



## Houndstongue

*Cynoglossum officinale*



### Houndstongue

<b>General</b>	Family: Boraginaceae Native to Eurasia Colorado List B
<b>Habitat</b>	Biennial to short-lived perennial Contains alkaloids that are poisonous to livestock Disturbed areas, pastures, rangelands, roadsides, and right-of-ways Up to 9,000 feet elevation
<b>PLANT</b>	
<b>Vegetation</b>	Plants are 1-4 feet tall Leaves are hairy, oblong shaped, 1-3 inches wide and 1-12 inches long
<b>Roots</b>	Taproot to 3 feet deep Black, woody
<b>Flower</b>	May - August Reddish-purple ¼ - ½ inch wide 5-petaled
<b>Seed</b>	Covered with barbed hooks Usually 4 per flower, to 2,000 per plant Seeds left on the plant may remain viable for 2-3 years
<b>Seedling</b>	Rosettes form the first year and bolt early in May to June of the next year
<b>Reproduction</b>	Seed

<b>CONTROL – CHEMICAL</b>		
<i>Timing</i>	<i>Herbicide</i>	<i>Notes</i>
Spring or Fall Rosette	2,4-D (various) Chlorsulfuron (Telar)	Use of a surfactant is recommended for most herbicides to help increase contact with the vegetation and to facilitate herbicide uptake. Refer to the specific label for the appropriate type of surfactant.
Or	Dicamba (various) Glyphosate (various)	Treating at the rosette and early bolt stage stops biennial weeds from using resources that desirable plants need to prosper.
Spring to Early Summer To Early Flowering	Imazapic (Plateau) Metsulfuron (Escort XP) Picloram (Tordon) Restricted Use	Refer to the individual label for allowed sites, specific timing, and restrictions about grazing and haying. Formulations of more than one active ingredient are available. For established populations, control will take a few years so treatment will need to be repeated.

<b>CONTROL -- NON-CHEMICAL</b>		
<i>Technique</i>	<i>Timing</i>	<i>Method</i>
<b>Biological</b>	N/A	
<b>Burning</b>	N/A	
<b>Cultivation</b>	N/A	
<b>Grazing</b>	N/A	Grazing is not recommended because houndstongue is poisonous to livestock.
<b>Mowing</b>	Spring to Early Summer	Bolting plants before flowerbuds form.
<b>Prevention</b>	Anytime	Maintain the health of the site by encouraging healthy stands of grass.
<b>Removal</b>	Spring to Early Summer Rosette to Bolting	Remove rosettes and young plants before they are more than 8-10 inches tall (before flower buds form). Remove at least the top couple inches of the taproot. Repeat as new rosettes germinate.
	Summer Flowering	Remove, bag, and dispose of in the trash or landfill. Sever root a least a couple inches below the soil. Plants without flower buds do not need to be put in the trash.
	Fall Rosette	Remove rosettes and at least the top couple inches of the taproot.
	Pulling when plants are small results in less bulk and makes disposal easier. Pulling will disturb the soil so it may contribute to more of the seedbank to germinate.	

Use all chemicals according to the manufacturer's label. The label will provide specific instructions including allowed sites, application methods, rates, storage, re-entry requirements and personal protective equipment. No specific recommendation or endorsement is made or implied by listing the above methods or products. 9/2021