



What's Working:

Invasive Species Control

July 2016

Canada Thistle Control

2016 Information

- Prevention: Staying ahead of thistle can be difficult; the best plan of action involves having good timing, and using the combined methods of mechanical and chemical control to treat the plant before the flowers go to seed. Mature thistle plants can contain up to 10,000 seeds per plant, and has an aggressive root system that continually produces new shoots.



Clipping: Mechanical treatment will be the most effective in areas where thistle is cohabitating with the desired flower species in a native prairie, as spraying will be harmful to the broadleaf forb varieties. For thistle intermixed with desired natives, clipping multiple times in the growing season to approximately 1' with a mower attachment that does not create windrows, will allow for the growth of desired natives, while also not allowing the quick growing thistles to go to seed.

Spraying: Areas that are dense with thistle and not with native flowers can be broadcast sprayed, as the grasses will not be affected by the broadleaf herbicide. Backpack or handheld spray works best for small areas. (Farm Bill Partnership Staff)

2013-2014 Information

- If you have a Canada thistle problem (or other perennial noxious weeds), and want to establish wildflowers in your project area, don't seed them at the beginning of the project. You may well wind up killing them all with herbicide to get the thistle under control. Seed only grass at project start, then invest 2-3 years in concentrated herbicide work to get the thistle under control. Once thistle is controlled, do a spring or fall burn and inter-seed forbs (Dennis Pederson, Habitat Forever).

2008-2012 Information

- For Canada thistle, if can be done, very aggressive, competitive plant communities that maintain cover will eventually relegate C thistle to fragmented patches or none at all as in the case of diverse, aggressive prairie communities or sod-bound brome on productive soils, or aggressive rotational grazing systems. Sites with continual disturbance such as periodic flooding, traffic, low fertility, non-productive

soils with perpetually open niches for invasion are problematic (Roger Becker, University of Minnesota Extension).

- If herbicides are needed my picks are: 1)Milestone (aminopyrchlor) 5 oz. followed by below labeled rate 3 oz the following year if needed to clean-up. 2)Transline/Stinger (clorpyralid) 10.67 oz. followed by below labeled rate 8 oz. the following year if needed to clean-up. -aminocyclopyrachlor (Perspective, Streamline from DuPont) is very effective but limited to localized spot treatments or to industrial areas, guard-rails, etc. - areas where vegetation impacts not that critical. -Tordon (picloram) same issues and less effective than aminocyclopyrachlor products.-2,4-D repeated over a few years will work, more non-target dicot damage than 1 and 2 above. Tank mixes with products above work very well but relegated to grasslands, not mixed plant communities with dicots.-Garlon/triclopyr and Banvel/dicamba including Overdrive not that good on C thistle-Sulfonylureas like Glean/Telar (chorimuron-ethyl), Oust (sulfometuron-methyl) good at high enough rates but lots of nontarget issues, and Ally/Escort (metsulfuron-methyl) not that good (Roger Becker, University of Minnesota Extension).
- In plantings where primarily warm grass species were planted and early succession forbs are absent, thistles have no competition and often reach maturity before warm season grasses like big bluestem and Indian grass even start to green up. Having a strong Canada wild rye component as well as composite forbs, like black eyed Susan and Yellow coneflower seems to put pressure on thistle populations (Martin SWCD).
- For high quality communities, hand pulling or careful wick application of clopyralid herbicide.
- Spot treatment of thistle early in development before it has a chance to spread.
- Push Canada thistle control with spot spraying rather than whole field spraying when forbs are present (Redwood SWCD).
- Renville SWCD has developed a landowner handout giving recommendations regarding chemical control for Canada thistle as they have nearly 400 RIM/PWP/CREP easements requiring management. The SWCD strongly recommends Milestone application in both spring and fall and has found that to be the only effective way to control thistles. The handout works for not only landowners, but is also given to other interested parties and to Township Boards as they try to administer the Noxious Weed Law (Renville SWCD).