



a



b

Figure 1. Houndstongue is a biennial that overwinters as a rosette during the first year of growth (a). The plant has very pubescent leaves that feel like a dog's tongue, hence the common name (b).

Houndstongue

(*Cynoglossum officinale* L.)

Identification and Control

STOP THE SPREAD

Rodney G. Lym
NDSU Department of Plant Sciences

Houndstongue is a biennial poisonous herb that is native to Eurasia. The plant is a member of the Borage family, which includes more commonly known plants such as Virginia Bluebells, Forget Me Nots and the fiddlenecks. Houndstongue commonly is found in disturbed areas, including roadsides and trails, and in pasture and woodlands following soil disturbance or overgrazing.

How do I identify this plant? The leaves are oblong, very pubescent and rough, which resembles a hound's tongue (Figure 1). Plants bolt during early summer the second year of growth to a height of 1 to 4 feet and flower in mid-June (Figure 2a). Flowers clusters range from red to burgundy (Figure 2b). Each flower produces three to four nutlets (Figure 3a), which are flat and teardrop-shaped with a very hard seed coat and numerous barbs (Figure 3b).

What is houndstongue's growth cycle? Houndstongue forms a rosette the first year of growth (Figure 1a) and bolts

and flowers the second season. The plant only reproduces from seed, but it can spread great distances because the barbs on the nutlets cling to clothing, machinery and animals. Plants generally are found along trails and roadsides, on the edge of wooded areas and in disturbed habitats.



a

Figure 2. Houndstongue bolts early in the summer during the second season of growth and produces small red to burgandy flowers (a). The flowers are inconspicuous and bloom in series for several weeks (b).



b

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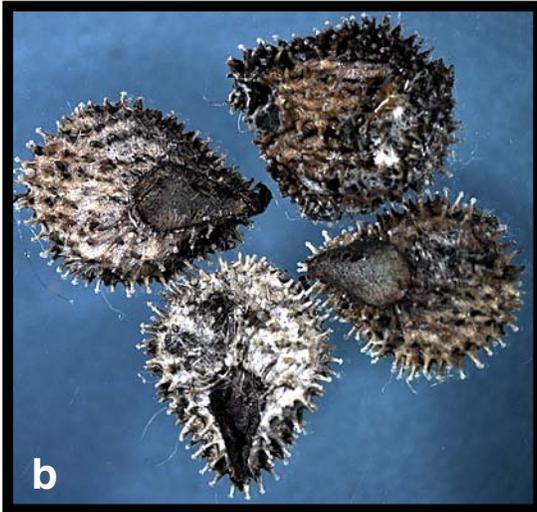


Figure 3. Three to four nutlets form from each houndstongue flower (a). The seeds have numerous barbs which can attach to people, animals, and equipment helping the plant spread to new areas (b).

Why is this plant a concern? Houndstongue tends to be a nuisance plant rather than a noxious weed unless infestations grow to become large patches. The nutlets often become imbedded in the wool or hair of livestock, which can cause a loss in the value of the wool and/or increase costs to remove the burrs. Eye damage can occur if burrs become embedded in the eye or eyelids. The burrs can be problematic for hikers, hunters and fishermen, and also to their pets.

Houndstongue contains alkaloids that are especially toxic to cattle and horses. The plant rarely is eaten in the green state; however, animals will eat the dried plant in hay. Sheep are more resistant to the pyrrolizidine alkaloids than other livestock, while horses, especially when confined to small areas infested with houndstongue, are more likely to ingest toxic levels. Fatal liver disease in horses occurred following two weeks of feeding hay with as little as 6 percent houndstongue.

Where in the state is this plant found? The plant first was collected in North Dakota near Valley City in 1911, and in 1950, it was described by O.A. Stevens of the North Dakota Agricultural College as confined to “Ransom, Barnes, and Steele Counties only.” Beginning in the late 1990s and early 2000s, houndstongue began to be more widespread in North Dakota, especially in the southwestern and north-central part of the state.

How do I control this plant? Prevention is the best method to keep houndstongue from invading North Dakota. Use only certified weed-free hay and eradicate new infestations before the plant can spread. Escort (metsulfuron) at 1 to 2 ounces per acre (oz/A) is very effective for controlling houndstongue and can be applied throughout the growing season.

First-year houndstongue rosettes can be controlled with 2,4-D at 2 pints/A applied from late May to mid-June. Second-year plants are much less susceptible to 2,4-D. Plateau applied at 8 to 12 oz/A will control houndstongue pre- and postemergence, but grass injury, especially to the cool-season species, is likely when Plateau is applied at the maximum rate.

A root weevil, *Mogulones cruciger*, has been released for control of houndstongue in Canada. The insect has become well-established in Alberta and has greatly reduced the houndstongue infestation in that province. However, this biological control agent likely will not be approved for release in the U.S. due to concerns it may feed on native plants in the Borage family.

The seed-feeding weevil *M. borraginis* is in the final stages of evaluation as a likely candidate for release. A stem-mining weevil, a root-mining weevil and a root-mining hoverfly attacked several North American borage plants during testing and no longer are being considered for release.

**If you find this weed,
report it to your
local weed officer.**

**HELP STOP THE
SPREAD**

All photographs by Rodney G. Lym.

For more information on this and other topics, see: www.ag.ndsu.nodak.edu/invasiveweeds

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