

Weed Awareness

Weed Management for Small Rural Acreages

Prevention

Prevention keeps weeds from occurring or increasing in an area. Preventive techniques include planting high quality, weed-free crops or grass seed. These areas need to be managed to maintain vigorous weed-free growth. (See Livestock Grazing and Weed Prevention on Acreages and Pastures in the 2002 Weed Awareness at lancaster.unl.edu/nebline/2002/mar02/insert.pdf)

An important preventive measure related to control is to keep weeds from going to seed. This is important for annuals and biennials, because that is the only way they reproduce. Perennials reproduce from seed, as well as vegetatively from their root systems. Annual weeds live for one growing season, biennials for two and perennials more than two. However, preventing seed set is extremely important to keep perennials from starting new infestations some distance from existing ones.

Eradication

Eradication is the removal of weeds from an area so they will not recur unless reintroduced. If eradication creates an open area revegetate the ground to prevent another weed infestation.

Control

Control, the most common management strategy, reduces a weed population to a level where you can make a living off of or enjoy using the land. Adequate control also may prevent future infestations. There are four control methods: cultural, mechanical, biological and chemical.

Cultural control methods promote growth of desirable plants. Fertilization,



irrigation and planting at optimum densities let crops compete with weeds and not with each other. While nitrogen fertilization increases yields in grass hay meadows, it also fosters weed establishment and growth. Fertilize cautiously, especially with nitrogen, and only when necessary as determined by soil testing.

Mechanical control methods physically disrupt weed growth. This is the oldest control method and is used most often worldwide. Tillage, hoeing, hand-pulling, mowing and burning are examples. To mulch or smother weeds often is considered mechanical, even though it simply excludes light rather than physically disrupting weed growth.

Biological control methods use an organism to disrupt weed growth. Often the organism is an insect or disease and a natural enemy of the weed. See Biological Control discussion elsewhere in this insert.

Chemical control methods use herbicides to disrupt weed growth. The first rule of any pesticide use is to read the label before using the product and follow all directions and precautions. (NOTE: Avoid using soil-active herbicides, such as Tordon, Vanquish/Clarity

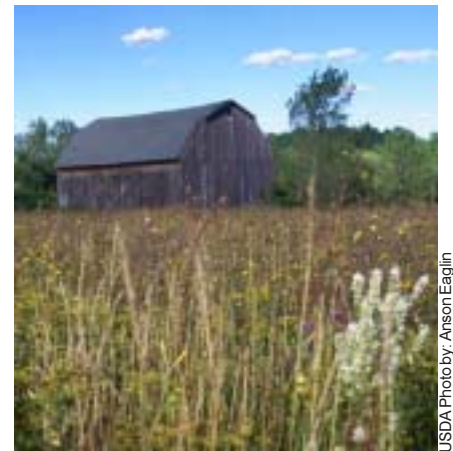
or Telar, near windbreak plantings and other desirable woody vegetation. Plant injury or death can occur. Do not allow any herbicide to drift onto woody or other desirable vegetation for the same reason.)

Weed-Management Systems

A weed-management system uses two or more control methods. The key is to encourage desirable plant growth with optimum fertilization, when necessary, and/or irrigation (cultural control). Plant competition is an often overlooked tool and should be used first, but not exclusively. Till, hoe, hand-pull, mow or mulch (mechanical control) where possible. Herbicides (chemical control) are powerful tools that should be used judiciously, not exclusively.

Reference: Weed Management for Small Rural Acreages, No. 3.106, by K.G. Beck Cooperative Extension, Colorado State University, Fort Collins, Colorado. www.ext.colostate.edu/PUBS/crops/03106.html

Planning Tips for Noxious Weed Control in CRP Contracts



CRP land that has not been cut.

Following are some planning tips to consider prior to establishing or enhancing vegetation in a Conservation Reserve Program contract.

1. Aggressively treat noxious weed infestations prior to seeding or interseeding.
2. Map areas of noxious weed infestations. Mark these areas on your plan map. Canada thistle and leafy spurge will recur from roots and seed. Musk and plumeless thistle and knapweeds will recur from seed and overwintering of fall germinated plants.
3. Avoid tillage or seeding through noxious weed infestations as much as possible. Tillage may cause germination of seeds and the spread of the infestations to other areas by the transported seed of any of the noxious weeds and the root parts of Canada thistle and leafy spurge.
4. Noxious weed control and legumes considerations:
 - Avoid planting legumes in known noxious weed infestations.
 - If it is decided to seed legumes in an infested area, aggressively treat the noxious weed infestations prior to the seeding.
 - Remember, if legumes are planted in a noxious weed infestation, it will make noxious weed control difficult, expensive and labor intensive.
5. Control Options in legumes:
 - Individual plants of all noxious weeds can be spot treated with the appropriate herbicide for the targeted plant.
 - Individual plants of musk and plumeless thistle and knapweeds could be dug or pulled.
 - Mowing is not a satisfactory control option.
 - Mowing will prevent seeding of Canada thistle and leafy spurge, but will not kill the plants or prevent the spread of the roots.
 - Mowing will delay seeding of musk and plumeless thistle and knapweeds, but will not stop the plants from further flowering and seed production.

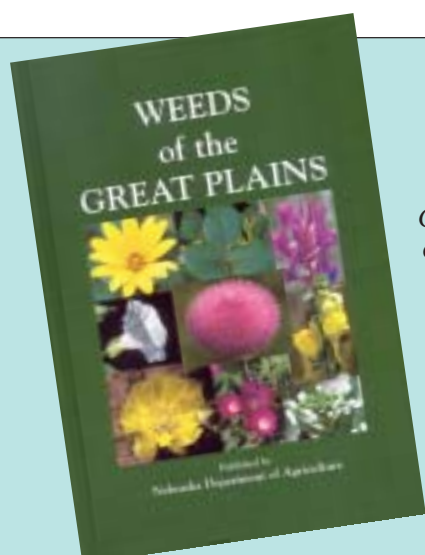
2004 Guide for Weed Management in Nebraska

This 160-page University of Nebraska Cooperative Extension publication "2004 Guide for Weed Management in Nebraska", EC04-130 is available online at <http://ianrpubs.unl.edu/fieldcrops/ec130.htm> or you may purchase a copy for \$3 at the Lancaster County Cooperative Extension office.

The 2004 Weed Management Guide features several new sections as well as the latest research-based updates to the existing information on weed control and herbicide efficacy for a range of Nebraska crops and cropping practices.

Additions and improvements:

- Range and pasture weed response tables are included for the first time.
- Pre-emergence herbicides that can be used as post-emergence are listed.
- Fertilizer-herbicide compatibility information is provided.
- An updated Glyphosate Comparison Table contrasts many of the common glyphosate herbicides registered for Roundup Ready corn and soybeans.
- Noxious Weed control is now a separate section preceding Troublesome Weeds.



Weeds of the Great Plains

The Nebraska Department of Agriculture announced the release of *Weeds of the Great Plains*. This publication replaces *Weeds of Nebraska and the Great Plains* distributed since 1994.

Weeds of the Great Plains is a collaborative effort between the University of Nebraska and the Nebraska Department of Agriculture. *Weeds of the Great Plains* is a 7 x 10 inch, hardbound book. The intent of this important weed identification book is to meet the needs of farmers, ranchers and homeowners, as well as the more technical expectations of botanists to accurately identify weeds and common plants in the great plains.

The price of this book is \$25 per copy which includes postage and handling. Individuals wishing to purchase the book at the Department of Agriculture's office in Lincoln may do so for a cost of \$22.50. Credit card orders may be made over the phone by calling 402-471-2394.