

ORANGE HAWKWEED *(Hieracium aurantiacum)*

INTRODUCTION

Orange hawkweed is easily recognized by its vibrant orange-red flowers. It was originally introduced from Europe and is now scattered and locally abundant in BC south of 55 °N. This perennial is a weed of concern in the Okanagan and is listed as regionally noxious in many other areas of BC due to its ability to spread rapidly.

Orange hawkweed primarily occurs in open areas at low-mid elevations including native meadows, forest openings, permanent pastures, hayfields, roadsides, and disturbed sites. It out-competes many native species by forming dense monocultures, or competes with forest understory plants. The full impact of orange hawkweed on agricultural crops is not fully known in BC, but it does compete with forage crops on pastures. Orange hawkweed is sometime found in nurseries (often as seed) and as a component in 'wildflower' seed mixes.

There are 14 hawkweed species occurring in British Columbia; however, many are yellow or white-flowered native plants that are difficult to differentiate from the non-native varieties. Orange hawkweed is the only orange-red flowered hawkweed. It mostly closely resembles the introduced yellow-flowered hawkweed, *Hieracium pilosella*, which rarely occurs in southern BC.

Daisy-like orange to red flowering heads are clustered at the top of leafless stems.

IDENTIFICATION

- Grows 30-60 cm tall
- Stems are filled with a milky juice
- Vibrant orange-red petal-like flowers
- Stems are covered with stiff, black hairs and grow 0.3-1.2 metres tall
- Leaves are long, oval-shaped and clustered at the base of the plants

BIOLOGY

Orange hawkweed spreads by seed, creeping stolons and rhizomes. Stolons root at the nodes and form new rosettes in the spring and early summer. Once established, orange hawkweed can quickly develop into a patch that continues to expand until it covers the site with a solid mat of rosettes, forming a monoculture. Plants overwinter as rhizomes and regrow the next spring.



Seeds facilitate more widespread dispersal. Minute barbs along ribs on the seeds enable them to stick to hair, fur, feathers, clothing and vehicles, and be carried long distances. Plants flower in June-July and quickly produce seed. Each flowering stem may produce several hundred seeds; the viability of seed is currently unknown.

INTEGRATED MANAGEMENT

The best overall method of control for orange hawkweed is an integrated program. Cultural, mechanical and chemical control methods are all possible. Small infestations may be hand pulled or cut prior to formation of seed to prevent further spread. Herbicide control is better suited for medium-large infestations where it is impractical to use other management methods. Eradicate small infestations by digging up roots or by spot-treatment with the appropriate herbicide, followed by re-seeding with grasses where possible. For several years following treatment, areas should be monitored for new plants emerging from the seed bank.

PREVENTION

Orange hawkweed is very effective at exploiting over utilized areas. It does not do well in dense healthy forage stands. To ensure that pastures remain free of orange hawkweed, maintain a competitive condition through moderate grazing, fertilization and variety selection. Fertilizing light infestations with ammonium sulphate may reduce hawkweed density and vigor due to an increase in grass and forb competition.

PHYSICAL CONTROL

Small infestations may be controlled by carefully digging rosette plants in the spring or early summer when soils are still moist and before the seeds mature. Care needs to be taken to avoid breaking off the roots as plants can re-grow from root fragments. Removing flower stems prevents seed production, but repeated mowing can encourage reproduction from roots. If seeds have already developed, cut and bag the seeds heads before digging up the rest of the plant. It is very difficult to pull plants without dispersing the small lightweight seeds when they are present. Agricultural infestations can be cultivated and rotated to an annual crop.

For further information on weeds in BC check out the provincial websites at: <http://www.weedsbc.ca> or <http://www.agf.gov.bc.ca/cropprot/weeds.htm>
For more information about the Regional District of Okanagan-Similkameen Noxious Weed Education Program please contact the Regional District at 250-492-0237 or toll free at 1-877-610-3737.
Information is also available on our website at: <http://www.rdos.bc.ca>

BIOLOGICAL CONTROL

There are currently no biological control agents approved for release in Canada. An international Hawkweed Biocontrol Consortium is currently researching the potential for biological control of hawkweeds.

