Cynoglossum officinale L.
Identification and Control
Marsha Watland-Becker County Agriculture Inspector

**Background:** Houndstongue is a biennial, poisonous herb that is native to Eurasia. The plant is a member of the Borage family. The plant is commonly found in disturbed areas, including road sides and trails, and in pastures and woodlands following soil disturbance. In Becker County, houndstongue is found at base of trees where animals rub against trees and seeds drop by base, along deer trails and where deer bed down or feed such as under oak trees.

**Description:**
1. Is a biennial that spends its first year as a rosette with soft, velvety leaves.
2. The second year there is a leafy rosette along with a flowering stem that may reach 4’.
3. Leaves are oblong and covered with rough hairs and feels like a dog’s tongue.
4. Lower leaves are 4-12” long & 3” wide, upper leaves are smaller but lack stems.
5. Flowers are dull, reddish-purple at the end of upper stems, blooming from May until frost.
6. Each flower develops four burr-like nutlets. Reproduces only from seed.
7. The seed hulls are covered in tiny spines, giving them Velcro-like ability to cling to clothing and the hair of fur of animals. This is how the plant spreads.
8. Seed is viable for up to two years. Mature plants produce up to 2,000-6,000 seeds
9. Houndstongue contains pyrrolizidine alkaloids which are toxic to cattle, horses, sheep and goats. The plant is rarely eaten in the green state, animals will eat the dried plant in hay.
10. Horses and cattle are most susceptible to poisoning from alkaloids that have a cumulative effect on the liver and pretty much will induce fatal poisoning which is irreversible. There is no treatment. Fatal liver disease in horses has occurred following two weeks of feeding hay with as little as 6 percent houndstongue.

If you find this weed, report it to your County Agriculture Inspector
Management Tips

Prevention:
   a. Monitor and destroy new plants before they go to seed.
   b. Provide livestock with a grazing revegetation practice.
   c. Do not overgraze since plants do well in disturbed sites.
   d. Clean burrs from animals and from clothing and shoes before leaving infested areas.

Control:
   - For small infestations, houndstongue can be dug-up or hand-pulled if soil conditions permit.
   - The most effective method if the root crown is severed 1-2 inches below the soil surface.
   - For plants that have already gone to seed, clip and bag stalks and nutlets. Plants will not regrow the following year as each plant dies following seed production. Once collected and bagged, burning seedheads in Becker County has worked well.

Most Effective Control Method and Timing

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Herbicides that have been effective in Becker County

Apply herbicides during the pre-bud stage or rosette stage. Apply spring to early summer and fall.

1. Chaparral (3 oz/acre)+ 2,4-D (2 pints/acre).
   This mixture has worked also in early bolt stage.
2. Escort (Metsulfuron) 1 oz/acre + 2, 4-D
3. 2,4-D (2 pints/acre) at first-year rosette stage.

Follow label directions.

Thank you to Howard Lomsdahl for finding Houndstongue on his property in Becker County, MN. in 2009 so treatment could begin.

Photos by Marsha Watland unless otherwise designated.