



Native or Noxious?

NGSS Standards: 3-LS1-1, 3-LS3-2, 3-LS4-3, 4-LS1-1, 5-PS3-1, 5-LS1-1, 5-LS2-2, MS-LS2-1, MS-LS2-4, MS-LS-2-5, MS-ESS3-3

Level: 3 & 4 grade/5-8 grade

Time: 60 minutes

Objectives:

1. Students will be able to define the terms: non-native, noxious, invasive.
2. Students will be able to identify 8 invasive plant species in the Willamette Valley.
3. Students will be able to identify 3 native plant species in the Willamette Valley.

Materials:

- Western US Invasive Plant EDRR Weed ID Guide
- Plants of the Pacific Northwest Coast by Pojar & Mackinnon
- Great race invasive game S:\Conservation_District\Education\Education Activities
- Note cards with weed and native species
- Orange cones (4)
- Photosynthesis handout <https://thumbs.dreamstime.com/z/animal-plant-cell-energy-cycle-vector-illustration-diagram-mitochondrion-chloroplast-animal-plant-cell-energy-114049679.jpg>
- Vocab cards: weed, non-native, invasive and noxious

Pre-Activities:

Weed Explosion pages 151-161 <https://appliedeco.org/wp-content/uploads/Oregon-Botany-Curriculum-Salmonberry-to-Sagebrush.pdf>

Where in the World Do They Come From pages 19-24 Alien Invasion Plants on the Move

Procedure:

1. Review vocabulary cards: definitions of non-native, noxious, invasive. Review photosynthesis process.
2. Show and tell invasive species cards: Yellow flag iris, Canada thistle, Meadow knapweed, Shiny geranium, English holly, Scotch broom, English ivy, Himalayan blackberry
3. Show and tell native species cards: Common camas, Large leaved lupine, Fireweed
4. Explain Great Race for Survival: set-up cones for the start and finish lines, use about 50 feet of space between the cones. Read the following aloud:
 - a. Each one of you has been magically transformed into a tiny plant seed. You are many kinds of plants. Through the actions of wind, water, animals and people each one of you is now lying along the same stretch of road within a national park. You have been lying dormant in the soil all winter. When this road was rerouted last year, the construction caused a disturbance in the soil. Conditions are now ideal for weed species to establish themselves

here. The events that I will describe represent one year in your life. All of you will not survive the year. Listen carefully to instructions. When I tell you to step forward or backward, TAKE NORMAL WALKING STEPS.

- b. Follow the number steps on the Great Race Handout.
5. Conclusion: Who won the race? Why were some species more successful than others? Which plants were most successful, the weeds or native species? When weeds win or survive, what happens to other plants? What are the consequences to other plants, animals and humans? How was the race similar to or different from real life? What are the economic, ecological, and aesthetic consequences when invasive plants establish themselves?

Post-Activities & Resources:

1. Make a Field Guide for Your School pages 45-49 <https://appliedeco.org/wp-content/uploads/Oregon-Botany-Curriculum-Salmonberry-to-Sagebrush.pdf>
2. Vin Vasive Videos from USDA https://www.youtube.com/watch?v=2iZda5T-ICg&list=PL2_jEtoY8jigXZ3_0JQ22EzPtnh0QxSMg

<https://www.oregon.gov/ODA/programs/Weeds/OregonNoxiousWeeds/Pages/AboutOregonWeeds.aspx>