

Scotch thistle

Adams County
Weed Department
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Key ID Points

1. Stems have spiny wings and dense, fine hair that give it a blue-green color
2. Rosettes often have huge, broad leaves
3. Grows up to 12 feet tall

Scotch thistle Identification and Management



Scotch thistle during the flowering stage. This stage typically occurs in the early summer. Seed production will follow and effective management options will then become limited.

Identification and Impacts

Scotch thistle (*Onopordum acanthium*) is a non-native biennial forb that reproduces solely by seed. A biennial is a plant that completes its life-cycle within two years. During the first year of growth, Scotch thistle appears as a rosette in spring or fall. During the second year in mid to late spring – the stem bolts, flowers, sets seed, and the plant dies. A prolific seed producer, Scotch thistle can produce up to 14,000 seeds per plant. Therefore, the key to managing this plant is to prevent seed production.

Scotch thistle can grow up to 12 feet tall. Stems are numerous, branched, and have broad, spiny wings. The leaves are large, green, spiny, and covered with fine dense hair giving the leaf a woolly appearance. The flowers are violet to reddish in color, numerous (70-100/plant), and are surrounded by spine-tipped bracts. You can expect to see flowers from mid-June to September.

Scotch thistle is designated as a “B” list species on the Colorado

Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information visit www.ag.state.co.us.

Due to the robust, spiny nature of Scotch thistle, this plant can act as a living barbed wire fence, making areas impassible for wildlife, livestock, and people. Scotch thistle invades rangeland, overgrazed pastures, roadsides, and irrigation ditches. It also prefers moist areas adjacent to creeks and rivers.

On the backside of this sheet are Scotch thistle management recommendations. If you have any questions or would like more information, please contact the Adams County Weed Department at 303-637-8115. Please visit our website www.adamscountyextension.org.



Onopordum acanthium

**CULTURAL**

Establishment of selected grasses can be an effective cultural control of Scotch thistle. Contact your local Natural Resources Conservation Service for seed mix recommendations. Maintain healthy pastures and prevent bare spots caused by overgrazing. Bareground is prime habitat for weed invasions.

**BIOLOGICAL**

There are no biological control insects currently available that will control Scotch thistle.

**MECHANICAL**

Any mechanical or physical method that severs the root below the soil surface will kill Scotch thistle. Mowing or chopping is most effective when Scotch thistle plants are at full-bloom. Be sure to properly dispose of the flowering cut plants, since seeds can mature and become viable after the plant has been cut down.

Integrated Weed Management:

Scotch thistle is best controlled in the rosette stage. For small infestations, Scotch thistle can be controlled by severing its taproot 1-2 inches below the ground. Control can be enhanced by a follow-up application of herbicides to the surviving rosettes.

It is imperative to prevent seed production. Do not allow Scotch thistle flowers to appear.

HERBICIDES

The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow the label directions. The herbicide label is the LAW!

Rates are approximate and based on equipment with an output of 30 gallons per acre. Please read label for exact rates.

HERBICIDE	RATE	APPLICATION TIMING
Milestone	3-5 ounces/acre or 1 teaspoon/gal water	Spring at rosette to early bolt stage and/or in the fall to rosettes. Add non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Escort XP	1-2 ounces/acre or 0.25-0.50grams/1gal water	Apply in the spring during rosette to bloom stage or in the fall to rosettes. Add non-ionic surfactant @ 0.32oz/gal water or 1qt/100 gal water.
Redeem R&P	1.5-2 pints/acre or 0.75 oz/gal water	Apply from rosette to early bolt stage of growth and/or in the fall to rosettes. Add non-ionic surfactant @ 0.32oz/gal water or 1qt/100 gal water.
2,4-D Amine	1 qt/acre or 1.0 oz/gal water	Spring/fall rosette - before flowering stalk lengths. DO NOT apply when outside temperatures will exceed 85 degrees F. Add a non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.

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