#### **List B Species**

#### Rangeland, pasture, and riparian site recommendations

Colorado Dept. of Agriculture, Conservation Services Division 700 Kipling Street Suite 4000 Lakewood, CO 80215 303-239-4100



## **Key ID Points**

- 1. Shallow lobed leaves that have sticky hairs.
- 2. Flowers have purple centers and veins.

## Black henbane Identification and Management



# Identification and Impacts

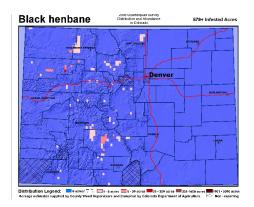
Black henbane (Hyoscyamus niger) was introduced from Europe as an ornamental and medicinal herb. In Colorado it is mostly found on the western slope. The plant blooms June through September and may be an annual or biennial. A mature plant reaches 1 to 3 feet in height with foliage that has a fowl odor. Leaves are shallowly lobed to coarsely toothed with sticky hairs. The outer part of the flower is brownish yellow in color with a purple center and veins. Fruits are approximately 1 inch long with 5 lobes.

A ll parts of Black henbane are poisonous to both livestock and humans when ingested. However; the plant is usually avoided by livestock due to the foul odor. The plant is a strong competitor for moisture and nutrients and produces a persistent litter effecting germination and growth of native plants. Black henbane invades disturbed and overgrazed sites. A good preventable measure is to guard against overuse.

Habitats for Black henbane included disturbed open spaces, roadsides, fields, waste places and abandoned gardens. It grows in most soil types but likes sandy or well drained loam soils. The seed viability or longevity is considered to be 1 to 5 years.

The key to effective control of Black henbane is guarding against disturbance and overuse, this can prove to be a good preventative measure against black henbane. Mechanical control and chemicals are the most commonly recommended method. Controlling plants in the spring or early summer prior to seed production is most effective, follow-up treatments are recommended to pick up missed or late bolting plants. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

**B** lack henbane is designated as a "List B" species in the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information visit <u>www.colorado.gov/ag/csd</u> and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.



Photos © (2 on bottom, left): Steve Dewey, Utah State University; (Top left and top center): Mary Ellen Harte, forestryimages.com and Map above by Crystal Andrews, Colorado Department of Agriculture.

#### Integrated Weed Management recommendations







#### CULTURAL

Cultural controls are possible in theory, but are very time consuming and expensive. Complete removal of any seedlings or newly established plants by continual hand pulling is also possible.

#### BIOLOGICAL

There is no biological control available for Black henbane. Since biological control agents take years to research, develop and release, no releases are expected in the foreseeable future. For more information, contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916.

### MECHANICAL

Hand pull or dig from moist soil, so the entire tap root system can be removed. Tillage will control henbane, but is usually not recommended due to the land it occupies: rangeland, roadsides and pastures. Be sure to bag specimens carefully if removed during or after flowering.

#### Integrated Weed Management:

Controlling plants in the spring or early summer prior to seed production is most effective, follow-up treatments are recommended to pick up missed or late bolting plants.

Constant monitoring of site after last adult flowering plant is removed is suggested since seed viability can be up to 5 years.

## HERBICIDES

NOTE: The following are recommendations for herbicides that can be applied to range and pasturelands. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. Always read, understand, and follow the label directions. The herbicide label is the LAW!

HERBICIDE	RATE	APPLICATION TIMING
Metsulfuron (Escort XP)	1 oz product/acre plus 0.25% v/v non-ionic surfactant	Surfactant absolutely necessary. Apply late bolt to early flower. (Summer to Early Fall)
Picloram (Tordon 22K *this is a Restricted Use Pesticide*)	Apply at 1 qt/acre plus 0.25% v/v non-ionic surfactant	Apply when soil moisture adequate and weeds rapidly growing. (Late Spring to Early Fall)



enbane