



Orange Hawkweed Identification and Management

Background Information

History and Impacts

Orange hawkweed (*Hieracium aurantiacum*), is a class A (highest priority) noxious weed in Deschutes County. It is a perennial plant of the Aster family, originates from Europe, and is also known as Devil's paintbrush, Red daisy, Flameweed, and Devil's weed. It forms extensive mats that can compete with other plants. It is an aggressive competitor for space, light, and soil nutrients. It has been reported to be allelopathic, inhibiting seed germination, seedling emergence, or regeneration of other plants.

Habitat

It invades different habitats including urban sites, moist meadows, pasture, hay fields, roadsides, gravel pits, forested areas and riparian areas. Plants prefer full sun or partial shade and soils that are well drained and coarse-textured. It is most commonly found in Deschutes County in gardens and lawns.

Identification

Plant: Orange hawkweed is a fibrous rooted perennial herb in the Aster family (Asteraceae) that grows 10-36 inches tall and branches at the top to produce flower heads.

Leaves: The simple lance shaped leaves are basal measuring about 4 - 5 inches in length and are covered with hairs.

Stems: Erect stems usually do not have stem leaves, contain a milky juice and are covered with stiff hairs.

Flowers: Conspicuous orange-red ray flowers, bloom June –September and are clustered at the top of the stem with 5 to 35 flower heads.

Seeds: Similar to dandelions, tiny seeds are dark brown or black, cylindrical, elongated, longitudinally ridged, barbed and bristled.



Reproduction and Spread

Orange hawkweed reproduces and spreads through prolific seed production as well as vegetatively through stolons, and rhizomes. Under favorable conditions, one plant can spread and infest an area 2–3 feet in diameter in its first year of growth. The roots are shallow and fibrous with aboveground stolons that resemble strawberry runners and below ground rhizomes that allow for aggressive vegetative reproduction. Stolons originate from buds in the rosette when plants flower. These runners radiate out from the original plant and form new rosettes where they touch down and take root. Each flower

produces 12-30 tiny seeds that can be dispersed by wind, water, or “hitch-hiking”, and are often moved in contaminated soil associated with transplanting new plants into gardens and flowerbeds. Seeds remain viable in soil for up to 7 years.

Control Information

Integrated Pest Management

The preferred approach for weed control is Integrated Pest Management (IPM). IPM involves selecting from a range of manual, mechanical, chemical, cultural and biological control methods to match the management requirements of a specific site. Management will require dedication over a number of years, and allow for flexibility of methods used as appropriate to the current situation. Plan to revisit the site to control plants that have survived or sprout after initial control efforts. Persistence is necessary.

Control practices should be selected to minimize soil disturbance or efforts should be taken to mitigate or reduce impacts of disturbance. Minimizing disturbance also avoids creating more opportunities for germination of weed seeds. Whenever possible, control should be done before plants are flowering to prevent seed production.

Early Detection and Prevention

Early detection and prevention is the key to weed control. Orange hawkweed can be difficult to spot in tall grass unless it is in flower. Survey pasture areas, unmanaged grasslands and roadsides for flowering and pre-flowering plants from May to July. Prevent plants from spreading away from existing populations by washing tools and boots, vehicles, equipment and animals that have been in infested areas. Communicate weed control needs with neighbors and persons working in infested areas, awareness will increase prevention.



Manual

Isolated small populations can be dug up if caught early before roots are well established. If the plants are in flower, cut off and bag all flower heads because they can form viable seeds after they are cut or dug up. If there are already seeds, bag and cut off the seed heads before digging up the rest of the plant. It is very difficult to pull the plants without dispersing the small, lightweight seeds.

Mechanical

Mowing will not control hawkweed because it is a perennial and also reproduces by stolons as well as seed. Mowed plants respond by sending up shorter stems and quickly flowering again. Plants will also put more energy into spreading by stolons and the infestation size and density will increase

Cultural

Areas where mature plants are dug up may become infested with new seedlings unless they are carefully monitored and planted with competitive vegetation. Infested areas typically have many seedlings and an extensive seed bank. Fertilization will also promote competition by increasing health and vigor of existing vegetation.

Chemical

The use of a selective broadleaf herbicide is a successful method of control for orange hawkweed. Spray before buds form, typically in May or June. Because the hairy surface makes it difficult for the herbicide to adhere to the plant the use of a surfactant is recommended. Repeated treatment may be necessary as seedlings continue to sprout. **Speedzone** is an effective herbicide for turf and ornamental applications. **Milestone** is very effective on orange hawkweed but must only be used in permanent pastures, rangeland or non-crop areas.



Precautions: Herbicides should only be applied at the rates and for the site conditions and/or land usage specified on the label of the product being used. Follow all label directions, the label is the law. For your personal safety, at a minimum wear gloves, long sleeves, long pants, closed toe shoes, and appropriate eye protection. Follow label directions for any additional personal protection equipment needed.

Biological

There are no biological controls currently available.

Summary of Best Management Practices

- Small plants can be successfully dug up, mature plants that have formed a mat have extensive fibrous roots and digging will not be effective without extensive soil disturbance.
- Selective broadleaf herbicides applied early in the growing season before buds form is the most effective practice for eradication.
- Promote healthy grass or other vegetation to fill growing space and compete with new hawkweed seedlings.

If you have any questions or need additional assistance, please contact Deschutes County at 541-322-7117 or visit our website at www.deschutes.org/weeds

