Hawkweed in Maine Lawns

Donna Coffin
Introduction
In Maine, hawkweed is not on the state’s invasive plant list, although it is in other states. Hawkweed can be a concern to homeowners with lawns that get infested with it. It can also be a problem where the grass is not thriving due to low fertility, dry soils, or compaction. It can also be a problem in pastures and hayfields.

Hawkweed does have a few redeeming qualities for pollinators. Beauty is in the eye of the beholder. If you don’t mind seeing these little yellow or orange flowers spring up above your grass and you are in low maintenance mode for your lawn, it’s not a problem. If you want a perfect uniform green grass lawn, then yes, you need to control it.

**Identification**

Hawkweeds are in the sunflower family with milky juice, yellow or orange dandelion-like flower heads, and are bristly-hairy overall. Plants have rosettes of strap or lance-shaped leaves at the base of the stem. Basal leaves of most non-native hawkweeds usually persist through flowering. Hawkweeds hybridize freely with native and non-native species and are very difficult to identify species.

Many non-native hawkweeds have stolons (runners), allowing for aggressive vegetative reproduction. It is an indicator plant for infertile soils. Native hawkweed species do not have stolons, although some non-native hawkweeds lack them, too. Orange hawkweed (*Hieracium aurantiacum*) has been reported to be allelopathic. This means it can inhibit the germination of other plants by producing toxic chemicals in the surrounding soil. In early spring during cool weather hawkweed leaves may appear purplish, but green up with warmer temperatures.

1. Identify the patch of hawkweed in the lawn.

Yellow and orange hawkweed in flower.
Orange hawkweed flower detail.

Yellow hawkweed in flower by the roadside with other weeds.

Hawkweed leaf detail.

**Habitat**

Hawkweeds prefer full sun or partial shade and soil that is well-drained, coarse-textured, and moderately low in organic matter. They are mostly found on roadsides and in fields, pastures, and mountain meadows. Hawkweeds tolerate some shade and can grow in forest openings and cleared areas. Orange hawkweed is commonly found in or near residential yards and garden areas where it escapes from intentional plantings or as part of a “wildflower meadow mix.”

**Reproduction & Spread**

There are both annual and perennial hawkweeds. Annuals are spread by seed. Perennials also reproduce by seed as well as vegetatively. Some hawkweeds can reproduce vegetatively by runners, also known as stolons, which are above-ground stems. Hawkweeds
can also produce viable seed without pollination. For most hawkweed species, flowering typically starts in late May or early June. Usually, some plants go to seed starting in July but plants continue to flower and go to seed through September. As a result of prolific seed and stolon production each season, hawkweeds are successful competitors, crowding out native, ornamental, pasture, and crop species.

**Redeeming qualities**

Flowers are visited by a variety of insects, including bees and butterflies. Also, leaves are nutritious for livestock, though trichomes (hairs on the leaves) limit animals’ desire to eat them. Plants can prevent soil erosion. They were originally introduced to the United States from Europe as ornamentals.

**Control**

No single management practice can be implemented just once to manage hawkweed. Ultimately, the management of hawkweed will depend on a program that integrates multiple procedures that increase the competitive ability of desired species of grass such as removing the hawkweed and adjusting the soil fertility.

1. **Test soil** to find out what soil nutrients are deficient. Contact the [Analytical Lab and Maine Soil Testing Service](#) for soil testing information.
2. **Soil nutrients need to be added** to encourage grass to outcompete hawkweed. Spread soil nutrients as needed on the whole lawn. (lime, fertilizer, compost, etc.) Refer to [Bulletin #2154, Fertilizing a Home Lawn in Maine](#) for details about when and how to fertilize your lawn. In areas of bare soil, where hawkweed was removed, till or mix soil nutrients into the soil. Spread seed on bare soil areas, lightly rake, and firm soil. Keep moist if possible until new grass comes in. Endophyte-enhanced perennial ryegrass seed can be used to fill any bare spots quickly in lawns (not recommended for pastures or hayland).
3. Remove Hawkweed
   ○ Spotty infestations can be hand-pulled. Use an iron rake to pull up the plants and roots. Hand removal can be effective if care is taken to remove as much of the root as possible. Intensive hand removal on lawns is more effective if used in conjunction with fertilization, which can help the grass to outgrow the hawkweed.
   ○ Mowing is ineffective because rosettes are so close to the ground. Although mowing prevents seed production by removing flowering stems, repeated mowing encourages faster vegetative spread.
   ○ Widespread infestation needs a combination of methods (improve soil fertility, herbicide treatment, improve competitiveness of grass). Broadleaf lawn growth-regulator type herbicides, containing 2,4-D, dicamba, and/or trimec (Weed Clear Weed Killer, Preen Broadleaf Weed Killer, etc.) used according to label directions can be effective in gaining initial control but it is rarely a long-term solution to the management of hawkweed. Plants should be treated when they are in the rosette stage before they flower. If necessary a second application can be made after 30 days.
   ○ For homeowners, a “weed and feed” type fertilizer is a less labor-intensive option, since it includes both herbicide and fertilizer. (Ace Weed and Feed, Scotts Turf Builder, etc.) Application rates for these products are based on weed control and not soil fertility, so soil nutrients may not be at optimum levels. Always follow the pesticide label directions attached to the pesticide container you are using. Remember, the label is the law.

4. If using a herbicide, remember that it may kill desirable plants if not used according to instructions. If necessary and allowed by the label, a second application can be made later in the season.

Steps to reseeding patch of lawn
1. Identify the patch of hawkweed in the lawn.

2. Use an iron rake to remove hawkweed.

3. Expose the soil.
4. Till the soil to a shallow depth.

5. Use clover seed.
6. Mix the grass seed with fertilizer and mulch.

9. Firm up the soil.
8. Lightly till the soil.

9. Firm up the soil.
10. Water the seeded lawn using a hose.

Additional Information

- Bulletin #2243, Maintaining a Home Lawn in Maine
- Bulletin #2367, Establishing a Home Lawn in Maine
- Bulletin #2166, Steps to a Low-Input, Healthy Lawn

Sources

- D’Appollonio, J, Orange Hawkweed, 2011, UMaine Extension
  https://wric.ucdavis.edu/information/natural%20areas/wr_H/Hieracium.pdf

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