

LESSON 13: CAMPUS/COMMUNITY WEED PULL

Duration: Two 45-minute class periods

Background information:

(Repeated from lesson 12):

Most plants can be identified by common characteristics such as leaf shape and color. Monocots (plants with one emergent sprout leaf) have grass-like leaves, with veins running the vertical length. Dicots (plants with two sprout emergent leaves) have rounded leaves, with veins that are webbed from a central mid-vein. Typically, plants have characteristic roots as well. Grasses and other monocots usually have a fibrous root system. Broad-leafed dicots usually have either a tap root, or adventitious roots that trail just under the surface of the soil.

Many invasive plants can sprout and continue to grow if the top is chopped off or if a small fragment of root remains in the ground. As a result, invasive plant species are difficult to remove permanently.

Objectives:

- Practice field identification of exotic invasive species.
- Remove exotic invasive species as a community service.

Prepare in advance:

- Collect plastic grocery bags (request students bring them to school).
- Make a copy of Handout 1 (Types of Roots) for each student.

Materials:

- lab/field notebooks
- glue sticks
- trowels
- plastic grocery bags

Description:

Students use their knowledge of exotic invasive species, their identification key, and invasive plant species flash cards to identify and dig up exotic invasive species in a pre-selected area.

Instructional sequence:

(5 – 10 minutes)

- **Direct** students to glue the root identification diagram into their lab/field notebooks.
- **Remind** students of the different kinds of roots plants can have.
- **Remind** students of outdoor safety rules (e.g., work with a buddy, do not leave the area, do not eat any plant or plant part, and report all injuries to the teacher.)

(10 – 15 minutes)

- **Escort** students to the pre-selected location, where students previously tagged exotic invasives (Lesson 12).
- **Demonstrate** using a trowel to completely remove roots of an invasive plant.

(20 – 55 minutes)

- **Instruct** students to practice digging up weeds.
- **Monitor and assist** students with root extraction as needed.
- **Remind** students to *completely remove the plant and root*. Many invasive plants can grow from a small fragment of root left behind.
- **Supervise** while students extract tagged exotic invasive species.

Optional assessment task:

Collect and save species of invasive plants in separate bags for population monitoring.

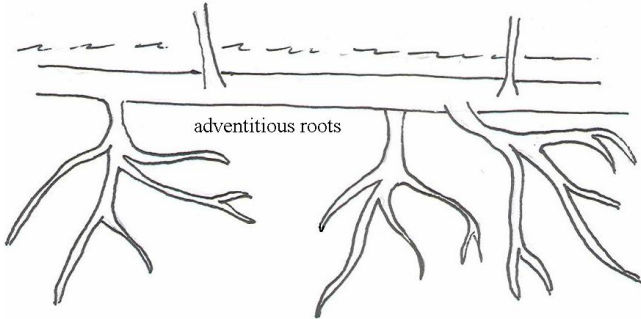
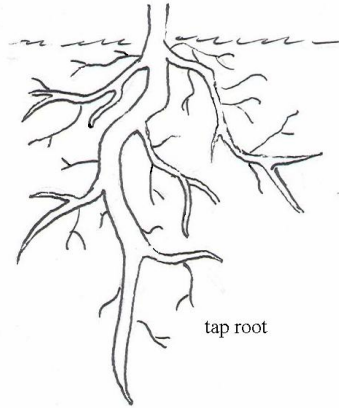
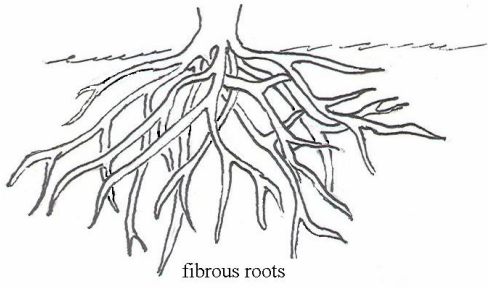
Chart and graph your data and submit to Southeast Exotic Pest Plant Council.

Point out correlations between leaf types and root types.

Some students may be interested in a follow-up, restoration project. (See lesson 11.)

Source: Southeast Exotic Pest Plant Council, *Invasive Species flash cards*, online at <<http://www.se-eppc.org/pubs/cards.cfm>>

Handout 1: Types of Roots



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