

NOXIOUS WEEDS

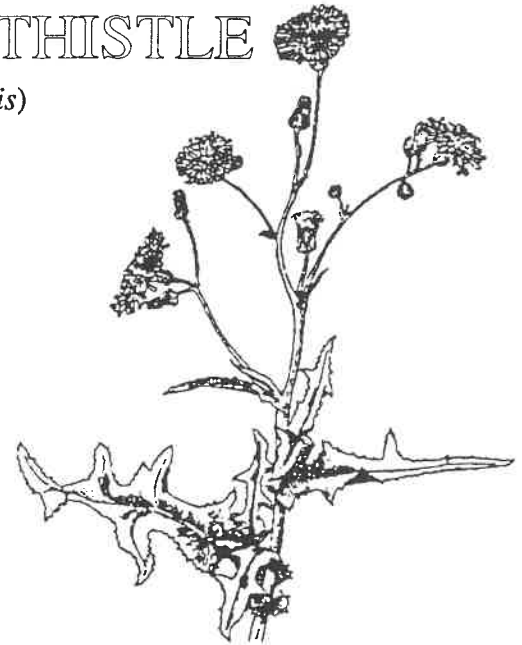
Status: Introduced

PERENNIAL SOWTHISTLE

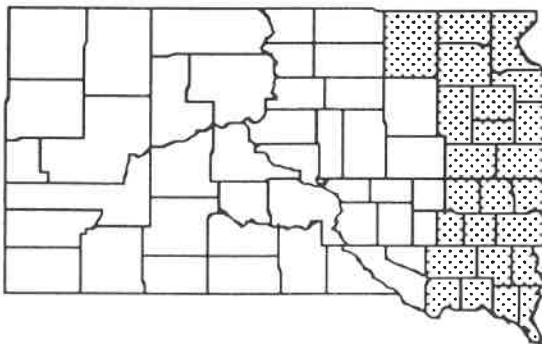
(*Sonchus arvensis*)

Description

The 2 to 7-foot (0.6 - 2.2 m) tall *perennial* sowthistle is easy to identify from a distance when in full bloom. The stems are smooth, hollow and branched at the top. This species is distinguished by its dandelion-shaped leaves that have short, stiff spines at the lobe tips. The leaves are shiny green, about 4 to 8 inches (10 to 20 cm) long with 2 to 5 lobes. The plant's yellow-orange flowers, 1 to 1.5 inches (2.5 to 3.8 cm) across also resemble dandelions. Numerous flower heads are found on the ends of the terminal branches. The 1/8 inch (3.2 mm) seeds are oblong, dark brown, prominently ridged and wrinkled, with a tuft of soft white *pappus* bristles. Perennial sowthistle has underground, creeping roots, unlike the similar-looking annual sowthistle, which is not considered a *noxious weed*.



Distribution



Perennial sowthistle is found primarily in small patches and is less widespread in

South Dakota than most other thistles. The species is a native of Europe and Asia and is widely distributed in North America. In South Dakota, perennial sowthistle is concentrated in the northeast and eastern areas of the state. It is more common in pasture and rangeland than in cultivated fields. In recent years, new patches have been spotted along fencelines, roadsides and field borders. Nearly 40,000 acres are infested in South Dakota.

Natural History

The perennial sowthistle was once the predominant thistle in the state, but acreage has declined dramatically for unknown reasons. This thistle blooms in June and July with the seeds maturing between July and August. Seeds become

viable 10 to 14 days after the initial color develops. Perennial sowthistle is a dangerous pest because it spreads rapidly by seed. In addition, the widely spreading white underground root can penetrate 10 or more feet (3.1 m) deep. The plant's horizontal fleshy roots are numerous, but do not penetrate deeper than 4 inches (10.2 cm). The plant seems to prefer moist, low areas. The whole plant contains sticky, white sap and a sour odor. It is a heavy nitrogen user.

Management Considerations

Perennial sowthistle is found primarily in small patches and is less widespread than most other thistles. However, there is potential for expanding infestations if control is overlooked.

Preventing seed production is very important. Landowners should check for new, small patches along marshes, ponds, and wet areas to eradicate *perennial* sowthistle before it produces seeds. Extensive areas of sowthistle may be eradicated with a combination of cultivation, planting competitive crops, and herbicide application. Small grain, closely planted forage crops, and alfalfa are useful in rotation. Fall tillage or application of herbicides after harvest weaken the thistle plants in cropland.

The South Dakota Weed and Pest Control Commission has the legal responsibility for developing and implementing a statewide control program for all *noxious weeds*. South Dakota law requires that all land owners control noxious weeds on their land. If land owners do not comply with noxious weed control requirements, fines, tax levies, and liens against their land could result.

Glossary

Noxious weed - designation of the State Weed Control Board. These are weeds that are difficult to control once they are established.

Pappus bristles -

Perennial - a plant that lives more than two years.

References

- Agricultural Research Service of USDA, Common Weeds of the U. S. 1971. Dover Publications Inc. NY.
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- Klingman Glenn C., Weed Science, 1982. John Wiley & Sons Inc. NY.
- Zimdahl, Robert L., 1989. Weeds and Words The Etymology of the Scientific names of Weeds and Crops. Iowa State University, Ames, Iowa.

Selected Resources For Teachers

- Noxious Weeds of South Dakota*, Extension Special Series 34, 1993. Cooperative Extension Service, SDSU, Brookings, SD 57007.
- South Dakota/Nebraska Weed Identification Guide*, 1994. Black Hills RC&D Office, 515 9th Street, Rapid City, SD 57701-2663.

Technical Reference:

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