberries)

### Discovery Activities

1. **Native / Non-Native Plant Collage:** Kids create a collage of pictures/drawings of native and non-native plants found in their region. Throughout this activity, kids discuss meaning of “native” and “non-native” and discuss invasive and non-invasive species
2. **Native Plants: Know Your Neighbours:** Kids practice observation skills and get to know their local, “natural” neighbourhood or park.
3. **Invasive Plant Field Guide Page:** Kids help each other create a field guide for invasive plants in their area and discuss the difference between native, introduced and invasive plants. Kids also provide examples of what to do if you find one of these plants.
4. **Invasive Plant “Wanted” Poster:** Kids discuss the main distinguishing features of a locally selected invasive plant and make a poster about it.
5. **Invasive Animals: Brochure:** Kids develop a brochure to highlight an invasive animal species that is either present in their region or has the potential to invade.
6. **Invasive Species: Careers:** Kids create an interview sheet that asks specific questions of an invasive species employee working for a local agency or site.

### Field Trips / Service projects

1. **Site Visit: Invasive & Native Species:** Kids visit a local garden, plant nursery, garden center, park or botanical garden and explore plants for sale or are growing. Kids discuss invasive plants and their characteristics and purchase some native or non-invasive seeds to grow.
2. **Invasive Species Community Weed Pull:** Kids get involved at a community weed pull.
3. **Field Trip to an International Airport:** Kids and leaders go on a tour with a Canadian Food Inspection Agency official. Kids ask questions about how officials prevent travellers from transporting plants and animals illegally in and out of the country.



# Invasive Species Education Resources & Links

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*Please contact me any time if you have questions or need more information – I'd love to hear from you and learn more about the work you are involved with!*

## Resource Links

- Invasive Species Council of BC: <http://www.bcinvasives.ca>
- Canadian Wildlife Federation: Encyclopedia of Invasives; activities: <http://cwf-fcf.org/en/discover-wildlife/resources/>
- Invasives on the Move: K – 12 curriculum; Oregon Natural Resources Education Program (ONREP) <http://www.weedinvasion.org>
- Making Waves Protecting Ontario's Aquatic Habitat: <http://www.invadingspecies.com>
- Grade 4 curriculum kit, Grade 6: Biodiversity Challenge!, Compendium of outreach resources:
- Center for Invasive Species Management: Montana – good list of resources: <http://www.weedcenter.org/education/k-12.html>
- Citizen Science Handbook: Invaders of Texas <http://www.texasinvasives.org/invaders/toolkit.php>
- Biodiversity Education & Awareness Network: <http://biodiversityeducation.ca/formal/>
- Community Stewardship Projects on Exotic Aquatic Species: Booklet of activities and community stewardship projects Sea Grant <http://www.iisgcp.org/edu/cr/index.html>.
- ESCAPE: Exotic Species Compendium of Activities to Protect the Ecosystem <http://www.iisgcp.org/edu/escape/index.html>