Madison County 2003 Weed Resolution

BE IT RESOLVED by the Board of Supervisors of Madison County that pursuant to the provisions of Chapter 317, Code of Iowa, 2003, it is ordered:

That each owner and each person in the possession or control of any lands in Madison County, including right-of-way of County trunk roads and local County roads, shall cut, burn or otherwise destroy all noxious weeds thereon, as defined in this chapter, at such time each year and in such manner to prevent said weeds from blooming or coming to maturity, and shall keep said lands free from such growth as shall render the streets or highways adjoining said lands unsafe for public travel. Noxious weeds shall be cut or otherwise destroyed on or before the following dates and as often thereafter as is necessary to prevent seed production throughout the year: A copy of Chapter 317, code of Iowa, can be seen in the Weed Commissioners Office.

Group 1: May 12, 2003 Musk Thistle, Multiflora Rose

Group 2: May 19, 2003 Leafy Spurge, Perennial Peppercorns, Sour Dock, Sheep Sorrel

Group 3: June 2, 2003 Canada Thistle, Russian Knapweed, Buckhorn, Wild Mustard, Bull Thistle

Group 4: June 23, 2003 Field Bindweed, Wild Carrot, Teasel, Poison Hemlock

Group 5: July 1, 2003 HorseNettle, Perennial Sow Thistle, Quack Grass, Butter Print, Puncture Vine, Cocklebur, Wild Sunflower, Shattercane

That if the owners or persons in the possession or control of any lands in Madison County fail to comply with the foregoing orders, the Weed Commissioner may cause this to be done, or impose a maximum penalty of ten dollars ($10.00) fine for each day up to ten (10) days. The expense of said work including cost of serving notice and other costs, if any, to be assessed against the real estate plus an amount equal to twenty-five (25) percent of all sums expended.

Complaints will be handled as follows: The complaint will not have to be signed. State the reason for the complaint, the general location of the property, the legal description of the property, the owners of the land and the tenants or persons in control of the land. Forms are available at the Weed Commissioner's office or will be mailed upon request.

MADISON COUNTY BOARD OF SUPERVISORS

The most common complaint received in our office involves "musk thistle". Below you will find some valuable information on this pesky weed that creates a whole lot of unhappiness in Madison County.

Quick Facts...

- Musk thistle is a biennial weed that reproduces only from seed.
- The key to successful musk thistle control is to prevent seed production.

- Apply herbicides to musk thistle rosettes in spring or fall. Apply up to the early flower growth stage.
- Combine control methods into a management system for best results.

Musk thistle is an aggressive weed of foreign origin that occurs in pastures, rangeland, roadsides and non-crop areas. It is a biennial weed, although occasionally it is an annual. Because musk thistle reproduces solely from seed, the key for successful management is to prevent seed production.

Germination and seedling establishment are correlated with moisture and light. Thus, more seeds germinate and establish plants in open pastures and other degraded areas.

Vigorously growing grass competes with musk thistle, and fewer thistles occur in pastures where grazing is deferred. However, musk thistle also can become a problem in pasture or rangeland that is in good condition.

Phenology

Seedlings normally emerge early in spring, develop into rosettes and spend the first season in this growth stage. Seedling emergence also can occur in fall. All seedlings grow into rosettes and overwinter in that stage. Rosettes are usually large and compact with a large, corky taproot that is hollow near the crown.

Early in spring of the second year, overwintered rosettes resume growth. Shoots begin to elongate (bolt) in late March through May, depending on weather and altitude. Musk thistle flowers and starts to produce seed 45 to 55 days after it bolts.

Musk thistle dies after it sets seed. It spends approximately 90 percent of its life cycle in a vegetative growth stage. Musk thistle's tolerance to most herbicides increases after it bolts.

Reproduction and Spread

Musk thistle is a prolific seed producer. One plant can set up to 20,000 seeds. However, only one-third of the seeds are viable. Musk thistle produces many heads. The terminal, or tallest, shoots flower first, then lateral shoots develop in leaf axils. A robust plant may produce 100 or more flowering heads.

Musk thistle flowers over a seven- to nine-week period. It begins to disseminate seed from a head about two weeks after it first blooms. It is common to observe musk thistle with heads in several stages of floral development and senescence. Thus, musk thistle sets seed over an extended time period.

Most seed is disseminated within the immediate vicinity of the parent plant. This leads to a clumped pattern of seedling development and results in intraspecific competition and mortality. Wind and water are good dissemination methods and seeds are also spread by animals, farm machinery and other vehicles. Less than 5 percent of seed remains attached to the pappus when it breaks off the flowering head and floats away on wind currents.

Management

Cultural control. Maintaining pastures and rangeland in good condition is a primary factor for musk thistle management. To favor pasture and rangeland grass growth, do not overgraze. Fertilize only when necessary and according to soil testing recommendations. To successfully manage musk thistle, prevent seed formation.

Mechanical control. Musk thistle will not tolerate tillage and can be removed easily by severing its root below ground with a shovel or hoe. Mowing can effectively reduce seed output if plants are cut when the terminal head is in the late-flowering stage. Gather and burn mowed debris to destroy any seed that has developed.

Chemical control. Several herbicides are effective in the control and destruction of musk thistle, contact your local farm service, coop or extension office for types and application guidelines. Apply these herbicides in spring or fall to musk thistle rosettes.