



## INVASIVE ALIEN SPECIES

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

**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 Alberta.

### 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.

### Prevention:

The availability of closely related plants through the nursery and seed trade contradicts the perception of Oxeye as an invasive plant. Shasta daisy is a cultivar (originated from) of Oxeye and was originally sterile, but can revert back to being fertile. Oxeye 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 labelled as Oxeye daisy. Consumers should carefully read the contents of so-called 'wildflower' seed mixes and avoid those containing invasive ornamentals. Healthy, fertilized grass pastures are resistant to invasion.



### Control:

**Grazing:** Not grazed. Livestock may physically damage oxeye 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 re-sprouting 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:**<sup>1</sup> Several herbicides are effective at controlling Oxeye 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 local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

**Biological:** None researched to date.

<sup>1</sup> Always follow the product labels. 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 *Alberta's Environmental Protection and Enhancement Act*.