

Montana Noxious Weed Education

Lesson Title: Life and the Noxious Weed Web



Grade: 2-3

Duration of Lesson: 1- 45 minute classes

Brief: Students will understand human's role in spreading and stopping the spread of noxious weeds

Materials:

Activity cards found in Appendix 1 of this lesson (cut them out prior to teaching lesson)

One ball of yarn

Montana Noxious Weed Education Folder

Houndstongue ID Card #27 (part of card set in the folder)

Montana Noxious Weed Education Poster

Seeds from Houndstongue if available (please remember to properly dispose of seeds when finished)

Key Terms

Noxious weeds, biennial, inhabit, medicinal, toxic, nutlet, rosette, taproot, alkaloid, sticky, and transport

MONTANA COMMON CORE STANDARDS:**ELA 2. Reading Informational Texts**

3. Key Ideas and Details: Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

4. Craft and Structure: Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

NGSS 2. Interdependent Relationships in Ecosystems

2-LS2-2: Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating flowers.

NGSS 3. Weather and Climate**Crosscutting Concepts, Cause and Effect**

Cause and effect relationships are routinely identified, tested, and used to explain change.(3-ESS3-1)

Students will know:

Weed seeds have adaptations that help them travel from one area to another, often with human involvement.

Students will be able to: analyze seed characteristics and infer how they might travel from one area to another and recognize their role in stopping the spread of noxious weeds.

Performance / Observations**Performance Task(s):**

Recognize activities they do that might spread noxious weed seeds, recognize activities that others do that might spread noxious weed seeds.

Other Evidence:

Students will recognize their potential to spread noxious weeds and their role in stopping the spread of noxious weed seeds.

Learning / Inquiry Activities***Introduction***

Houndstongue has Velcro like seeds, sometimes called burrs, which attach to nearly everything they touch, even tires. By sticking to other objects the seed is transported to other areas, starting new infestations. Many people use rangelands, recreational areas, and private lands for work and enjoyment. All of the people who use these lands have the potential to spread Houndstongue and other noxious weeds. In this lesson students will form a web around weeds showing how many activities have the potential to contact and spread noxious weeds. This lesson can be adapted to be used with any of the 32 noxious weeds in the Montana Noxious Weed Education packet.



NRCS, Cynoglossum, Houndstongue, Columbus, MT 5/24/2007

Learning / Inquiry Activities:

Show students the Montana Noxious Weed Education packet, cards, and poster. Let them know that you will be talking about #27 Houndstongue today. After showing the photo on the front, read and discuss the information on the back of the card. Show the appropriate noxious weed seeds if you have them available. Ask students if they recognize the plant and if they have ever had seeds from Houndstongue stick to them.

Distribute the activity cards (one out of each 8 students will need to play the role of Houndstongue in this activity; there are several Houndstongue cards in the set of student cards, Appendix 1). Have them tape the activity card onto their clothing, along with card #27 onto one of the students playing the role of Houndstongue.

Ask students to check their activity cards and to think about the activity. Ask them where their activity most likely takes place. When someone is doing this activity, would they be likely to travel across several local or regional areas?

Beginning the yarn toss: (See Appendix 2 for example)

Step 1: Ask students who have the Houndstongue cards to stand aside for a moment. Ask all of the other students to form a circle. Next have the students with the Houndstongue cards stand in the center of the circle with their hands out AND inform them that they are very sticky and should grab any yarn that touches them!

Step 1: If students have participated in the activity shown on their activity card in the past ask them to raise their hand.

Step 2: Give the ball of yarn to one of the students who has their hand up and ask them to toss the yarn ball to someone directly across from them who has their hand up **and** whose card shows an activity which they have done in the past. If the ball of yarn hits the Houndstongue during the toss it is stuck there and the Houndstongue plant that caught the yarn can choose who to give it to next. (In this first throw the yarn must cross Houndstongue, so everyone who touches the yarn ball from this point forward theoretically has Houndstongue on them and will spread it to the next person who catches the yarn ball).

Step 3: The student who catches the ball of yarn holds onto the yarn string and tosses the ball to someone whose card shows an activity which they have done in the past.

Step 3: Students continue tossing the yarn ball until all of those with their hands up have yarn and they are all webbed together with yarn string.

Stop the lesson and discuss how many times the yarn touched the Houndstongue in the center of the circle. Each time the yarn touched the Houndstongue it represents how easy it is to pick up Houndstongue on your clothing, tires, pets, livestock, and other items, eventually starting infestations wherever it has traveled.

Wind the yarn up and allow the Houndstongue people to choose one of the activities that one of the other students represents, have them change cards. Repeat the yarn toss, this time asking students to raise their hands if their card represents something that they would like to do someday. Repeat the steps using the new criteria.

After finishing the activity discuss how we have the potential to spread noxious weeds each time we do an outdoor activity, and how we can be better in the future at controlling our role in spreading noxious weeds by following a few simple steps:

Check your shoes, shoelaces, clothing, tires, and any gear you had along for weed seeds and plant parts: Throw the weed seeds and plant parts away in a trash receptacle. Do not throw them on the ground as they can start new infestations.

Contact your local Weed District Coordinator <http://www.mtweed.org/> for more information.

Lesson Extension: Read about other noxious weed seed characteristics, can you find other noxious weeds with Velcro like seeds or seeds that might easily attach to you?

Thank you for being part of the solution to noxious weed control in Montana!

Photographer



Mountain Biker



Four wheel drive enthusiast



Rancher



Miner



Picnicker



Fisherman



Hiker



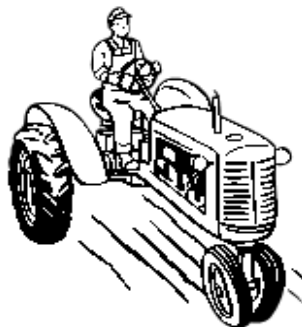
Surveyor



Rockhound



Farmer



Woodcutter



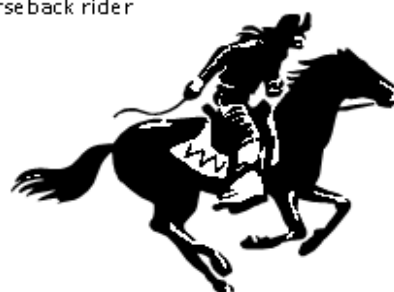
Four wheeler riders



Nature Artist



Horseback rider



Birdwatcher



Runner



Dog walker



Ranger/field staff



Dirt bike rider



Mountain climber



Boater



Camper



Berry picker



Houndstongue seed



Houndstongue seed



Houndstongue seed



Houndstongue seed



Houndstongue seed



Houndstongue seed



Appendix 2 SAMPLE: NOXIOUS WEED SPREAD WEB

