



Pull Your Share Pre-Weed Pull Classroom Lesson (General Guide)

Active Engagement

Concentrate the lesson on the noxious weed at the site being adopted. We'll use spotted knapweed in this example.

1. **Introduction/Career Education:** If the presenter is someone other than the teacher, tell students your name, job title, duties, and the path you took to obtain your position.
2. **Make controlling noxious weeds important to the students:** Ask for a show of hands who likes hunting, who likes seeing wildlife, who likes camping, backpacking, etc. Ask students, how would you like it if our beautiful habitat disappeared and there was less wildlife? What could cause this to happen? Hold up a plastic spotted knapweed or photo. How many of you know what this is? Tell students noxious weeds are non-native and take over native habitat and forage plants.
3. **Describe how knapweed displaces forage:** Ask students what are some of the main foods deer, elk, bison, and antelope eat, someone will say grass. Using a green marker, draw green blades of grass on the white board. Use a red marker to show the first spotted knapweed seed landing on the soil and then growing roots and the plant above the ground. Using red circles around the base of the plant to indicate catechin in the soil around the knapweed plant. Tell students that most forage plants can not live in soil with catechin. Tell students that each knapweed plant can produce thousands of seeds. The seeds can remain viable in the soil for 7 plus years (the seed bank). Using the red marker draw more knapweed plants and erase green grass until it is all red knapweed plants.

Optional: First 5 slides of Pull Your Share Classroom Powerpoint showing knapweed taking over an area and deer covered with houndstongue burs.

4. **Ask students, what is the solution to this problem?**

1. **Stop the spread of spotted knapweed seeds to new areas**

2. Kill spotted knapweed at a rate greater than it reproduces.
5. Ask students, how do you think spotted knapweed seeds are spread and write the answers on the board: By vehicle, wind, water, boots, horses hooves, hay, clinging to wildlife, animal droppings etc.
6. Ask students, how can we reduce the spread of spotted knapweed seeds, and write on the answers on the board: Clean our boots after each outing, clean the undercarriage of our vehicles, clean horses' hooves before leaving on a trip, feed horse weed free hay or forage 24 hours before trip, etc.
7. Ask students how do we kill spotted knapweed? Talk briefly about biocontrol, chemical, and hand pulling. Talk about the Pull Your Share Project. Classes adopt noxious weed sites such as campsites, trailheads, and boat launches to provide long term year after year reduction of noxious weeds at each adopted site through hand pulling. The students and their teachers also install Pull Your Share signs to encourage all recreators to pull their share which is 5 to 15 minutes per outing day. Show a Pull Your Share poster or sign.

Optional: Show remainder of the Pull Your Share Classroom PowerPoint starting at slide 6 show and one of the three weed pull videos at the end of the PowerPoint. These slides describe and show how the Pull Your Share Project works.

8. Talk about weed pulling strategy with students: In many areas we can not pull all the spotted knapweed at once, so we must be strategic about where we pull to prevent spotted knapweed from spreading rapidly to other areas. Think of knapweed patches as growing entities. Draw aerial drawings of trails and waterways steep areas and draw knapweed patches in odd shapes. Brainstorm with students where weeds should be pulled first to slow the spread of knapweed. Pull Along trails, waterways, where it's about to go up or down a steep hill, perimeter pulls, etc.
9. Talk to students about what clothing they should wear to the weed pull and how to properly pull spotted knapweed: Students should wear sturdy shoes or boots, socks, long pants, long sleeve shirt, and bring along a jacket and hat. The school or weed pull host will provide gloves and a weed pry tool. Talk about the importance of wearing gloves and to be careful when carrying and using the weed pry tool. Using a plastic knapweed plant or photo, show students how to properly pull knapweed and dispose of it afterwards. If there are no seed heads, weeds can be left where they are pulled. If the plants have seed heads, we will bag the weeds, close the bags, and dispose of them in a garbage container.
10. Pass out permission slips and the letter describing the field trip to parents, what clothing their student should wear, and if the school is providing lunch or if the student needs to bring their own lunch.

Tell students you are looking forward to seeing them at the weed site!!!

Any questions contact Megan Hoyer at agrweeds@mt.gov or 406-594-9171