What to Do About Weeds

Rationale

Weeds affect us all, from homeowners to farmers to recreationists. Weeds steal moisture and nutrients from new seedlings, shade out older plants, decrease the nutritional value of forage, and may even kill or injure livestock or people. They can also cause problems in lawns and household landscaping, along roads, and in parks. Weed infestations can decrease forage yields and lower the value of pastures.

Weed problems often result from poor land management practices. Practices such as overgrazing, creating bare ground, and overwatering or underwatering all contribute to weed invasion. This lesson provides information useful to all land managers on identifying, preventing and managing weeds.

Objectives

Participants will:

1. Understand their state weed law and landowner responsibilities.
2. Be able to inventory their properties, identify their weed species (with help if needed), and determine the extent of their weed problems.
3. Learn techniques to prevent (further) weed invasion and spread.
4. Learn the common methods of weed control and how to decide which method to use.
5. Design, implement and monitor a management plan on their land that includes the use of integrated weed management techniques.

What to Do About Weeds – Lesson Plan

Time	Section	Goal	Activity	Instructor
10 min	Introduction and class agenda	Answer any questions or address any concerns from the last session, as time permits. Clearly delineate what will be covered.	Agenda • What is a weed? • Why worry about weeds in pastures and landscapes? • Factors that lead to weed invasion • How weeds are regulated • Weed biology • Identifying weeds • Integrated Weed Management • Preventing invasion and spread of weeds • Control—eradication, mechanical, cultural, biological, and chemical • Common weeds in your area	This is a very long agenda, so determine the most important information for your audience and adjust accordingly. PowerPoint slides 1-2
15 min	Weed definition, weed costs, weed invasion factors	Participants will understand how their property management techniques may result in favorable conditions for weeds.	Begin with a demonstration of competition and weed growth (see handout). Discuss definition of "weed," go over broad impacts, and provide factors that enable weeds to invade.	Losses and Damage Caused by Weeds Information Sheet. PowerPoint slides 3-10
15 min	Weed regulations	Participants will understand their responsibilities under their state weed law and will learn techniques to prevent weed invasion and spread.	Present your state and/or local weed law and/or weed list and explain the landowner's responsibilities. Discuss prevention methods. If time permits, have participants put cotton socks over their shoes and walk through a field to see how many weed seeds they pick up, or suggest this as an activity at home.	Preventing the Spread of Weeds Information Sheet PowerPoint slides 11-12
15 min	Weed biology, classification, and identification	Participants will learn several ways by which weeds can be classified and/or identified.	Discuss and show characteristics of common plant families; include classification of plants by plant type, method of reproduction and life cycle. Give instructions on submitting samples locally for identification.	Show copy of "Weeds of the West"; plant samples used to identify botanical characteristics; Range and Pasture Weed ID Guide PowerPoint slides 13-27
10 min	How weeds spread	Participants learn how weeds spread and what makes them successful.	Cover the specific ways in which weeds ensure their success. Discuss the various ways by which weeds are spread, natural and man-made.	PowerPoint slides 28-33
15 min	BREAK	BREAK	Let participants examine weed samples	BREAK

What to Do About Weeds – Lesson Plan (continued)

Time	Section	Goal	Activity	Instructor
30 min	IPM, weed control methods	Provide basic weed management tools and information to help participants learn to select the appropriate tool(s).	Discuss Integrated Pest Management - a primer on mechanical, cultural, biological and chemical control, and applications to Integrated Weed Management	Ten Steps to Effective Weed Control Information Sheet; Weed Management Plan Checklist Activity Sheet PowerPoint slides 34–49
30 min	Herbicide safety	Participants will understand 12 steps to follow when using herbicides, how to handle and use herbicides safely, and different types of herbicides.	Pass out labels from some of the more commonly used herbicides and direct students to complete the "Reading Herbicide Labels Activity Sheet" in groups.	Herbicide Safety Tips Information Sheet; Reading Herbicide Labels Activity Sheet PowerPoint slides 50–85
30 min	Common weeds in your area	Familiarize participants visually with some local problem weeds so that they can go home and do a property inventory.	Present brief slide show of some of the common and most aggravating local weeds, selecting from the slides included, or adding others as needed. If live or pressed samples are available, allow time for participants to look at the samples. You may wish to put out the samples for participants to study during the break.	This section must be customized to your area. The PowerPoint presentation (slides 86–165) shows 40 common problem weeds. You may wish to add weeds of local concern to the presentation. Pressed or live samples of common weeds may be a helpful aide. Local weed guides, if available, could provide additional help for future reference and continued monitoring by participants.
10 min	Questions and homework assignment	Participants begin to develop a weed management plan for their property.	Homework assignment: Participants inventory and map the weeds on their property and develop a management plan. This includes ongoing monitoring and documentation of their plan and its overall effectiveness. Hand out the Weed Management Plan Activity Sheet.	Weed Management Plan Activity Sheet PowerPoint slides 166-168 You may want to include brief slide show "test" at end of class to see how many weeds participants can identify. This test could be given both before and after class to determine knowledge gained in this lesson.

What to Do About Weeds

Materials/supplies to be requested from participants before class starts

1. Maps they have made of their properties
2. Notebook with forms and exercises completed to date
3. Unidentified weed samples, contained in plastic bags to limit contamination or seed spread
4. Calculator, paper, writing utensils, rulers

Materials/supplies needed for class

1. Flip chart and markers (or dry-erase board, chalkboard or overhead projector)
2. Overhead or PowerPoint computer projection system
3. Pointer
4. Refreshments

Local resources needed for class

1. State noxious weed law
2. State noxious weed list
3. List of locations where participants can take weeds to be identified, including submittal forms required (if applicable) and cost, if any.
4. Slides of local weeds not included in this lesson and pressed or live samples of weeds of local importance
5. Weed Specialist contact information, local Cooperative Extension office

Background information for instructors

DiTomaso, J. and Healy, E., 2007, Weeds of California and Other Western States, University of California Agriculture and Natural Resources Publication 3488.

Dow AgroSciences, unknown date, Range and Pasture Weed Identification Guide, 354-32-094 (12/99) BR, phone 1-800-263-1196, usually provided at no cost.

Whitson, T.D., et al., 2004, Weeds of the West, Western Society of Weed Science. Available at most book stores.

Weeds included in the PowerPoint presentation:

- Canada thistle
- Common crupina
- Curly dock
- Dalmatian toadflax
- Diffuse knapweed
- Dodder
- Downy brome
- Dyer's woad
- Eurasian watermilfoil
- Field bindweed
- Field horsetail
- Foxtail barley
- Hoary cress
- Houndstongue
- Johnsongrass
- Klamathweed

What to Do About Weeds

Background Information for Instructors, continued

Weeds included in the PowerPoint presentation, continued:

- Kochia
- Leafy spurge
- Meadow hawkweed
- Mediterranean sage
- Medusahead
- Musk thistle
- Oxeye daisy
- Perennial sowthistle
- Perennial pepperweed
- Plumeless thistle
- Poison hemlock
- Puncturevine
- Purple starthistle
- Purple loosestrife
- Quackgrass
- Russian knapweed
- Russian thistle
- Rush skeletonweed
- Scotch thistle
- Spotted knapweed
- Sulfur cinquefoil
- Tamarisk
- Yellow starthistle
- Yellow toadflax

Handouts needed for participants

1. Losses and Damages Caused by Weeds Information Sheet
2. Preventing the Spread of Weeds Information Sheet
3. Ten Steps to Effective Weed Control Information Sheet
4. Weed Management Plan Checklist Activity Sheet
5. Herbicide Safety Tips Information Sheet
6. Reading Herbicide Labels Activity Sheet
7. Weed Management Plan Activity Sheet

Handouts needed for participants (in addition to lesson handouts)

1. Your state noxious weed list and weed law
2. Local weed identification book. Most states have their own version.
3. Three sample herbicide labels. Select labels for products that are commonly used in your area, or use the samples provided at the end of this lesson.
4. Range and Pasture Weed Identification Guide, Dow AgroSciences, 354-32-094 (12/99) BR, phone 1-800-263-1196 (optional)
5. Local weed resource guides (check with your Cooperative Extension Office.)

What to Do About Weeds

Web sites for further information

Australian National Weeds Strategy, http://www.weeds.org.au/links.htm

California Weed Science Society, http://www.cwss.org/

Colorado Environmental Pesticide Education Program, http://www.colostate.edu/Depts/SoilCrop/extension/CEPEP/

Colorado State University, http://www.ext.colostate.edu/pubs/natres/03106.html

Colorado State University Cooperative Extension Small Acreage Management, http://www.larimer.org/extension/sam/weeds.htm

Database of IPM Resources (DIR) Internet Resources on Weeds and Their Control, http://www.ipmnet.org/cicp/

Extension Toxicology Network, http://extoxnet.orst.edu/

Federal Interagency Committee for the Management of Noxious and Exotic Weeds, http://www.fws.gov/ficmnew/

Idaho Noxious Weeds, http://www.oneplan.org/Crop/noxWeeds/index.shmtl

Idaho Weed Awareness Campaign, http://www.idahoweedawareness.org/

Invasive Species, http://www.invasive.org/weeds.cfm

Invasive Weeds of the Southwest, http://www.invasiveweeds.com/

Montana Pesticide Education Program, http://mtpesticides.org/

Pesticide Education Network, http://www.gaipm.org/pen/

The Nature Conservancy, Global Invasive Species Team, http://tncweeds.ucdavis.edu/

University of California IPM Pesticide Information Resources, http://www.ipm.ucdavis.edu/GENERAL/pesticides.html

University of Montana Invaders Database System, http://invader.dbs.umt.edu/

US Army Corps of Engineers Invasive Plants Management, http://www.saj.usace.army.mil/invasive_species/index.htm

USDA CSREES Pesticide Safety Education Program, http://www.csrees.usda.gov/nea/pest/part/pesticides_part_psep.html

USDA Plants Database, http://plants.usda.gov/java/noxiousDriver

Utah State University Extension Pesticide Use and Safety Information, http://extension.usu.edu/htm/publications/by=category/category=53

Western Society of Weed Science, http://www.wsweedscience.org/

WSU Urban IPM and Pesticide Safety Education Program, http://pep.wsu.edu/

What to Do About Weeds

Homework assignment

1. Inventory your property for weeds, identify the weeds, and formulate a weed management plan for your property. Use the Weed Management Plan Activity Sheet.
2. Begin to implement your weed management plan.
3. Continue to monitor your results, and identify and correct any problems with the plan.

Losses and Damage Caused by Weeds Information Sheet

- Weeds take water, nutrients, and sunshine away from crop plants and reduce the yield of the crop. Sometimes crops have to be cut before they mature because of weeds.
- Weeds add work and expense to harvesting crops. It may be difficult to hire someone to hay your fields if they are infested with weeds.
- Weeds reduce the value of products on the market. Hay and other feeds containing noxious weeds should not be sold off the farm and should not be permitted to spread onto clean land. Other states may refuse shipments of hay from your state if it is infested with noxious weeds.
- Poisonous weeds may kill livestock or leave them in a sickly, unprofitable condition.
- Unpalatable weeds may replace valuable grass plants and reduce the grazing value of pastures.
- Weeds growing on ditch banks interfere with delivery of irrigation water and contaminate water with weed seeds. Their removal and control may be costly.
- Weeds that affect human health cause loss of labor and time, adding to medical costs.
- Weeds may be hosts for plant diseases and insects that spread to crop plants.
- Many farmers spend hundreds of dollars yearly trying to control or eradicate weeds.
- Property values decrease when invasive weeds are present.
- Some landscape ornamentals have become serious invasive weeds of wildlands, affecting wildlife, native plant communities, and watersheds.

Preventing the Spread of Weeds Information Sheet

- Plant clean, weed-free crop seed.
- Avoid spreading weed seeds with manure. Wait at least five days after grazing in a weed infested area before moving livestock into areas that are currently weed-free.
- Sanitize tillage and harvesting equipment before moving from one field to another.
- Plant and maintain desirable plant species to discourage weed establishment. Avoid disturbing the land without revegetating the area, as weeds will invade.
- Consider crop rotation to slow weed spread.
- Minimize soil disturbance by vehicles, machinery, wildlife, stream flow, and livestock to lessen the advantage noxious weeds have developed for success in these sites.
- Avoid driving in noxious weed infested areas. Seeds can become stuck in tire treads or mud on the vehicle and be carried to unaffected areas. Check and clean tires and undercarriage of vehicles and machinery for contamination after driving in a weed-infested area.
- Likewise, request that campers, hikers and sportsmen take care to brush and clean not only their vehicles, but also their clothing when coming from weed-infested areas. Post warnings near infested areas to exclude users when possible.
- Don't transport flowering plants that you cannot identify, or noxious weeds, many of which are beautiful.
- If you find a small number of isolated noxious weeds that have no flowers or seeds, pull the weeds and leave them where you found them to dry out. If possible, burn or bag the weeds and dispose of them in a sanitary landfill.
- If you find noxious weeds and they have flowers or seeds, pull them, place them in a plastic bag or container to avoid spreading seeds, and either burn them or dispose of them in a sanitary landfill.
- Report newly found noxious weeds to your Division of Agriculture or Cooperative Extension office.

Ten Steps to Effective Weed Control Information Sheet

1. Attend this class.
2. Identify your problem weed. Whenever possible, bring a fresh sample stored in a paper or Ziploc bag to your local Cooperative Extension office. Don't spread seeds while transporting.
3. Gather information on your weed. Ask for available publications or other materials.
4. Learn the life cycle of the weed. Is it an annual, perennial, or biennial?
5. Evaluate the reproduction method and likely means of spreading the weed.
6. Determine whether the weed is a broadleaf or grass plant.
7. Create a plan for the eventual rehabilitation of the land once the problem weeds have been eradicated. Weeds take advantage of site conditions including soil disturbance, uneven soil moisture, and compaction. You'll need to inspect your property often, to catch the presence of weeds as early as possible.
8. List and assess the treatment options: mechanical, cultural, biological, and chemical. Determine the most effective time of year to control your weed.
9. Complete your weed management plan and monitor and evaluate its success.
10. Check next year and every year to see if your weed management continues to keep weeds out.

Weed Management Plan Checklist Activity Sheet

Have I identified the locations, species, life cycles and methods of reproduction of my problem weeds? ☐ Yes ☐ No

Have I identified the extent of the problem, e.g. is there one plant, a few plants, an acre with about 50 percent coverage? ☐ Yes ☐ No

Will my proposed control method work efficiently on a problem of this size? ☐ Yes ☐ No

What do I hope to do with the site? _____

_____

_____

Does it require frequent tilling, which may favor the increase of rhizomatous perennials?
☐ Yes ☐ No

Is my application of water and fertilizer uniform and appropriate? ☐ Yes ☐ No

Which site conditions cannot be changed? _____

_____

_____

Have I incorporated methods of prevention to keep from reintroducing weeds? ☐ Yes ☐ No

Do I know what the most effective control methods are? ☐ Yes ☐ No

Have I considered which control methods from my toolbox are appropriate to use?
☐ Yes ☐ No

Which tools will I use? _____

_____

_____

Can I afford what it will cost to follow all the elements of my weed control plan?
☐ Yes ☐ No

If I am going to use herbicides, have I read the pesticide safety information so that I will not endanger myself, others, the local water supply, or habitat when using herbicides? ☐ Yes ☐ No

Herbicide Safety Tips Information Sheet

Herbicides are poisons and must be used with caution at all times. Follow the herbicide safety tips below:

1. **Read the label carefully and take notice of personal safety and environmental precautions.** The label information isn't advertising – it's based on solid science *and the law*. It includes the proper rate of herbicide use for various conditions, the relative toxicity of the product, directions for safe mixing and application, and any environmental precautions. It lists the product manufacturer's name and address, required protective clothing, and warnings about groundwater contamination, hazards to wildlife, and the re-entry interval – how long one must wait before entering the treated area.
2. **Wear appropriate personal safety equipment when handling herbicides.** Start by wearing a wide-brim hat, long-sleeved shirt, long pants and chemical-resistant gloves. You should also wear sturdy work shoes or rubber boots, not sneakers or sandals. Depending on the product you are using, it may be necessary for you to wear goggles, a face shield, and a respirator.
3. **When mixing and loading chemicals, prevent spills that might contaminate water supplies.** One key spill-prevention step: prevent tank overflow by never leaving a sprayer unattended during filling.
4. **While filling sprayers, avoid back siphoning by keeping the discharge end of the fill hose above the tank's water level.** If you put the end of the hose down into the herbicide liquid in the tank, you run the very real risk that the hose will suck water and chemicals back into the hose, and possibly into your well or home, when you turn off the water.
5. **Never exceed labeled chemical rates. Always calibrate your sprayer before application.** After you've read the label and chosen the right product to apply at the prescribed rates, it's important to make sure your sprayer is delivering the appropriate amount of product. Carefully follow the directions on the sprayer.
6. **Prevent herbicide leftovers by mixing only needed quantities.** If you follow label instructions for rates and mix carefully, your tank should be empty as you complete application.
7. **Never rinse equipment near wellheads, ditches, streams or other water sources.** If needed, install a longer rinse water hose to move the cleaning operations a safe distance from a well or other water source. Spray the rinse water in the spray tank out over the target area, following label directions.
8. **Always triple rinse or pressure rinse chemical containers before disposal or recycling.** If it's been properly rinsed and label instructions have been followed, the herbicide container is ordinary trash, but the best place for it is a pesticide container collection and recycling facility.

Reading Herbicide Labels Activity Sheet, page 1 of 2

Instructor: This exercise is designed to familiarize participants with reading herbicide labels. Pick labels for several products commonly used in your area. Labels can be downloaded from:

www.cdms.net/manuf/manuf.asp
www.greenbook.net

This exercise is designed to teach you how to read herbicide labels. Herbicide labels are quite long and contain extensive information. On first glance, they can be quite daunting. They are required by law to contain certain information: health and environmental hazards, weeds they control, mixing rates, etc. The daunting part is, there is no set order by which this information is supposed to be presented. ALWAYS READ THE ENTIRE LABEL. It is imperative that you understand that as a consumer, once you buy these products and use them, you are agreeing to the limit of liability and warranty on the label and you are agreeing to use them only in the manner specified on the label.

The following is a short exercise on herbicide labels. You will be answering the same seven questions for three different products. These products are common herbicides that can be purchased without special permits or licenses.

Product 1 _____

What are the active ingredients? _____

Can the product be used adjacent to or in surface water bodies? ☐ Yes ☐ No

How should you dispose of the container? _____

What should you do if you get some of the product on your skin? _____

_____

Can the product be used to control Russian thistle? ☐ Yes ☐ No

Can the product be used to control Canada thistle? ☐ Yes ☐ No

Can the product be used to control musk thistle? ☐ Yes ☐ No

How much product would you use to mix up one gallon of spray at 1.5% of product? _____

_____

Reading Herbicide Labels Activity Sheet, page 2 of 2

Product 2 _____

What are the active ingredients? _____

Can the product be used adjacent to or in surface water bodies? ☐ Yes ☐ No

How should you dispose of the container? _____

What should you do if you get some of the product on your skin? _____

_____

Can the product be used to control Russian thistle? ☐ Yes ☐ No

Can the product be used to control Canada thistle? ☐ Yes ☐ No

Can the product be used to control musk thistle? ☐ Yes ☐ No

How much product would you use to mix up one gallon of spray at 1.5 percent of product? _____

_____

Product 3 _____

What are the active ingredients? _____

Can the product be used adjacent to or in surface water bodies? ☐ Yes ☐ No

How should you dispose of the container? _____

What should you do if you get some of the product on your skin? _____

_____

Can the product be used to control Russian thistle? ☐ Yes ☐ No

Can the product be used to control Canada thistle? ☐ Yes ☐ No

Can the product be used to control musk thistle? ☐ Yes ☐ No

How much product would you use to mix up one gallon of spray at 1.5 percent of product? _____

_____

Weed Management Plan Activity Sheet

Date:_____ Address:_____

Use your property map to map the location of your problem weeds. Which of the weeds MUST be controlled according to law?

Common Name (Note if weed is a legally noxious weed)	**Scientific Name**	**Life Cycle** (summer annual, winter annual, biennial or perennial)	**Plant Type** (broadleaf or grass)	**Method of Reproduction** (seed, underground roots or shoots, both)	**Spread** (vehicles, animals, wind, water, birds, foot traffic, fill dirt, contaminated hay, seed or manure, other)	**Mechanical Control**	**Cultural/ Biological Control**	**Chemical Control** (Chemical applied)	**Chemical Control** (date applied)	**Chemical Control** (Application rate and success)
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										

Remember:
Most annuals and biennials can be controlled by mechanical means. Check to determine which integrated pest management tools will be effective for the specific species and site conditions. When chemical control is needed, contact the local Cooperative Extension office or Dept. of Agriculture for chemical recommendations. ***Follow all label directions and safety precautions***.
After controls have been applied, follow through with a revegetation plan so weeds do not reinvade.

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What to Do About Weeds Glossary, page 1 of 1

Annual: Plant that completes its life cycle, growing from a seed to producing seed, in one year.

Biennial: A plant that completes its life cycle in two years. First year growth consists of roots and low growing leaves; the second year growth includes flowers and seeds.

Dicot: Plant with two seed leaves, net-like veins, and coarse taproots; generally broad-leafed plants.

Eradication: Complete elimination of a pest. This is difficult to achieve except in very small, new infestations.

Herbicide: Pesticide (chemical) used to specifically control undesirable plants and vegetation.

Indigenous Plants: Native plants, plants that evolved or developed over time in this area.

Invasive weeds: Weeds that rapidly multiply to dominate a site, are difficult to control, and are damaging.

Integrated weed management (IWM): A weed control program that combines two or more control methods. Methods commonly considered include prevention, eradication, mechanical controls, cultural controls, biological controls, chemical controls.

Monocots: Plants with one seed leaf, parallel veins and fibrous roots; generally grasses.

Monocultures: Plant communities consisting on one plant species, generally an undesirable plant species.

Nonindigenous plants: Introduced, nonnative plant species.

Noxious weeds: Invasive weeds that meet the “3 D’s”: **D**amaging, **D**ifficult to control, and tend to **D**ominate a site.

Perennials: A plant that lives for three or more years, even though some perennials die down to the ground each year.

Pesticide: Chemical used to kill pests, generally formulated for a specific pest. The responsibility falls on the person doing the application to have correctly identified the pest and used the pesticide correctly – ALWAYS READ THE LABEL. A chemical used to kill or damage pests of any kind. An herbicide is a type of pesticide used to kill plants or weeds.

Rhizomes: Underground stems, usually horizontal, capable of producing new shoots and roots at the nodes.

Seed bank: Term used to describe the wealth of seeds present in the soil, awaiting optimum conditions to sprout and grow. Weed seeds are particularly adept at remaining viable for years or decades in the soil, waiting for the conditions necessary to germinate and grow.

Stolon: Trailing or lateral stem forming at or below the soil surface, capable of rooting and sending up new shoots at the nodes.

Weed: Any plant growing where it is not wanted.

What to Do About Weeds Evaluation

(Circle your answer.) Was this lesson:	Not at all	----------→			Very much so
Current, up-to-date?	1	2	3	4	5
Understandable?	1	2	3	4	5
Presented in an interesting way?	1	2	3	4	5
Did the program answer any questions you had?	1	2	3	4	5
Did it help you learn how to do new things or how to do something better than you knew before?	1	2	3	4	5
Do you intend to use any of the information from this lesson?	1	2	3	4	5
Overall, was this program worth your time to attend?	1	2	3	4	5

What was the most informative part of this session?

Which part was too technical and why?

Which part was too easy and why?

On which part(s) do we need to spend more or less time?

On which topic(s) would you like more information?

What one practice from this lesson will you implement within a year?

What to Do About Weeds Post-class Mini-test

1. What are the “3 D’s” that determine whether an invasive weed is truly a noxious weed?

    a.
    b.
    c.

2. Annual weeds reproduce by:

    a. Seeds and seed bank
    b. Rhizomes
    c. Pieces of roots
    d. All of the above

3. Perennial weeds reproduce by:

    a. Seeds and seed bank
    b. Rhizomes
    c. Pieces of roots
    d. All of the above

4. What is the single most important factor to determine before formulating a management plan to control problem weeds?

    a. Location of the weed
    b. Identity of the weed
    c. Life cycle and method of reproduction of the weed
    d. Type of herbicide that will kill the weed

5. T or F A biennial weeds requires three or more years to complete its life cycle.

6. T or F The best way to control perennial weeds is by tilling the soil once.

7. T or F Most grasses are dicots.

8. T or F “Seed bank” is a term to describe the viable seeds contained in the soil, waiting for the proper conditions and time to germinate and grow.

9. T or F One key to weed management is to create a favorable environment for growth of desirable plants.

10. T or F Minimizing the spread of existing weeds and preventing the growth of new weeds should be the focus of a weed management program.

What to Do About Weeds Post-class Mini-test Answer Key

1. The 3 D's of noxious weeds:

    a. **D**amaging
    b. **D**ifficult to control
    c. Tend to **D**ominate a site

2. a. Seeds and seed bank

3. d. All of the above

4. b. Identity of the weed

5. F

6. F

7. F

8. T

9. T

10. T