Oxeye Daisy Identification and Management



xeve daisy (Leucanthemum vulgare) was introduced from Europe as a seed contaminant and as an ornamental. It is a rhizomatous, creeping, short-lived perennial that grows 10 inches to 2 feet tall. The basal and lower leaves are spoonshaped, toothed, and with long petioles (leaf stem). The upper leaves are narrow, toothed, and clasp the stem. Flowers bloom between June and August. The flowers are 1 to 3 inches in diameter, with 15 to 30 white ray flowers, and mostly solitary. The phyllaries beneath the flower head are green with a dark brown margin. One flower head can produce up to 200 seeds. Oxeye daisy spread vegetatively from roots, root fragments, or by seed. Seeds may be viable up to 38 years or more. Infestation sites needs to be monitored for at least 10 years after the last flowering plant has been eliminated and treatments repeated

when necessary. Ornamental Shasta daisy (Leucantheum x superbum) is not an aggressive invader and looks similar to oxeye daisy, but it is 6 to 12 inches taller and has larger flowers.

Oxeye daisy is an strong competitor. It forms dense stands that reduce native plant diversity. It degrades pastures and natural areas because cattle and wildlife avoid feeding on oxeye daisy. Heavy infestations may reduce nutrient cycling due to a shallow root system and create areas of bare soil, thus increasing soil erosion.

abitats for oxeye daisy included mountain meadows, grasslands, pastures, streams, gardens, waste grounds, railway, and roadsides. Oxeye daisy typically grows in high elevations, up to 11,000 feet in Colorado.

The key to effective control of oxeye daisy is education and prevention. Oxeye daisy has been included in many different seed mixes, thus consumers should carefully read the label prior to planting so-called "native wildflower" mixes. Homeowners and land managers often overlook the impacts and the need to manage this weed because of the plant's attractiveness. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

xeve daisy is designated as a "List B" species in the Colorado Noxious Weed Act. It is required to be either eliminated, contained, or suppressed depending on the local infestations. For more information visit www.colorado. gov/ag/weeds and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, (303) 869-9030.



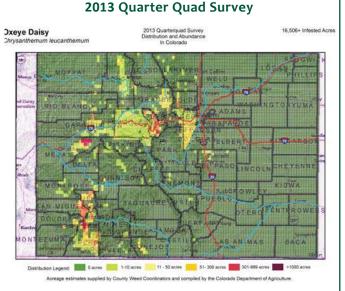




Key ID Points

- 1. 15-30 white ray flowers on flowerheads that are 1-3 inches in diameter.
- 2. Rosette and lower leaves are spoonshaped and toothed.
- 3. Upper leaves on the stem are narrow, toothed, and clasp the stem.





Integrated Weed Management Recommendations

Oxeye daisy has been included in many different seed mixes, thus consumers should carefully read the label prior to planting so-called "native wildflower" mixes. Repeated hand pulling can eliminate small infestations. Mowing or grazing by sheep or goats can be effective, in addition with a chemical approach.



CULTURAL

Generate awareness for this noxious weed. Carefully inspect "wildflower" seed mixes; do not plant mixes that include Leucanthemum vulgare. Avoid overgrazing, disturbance, and seed dispersal. Bare ground is prime habitat for weed invasions. Tall perennial grasses that shade oxeye daisy are good competitors.



BIOLOGICAL

Goats or sheep can be effective in the control of oxeye daisy. There are no insect biological controls available for oxeye daisy. For more information on biocontrols, contact the Colorado Department of Agriculture-Palisade Insectary at 970-464-7916.



MECHANICAL

Repeated hand pulling or digging when soil is moist and infestations are small. Oxeye daisy is fairly shallow rooted; pull up as much of the root as possible. If removed during or after flowering, bag specimens carefully so as to not scatter seeds. Mowing before flowering or when flower buds are present can limit dispersal; do not mow during or after flowering. Tilling at 6 inches or deeper, and repeated shallowly as necessary, can control patches.



CHEMICAL

The table below includes recommendations for herbicides that can be applied to rangeland and pastures. 0.25% v/v non-ionic surfactant is equivalent to 0.32 oz/gal of water or 1 pt/100 gal of water. Always read, understand, and follow the label directions. The herbicide label is the LAW!

HERBICIDE	RATE	APPLICATION TIMING
Aminopyralid (Milestone)	4-6 oz/acre + 0.25% v/v non-ionic surfactant	Optimum control when applied at the pre-flower bud growth stage.
Metsulfuron (Escort XP)	1 oz product/acre + 0.25% v/v non-ionic surfactant	Surfactant is absolutely necessary. Optimum control when applied at flowering growth stage. 1 oz product is the minimum eradication rate based on best treatment observed in several CSU experiments.
Chlorsulfuron (Telar)	1 oz product/acre + 0.25% v/v non-ionic surfactant	Surfactant is absolutely necessary. Optimum control when applied at flowering growth stage.



