



Invasive Species Council of BC

INDIGENOUS RESOURCE SERIES

2019

## Educational Activity

# Create Your Own Field Guide

### TIME

2.5 – 3 hours

### AGE

10 – 18 years

### PURPOSE

This activity helps youth to identify and learn about culturally important species in their territories by developing a locally relevant field guide. This guide will include key invasive species and their impacts on the culturally important species in their area, as well as actions that Indigenous youth can take to prevent their spread.

### MATERIALS

#### Option A: Notebook Field Guide (for younger youth)

- » Markers (Red & Green)
- » Notebook
- » Pencil crayons or markers in various colours
- » Paper
- » Pencils
- » Tools for exploring habitat: binoculars, hand lenses, field guides (native and invasive species)

- » Clip board
- » Habitat Data Sheet (included)

#### Option B: Digital Field Guide (For Older Youth)

- » Digital cameras or cell phones (optional for digital field guide for older youth)
- » Computer to insert data and create field guide

### PROCEDURE

#### Part 1: Explore the Territory

As a group go for a walk or a fieldtrip and note each native and invasive species that you see. Ask older youth who are using cameras or phones to take photos of each species.

Use the Habitat Data Sheet to help start youth off on searching for different species in the area.

#### Part 2: Native and Invasive Species Research

Once a number of species have been identified and noted, ask youth to research each of the species found.

#### Part 3: Create field guide

Using the instructions below, youth can create their own field guide.

## OPTION A: NOTEBOOK FIELD GUIDE (For younger youth)

1. Use the notebook to create a guide. Dedicate a page to each species (one per page). Use as many pages as needed for each species.
2. For **culturally important species**, include:
  - » Name (write in **green**)
  - » Latin name (write in *italics*)
  - » Traditional name (if known)
  - » Image(s) (drawn or photo)
  - » Cultural uses

### Example 1

**Salmon** *Oncorhynchus sp.*

Traditional Name:  
Kwōxweth (Coho Salmon  
in Halq'eméylem)

There are five types of  
salmon in BC:

1. Coho
2. Chinook
3. Pink / Humpback
4. Sockeye
5. Chum / Dog salmon

Salmon is a culturally important species, not only as an important food but in our stories, culture and history.



### Example 2

**Sagebrush** *Artemisia tridentata*

Traditional Name: ck<sup>w</sup>asq̓l̓stn (Large  
Sagebrush in Sylix)



Sage is an important medicinal plant that cleanses and heals the body, mind, and spirit as well as dwellings. It is used as part of the smudging ceremony.

3. For **invasive species**, include:
  - » Name (write in **red**)
  - » Latin name (write in *italics*)
  - » Image(s) (drawn or photo). Things to note next to image:
    - » Colour
    - » Size and shape
    - » Where it came from
    - » Where it is found
    - » How it spreads
    - » How many seeds it produces a year
    - » If it has any predators or pests that feed on it
  - » Impacts to native species
  - » Impacts culturally important species
  - » Actions to Take to prevent / control this invasive species

### Example 1

**Largemouth bass** *Micropterus salmoides*

Largemouth Bass is a well-known sport fish that was introduced into BC waters.

Largemouth Bass is a voracious fish that eats salmonids including Chinook Salmon and other important species.

Largemouth Bass can outcompete important species such as salmon, Largemouth Bass have even been known to eat juvenile salmon. Largemouth bass can even cause local extinctions of small prey fish.

#### Actions to Take:

- Do not transport this species into other water bodies around BC.
- Clean, Drain, Dry boats, water toys and floatation devices, and equipment before entering a new water body.
- Report sightings using [Report-Invasives](#) mobile app or visit [bcinvasives.ca/report](http://bcinvasives.ca/report)



## Example 2

### **Giant Hogweed** (*Heracleum mantegazzianum*)



Giant Hogweed contains a clear, extremely toxic sap that, can cause severe burns, blisters and scarring.

Giant Hogweed could harm harvesters who accidentally come into contact with this plant.

Giant Hogweed can also harm other animals who come into contact with this plant.

#### **Actions to Take:**

- Avoid contact – this plant is dangerous
- Report sightings using [Report-Invasives](#) mobile app or visit [bcinvasives.ca/report](http://bcinvasives.ca/report)

## Example 3

### **Rush Skeletonweed** *Chondrilla juncea*

Grows in grassland, rangelands, roadsides, and disturbed habitats.

Rush Skeletonweed poses a threat to medicinal plants such as sage, sweetgrass, and bitterroot as they infest grassland and sage steppes and take over native plant habitat.



#### **Actions to Take:**

- Prevention and early detection are important as they are deep rooted weeds, and broken roots can create new plants.
- Eradicate small patches of Rush Skeletonweed as soon as they appear.
- Do not till or cultivate Rush Skeletonweed.
- For just a few plants, dig out all part of roots.
- For larger infestations, chemical and/or biological methods may be required.

4. Create a cover for the guide depicting culturally important species. Using a blank piece of paper, design and create a cover page for the guide that will be attached to the cover of the notebook – feel free to use your creativity!

## OPTION B: DIGITAL FIELD GUIDE (For older youth)

1. Write the name of the species at the top of the page: name of invasive species (written in **red**) or name of culturally important species (written in **green**) and Latin name (written in *italics*) e.g. **Sagebrush** (*Artemisia tridentate*)
2. Under the name of the species, show an image of the species either using photos of or drawing species.
3. For **culturally important species**, include:
  - » Name (write in **green**)
  - » Latin name (write in *italics*)
  - » Traditional name (if known)
  - » Image(s) (drawn or photo)
  - » Write down the uses of the species
4. For **invasive species**:
  - » Include name (write in **red**)
  - » Latin name (write in *italics*)
  - » Image(s) (drawn or photo)
  - » Impacts to native species
  - » In note form include how invasive species can impact culturally important species
  - » Actions to Take: add what to do to prevent / control this invasive species

Youth creating a digital guide can use available programs on their device to create a cover page and appropriate table of contents.

## RESOURCES

### Invasive Species-related websites

- » Invasive Species Council of British Columbia [www.bcinvasesives.ca](http://www.bcinvasesives.ca)
- » Government of British Columbia <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species>
- » To find your regional invasive species organization visit: <https://bcinvasesives.ca/about/partners/bc-stakeholders/>

### Other Resources

- » E Fauna BC <http://ibis.geog.ubc.ca/biodiversity/efauna/>
- » E Flora BC <http://ibis.geog.ubc.ca/biodiversity/eflora/>
- » Field Guide to Noxious Weeds and Other Selected Invasive Plants of BC
- » “Food Plants of Coast First Peoples” by Nancy J. Turner (1995)
- » “Food Plants of Interior First Peoples” by Nancy J. Turner (1997)
- » “Trees and Shrubs of British Columbia” by T. Christopher Brayshaw (1996)
- » “Plants of the Pacific Northwest Coast: Washington, Oregon, and British Columbia” by Jim Pojar and Andy MacKinnon (2016)
- » “Northwestern Wild Berries” by J.E. Underhill (1980)
- » Royal Museum of BC Learning Portal <https://learning.royalbcmuseum.bc.ca>

# Habitat Data Sheet

Date: \_\_\_\_\_

Name: \_\_\_\_\_

1. Find at least 3 leaves from different species:

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2. Find a plant with at least 3 different colours:

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3. Find 5 different types of plants:

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4. Find 3 types of plants that are used as food by animals:

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5. Find 2 types of plants that were traditionally used as food or medicines:

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6. Find 3 types of decomposers (slugs, fungi, worms, snails, etc.):

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