

Hypochaeris radicata

HAIRY CAT'S EAR

ENGLISH NAMES

Hairy cat's ear, spotted cat's ear, flatweed, common cat's ear, frogbit, gosmore, false dandelion, rough cat's ear

SCIENTIFIC NAME

Hypochaeris radicata L.
(also seen as *Hypochoeris radicata* L.)

FAMILY

Asteraceae or Compositae
(Daisy)



Photo Credit: © L. KERSHAW

Hairy cat's ear is a yellow-flowered perennial herb with stems that exude a milky juice when broken.

RANGE/KNOWN DISTRIBUTION

Hairy cat's ear is a native of Europe that was introduced to North America by the 1930s. It is now widely established across southern Canada, the coastal United States (including Hawaii and Alaska), Australia, New Zealand, Chile, Britain and Japan. This species is found primarily in coastal regions of North America. It is common in southwestern British Columbia and the Queen Charlotte Islands, and is one of the most widespread invasive species in Garry oak ecosystems of Washington and British Columbia.

IMPACTS ON GARRY OAK AND ASSOCIATED ECOSYSTEMS

Hairy cat's ear has been described as “the most overlooked, ignored and invasive herbaceous weed in Garry oak ecosystems” (Beckwith, 2005). This plant is common throughout Garry oak and associated ecosystems, representing 10 percent cover in some areas. The long leaves form a dense rosette that displaces native species, particularly annual plants that germinate in open areas. Its deep taproot and ability to draw considerable amounts of water from an area may lend a competitive advantage to this species in arid or semi-arid habitats.

This species has invaded sites where various rare and endangered plants grow, although its impacts are not clear. Hairy cat's ear plants may release allelopathic chemicals that suppress the growth of other plant species. Once established, hairy cat's ear can be very persistent.

FIELD DESCRIPTION

Hairy cat's ear is a dandelion-like perennial herb with yellow flower heads. Plants grow from a woody stem base or enlarged fibrous root.

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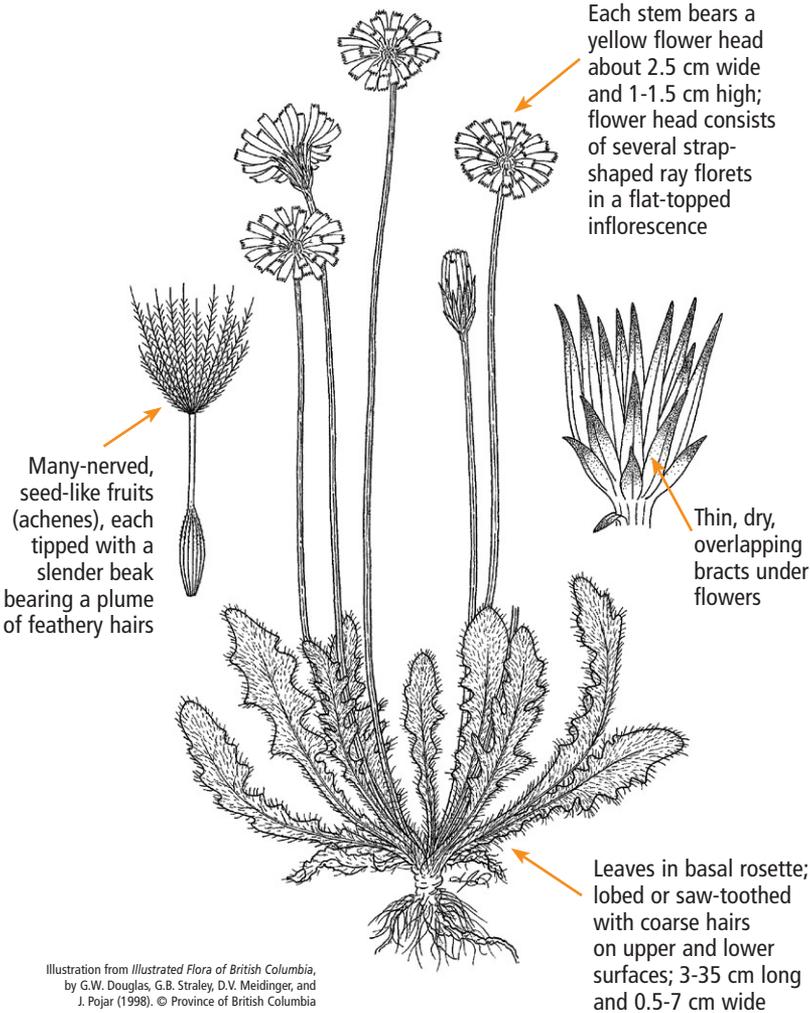


Illustration from *Illustrated Flora of British Columbia*, by G.W. Douglas, G.B. Straley, D.V. Meidinger, and J. Pojar (1998). © Province of British Columbia

Coarsely hairy leaves form a rosette at the base of the plant. Hairless to hairy, hollow, sparsely branched flowering stalks grow 15-60 cm tall and exude a milky juice when broken. Several flower heads form on each plant. Seeds have fluffy plumes, similar to those of dandelion. Plants tend to grow in a scattered pattern rather than forming dense monocultures.

Dandelion (*Taraxacum officinale*) is distinguished from hairy cat's ear in having hairless (or nearly hairless) basal leaves, unbranched flowering stalks, and seeds with simple, not feathery, hairs.

LIFE HISTORY

This perennial forms a dense, hairy rosette the first year, and bolts as a full plant in the second year. Flowers bloom from spring to fall, with seeds produced shortly after the flowers. Hairy cat's ear plants live a maximum of 10 years and produce seeds that survive only briefly in the soil seed bank. The plumed seeds are well adapted to wind dispersal. In British Columbia, two generations of plants per year are common.

HABITAT

Hairy cat's ear invades a wide range of habitats. It prefers disturbed sites, such as roadsides, lawns, pastures and waste places. In Garry oak ecosystems it grows most frequently in open areas and appears to thrive in many soil types.

MANAGEMENT

Develop a long-term, realistic program for invasive species removal before undertaking any work. Before taking action, obtain expert advice. Please refer to the introductory section of this manual.

Given its prolific seed production and wind-blown dispersal, hairy cat's ear can quickly re-infest areas where it has been previously controlled. Often, cat's ear is too abundant to effectively eradicate, particularly when there are nearby seed sources.

PHYSICAL CONTROL: Hairy cat's ear has a deep taproot with several fibrous roots that spread from it, making hand-digging difficult. However, if the entire root system can be removed, such as with a hand mattock or screwdriver, the plant will not grow back. In Garry oak ecosystems, care must be taken to minimize soil disturbance to avoid new infestations.

BIOLOGICAL CONTROL: No known biological agents are available.

CHEMICAL CONTROL: Non-selective herbicides will kill hairy cat's ear but will also kill native plants. Since hairy cat's ear usually grows quite sparsely, spot-spraying can be an effective treatment method, particularly with herbicides containing 2,4-D, MCPA, dicamba or clopyralid. The best time to treat this species is in the first year, when plants are in the rosette stage.

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Herbicides should be used in sensitive Garry oak ecosystems only with extreme caution and expert advice.

OTHER TECHNIQUES: Flaming with a hand-held propane torch can successfully treat hairy cat's ear, but after several months populations may re-establish to their original abundance. Plowing followed by solarization using plastic cover is also effective, but this technique should be applied only in highly degraded sites where there are no native species. Prescribed burning has varying effects on hairy cat's ear, causing an increase in abundance at some sites and a decrease at others.

PREVENTIVE MEASURES: Reducing soil disturbance, maintaining native plant species and removing hairy cat's ear plants when they first infest a site are the best methods of prevention.

PERSISTENCE: Control of well-established infestations of hairy cat's ear is very difficult because of its wind-dispersed seeds and its ability to rapidly re-infest disturbed sites. Because it is difficult to maintain areas free of cat's ear when infestations are extensive, conduct intense management of this species in areas adjacent to rare plant habitat using the Decision Support Tool.

GENERAL COMMENTS

Horses preferentially grazing on hairy cat's ear have been reported to develop a unique lameness disorder called Australian stringhalt. No specific toxin that causes this condition has been identified in the plant.

SELECT REFERENCES

Beckwith, Brenda. 2005. *Personal communication*. Ethnoecologist, University of Victoria, Victoria, BC. March 18, 2005.

Douglas, G. W., G. B. Straley, D. V. Meidinger, and J. Pojar (eds.). 1998. *Illustrated Flora of British Columbia, Volume 1: Gymnosperms and Dicotyledons (Aceraceae through Asteraceae)*. BC Ministry of Environment, Lands and Parks and BC Ministry of Forests, Victoria, BC. 436 pp.

Murray, C., and R. K. Jones. 2002. *Decision Support Tool for Invasive Species in Garry Oak Ecosystems*. Prepared by ESSA Technologies Ltd. for the Garry Oak Ecosystems Recovery Team. Victoria, BC.

A comprehensive annotated bibliography of literature specific to hairy cat's ear is available at <http://www.goert.ca/resources/biblio.htm>.

For more information contact the Garry Oak Ecosystems Recovery Team, or see the website at www.goert.ca