

common hawkweed

Hieracium lachenalii C. C. Gmelin (*Hieracium vulgatum* Fries)

Synonyms: *Hieracium acuminatum* Jord., *H. amitsokense* Dahlstedt, *H. groenlandicum* Arvet-Touvet, *H. ivigtutense* Omang, *H. scholanderi* Omang, *H. sylowii* Omang, *H. sylowii* var. *norwagorum* Owang, *H. sylowii* var. *sylowii* Omang

Other common names: none

Family: Asteraceae

Invasiveness Rank: 57 The invasiveness rank is calculated based on a species' ecological impacts, biological attributes, distribution, and response to control measures. The ranks are scaled from 0 to 100, with 0 representing a plant that poses no threat to native ecosystems and 100 representing a plant that poses a major threat to native ecosystems.

Description

Common hawkweed is a perennial plant that grows 20 to 80 cm tall. Plants exude milky juice when broken. Stems are hairy, erect, and usually solitary. Basal leaves are persistent, petiolated, lanceolate to elliptic, hairy or glabrous, 5 to 15 cm long, and 1 to 5 cm wide with toothed margins. Leaf bases are usually cuneate but are occasionally rounded or squared. Stem leaves are reduced in size up the stem. Flower heads are arranged in groups at the ends of stems. Peduncles are hairy. Florets are yellow, strap-shaped, and 13 to 18 mm long. Involucres are 8 to 11 mm tall. Involucral bracts are hairy and lanceolate with obtuse or acute tips. Seeds are cylindrical and 2.5 to 3.5 mm long. Each seed has a pappus composed of 30 to 40 bristles that are 4 to 5 mm long (Strother 2006, Klinkenberg 2010).



Flower heads of *Hieracium lachenalii* C. C. Gmelin. Photo by J. Opiota.

Similar species: Common hawkweed can be distinguished from all other *Hieracium* species in Alaska by the combination of the following traits: florets that are yellow and 13 to 18 mm long, cuneate leaf bases, elliptic to lanceolate leaves with toothed

margins, leaves that are all basal or mostly basal, 40 to 80 florets per flower head, and cylindrical seeds that are 2.5 to 3.5 mm long. Several other yellow-flowered Asteraceae species that produce basal rosettes can be confused with common hawkweed. Common dandelion (including the native *Taraxacum officinale* ssp. *ceratophorum* and the non-native *Taraxacum officinale* spp. *officinale*) can be distinguished from common hawkweed by the absence of branched stalks and leaves on the stalks. Narrowleaf hawksbeard (*Crepis tectorum*) can be distinguished from common hawkweed by the presence of two rows of involucral bracts, involucres that are 6 to 9 mm long and 7 to 8 mm wide, and florets that are 10 to 13 mm long. Unlike common hawkweed, fall dandelion (*Leontodon autumnalis*) has deeply lobed leaves. Hairy cat's ear (*Hypochaeris radicata*) can be distinguished from common hawkweed by the presence of many scale-like bracts on the stems (Strother 2006, eFloras 2008, Klinkenberg 2010).



Basal rosette of *Hieracium lachenalii* C. C. Gmelin. Photo by King County.

Ecological Impact

Impact on community composition, structure, and

interactions: Although ecological impacts have not been documented from natural areas, common hawkweed was one of the two most invasive plant species in an anthropogenically disturbed forest on Prince Edward Island, Canada, based on the distance it penetrated beyond the forest edge and the area it covered. In this study, common hawkweed represented 10% of the ground cover (MacQuarrie and Lacroix 2003). Similarly, 14% of infestations recorded in Alaska occur at over 10% ground cover in areas disturbed by fill importation (AKEPIC 2011). Common hawkweed therefore has the potential to increase the density of forb layers and reduce population sizes of colonizing species in disturbed areas. *Hieracium* species hybridize with other native and non-native members of the genus (Wilson 2006, Gaskin and Wilson 2007). The impacts of common hawkweed on associated trophic levels are largely unknown.

Impact on ecosystem processes: Another *Hieracium* species, mouse-ear hawkweed (*Hieracium pilosella*), has been shown to significantly alter the nutrient contents of the soils on which it grows (Makepeace et al. 1985, McIntosh et al. 1995). However, common hawkweed lacks the stoloniferous growth habit of mouse-ear hawkweed (Strother 2006) and may not affect soil conditions in a similar way.

Biology and Invasive Potential

Reproductive potential: Common hawkweed reproduces by seeds. Seed production in *Hieracium* species is often asexual, allowing plants to colonize large areas without pollination (Strother 2006, King County 2011). The amount of time seeds remain viable for this species is unknown, but *Hieracium* species often maintain seed viability for seven years (Rinella and Sheley 2002).

Role of disturbance in establishment: Common hawkweed has only been documented from anthropogenically disturbed sites in Alaska (AKEPIC 2011). However, it grows in gravel riverbeds in British Columbia (Klinkenberg 2010) and mountain meadows in Washington (King County 2011), suggesting that it has the potential to establish in naturally disturbed areas or early successional habitats.

Potential for long-distance dispersal: Seeds are dispersed by wind, making common hawkweed a good colonizer of disturbed areas (Dzwonko and Loster 1992).

Potential to be spread by human activity: Seeds can be transported on mowing equipment (King County 2011). Common hawkweed is commonly found along gravelly roadsides in Washington (Washington NWCB 2007) and it has spread along roads in southeast Alaska (AKEPIC 2011), suggesting that seeds can be dispersed by the movement of people or vehicles.

Germination requirements: The germination requirements of common hawkweed are unknown.

Growth requirements: Common hawkweed usually

grows in well-drained, coarse, nutrient-poor soils. In the Pacific Northwest, they are most common at elevations between 600 and 1,500 m, but they also grow at lower elevations (King County 2011).

Congeneric weeds: All *Hieracium* species are considered noxious weeds in Washington. Polar hawkweed (*Hieracium atratum*), orange hawkweed (*H. aurantiacum*), meadow hawkweed (*H. caespitosum*), *H. ×floribundum* (no common name), mouse-ear hawkweed (*H. pilosella*), and tall hawkweed (*H. piloselloides*) are each considered a noxious weed in one or more states of the U.S. or provinces of Canada (Invaders 2011, USDA 2011).

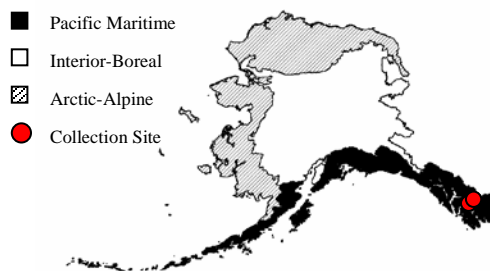
Legal Listings

- Has not been declared noxious
- Listed noxious in Alaska
- Listed noxious by other states (All *Hieracium* species: WA)
- Federal noxious weed
- Listed noxious in Canada or other countries (QC)

Distribution and Abundance

In North America, common hawkweed grows in disturbed areas, open sites in thickets, roadsides, gravel riverbeds, pastures, abandoned farmland, logged areas, and forest openings (Strother 2006, Klinkenberg 2010, King County 2011). It is an occasional agricultural weed in Canada (Darbyshire 2003).

Native and current distribution: Common hawkweed is native to much of Europe (Washington NWCB 2007). It has been introduced to North America, and it grows in 16 states of the U.S. and much of Canada (Strother 2006, AKEPIC 2011, USDA 2011). This species grows as far north as 69.7°N in Norway (Norwegian Species Observation Service 2011). Common hawkweed has been documented from the Pacific Maritime ecogeographic region of Alaska (AKEPIC 2011).



Distribution of common hawkweed in Alaska

Management

Small populations can be controlled by hand digging. Because common hawkweed can resprout from the root crowns, the entire root should be removed. Flowering stems should be bagged to prevent seeds from dispersing. Mowing is not an effective control measure

because seeds can disperse from cut flower heads and plants will flower again in the same growing season. Selective herbicides have proven successful in controlling common hawkweed (King County 2011). Aminopyralid at 105 grams per hectare and clopyralid at 420 grams per hectare consistently controlled orange hawkweed (*Hieracium aurantiacum*) infestations in

southern Alaska and may provide effective control of common hawkweed as well. Aminopyralid is better suited to pasture habitats as it controls a broader spectrum of forbs than clopyralid, while clopyralid is better suited to natural habitats as it will remove less of the native vegetation (Seefeldt and Conn 2010).

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