Yellow Starthistle (Centaurea solstitialis L.)

INTRODUCTION

Yellow starthistle, also known as St. Barnaby's thistle, is a member of the *Asteraceae* (Sunflower) family. It was introduced from Europe and is now well established in the western US States. Yellow starthistle is currently not known to occur in BC.

Yellow starthistle prefers dry grassland or shrubsteppe habitat. It readily invades rangelands, pastures, roadsides, cropland and disturbed areas, forming dense infestations that reduce available forage for livestock and wildlife. The plant is also known to cause a neurological disorder in horses called "chewing disease". Similar to its relatives, diffuse knapweed and spotted knapweed, yellow starthistle may have allelopathic effects on some native vegetation.

CURRENTLY UNKNOWN IN BC

(but infestation occurs in Washington State, approximately 20 km south of Osoyoos)



IDENTIFICATION

- Taprooted winter annual
- Grows from 0.6 to over 1 m tall
- Heavily branched
- Yellow flowers contain sharp straw-coloured thorns up to 2 cm long
- Flowers at the end of branches
- Stems are winged and covered with fine hairs

BIOLOGY

Yellow starthistle begins flowering in late June and continues through September. Reproduction is entirely by seed. A single plant can produce 700-1,000 seeds that may remain viable for several years. Seeds are blackish-brown or mottled and approximately 3 cm long.

Yellow starthistle produces two types of seeds in each flower head. Inner seeds are plumed with a ring of fine white bristles and outer seeds are plumeless. The inner plumed seeds are dispersed by the wind shortly after maturity and will germinate as soon as moisture and temperature conditions are favourable. Plumeless seeds are smaller and are produced in the outer circle of the florets. These seeds remain in the seed head until it falls apart during the winter, providing a second flowering period and method of seed dispersal. Plumeless seeds require different conditions to germinate.

REPORT INFESTATIONS

Contact the RDOS Invasive Plant Program Coordinator at 250-492-0237 or Toll Free at 1-877-610-3737

INTEGRATED MANAGEMENT

The most effective method of control for yellow starthistle is to prevent establishment through proper land management. The healthier the natural plant community, the less susceptible it will be to starthistle invasion. Integrated management will require a combination of prevention and physical control. Monitor your property annually for new infestations of yellow starthistle. If plants are identified, report and destroy plants immediately.

PREVENTION

- Maintain grasslands in a healthy, vigorous condition to ensure a productive plant community; competitive perennial plants utilize water and nutrients that would otherwise be readily available to yellow starthistle.
- Regularly patrol your property for starthistle plants and take action immediately if starthistle plants are identified.
- Report any starthistle plants to the RDOS Invasive Plant Program Coordinator.
- Immediately re-vegetate disturbed soils with a suitable grass seed mixture that provides dense, early colonization to prevent weed invasion.
- Check seed for contaminants and use only certified seed.

CONTROL OPTIONS

Small, isolated infestations of yellow starthistle should be hand pulled. For larger infestations, mowing will help to stress plants, however mowing alone is ineffective and should be combined with seeding or possibly herbicide applications.

As this particular weed has not yet invaded BC, control options should be discussed with the RDOS Invasive Plant Program Coordinator to ensure eradication.

For further information on weeds in BC check out www.weedsbc.ca For more information about the Regional District Okanagan-Similkameen Invasive Plant Program call 250-492-0237 or toll free at 1-877-610-3737. Information is also available on our website: www.rdos.bc.ca





Produced by the Regional District Okanagan-Similkameen

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