Invader Rangers are making a stand!

Invasive plants are threatening our great outdoors. Also known as noxious weeds, plant invaders taste bad to animals, and are harmful to the environment.

www.bcinvasives.ca
REPORT A WEED: 1-888-933-3722

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Design and Artwork: Julianne Leekie (ISCBC); Cartoon Artwork: Alex Walton
2010 Activity Book Compilation: Cathy Koot
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1 - INVADER RANGERS ACTIVITY BOOK
**Word Search**

You can learn to spot and recognize these plants. Care for native plants and report the invasive ones!

**Native Plant Word Search** - Names of some of our home-grown plants can be read from left to right, top to bottom, and diagonally.

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</table>

<table>
<thead>
<tr>
<th>Cattail</th>
<th>Goldenrod</th>
<th>Prickly Pear Cactus</th>
<th>Alder</th>
<th>Fireweed</th>
<th>Tiger Lily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balsamroot</td>
<td>Bunchberry</td>
<td>Trillium</td>
<td>Bunchgrass</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What Plant am I?

Read the descriptions and match the plant names to the pictures.

**Native Plant** – Plants whose relatives have grown in nature in this part of the world for a long, long time. They are eaten by local animals, including insects. Many kinds of native plants grow together in one place.

**Introduced Plant** – Brought from another part of the world by people. Some are planted on purpose in gardens and farms, but others came here by accident. Not all are invasive.

**Invasive Plant** – A kind of plant, usually from another part of the world, that grows and spreads in such big numbers that they take over from native plants. They are like bullies!

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**PLANT**

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**PLANT**

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**PLANT**
Word Search

Invasive Plant Word Search – Names of some Plant Invaders can be read from left to right, top to bottom, and diagonally.

O J H N C B Z M R Q T C N Y X T I G
R M O G A G I A N T H O G W E E D C
A F U O N F U D D K E M G B Q P E R
N P N X A O B C P B N M G O R S E K
G P D E D H R I U Q F O N Z M A F N
E O S Y A G L J J O O N T P P F F A
H T T E T W U I Y X Y T Z W M F R P
A V O D H Z H B N G N A O M E C U W
W X N A I D L Z T B N F Y V E C E
K T G I S E A Q C A D S H R Z H D E
W Z U S T A V G O J S Y Q D P B H D
E B E Y L B B L E A F Y S P U R G E
E D H Y E L L O W F L A G I R I S Z
D Z J S D K J F K N N C N V C N Q I
C P U R P L E L O O S E S T R I F E

Yellow Flag Iris  Canada Thistle  Knapweed  Oxeye Daisy  Gorse  Leafy Spurge
Hounds Tongue  Purple Loosestrife  Knotweed  Giant Hogweed  Common Tansy  Orange Hawkweed

(Answers on Page 17)

Making a Stand Against Invasive Plants! - 4
Name each silhouette using the labeled drawings on the Word Search (page 4).

1. __________________  2. __________________  3. __________________

4. __________________  5. __________________  6. __________________

(Answers on Page 17)
Secrets of Invaders’ Success

Matching numbers to letters in this key, figure out the secrets to why plant invaders can take over and spread far and wide.

A B C D E F G H I J K L M
1 2 3 4 5 6 7 8 9 10 11 12 13

N O P Q R S T U V W X Y Z
14 15 16 17 18 19 20 21 22 23 24 25 26

1. Tough Guys: Invasive plants grow well where native plants don’t, such as beside roads, in

___________ pits and on __________ ground.
(7 18 1 22 5 12) (2 1 18 5)

2. Power in Numbers: Invaders multiply quickly. A single plant can produce ____________ of seeds a year.
(20 8 15 21 19 1 14 4 19)
Roots spread underground and send up new shoots. Plant invasions ___________ as more and more new
(5 24 16 1 14 4)
___________ grow from roots and new plants
(19 8 15 15 20 19)
grow from ____________.
(19 5 5 4 19)

3. No Predators: Many ____________ feed on
(9 14 19 5 3 20 19)
only certain kinds of plants. When a plant is moved to another part of the world where animals don’t know to eat it, the plant spreads quickly. Invasive plants often taste
______ or are ________________.
(2 1 4) (16 18 9 3 11 12 25)

Get This!
The invasive Purple Loosestrife:

1. Can make 300,000 seeds in one plant in one year.
2. Has more than 120 different kinds of insects that feed on it in Europe where it’s from but has next to none here.

(Answers on Page 17)
Phooey For Plant Invaders

Invasive plants create hard times for people, animals and native plants. Find and circle all the problems where these bully plants have taken over. Clue: There are 8 problems to look for.

(Answers on Page 17)
Invader Invitation

Bare ground invites invasive plants to grow and multiply.

Invaders are good at living in places where other plants have a hard time growing, such as gravel edges of roads or places used a lot by people and vehicles (cars, ATVs, bikes, boats, trains). Some grow along streams and wetlands too, and others live in water.

Put a (✔) beside the places you would expect to find plant invaders growing and an (✗) where you would not.

<table>
<thead>
<tr>
<th>a) on top of a mountain</th>
<th>f) in space</th>
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<tbody>
<tr>
<td>b) a boat launch</td>
<td>g) building construction site</td>
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<tr>
<td>c) gravel pit</td>
<td>h) the wilderness</td>
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<tr>
<td>d) road edge</td>
<td>i) along a railway line</td>
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<tr>
<td>e) a stream bank in a popular park</td>
<td>j) where bikes and ATVs went off-trail and stirred up the soil</td>
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Did you know?

Small patches of invaders are the easiest to control. Take action – pull or report plant invaders when you find them so they don’t spread further!

Let’s be sure to prevent the spread of invaders to new places!

(Answers on Page 17)
How do seeds and plant parts travel? Put a (✔) in the column(s) you think best describes how the invaders in each picture spread to new places.

<table>
<thead>
<tr>
<th></th>
<th>Tumbleweed (a)</th>
<th>Free Ride (b)</th>
<th>Blowin' in the Wind (c)</th>
<th>Scattering (d)</th>
<th>Garden Escape (e)</th>
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(Answers on Page 17)
Some plants make use of the wind to spread their seeds. This allows plant seeds to go far.

Along what path did the wind blow this seed?
Slow the Spread

We can make a difference! Unscramble the tips on how to slow the spread by using the clues.

1. EGGARAB GAB  Plants with seeds should be thrown in one of these to prevent seed spread. __________

2. STRALI  Biking on existing “_____” prevents spread of seeds and plant parts. __________

3. AHY  What goes in, comes out! Feed your horse weed-free “_____.” __________

4. NOGRECIZE  By learning to do this, you can spot and report invasive species. __________

5. LUPL  Do this, roots and all. __________

6. NEVERPTION  This is the best way to deal with invasive plants. __________

7. RUBR  Pull these off your shoe laces or dog’s fur and throw into the garbage. __________

8. ERPROT  Do this at 1-888-WEEDSBC if you find invasive plants. __________

9. SLOVEG  Wear these to protect your hands when pulling out invaders from the soil. __________

10. SMEIL!  Do this when you are happy about making a difference by helping nature. __________

Number Crunching

One giant hogweed plant can produce 50,000 seeds per year! These seeds can still grow even after sitting around for 15 years!

**Question:** If each seed was worth a penny, and there are 100 pennies in a dollar, how many dollar’s worth would you have with one plant?

(Answers on Page 17)
**Weedy Widget**

**Folding Instructions:**
1. Cut along the dotted line.
2. Place Weedy Widget this side down (side with most writing).
3. Now, fold each corner to the centre so that you have a smaller square.
4. Turn the folded square over and fold each corner to the centre again.
5. Fold this square in half to crease it. Undo that fold and fold in half the other way.
6. Using both hands, place your thumbs and index fingers under the flaps.

**How to Play:**
- This game is for 2 players. Ask the other player to pick a topic, like “Leafy Laughs.”
- Open and close the Weedy Widget in an alternating direction for each letter of the phrase L E A F Y L A U G H S (11 times).
- Ask the question under the chosen topic and let the other player answer. Lift the flap to find the answer.
- Now pass the Weedy Widget to the other player. Alternate asking and answering until all the questions are answered.

**Groaners**

**Leafy Laughs**

What did the clingy seed say on a cold day?

What’s the difference between hawkweed and a hound’s tongue?

“Burr!”

One is not covered in slobber!

How do you get to the roots of the matter?

How do you fight a plant invasion?

Pull ‘em, bag ‘em and throw ‘em in the trash.

Sticky to the trails, make plant invasion fail!

What did the knotweed get reported to 1-800-WEEDSBC?

Knock, knock. Who’s there? Thistle. Thistle who?

Knock, knock. Who’s there? Sticky. Sticky who?

Because it was naughty!

Knock, knock. Who’s there?

Because it was naughty.

Why did the knotweed disappear from your garden?

Because it was naughty!

What is spotted but doesn’t spread?

A reported patch of invasive plants.

Get a grip and pull them out of the ground!

How do you get rid of a thistle?

Aim for the ground near the base of the flower.

Why did the knotweed disappear from your garden?

Because it was naughty!

What did the knotweed eat?

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What did the knotweed eat?
Weedy Widget
Use your new invasive plant knowledge by filling in the puzzle.

Across:
1. Seeds can get a free ride to somewhere new on bike and vehicle _______.
2. If you find an invasive plant, do this, roots and all.
4. ______ patches of invasive plants are easier to control than large ones.
6. Invasive plants grow well on ______ ground.
8. Many plants spread from these underground plant parts.
10. Places where we grow plants and where some can escape from.
11. Throw burrs picked off your pets and laces into one of these (2 words).
14. Name for kinds of plants that have been growing in an area for a very long time.
17. Fluffy seeds are blown by this.

Down:
1. Invasive plants come from other parts of the ______.
2. Invasive plants grow so well because there are few of these to eat and kill them.
3. ______ invasive plants to 1-888-WEEDSBC.
5. Fed to horses. Can contain invasive plants.
6. Propellers and trailers for these can move invasive aquatic plants.
7. People who grow food.
9. ______ can make a difference!
12. Plant invaders force wild ______ to go farther to look for food.
13. Slow the spread by not riding bikes and ATVs off of these.
15. Animals with six legs. Can be plant predators.
16. Invasive plants often each produce thousands of these.

(Answers on Page 17)
Plant Invader Dodecahedron

Make a dodecahedron — a twelve-sided “ball”. Get familiar with 12 invaders!

What You Will Need:

- Dodecahedron template from back cover
- Scissors and glue

How to Make One:

1. Carefully cut out along the outer, solid lines from the dodecahedron pattern (invasive plant images) on the back cover. Be sure to NOT cut the dashed lines!

2. Fold the dodecahedron pattern along the dashed lines so that it makes a twelve-sided “ball”. Glue the tabs to the inside to keep the shape from unfolding.

3. Once it’s made, roll it like dice. Using the fact lists, look up the name and a neat fact about the plant species that is facing up. Play with a friend or on your own. Share your knowledge about invasive plants with other people who pick up your dodecahedron to play with it.

Let’s learn about invasive plants and make this dodecahedron!
### Plant Invader Dodecahedron

#### Fact List

<table>
<thead>
<tr>
<th>What Plant Is It?</th>
<th>Where is it From?</th>
<th>How Did It Get Here?</th>
<th>What Does It Do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spotted Knapweed</td>
<td>Europe, Asia</td>
<td>In bags of alfalfa seed, accidental</td>
<td>Chokes out native grasslands</td>
</tr>
<tr>
<td>Common Tansy</td>
<td>Europe</td>
<td>As a garden plant, on purpose</td>
<td>Makes livestock and people ill if eaten</td>
</tr>
<tr>
<td>Hound’s Tongue</td>
<td>Europe, Asia</td>
<td>With grain seeds, accidental</td>
<td>Poisons livestock if it’s in hay</td>
</tr>
<tr>
<td>Orange Hawkweed</td>
<td>Europe</td>
<td>As a garden plant, on purpose</td>
<td>Spreads by roots, making a solid mat where other plants cannot grow</td>
</tr>
<tr>
<td>Oxeye Daisy</td>
<td>Europe, Asia</td>
<td>As a garden plant, on purpose</td>
<td>Overtakes pastures and cows do not eat it</td>
</tr>
<tr>
<td>Giant Hogweed</td>
<td>Mountains of South-western Asia</td>
<td>As a garden plant, on purpose, because it’s huge (3-5 m high)!</td>
<td>Sap causes skin to blister and hurt</td>
</tr>
<tr>
<td>Yellow Flag Iris</td>
<td>Europe</td>
<td>For garden ponds, on purpose</td>
<td>Takes over wetlands and ditches</td>
</tr>
<tr>
<td>Purple Loosestrife</td>
<td>Europe, Asia</td>
<td>As a garden plant, on purpose</td>
<td>Dominates wetlands, stream banks and ditches</td>
</tr>
<tr>
<td>Canada Thistle</td>
<td>Europe, Asia</td>
<td>With crop seeds, accidental</td>
<td>Spreads from roots, creates dense, prickly patches</td>
</tr>
<tr>
<td>Eurasian Water Milfoil</td>
<td>Europe, Asia and North Africa</td>
<td>By accident</td>
<td>A new plant grows from just a broken piece of stem. They are spread from lake to lake on boats and trailers.</td>
</tr>
<tr>
<td>Gorse</td>
<td>Europe</td>
<td>As a garden plant, on purpose</td>
<td>Spiny shrubs invade open areas and live for a long time</td>
</tr>
<tr>
<td>Knotweed</td>
<td>Asia</td>
<td>As a garden plant, on purpose</td>
<td>Grows and spreads really fast, especially along streams and bare ground</td>
</tr>
</tbody>
</table>

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**Making a Stand Against Invasive Plants!** - 16
Answer Keys

Native Plant Word Search (p. 2)

Invasive Plant Word Search (p. 4)

Silhouettes (p. 5)

Secrets of Invaders' Success (p. 6)
1. Tough Guys: gravel, bare
2. Power in Numbers: thousands, expand, shoots, seeds.

Phooey for Plant Invaders - Clues (p. 7)

Invader Invitation (p. 8)

b), c), d), e), g), i), j)

Getting Around (p. 9)
1. d), 2. b) and d), 3. c), 4. b), 5. a), 6. b), 7. e)

Slow the Spread (p. 11)

Invasive Plant Crossword (p. 14)

Across:
1. WHEELS 10. GARDENS
2. PULL 11. GARBAGE BAG
4. SMALL 14. NATIVE
6. BARE 17. WIND
8. ROOTS

Down:
1. WORLD 9. YOU
2. PREDATORS 12. ANIMALS
3. REPORT 13. TRAILS
5. HAY 15. INSECTS
6. BOATS 16. SEEDS
7. FARMERS
Cut out this template for the Dodecahedron activity on pages 15-16.

Contact the ISCBC or your Regional Invasive Species Committee to find out:
- More information on the most invasive plants in your community
- How to arrange a "Communities Pulling Together" weed pull event
- More information for your school or
- How to become an Invader Ranger and help spot invasive plants near you!

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