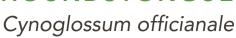


## **HOUNDSTONGUE**





WHAT IS IT?

Houndstongue (HT) is a biennial forb in the Borage family that was accidentally introduced from Eurasia. It is despised both for its poisonous leaves and its burlike fruits that cling to animals and clothing like Velcro and facilitate dispersal of its seeds. It has spread throughout most of the U.S. and Canada.







## HOW TO IDENTIFY HOUNDSTONGUE

STEM AND LEAVES

HT forms a rosette of basal leaves its first year, and a 3-foot-tall flowering stalk its second year. Basal leaves are broad and lance-shaped with smooth margins, long petioles, and noticeable leaf veins. Stem leaves are narrower, and tips are sharply pointed like a hound's tongue. All leaves are covered in fine hairs and often appear dusty and insect-ridden.

**FLOWERS** 

During its second year, HT produces several wiry flowering stalks with ¼ inch, reddish-purple, 5-petaled flowers. Flowers are self-pollinated.

**FRUITS** 

HT fruits are prickly burs composed of 4 teardrop-shaped seeds that are covered with tiny hooks and readily attach to clothing or fur.

## REPRODUCTION AND SPREAD

SEEDS
ROOTS
LIFE CVCI

Each bur-like fruit is composed of 4 prickly seeds that break apart at maturity and stick to the furs of passing animals as well as onto clothing and vehicles, and disperse great distances. Each plant produces about 2,000 seeds in its lifetime. Seeds remain viable on the parent plant for up to 3 years, but generally survive less time in the soil. Reproduction of HT is exclusively by seed.



OOTS

HT grows from a thick, woody taproot that can exceed 3 feet in depth. It cannot spread from its roots.



LIFE CYCLE

Like most biennial plants, HT forms a rosette of basal leaves its first year and develops a deep taproot. The following year it sends up a tall flowering stalk and produces flowers, fruits and seeds. After seeds are mature, the parent plant dies. Seeds remain viable on the parent plant for 2 additional years.

## HOW TO CONTROL IT

PREVENTION	HT can be controlled fairly easily if seed production is prevented.
MECHANICAL	HT can be dug out of the ground below the root crown, but make sure to bag and dispose of any seeds. Second-year plants can also be mowed close to the ground while in flower but DO NOT mow if seeds are present as this would spread them. Tilling HT provides effective control, as long as seeds are not present. Repeat annually to exhaust the soil seed reserve. Gloves should be worn for any hand removal, as the plant is poisonous.
CHEMICAL	HT can be controlled with herbicide, but the hairy texture of leaves requires addition of a surfactant. Herbicides with <i>Metsulfuron</i> or <i>Chlorsulfuron</i> as active ingredients are most effective on HT.
BIOLOGICAL	There are currently no Biocontrol agents approved for HT, but scientists are in the process of researching a seed-mining weevil. Livestock should not graze on this plant – it is deadly poisonous.
CULTURAL	Houndstongue is not a strong competitor in established plant communities, so reseed disturbed or bare soil with competitive native plant species to prevent infestation with houndstongue.