PERENNIAL and MARSH SOWTHISTLE

[*Sonchus arvensis* L. and
Sonchus arvensis ssp. *uliginosus* (Bieb.) Nyman]

Perennial sowthistle

Marsh sowthistle flower

PERENNIAL and MARSH SOWTHISTLE

State Noxious Weed List: **No.**

Perennial sowthistle was introduced from Europe and placed on the state noxious weed list in 1935 when it became a severe problem, especially in the northwestern part of the state. The weed subsequently was removed from the list in 1999 after revised farming practices and new herbicides had severely reduced the infested acreage. Most sowthistle infestations in North Dakota are annual not perennial species.

Identification and growth form:

Marsh sowthistle is a subspecies of perennial sowthistle and thus the plants are very similar in form and growth habit. Both species have bright yellow flowers similar to dandelion, but perennial sowthistle flower bracts are covered with gland-tipped hairs, while marsh sowthistle has smooth flower bracts. Both weeds have an extensive creeping root system. Leaves are lobed below, but less so above and have prickles on the margin and are 4 to 10 inches long (longer than the annual species). Generally, perennial sowthistle has fewer but larger flowers (1 to 1.5 inches across) than the annual species and end in a terminal cluster. Some taxonomists consider marsh a separate species from perennial sowthistle; others consider it a subspecies. Both contain latex and grow from 1.5 to 6 feet in height. Seeds are dark brown, with prominent ridges and have a tuft of white pappus or bristles.

Sowthistle generally flowers from July through September. Seed production is highly variable, but typically averages 30 seeds per flower head. Seed viability is relatively low for sowthistle and seeds usually do not survive longer than a year.

Perennial and marsh sowthistle can tolerate variable environments and can adapt well to wet areas with little soil disturbance. The plant commonly is found in cultivated areas, ditches, meadows, waste areas, sloughs, woods, lawns, roadsides, beaches, along rivers and lake shores. Sowthistle is adapted to many soil types, but seems to prefer low, fine-textured loam soils.

Why is this plant a concern?

Perennial and marsh sowthistle can displace native plant communities by invading disturbed areas and undisturbed natural habitats. Sowthistle can cause reduced crop yields, and lead to increased cultivation and herbicide costs.

How do I control these plants?

Annual and perennial sowthistle species are not true thistles and control options differ between these weed families.

Chemical. Products that contain metsulfuron such as Escort and Ally or Express (tribenuron) are very effective in controlling perennial sowthistle species. Preharvest applications of glyphosate and products that contain clopyralid or glufosinate will reduce perennial sowthistle. Tordon (picloram) and Milestone (aminopyralid) will control sowthistle species in noncropland.

Cultural. Cultivation will reduce perennial sowthistle species in cropland but care must be taken not to spread the roots to noninfested areas.

Biological. No biological control agents or pathogens are available for these weeds. Insects can be observed on the flower heads of these plants, especially perennial sowthistle, but they are feeding on sticky residue from the glands on the flower bracts, which does not harm the plant.