

The Meanest Flower that Blows!

Twenty activities correspond with the CD *The Meanest Flower That Blows!* included in the *What's In Your World?* booklet's inside back cover. Each audio play is designed to build on the one before it and set the stage for the one that follows. You can incorporate one play each day for four weeks at the beginning of your science lesson. There is one activity for each 2- to 3-minute play. Ten plays are about spotted knapweed and ten are about leafy spurge. Scripts can be printed from the CD inside the *National Invasive Species Library*.

Spotted Knapweed Activities

Pineapple Play Audio Track #11 (15 minutes)

Levels

Grades 3-6

Subjects

Science, Language Arts

Skills

Examining, Identifying, Listing, Describing, Discussing

Concepts

Structure and functions of living things; interactions among technology, science and society

Objectives

Students will learn to examine plants and identify plant parts.
Students will learn plant biology and develop ideas about describing plant characteristics.

Materials (20 student class-size)

What's in Your World? CD audio track #11
(inside the back cover) - 1 per class
4 different fake plants - 5 sets, 1 per small group of 4
noxious weed replicas are available at Extension
drawing paper and pencil - 1 each per student

Time Considerations

Preparation - 10 minutes Activity - 15 minutes

Lesson Overview

- Plant Identification. Pineapples to Flower Plumes
(15 minutes)

Background

Pineapple is one of several ways to identify the bracts that house the purple plumes of the spotted knapweed plant. Plants with similar characteristics can be from the same genus, or family group such as *Astereaceae* for the sunflower family group. Spotted Knapweed is a *Centaurea* species within the *Astereaceae* family group. Scientist sometimes change plant names based upon new knowledge about the plant's characteristics. Some scientist believe the *Centaurea maculosa* latin name should be *Beirbersteinem* because of certain plant characteristics that link it to another species.

SPOTTED KNAPWEED IDENTIFICATION LESSON DETAILS

STEP ONE. Break the students into four groups and provide one set of four fake plants to each group. Pass out the drawing paper and pencils. Tell the students to observe the plants one at a time and look closely at the leaves, flowers, roots, colors, and possible visible signs of how they reproduce. Ask the students to create a list. The list should include the plant characteristics of one plant that make it different from the next.

STEP TWO. Ask one student from each group to describe one plant and how it is different from another plant. They may want to hold the plant up and handle each plant part as they describe it.

STEP THREE. Ask the students--*Can you count the number of black tips on the bracts that hold the purple petals?* Next ask the students to make a list of spotted knapweed leaf parts, the shape, color, smell. Ask them to describe if the leaves are fuzzy or not, if there are fuzzy hairs on the bracts. Take a vote to see if the students agree or not whether the bracts resemble a pineapple.

STEP FOUR. Then ask the students to discuss spotted knapweed--*The deeply divided leaves have white hairs that seem to give the plant a bluish tint from a distance.* Students should always wear gloves when handling spotted knapweed.

Don't be surprised when you discover that taxonomist vary somewhat in how they organize and assign names to plants based on their visible characteristics. The same plant may have three completely different names or family groups.

Look at the four different plants and ask--
Is this plant a male or female plant, or both?
How complex is the root system--rhyzomatous or taproot?
Count the petals and describe how flowers are attached to the stem, or housed in a system of leaves called bracts.