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HOUNDSTONGUE MANAGEMENT TIPS

Houndstongue, a member of the Borage family, is a biennial forb with a taproot. Leaves are velvety, oblong and are said to look like a dog's tongue. Stem leaves decrease in size as you go upward along the stem. The flowers are reddish-purple and have five petals. Mature plants usually grow one to four feet tall. Reproduction is by seed only. The ½ inch long seeds are burr-like nutlets that readily attach to fur and clothing like Velcro[®]. **Seed longevity is one to three years.** Houndstongue displaces native vegetation, degrades forage quality and grazing capacity, and is poisonous to livestock.









Management and control efforts should focus on reducing seed production and must be planned for many consecutive years at the existing site in order to prevent seed formation/dispersal and to monitor for, and appropriately treat, any new plants that emerge.

Effective control measures for the management of houndstongue include:

- 1. Mechanical (hand pulling): Diligent hand pulling or grubbing can provide control of small infestations of houndstongue. Remove as much of the root as possible and place plants with flowers or seeds in bags to prevent seed dispersal. Return to the area for several years to monitor for and remove any new plants. Wear gloves when pulling or digging plants. Hand pulling is not feasible on more established infestations.
- 2. Herbicide: Always follow directions on the label. The label is the law! Calibrate your equipment to ensure that you are adding the proper amount of herbicide to your tank. The following herbicides are commonly used to control houndstongue. Do NOT use these herbicides in lawns, turf or ornamental settings - read the label. For the most effective control, apply herbicides when plants are in the rosette stage up to the early bolting stage.

Mixing rates in small backpack or hand sprayers are as follows:

*Opensight: 1/2 - 2/3 teaspoon herbicide to 1 gallon of water. 1/2 - 2/3 teaspoon herbicide to 1 gallon of water. *Chaparral: *Escort XP: 1/5 - 1/3 teaspoon herbicide to 1 gallon of water. *Telar XP: 1/5 - 1/2 teaspoon herbicide to 1 gallon of water. 1/4 - 1/3 teaspoon herbicide to 1 gallon of water. *Cimarron Plus:

1 - 2 oz herbicide to 1 gallon of water (rosette stage only). 2.4-D Amine:

Rates in large sprayers are as follows:

2.5 - 3.3 oz herbicide per acre.
2.5 - 3.3 oz herbicide per acre.
1 - 2 oz herbicide per acre.
1 - 2.5 oz herbicide per acre.
1.25 - 2 oz herbicide per acre.
1 - 2 quarts herbicide per acre (r *Opensight: 2.5 - 3.3 oz herbicide per acre. *Chaparral: *Escort XP: *Telar XP: *Cimarron Plus:

2.4-D Amine: 1 - 2 quarts herbicide per acre (rosette stage only).

NOTE: Adding a surfactant to your tank mix may enhance the performance of your herbicide and is required for certain herbicides (read the label). Add 0.5 - 1 oz per gallon of water for backpack sprayers or 1 - 2 pints per 100 gallons for large sprayers.

- 3. Cultural (tilling & revegetation): Repeated tilling may effectively control houndstongue as long as cultivation practices sever the root one to two inches below the soil surface. Plant competition can prevent the invasion of houndstongue, so it is important to promote healthy desirable plant communities.
- 4. Integrated management: Management of houndstongue is more effective when more than one strategy is used.

^{*} denotes that a surfactant is required for the herbicide to be effective