



INVASIVE ALIEN SPECIES

Oxeye Daisy (*Chrysanthemum leucanthemum* syn. *Leucanthemum vulgare*)

SK Provincial Designation: Noxious

Overview:

Introduced from Europe in the early 1800's primarily as a grass seed contaminant, and subsequently spread as an ornamental, oxeye daisy has become a serious invader of pastures and natural areas throughout North America. It is a perennial herb that reproduces both by seed and shallow rhizomes. Single plants quickly become patches that continually increase in size. Plants flower June-August and its seed germinates throughout the growing season. Oxeye daisy and the very similarly flowered scentless chamomile can be considered conspicuous, as there are no native white flowered daisies in Saskatchewan.



ABOVE: Oxeye daisy flower (photo by Steve Dewey, Utah State University, Bugwood.org)

BOTTOM LEFT: Oxeye daisy plant (photo by Mary Ellen (Mel) Harte, Bugwood.org)

Habitat:

It grows in a wide range of environmental conditions, and flourishes in nutrient poor soils. It can mature, flower and produce seed even at high elevations – 1000m or 3000'. Prefers full sun but tolerates partial shade.

Identification:

Stems: Multiple, un-branched stems grow up to 1 m tall and are smooth, frequently grooved and generally hairless.

Leaves: Basal and lower leaves are lance shaped with "toothed" margins and petioles that may be as long as the leaves. The upper leaves are alternately arranged, narrow, and stalkless with wavy margins. Leaves progressively decrease in size upward on the stem.

Flowers: Flowers are borne singly at the end of stems and can be up to 5 cm in diameter, with yellow centers, and 20 to 30 white petals radiating from the center. The petals are slightly notched at the tip.

Seed: Individual plants can produce over 500 flat, black seeds that are viable in the soil for 2-3 years or more. Seeds have no dormancy requirement and are viable upon dispersal.

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Oxeye Daisy (continued)

Prevention:

The availability of closely related plants through the nursery and seed trade contradicts the perception of oxeye daisy as an invasive plant. Shasta daisy is a cultivar (originated from) of oxeye daisy and was originally sterile, but can revert back to being fertile. Oxeye daisy plants can be found sold through nurseries and as seed in wildflower mixes. The two plants can cross breed, resulting in an invasive hybrid that is difficult to distinguish from either parent. This fact makes public awareness critical to prevention and control. Do not purchase nursery plants or seed labeled as oxeye daisy. Consumers should carefully read the contents of so-called wildflower seed mixes and avoid those containing invasive ornamentals. Healthy,



ABOVE: Oxeye daisy stem and leaves (photo by Steve Dewey, Utah State University, Bugwood.org)



ABOVE: Oxeye daisy leaves (photo by Ohio State Weed Lab Archive, The Ohio State University, Bugwood.org)

Control:

Grazing: Not grazed. Livestock may physically damage oxeye daisy plants by trampling under high stocking rates, but the subsequent overgrazing of desirable vegetation and soil disturbance will worsen the infestation. Plants consumed by dairy cattle can give the milk an off-flavour.

Cultivation: Because of its shallow root system, oxeye daisy is easily killed by intensive cultivation.

Mechanical: Repeated mowing prevents seed production, but also can stimulate resprouting of stems. Hand-pulling or digging before flowering is effective, but it is important to remove as much of the fibrous roots and rhizomes as possible. Repeated efforts will be required – both throughout the growing season and in subsequent years.

Chemical:¹ Several herbicides are effective at controlling oxeye daisy when applied to actively growing plants up to the flowering stage. Glyphosate, 2,4-D and dicamba can be used – picloram can provide very good control when used on the proper soil types. Consult your Regional Forage Specialist, the Saskatchewan Agriculture Knowledge Centre 1-866-457-2377 or the guide to Crop Protection for more information.

1. Always follow the product labels. Pesticides should only be applied by certified pesticide applicators. The use of pesticides in any manner not published on the label or registered under the *Minor Use of Pesticides* regulation constitutes an offence under both the *Federal Pest Control Products Act* and provincial acts in Saskatchewan. For the latest information on pesticides for agricultural use in Saskatchewan, please consult the provincial *Guide To Crop Protection*, produced annually by the Saskatchewan Ministry of Agriculture.