

SPOTTED KNAPWEED SEED COLLECTION AND DISSECTION LESSON DETAILS

Ode to Spotted Knapweed Poem

(20 minutes)

STEP ONE. Begin the activity by asking students to read pages 9 and 10 (spotted knapweed) in their *What's in Your World?* booklets. Once everyone has finished reading, discuss the seed dispersal techniques of spotted knapweed.

How does the spotted knapweed plant spread? Why technique of seed dispersal does spotted knapweed use?

STEP TWO. Next, tell the students that they are going to use the information about spotted knapweed that they just read to create an “Ode to Spotted Knapweed” poem (free or with a designated style.) Encourage them to use vocabulary words (root, stem, leaf, flower, fruit, seed) and descriptive adjectives.

STEP THREE. Once students have completed their poem, they may also draw a picture to display with their poetry. Ask volunteers to share their poems with the class.

What techniques do they think other noxious weeds use to spread across landscapes?

Spotted Knapweed Seed Collection and Dissection

(50 minutes)

STEP ONE. Take students to an area where a noxious weed(s), if possible spotted knapweed, is prevalent. Contact your local weed management district for areas and procedures. Tell students that they are going to collect seeds from noxious weeds in the area to later investigate. Show students tools from *What's in Your World?* activity tool kits for seed collection: hand lens, seed collection container and tweezers. Give each student a pair of gloves and tell students they must ALWAYS wear gloves when working with noxious weed specimens--some noxious weeds can be harmful. Knapweed sap contains a chemical that might permanently damage hands--be careful not to get any sap on cuts in skin.

STEP TWO. Walk through the area with the students and ask students if they can identify any noxious weeds growing in the area. Students may use their *What's in Your World?* booklets to help identify noxious weeds. With students, clearly identify the noxious weed which they will collect seeds from. Set up boundaries for the collection area and ask students to collect all the seeds from 3-5 plants.

STEP THREE. Bring students to an inside space or a sheltered area. Have students pour their seed collections onto a tray or paper plate. Ask students

to hypothesize how many seeds they collected. Also hand out spotted knapweed heads (if not collected by students.) Next, have students use hand lenses and tweezers to count and observe seeds.

Was your hypothesis accurate?

What do you notice about the seeds?

What special adaptation do the seeds have to spread?

Also discuss and perform proper disposal of noxious weed seeds.

STEP FOUR. Discuss with students the rate of spread of noxious weeds as compared to native plants. Have students turn to the last page of their *What's in Your World?* booklet--*“The bad weeds are coming!”*

How long does it take for a noxious weed to double the amount of land it infests?

Have students calculate this spread rate for Spotted Knapweed and compare it to other noxious weeds.

How long do you think it would take (or did it take) for a noxious weed to take over this area?

