



Mouse-ear Hawkweed

Hieracium pilosella L.



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Washington State University Archive, Washington State University, Bugwood.org

Overview:

Mouse-ear hawkweed is a member of the Aster Family and native to Europe. It is a fibrous rooted, perennial herb with a milky latex in the stems and leaves. Mouse-ear hawkweed reproduces by seed, a short, stout rhizome, and strawberry-like stolons.¹ Plants are leafy and mat-forming.¹ Seeds are produced by apomixis - asexually - as non-native hawkweeds are polyploids (n=9), as opposed to the native diploid hawkweeds. Occasional sexual reproduction occurs, facilitating out-crossing and hybridization.¹

Hawkweeds develop a low rosette of basal leaves before producing a flowering stem. Dandelion-like flowers are borne at the ends of stems and when mature produce a dandelion-like puffball of seeds which are wind dispersed.

Non-native hawkweeds exhibit many characteristics of an invasive plant: high seed production and germination rates, asexual seed production, wind-dispersed seed, vegetative reproduction via rhizomes, stolons, and root fragments, and rapid growth.¹ A

few invasive hawkweed species are popular ornamentals. All of these characteristics facilitate rapid colonization and monopolizing of resources. An undetected patch of hawkweed has great potential to become an un-eradicable infestation.

Habitat:

Hawkweeds prefer well drained, coarse textured soils, moderately low in organic matter, in mesic habitats.¹

Identification:

Stems: Are erect, leafless, and unbranched,¹ and sticky-hairy or somewhat woolly-hairy,² mainly near the base.¹ Plants grow 15-30 cm tall and stolons can be 10-25 cm long¹

Leaves: Are egg-shaped and narrow at the base, the upper surface dark green with long, simple hairs. The lower leaf surfaces are whitish from a dense mat of short, stellate hairs.¹ Leaves of the stolons are small and narrowly elliptic.²

Flowers: Occur singly (rarely two) at the ends of stems with yellow, strap-shaped petals, sometimes with red stripes¹ on the outer surface.² The involucre are 7-11 mm tall, the bracts linear-lanceolate² with numerous stellate, glandular, and simple hairs.¹ Fruits are achenes 1.5-2 mm long, narrowed at the base, and with a tawny pappus.²

Prevention:

Learning to recognize hawkweeds from the many yellow-flowered members of the Aster Family is the key to prevention. Hairs are an important characteristic of non-native hawkweeds and also in distinguishing between species. Long term management of hawkweeds requires maintaining healthy forbs and grasses - fertilization of desirable vegetation can result in out-competition of hawkweeds. Re-seed disturbance in areas susceptible to hawkweed invasion.

Control:

Grazing: Unknown. Invasive plants should never be considered as forage.

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Mouse-ear Hawkweed (Continued)

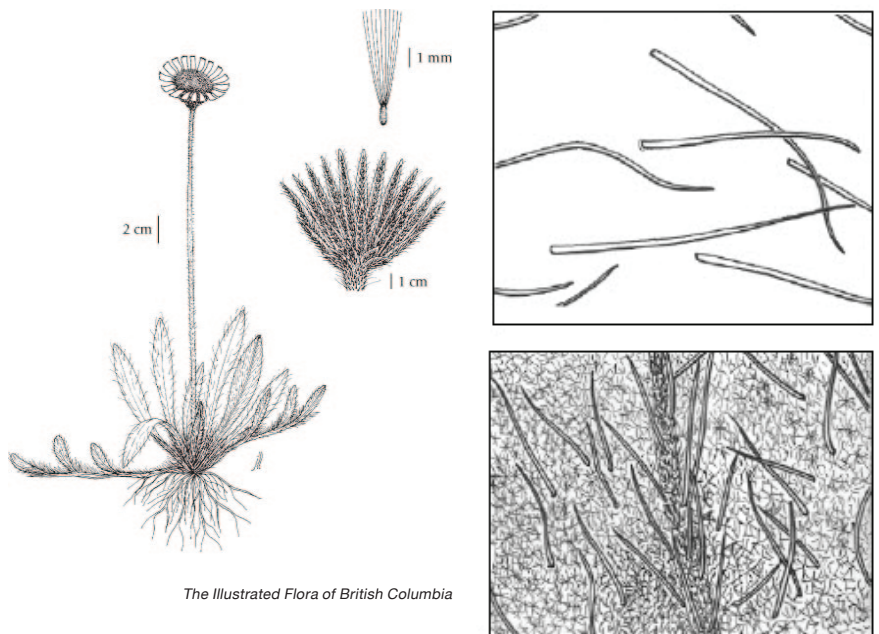
Mechanical: Mowing before flowering will prevent seed production of taller plants but will not prevent reproduction via rhizomes. Hand digging of small infestations may be effective, taking care to remove all root and rhizome pieces.

Chemical: Hexazinone, 2,4-D, and glyphosate are registered for use on *Hieracium* spp./hawkweeds. Always check product labels to ensure the herbicide is registered for use on the target plant in Canada by the Pest Management Regulatory Agency. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: The stolon-tip gall wasp *Aulacidea subterminalis* was first released in BC in 2011. Results are pending.³



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The Illustrated Flora of British Columbia

C_Roche

REFERENCES

- 1 Wilson, Linda. Key to Identification of Invasive and Native Hawkweeds in the Pacific Northwest. British Columbia Ministry of Forests and Range, Forest Practices Branch, Invasive Alien Plant Program.
- 2 *Hieracium pilosella*. The Illustrated Flora of British Columbia. <http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Hieracium%20pilosella>. Accessed August 6, 2014.
- 3 Target Invasive Plants and Biocontrol Agents Undergoing Screening. BC Ministry of Forests, Lands and Natural Resource Operations. <http://www.for.gov.bc.ca/hra/plants/biocontrol/screenagents.htm#Hawkweedcomplex>. Accessed August 31, 2014.