

# WEEDS TO WATCH

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## CANADA THISTLE (SIMILAR TREATMENT FOR MUSK AND PLUMELSS THISTLE)

Watch out for **Canada Thistle** (*Cirsium arvense*).

This plant is a long-lived perennial weed that spreads rapidly due to the generation of new shoots from extensive creeping roots and dispersive seeds after flowering.

Oblong, deeply lobed dark green leaves with spiny margins clasp the stems in an alternate arrangement. The leaf surfaces are smooth to slightly hairy. Unlike other exotic thistles, Canada thistle does not have a highly spiny stem.

Small ( $\frac{3}{4}$  inch diameter), composite flowers are borne at the tops of stems. Flowers vary from purple to pink, and are less commonly white. Seeds are light brown and have a featherlike pappus, which aids in wind dispersal. Seeds can be dispersed long distances by the wind, but most seeds tend to fall near the mother plant.

This aggressively spreading weed is very common and infests millions of acres. Through rapid reproduction in almost all climate conditions during the growing season, dense infestations can compete with and crowd out desirable native plants or crops. Just one seed can produce a new patch. New patches can spread quickly if control

measures are not taken. In pastures, cattle avoid the spiny leaves. Curiously, goats like the tough fodder and can be an effective means of control.

**HABITAT:** Commonly found in pastures, lawns, rangeland, cropland, and riparian areas.

**REPRODUCTION:** Primary spread is thru underground creeping roots with seed dispersal being second.

**CONTROL METHODS:** Unfortunately, there is no 'silver bullet'. The extensive root system stores carbohydrate (mostly in the fall) and allows the plant to regrow after shoots have been destroyed. Long-term control of this weed requires methods that destroy the roots or exhaust them of their carbohydrate reserves. Persistence is key.

Tillage and mowing are two mechanical tactics that can exhaust these tenacious root systems. Mowing should start at early bud-stage to prevent seed production. The plants should be cut as short as possible, with repeated mowing as plants regrow. Several years may be required to deplete the root stores. Tillage should occur every three weeks.

Managing Canada thistle requires treatment in the spring to prevent seed set and eliminate the first flush of growth, **and** in the fall to maximize injury to the root system. **Choose one spring treatment and one fall treatment.**

In late spring (at bud to early-bloom stage), **apply Round-up Pro (glyphosate) at 64 oz. per acre.** Other options are dicamba plus 2,4-D.

In the fall, **apply Milestone (aminopyralid) at 6 oz per acre or Forefront R&P (aminopyralid plus 2,4-D) at 32 oz. per acre or Round-up Pro at 128 oz per acre (spot treatment) or Vanquish at 48 oz per acre.**

As always, follow manufacturer's instructions and see labels for restrictions for spraying near livestock, waterways, and other information.

This information was assembled from the following articles:

*Managing Canada Thistle* by Gover, Johnson, and Sellmer, 2007 thru Penn State and the USDA CREP Factsheet 1.

*Organic Management of Canada Thistle* by Gramig and Keene, NDSU Extension Service, W1860, August 2017.



Typical example of Canada Thistle.



Note the spiny leaves and smooth upper surface of the leaves.



Seed head displaying seeds with feathery pappus.

## INVASIVE & NOXIOUS WEEDS

Invasive weeds are non-native plants that invade ecosystems and replace native plants.

Noxious weeds are usually invasive and designated by State law as priority plants that require control by landowners. These weeds can reduce grazing land and impact wildlife habitat.

Early detection and quick response is critical to slow

spread and protect weed-free areas.

The purpose of this newsletter is to provide early control methods and recommended treatments.

Contact your county Extension agent for management of large infestations or call

Ralph Hammer, Minnehaha County Weed and Pest Supervisor, at 605-367-4316.

