



Golden Visitor Centre

June/July 2020

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Outline:

- Introduction to Invasives
 - Why we should care
 - What we can do
-
- 15 minute presentation
 - Question time at end

Who we are

The Columbia Shuswap Invasive Species Society is a **network of partners** who facilitate the prevention, reduction and management of invasive species within the Columbia Shuswap region.



Purposes:

- To **educate** and **engage** people about invasive species and their impacts.
- To **operate** invasive species management programs.

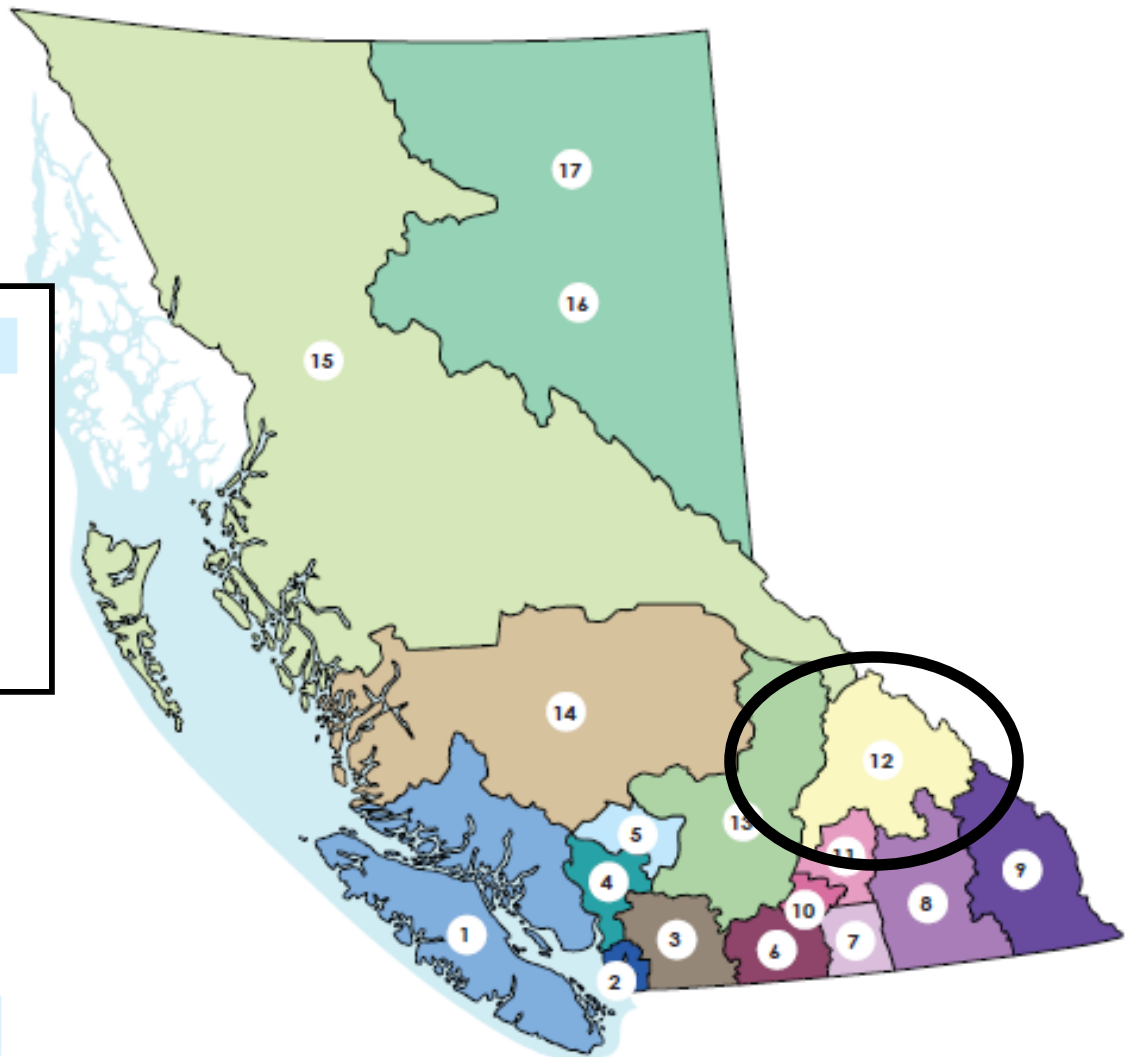
Invasive Species Organizations of BC

Regional Organizations

12. Columbia-Shuswap

Columbia Shuswap Invasive Species Society
Ph: 1-855-PUL-WEED (1-855-785-9333)
www.columbiashuswapinvasives.org
Email: csinvasives@gmail.com
PO Box 2853, Revelstoke, BC, V0E 2S0

Columbia-Shuswap Regional District (CSRD)
Ph: 250-832-8194 • www.csr.bc.ca



What is an “invasive species”?

- Not from here (BC)
- Animal, plant, insect, even microbe
- Has a negative impact (social, environmental or economic)



Are all non-native species invasive?



The background of the slide features a close-up, slightly blurred image of green grass blades. The blades are long and narrow, with some showing lighter green veins. The overall color palette is various shades of green, from light to dark, creating a natural and organic feel.

**What makes a species
invasive?**

They produce LOTS of offspring

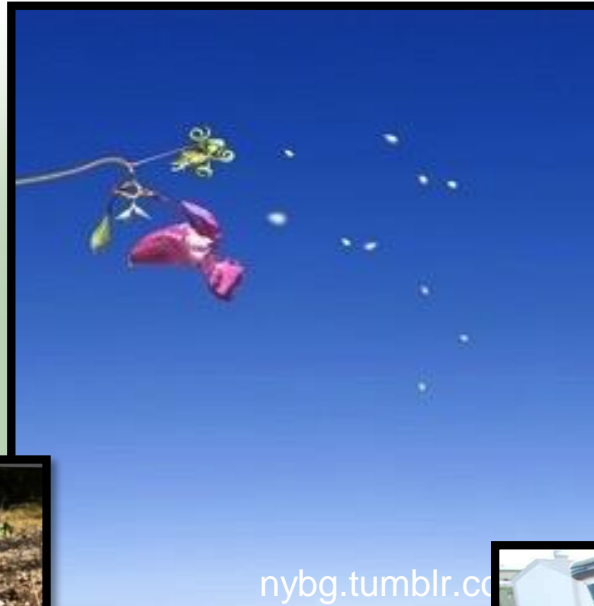
Purple loosestrife can produce
over 300,000 seeds/year



Zebra mussels can produce up to
1 million eggs per year - each!

Spread easily and effectively

Hooked seeds like burdock attach to animals, vehicles and clothing – always dispose of these in the garbage



Zebra mussels attach to boat propeller and travel across country



Himalayan Balsam seed pods explode sending seeds up to 10m



Can quickly establish and thrive in new areas

Knotweed (aka false bamboo) is extremely fast growing and will sprout from fragments of roots or stems as small as a pea.



Eurasian water-milfoil can spread when tiny stem fragments break off drift away (or are moved by boats) and grow into new plants.

Usually lack natural predators

Spotted knapweed tastes bitter to livestock and wildlife



The milky sap of Leafy spurge can cause sores around the mouths of animals that eat it.

**So they spread easily, grow fast,
invade new areas...**

But why do we care?

**They typically have significant
negative impacts**

Impact property and lifestyle

European fire ants

- Painful bite
- high density of nests makes your back yard a no-go zone
- Reduce property values



Knotweed

- Damages roads
- Breaks concrete foundations
- Damages septic systems
- Can cause neighbour disputes

Environmental impacts

Diverse wildflower meadow provides forage



Orange hawkweed as monoculture



Andy Fyon

Impacts to recreation

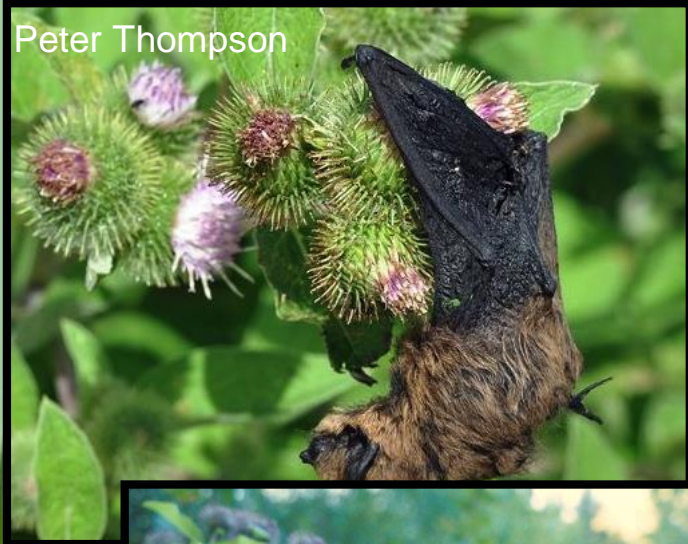
Eurasian water-milfoil makes lakes unsuitable for recreation



Puncturevine ruins recreational trails

Impact wildlife and domestic animals

Peter Thompson



Burdock ensnares bats and birds and irritates the eyes of livestock



Whirling disease kills salmonid fishes including salmon, trout and whitefish



Economic impact

Zebra/Quagga
mussels attach to
surfaces under water

Can cause damage to
pipes and other
structures

It can take just six
months to clog a water
pipe



Impact our food production



Reduction in crop yields

Loss of traditional food
and medicinal plants



Impact health

Some invasives can cause significant danger to human and animal health – giant hogweed



The background of the slide features a close-up, slightly blurred image of green grass blades. The blades are long and narrow, with some showing lighter green highlights where they catch the light. The overall tone is a soft, natural green, which frames the central text.

How

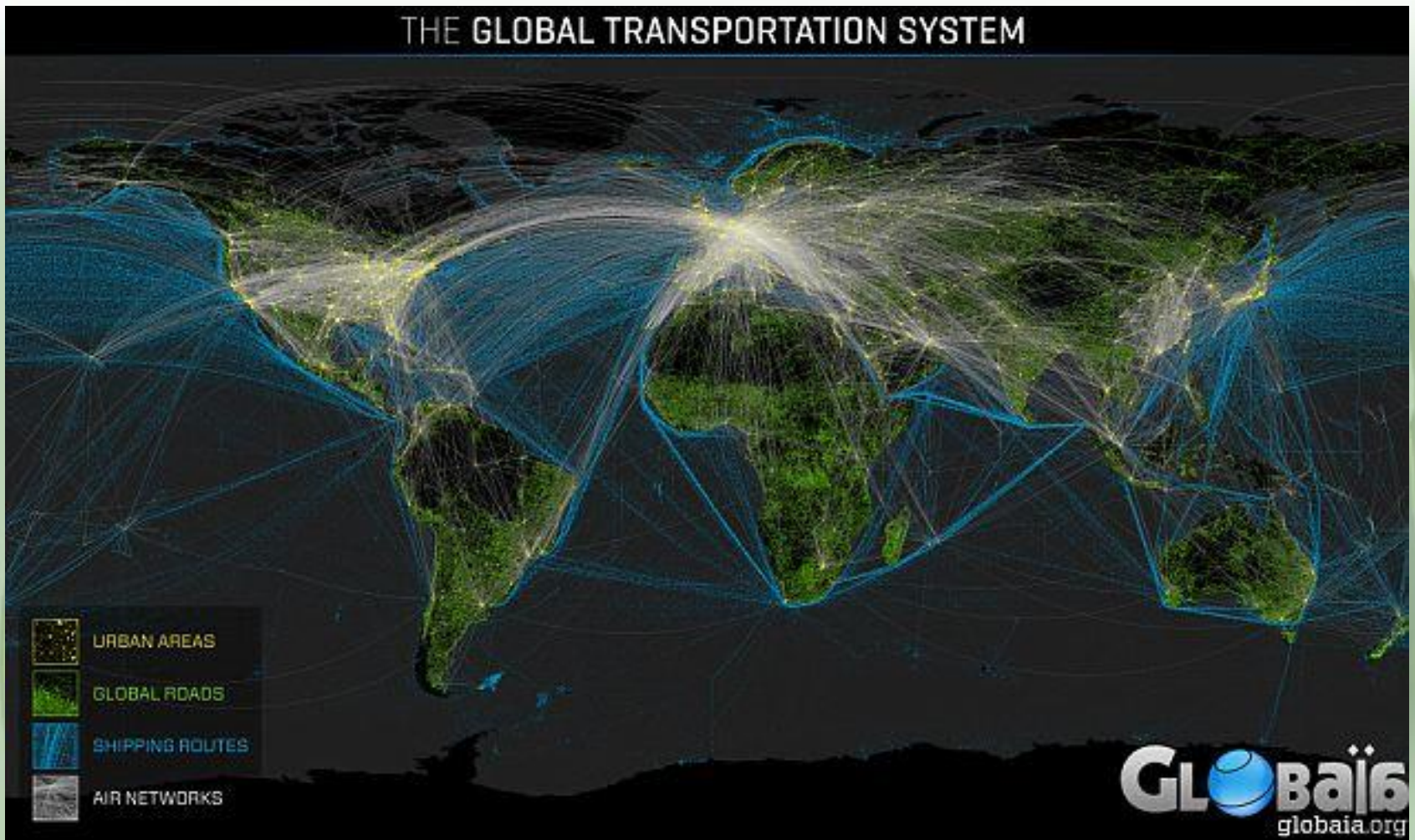
**do invasive species invade
new places?**

They hitch a ride with humans



Distribution of Common Tansy in BC

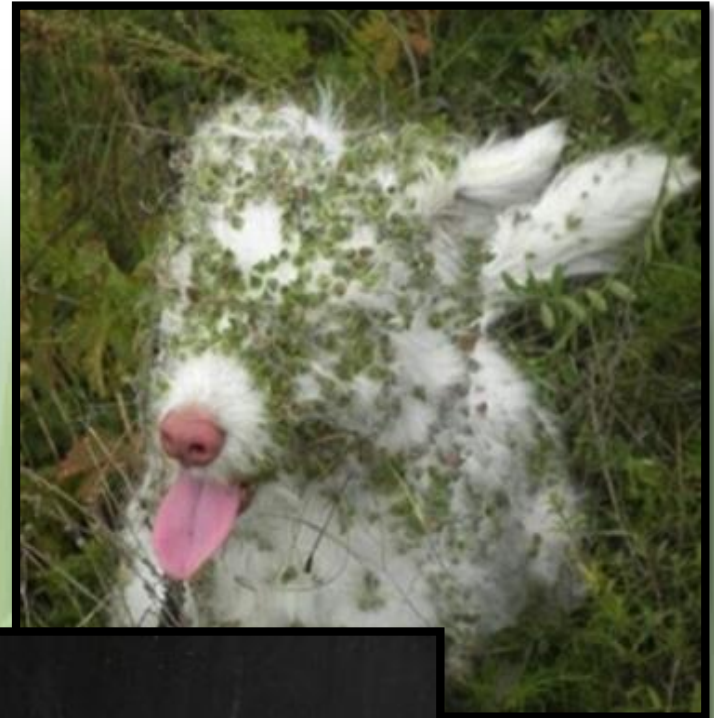
The human transportation system



Pathways of Invasion

Can we change our behaviour to reduce the spread of invasives?

Play, Clean, Go



Play, Clean, Go



Play, Clean, Go

Clean your **boots and bikes** after leaving a muddy trail

Check your **vehicle and equipment** and remove seeds /mud

Don't carry seeds home!



Clean, Drain, Dry



Clean, Drain, Dry

Before you move a water craft from one water body to another

- **Clean** all plants, animals, and mud from boat and equipment
- **Drain** any water onto land
- **Dry** all items completely



**CLEAN
DRAIN
DRY**

**Prevent the Spread of Aquatic
Invasive Species**

Zebra/Quagga Mussels

Small, clinging, freshwater mussel

Adults about the size of a dime

Not to be confused with the **native** Rocky Mountain Ridged Mussel which is endangered

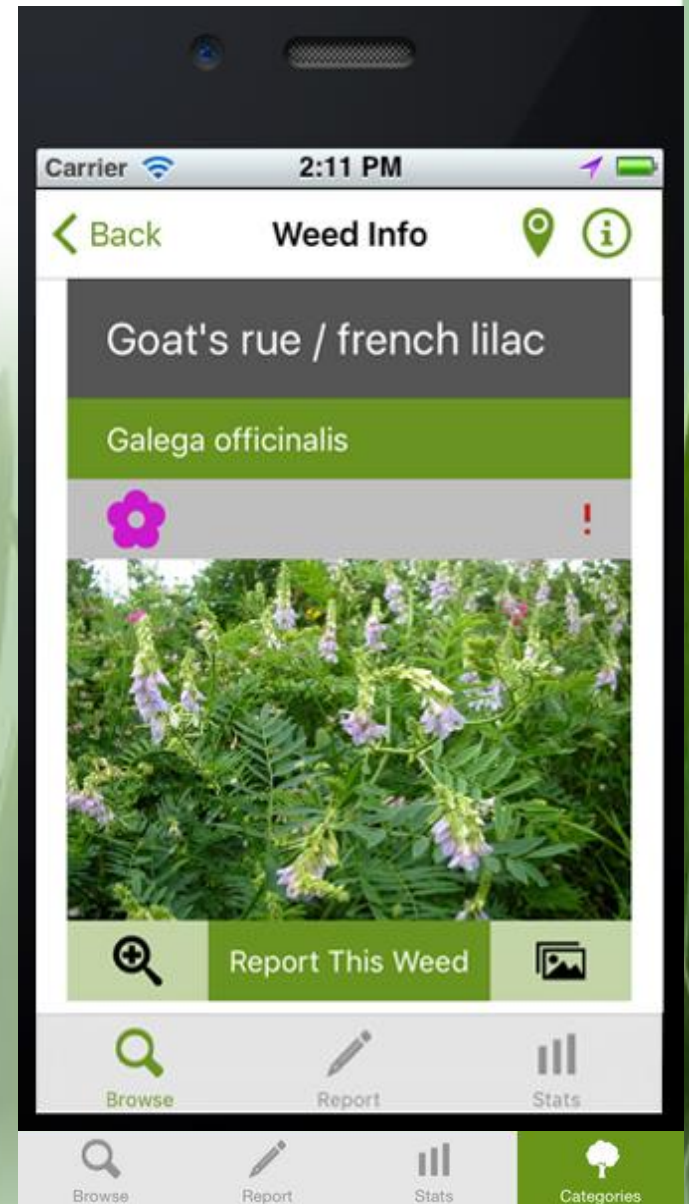


Watercraft Inspection

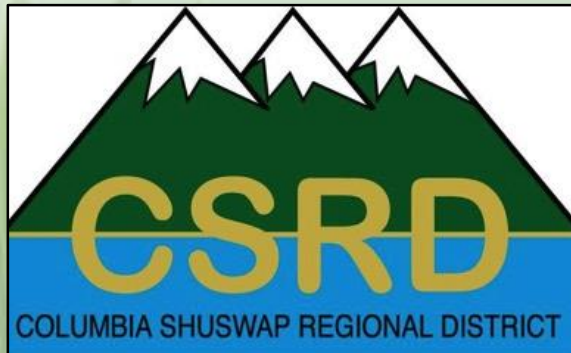
- No invasive mussels known in BC
- **Prevention is key**
- Mandatory watercraft inspection stations
- All watercraft must stop
- Inspection and Decontamination



- Spread the word not the weeds!
- Report strange plants or animals to CSISS
- Use the report-invasives app
 - app store
 - search “Report Invasives BC”



Thank you to our sponsors :



Thank you!



CSISS

COLUMBIA SHUSWAP INVASIVE
SPECIES SOCIETY

Thank you!

- More information:
 - Website:
www.columbiashuswapinvasives.org
 - Email:
info@columbiashuswapinvasives.org
 - Toll free: 1-855- PUL-WEED
- **Any questions?**



***Some high priority
invasive plants***

Knotweed (*Fallopia japonica*)

- AKA false bamboo
- Known to break through concrete and asphalt
- Extremely fast growing
- Grows from any small fragment.



Himalayan balsam

(*Impatiens glandulifera*)

- annual with exploding seed pods
- highly invasive, clogs waterways
- produces sweet nectar that can attract pollinators away from native or crop plants



Scotch Broom (*Cytisus scoparius*)

- Perennial
- Native to Europe and North Africa
- Introduced in the 1850's as an ornamental



Photo credit:

http://haliaeetus.blogspot.ca/2010_06_01_archive.htm

Leafy spurge (*Euphorbia esula*)

- Can send its roots 8 metres deep into the soil
- Produces a toxin that can inhibit the germination of nearby plants
- Contains a white milky latex that can irritate the skin and can cause serious injury to stock and wildlife



Field scabious (*Knautia arvensis*)

- Typical trident shaped growth habit
- A single plant can produce more than 2000 seeds
- Very difficult to get rid of once established



Yellow Flag Iris (*Iris pseudocorus*)

- Alters riparian habitat
- Affects wildlife movement to the water (waterfowl and turtles)
- Out-competes native plants that provide food for animals
- Creates very dense root mats that are very hard to remove



Purple Loosestrife

(*Lythrum salicaria*)

- AKA the swamp monster
- Changes water flows in marshes
- Increases mosquito habitat
- Up to 300,000 seeds per year.



Marsh Plume Thistle

(*Cirsium palustre*)

- Tall, water-loving thistle
- Wind, water and animal seed dispersal.
- Proliferates in forestry cut blocks
- Can out-compete forestry tree seedlings



Blueweed (*Echium vulgare*)

- Toxic to livestock
- Host for several plant diseases (tobacco and wheat)
- Silicone hairs similar to fiberglass







Bullfrogs

- Natural range is eastern North America
- Originally brought west as a farmed animal for their meaty legs.
- Out-compete all local frogs

[Bull frog call](#)

