

□ *Editor's note: Chase County Weed Supt. Randy Bartlett said this is the ideal time of year to begin control of musk thistle. He can be contacted for more information on control measures at 882-7520.*

Musk thistle remains one of the most plentiful noxious weeds in Chase County. It takes continued efforts to keep under control.

To successfully fight weeds, landowners need to know as much as possible about each weed and develop a strategy to manage each weed.

Musk thistle (*Carduus nutans*) is usually thought of as a biennial, germinating one year, usually in the fall, overwintering and flowering the next year. When there is a long enough cool period in the spring, some musk thistle plants will act as annuals by germinating in the spring and flowering in early summer.

Musk thistle spreads only by seed. One head can produce over 1,000 seeds. The seeds can remain viable in the soil for 10 years.

The key to managing musk thistle is to prevent all plants from going to seed, prevent the spread of seeds and maintaining vigorous growth of desirable vegetation.

Control steps

1. Scout the areas with past infestations in late-September and early-October for seedlings and rosettes. A seed bank has built up in the soil at these sites. These seeds will remain viable for eight or more years waiting for the right conditions to germinate.

2. It is most effective to treat the entire area with herbicides in order to control all the small seedlings, rosettes and seedlings not emerged. Spot control of these sites usually results in a lot of escapes since not all the plants are observed and some plants germinate later.

3. Use 2,4-D as a contact herbicide along with another herbicide adding to the effectiveness of killing the plants present but also have a residual that will kill later-germinating plants. Some of the herbicides providing residual control are Escort, Tordon 22K, Vanquish, Banvel and Telar, Graze on P & D and Milestone.

4. Scout these fall-treated areas in March and April for escapes and new plants.

5. Provide control prior to bolting of the flower stem in May. Use 2,4-D along with a residual herbicide.

6. Scout these areas weekly and provide needed follow-up control until July. Be alert to the musk thistle plants acting as annuals due to a cool spring. Remember, the best approach to control musk thistle is to scout and treat areas with past infestations (these areas have built up a seed bank in the soil) in the fall and spring. Provide treatment in the spring prior to bolting and always scout treated areas for escaped plants. One plant going to seed can contribute thousands of seeds to the seed bank.

Mechanical control

Severing the root of musk thistle a couple of inches below the soil surface will kill the plant. The entire root does not have to be removed.

Hand cutting or mowing has to be done at weekly intervals to be effective.

Fire has not proven to provide effective control. The plants survive prescribed burning, but can be easily found and controlled by other means after the burn.

Prevention

Infestations occur where there is a seed bank in the soil and the conditions are right for germination and survival. Healthy vegetation provides competition and minimizes the survival of musk thistle seedlings.

Care should be taken not to spread seeds from infested sites or to use forage or seeds

contaminated with noxious weed seeds.

Equipment should be cleaned before leaving an infested site, if possibly contaminated. Only weed-free certified forage and seed should be used.