# TACKLING Orange Hawkweed (Philosella aurantiaca)

Invasive species have significant impacts on the environment, human health, infrastructure and the economy in the Metro Vancouver region.

Thousands of hawkweed species are known worldwide, including a few native to BC. Orange hawkweed is one of many invasive hawkweeds, but it is the only one in BC with orange flowers. It was introduced from Northern and Central Europe in the 1800s as an ornamental and medicinal plant.

#### **IMPACTS**

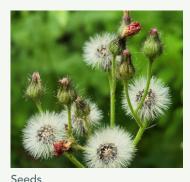
Orange hawkweed reproduces by seeds and ground-level horizontal stems (stolons). The plants quickly invade open and disturbed sites such as lawns, forest clearings and roadsides. Orange hawkweed impacts crop production and the quality of grasslands for grazing animals. There is evidence that hawkweeds release chemicals into the soil that inhibit the growth of other plants.

#### **IDENTIFICATION**

- Lifecycle: Perennial herb that lives up to 30 years
- **Stems:** Single, unbranched, 10-60 centimetres tall with glandular hairs, and usually no leaves
- Leaves: 5-12 leaves grow as rosettes clustered at the base of stems; leaves are covered with stiff hairs
- Flowers: Clusters of 5-30 small, dandelion-like flowers at the top of stems; bright orange with many black hairs; bloom from May to September



Leaf rosette CREDIT: ISCMV



CREDIT: ISCMV



Flowers CREDIT: L. SCOTT



Stolons arising from a rosette CREDIT: ISCMV

- Seeds: 1.5-2 millimetres long, dark brown or black with ridges and bristly plumes
- **Roots:** Shallow, fibrous roots with a woody base; stolons are hairy, have leaves, and can root at the joints
- Other: Stems and leaves contain milky sap

### PREVENTION AND CONTROL

To prevent further spread across the region and beyond, it is best not to purchase, trade, or grow orange hawkweed plants or seeds. Review seed mix packages carefully as orange hawkweed has been found in some wildflower seed mixes. Effective invasive plant management typically involves a variety of control methods. The following table summarizes the recommended techniques for controlling orange hawkweed on private property or where permission has been granted by the land owner or manager. Other methods may be used by professionals.

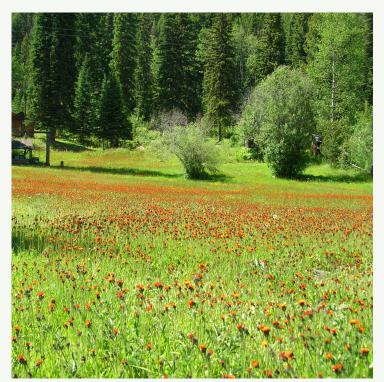
CONTROL STRATEGY	TECHNIQUES	SUITABLE SITES	NOTES
Manual	Hand pull or dig	Small sites	<ul> <li>Easiest to pull in spring or early summer when the soil is moist</li> <li>Remove as much of the roots and stolons as possible</li> <li>Bag plants with flowers and flower buds to prevent seed spread, as seeds can mature even after removal</li> </ul>
Cultural	Maintain competitive vegetation	All sites	<ul> <li>Plant a diversity of native shrubs and trees in gardens and natural areas</li> <li>Apply a mix of grass or forage seeds or replace your lawn with another ground cover</li> <li>Use in combination with other methods for best results</li> </ul>
	Cultivate and rotate annual crops	Farmland	• Maintain a dense, healthy annual crop that provides competition for orange hawkweed

Orange hawkweed seeds may be viable in the soil for up to 7 years. Planting native plants or re-seeding with native grasses can discourage orange hawkweed regrowth.

### How Can You Help?

- Do not purchase, trade or grow orange hawkweed. Check seed mixtures carefully.
- Control invasive plants and replace them with a non-invasive alternative. Check out **growgreenguide.ca** for suggestions.
- Do not place invasive plants in your backyard composter as the temperature will not become hot enough to destroy the seeds, stems and roots.
- To reduce the spread of invasive species, dispose of yard waste and infested soil appropriately. Visit your municipality's website for more information.
- Download the '**Report Invasives BC**' app to identify and report invasive species.
- Join a stewardship group and help remove invasive species from local parks.

For the complete set of best management practices for orange hawkweed, and other key invasive species, visit **MetroVancouver.org** and search 'Invasive Species'.



Orange hawkweed dominates a meadow CREDIT: L. SCOTT





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