

# WYOMING WEED & PEST COUNCIL EDUCATION NEWSLETTER VOLUME 4 - ISSUE 1



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## Wyoming Invasive Weed Awareness Week

May 10th - 16th, 2009

### Announcements:

1. The WWPC Education Committee is asking for \$ donations to help with advertizing for WIWAW 2009. Please send donations to Erika Edmiston at the Teton County Weed & Pest District.
2. 2009 Education Challenge: **Please plan one public activity during WIWAW.** Send your activity details to Amy Jerup so they can be posted on the WWPC website. **Email [ajerup@tcweed.org](mailto:ajerup@tcweed.org) by April 24th!** You don't want your County to be blank! We would also like to hear how it went. Please email Amy by the end of May and let us know how many people you reached. Thanks!!!!

# WebQuests

Over this past winter, Travis Ziehl and Amy Jerup have completed four WebQuests. These WebQuests are self guided learning assignments in which the student is given a challenge and all the resources to complete the challenge. The assignment is hosted on a web page and all the resources for the student are on the same page. This inquiry based learning challenges students by combining education about the subject, with the skills of using technology and giving a presentation to the class.

The WebQuests that have been created have yet to be tested in a classroom setting but, ideally we will get them in a classroom, Fall 2009. The four WebQuests are based on spotted knapweed, leafy spurge, salt cedar, and houndstounge. Please feel free to offer input on them or if you feel adventurous take them into a classroom (We created these with a 7th grade class in mind). To retrieve the WebQuests look for link on Wyoweed, education page under "Links". For more information on WebQuests go to [www.webquests.org](http://www.webquests.org)

## **New Activities - "What's in your World?"**

The Montana Weed Awareness Campaign has created a new project for us to steal. Just kidding! We are actually working closely with them with adding to this project. This new and exciting educational tool is set up as a kit which includes: a satchel stuffed with an exploratory booklet, CD with 20 audio clips, biocontrol cards, respirator, field lens, notebook, pencil with sharpener, scissors, insect collection bottle, ruler and tweezers. The main focus is teaching elementary age kids the benefits of biocontrol. Soon, Teton County will have 20 of these kits to be used in the classroom. Amy Jerup will be attending training this summer in order to receive the 20 kits at no cost. Normally, they are \$150 each.

In addition, MWAC is adding a Teachers guide to this project. There have been lessons created for each page of the exploratory booklet. Over the winter, Amy Jerup has created 20 short, hands-on lessons to go along with the 20 audio clips on the CD. These will be emailed to you with various attachments right behind this newsletter. You can use these 15-20 minutes lessons for your expo/fair booths or just to go along with a talk in the classroom. Amy will be able to mail out some of the kits next Fall for you to use in the classroom. Please email her at [ajerup@tcweed.org](mailto:ajerup@tcweed.org) if you are interested in learning more about this project.

Listed below are the Titles, Objectives, and attachments (if applicable) of these new activities for "The Meanest Flower that Blows".

# Activities for “The Meanest Flower that Blows”

- 1. Snap-Crackle-Pop**, Students will examine noxious weed seeds and describe how they travel.
- 2. Icky Stuff**, Students will learn to safely handle noxious weeds by observing fake ones.
- 3. Science Project**, Students will scientifically test and observe a soap additive to water for improved weed control.
- 4. A Map Quest**, Students will learn how to look at GPS locations of noxious weeds on a map and make an Integrated Weed Management plan for that location.
- 5. No Home on the Range**, Students will learn the effects of habitat destruction on migrating elk.
- 6. Meet the Beetles – Before and After**, Students will make observations and demonstrate their findings through an illustration. Attachment: FleeBeetle#6.pdf
- 7. Red-headed Stranger – Before and After**, Students will make observations and demonstrate their findings through an illustration. Attachment: RHStemBorer#7.pdf
- 8. Flying Flies – Before and After**, Students will make observations and demonstrate their findings through an illustration. Attachment: TipGallMidge#8.pdf
- 9. Horn Worm – Before and After**, Students will make observations and demonstrate their findings through an illustration. Attachment: HornWorm#9.pdf
- 10. Poison**, Students will make conclusions based on facts. Attachment: PlantFacts#10.doc
- 11. Pineapple**, Students will examine plants and describe their characteristics.
- 12. Just Say “No” to Spreading Weeds**, Students will participate in an activity then recommend ideas of how not to spread weed seeds.
- 13. “Pirates” of the Backcountry**, Students will compare the spread of weed seeds in the backcountry with use of certified and uncertified hay.
- 14. Serious Conversation**, Students will explain of why weeds are bad to win a game.
- 15. Pulling Weeds Quiz Show**, Students will use their knowledge to answer questions.
- 16. Sulfur Moth Collecting**, Students will learn how to successfully collect and release bio-control insects. Attachment: SulferKnapweedMoth#16.doc
- 17. Spending the Profit**, Students will participate in an activity where they will apply problem solving strategies to illustrate how much money is spent on noxious weed control.
- 18. Bike Tires**, Students will play charades and analyze the effects of noxious weed spread by cleaning off gear after an outdoor activity.
- 19. What are Scientific Names?**, Students will learn how to interpret scientific names of plants. Attachment: LatinPlantNameMeanings#19.doc
- 20. Clap your Hands**, Students will physically see how fast weeds multiply by playing a game.

# Silent Predators

## 4th-6th Graders - Mary McKinney

Begin the lesson with some great pictures (use PP Projector so they can be really big and impressive or make a great poster) of predators from WY such as bears, wolves, snakes, mountain lions, spiders, etc. This really gets students attention. While showing the various predators, ask the students about predator prey relationships and the different “prey” species that each one utilizes. Mention how each of these species fills niche in the ecosystem.

Ask students “What is a habitat? What do healthy habitats provide to the above species? (food, water, shelter, space).

Begin transitioning into the idea that predators do not have to be animals Show a picture of an innocent looking noxious species, preferably on that is attractive such as Purple loosestrife or Dalmatian toadflax. Ask students how a plant could be a predator? Plants don’t even have the capability to move, make noise, or stalk a prey. What do we know about plants: need water, sunlight, photosynthesis, cell wall, etc? BUT...All plants are not created equal. Introduce native, non-native, invasive, noxious to the class. So why are these species so harmful?

- Loss of habitat for wildlife
- Reduction of space, water, sunlight and nutrients
- Loss of and encroachment upon T & E species and their habitat
- Changes to natural ecological processes such as plant succession, nutrient cycling, watersheds
- Alteration of natural fire regime
- Disruption of native plant-animal relationships (niche)
- Prevention of the establishment of native trees and shrubs
- Reduction of native plant vigor
- All add up to loss of biodiversity

Ask students what it takes to be a successful predator. Mention traits like stealth, speed, keen sensory perception-hearing, smelling, touching, etc. Now that we have talked about what makes animal predators successful, What have we (w and p folks, scientists, etc.) learned about non native, noxious (invasive) species that make them so successful in overtaking our native rangelands. Tied to a plant’s biology including:

- Rapid growth and maturity
- Prolific seed production
- Highly successful seed dispersal, germination, and colonization
- Ability to out-compete native species-refer back to what all plants need in order to survive
- Allelopathic
- Our NATIVE species do not utilize these plants as they do not provide the same nutrition, are toxic, or unpalatable, etc.
- High cost of removal and control

Ask students “So what prey are these noxious species stalking...OUR NATIVE HABITAT! Which predator is more harmful...a Wolf or Noxious species? Why?

These “Silent Predators” threaten our native lands. Lands that our native species depend on for survival.

## ACTIVITIES:

Give each student a summary of a particular plant species to read about (make sure your summary pages have all the required info you ask). Have them work in teams of 2 or 3 depending on the size of the class. Give each team a paper and have them identify the following (or you may add your own questions):

- What is the common and scientific name?
- Where did this species come from?
- How did it get to North America?
- Why is this species such a problem
- Have each group draw their idea of what this species may look like considering its invasive tendencies.
- Have each group present their findings to the class.

## Closing remarks:

Ask Students what they can do to prevent introduction and spread of these Silent Predators.

- Learning to identify these species
- Cleaning clothing, equipment, pets etc.
- Don't pick plants you don't know, they could be invasive
- Stay on roads and trails
- Tell others

## After presentation activities.

- Have students do a research paper on a particular species.
- Have the class produce a "noxious" weed informational booklet.
- Volunteer to come again in the spring or fall and do a field presentation...

Vocabulary: attached

# “Wheel of Weeds”

As spring approaches and things are starting to get busy, Lincoln County Weed and Pest is getting ready to try out a new activity. We have purchased a clicker prize wheel and have come up with “Wheel of Weeds”. We will have the wheel set up with pictures and questions pertaining to noxious weeds, the students will spin the wheel and if they name or answer the question that the pointer lands on they will receive a prize. We are scheduled to try it out at a 4th grade Rendezvous, the first of May. I think it will be a fun and fast paced game to help the students become better educated and be more aware. The really great thing about it is that we can change the questions to gear it to all age levels.

- Lauri Coates