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BLACK HENBANE MANAGEMENT TIPS

Black henbane, a member of the Solanaceae family, is an annual or biennial with a large, white, fleshy, branched taproot. The leaves are large, grayish-green and alternate along the stem. The flowers are brownish-yellow with purple veins and are funnel-shaped with five lobes. Mature plants usually grow one to four feet tall. Reproduction is by seed only. The foliage has a foul odor, especially when crushed. Black henbane is considered poisonous to livestock and humans. It is commonly found in disturbed areas of rangeland and pastures, along roadsides, waste areas and fence lines. Negative impacts of black henbane include the formation of dense infestations and replacement of desirable native species, reduction in plant biodiversity and loss of agricultural production. **Seed longevity can be up to 5 years.**



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

Effective control measures for the management of black henbane include:

- 1. Mechanical (hand pulling, digging & mowing):** Hand pulling and digging can provide control of small infestations of black henbane. Remove as much of the root as possible and place plants with flowers or seeds in bags to prevent seed dispersal. Wear gloves when hand pulling. Repeated mowing throughout the growing season before seeds are produced can be effective.
- 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 black henbane. **DO NOT use these herbicides on lawns, turf or ornamental sites - read the label.** *For the most effective control, apply herbicides 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.
*Chaparral:	1/2 – 2/3 teaspoon herbicide to 1 gallon of water.
Milestone:	1 – 1.25 teaspoons herbicide to 1 gallon of water.
*Escort XP:	1/8 – 1/5 teaspoon herbicide to 1 gallon of water.
Clarity:	1 oz herbicide to 1 gallon of water.
DuraCor:	0.5 oz herbicide to 1 gallon of water.
Cimarron Plus:	1/4 teaspoon herbicide to 1 gallon of water.

Rates in large sprayers are as follows:

*Opensight:	2.5 – 3 oz herbicide per acre.
*Chaparral:	2.5 – 3 oz herbicide per acre.
Milestone:	5 - 7 oz herbicide per acre.
*Escort XP:	1/2 - 1 oz herbicide per acre.
Clarity:	1 quart herbicide per acre.
DuraCor:	18 oz herbicide per acre.
Cimarron Plus:	0.625 – 1.25 oz herbicide per acre.

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.

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

- 3. Cultural (tilling & revegetation):** Cultivation can be effective if repeated annually to deplete the seedbank. Planting or maintaining desirable, competitive species will help slow the spread.
- 4. Integrated management:** Management of black henbane is more effective when more than one strategy is used.