

## narrowleaf hawkweed

### *Hieracium umbellatum* L.

Synonyms: *Hieracium acranthophorum* Omang, *H. canadense* Michaux, *H. canadense* var. *divaricatum* Lepage, *H. canadense* var. *fasciculatum* (Pursh) Fernald, *H. canadense* var. *hirtirameum* Fernald, *H. canadense* var. *subintegrum* Lepage, *Hieracium columbianum* Rydb., *H. devoldii* Omang, *H. ×dutillyanum* Lepage, *H. eugenii* Omang, *H. kalmia* Linnaeus, *H. kalmia* var. *canadense* (Michaux) Reveal, *H. kalmia* var. *fasciculatum* (Pursh) Lepage, *H. musartutense* Omang, *H. nepiocratum* Omang, *H. rigorosum* (Laestadius ex Almquist) Almquist ex Omang, *H. scabriusculum* Schwein., *H. scabriusculum* var. *columbianum* (Rydb.) Lepage, *H. scabriusculum* var. *perhirsutum* Lepage, *H. scabriusculum* var. *saximontanum* Lepage, *H. scabriusculum* var. *scabrum* (Schwein.) Lepage, *H. stiptocaulum* Omang, *H. umbellatum* ssp. *canadense* (Michaux) Guppy, *H. umbellatum* var. *scabriusculum* (Schweinitz) Farwell

Other common names: narrow-leaved hawkweed

Family: Asteraceae

**Invasiveness Rank:** 51 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

Narrowleaf hawkweed is a perennial herb that grows from short, woody rhizomes. Plants grow 38 cm to 1 ¼ meters tall, contain milky juice, and bear numerous flower heads. They have only a few basal leaves, which wither quickly. Stem leaves are lanceolate and usually toothed. Leaves are covered in short, stiff, star-like hairs. Each flower head is 19 to 38 mm in diameter. Flowers are deep yellow. They appear in June and remain through early September in Alaska. Involucral bracts are many different lengths (Hultén 1968, Royer and Dickinson 1999, eFloras 2008).



Flower head of *Hieracium umbellatum* L.

**Similar species:** A number of other *Hieracium* species grow in Alaska. Narrowleaf hawkweed can be distinguished from them by its tall stature, relatively large flower heads, lack of gray or black involucral pubescence, narrow leaves, and basal leaves that wither

when the plant flowers. Perennial sowthistle (*Sonchus arvensis*) is also tall with large, yellow flower heads, but it can be distinguished from narrowleaf hawkweed by its prickly leaf margins (Hultén 1968). Narrowleaf hawkweed is often confused with narrowleaf hawksbeard (*Crepis tectorum*). Unlike narrowleaf hawkweed, narrowleaf hawksbeard has involucral bracts arranged in two rows (Royer and Dickinson 1999).



Involucral bracts of *Hieracium umbellatum* L.

### Ecological Impact

**Impact on community composition, structure, and interactions:** No impacts on native plant populations have been documented for narrowleaf hawkweed. Narrowleaf hawkweed establishes in partially disturbed herbaceous communities in south-central Alaska (I. Lapina – pers. obs.).

**Impact on ecosystem processes:** Narrowleaf hawkweed likely delays the establishment of native species in

disturbed areas (I. Lapina – pers. obs.).

### Biology and Invasive Potential

**Reproductive potential:** Narrowleaf hawkweed reproduces sexually by seeds and vegetatively from rhizomes (Plants for a Future 2002).

**Role of disturbance in establishment:** More than 95% of narrowleaf hawkweed infestations recorded in Alaska are associated with disturbed areas (AKEPIC 2010).

**Potential for long-distance dispersal:** Each seed has a pappus and can be dispersed by wind (Douglas et al. 1998).

**Potential to be spread by human activity:** This species has been observed spreading along transportation corridors (AKEPIC 2010). It has been planted as an ornamental (Plants for a future 2002).

**Germination requirements:** Unknown.

**Growth requirements:** Narrowleaf hawkweed is adapted to a variety of soil types, including sand, loam, and clay. It grows best on well-drained, moist soils that are either neutral or acidic. Narrowleaf hawkweed can tolerate semi-shade, but it grows best in sunny areas (Plants for a Future 2002).

**Congeneric weeds:** Orange hawkweed (*Hieracium aurantiacum*), meadow hawkweed (*H. caespitosum*), mouseear hawkweed (*H. pilosella*), and tall hawkweed (*H. piloselloides*) are each considered noxious weeds in one or more states of the U.S. or provinces of Canada (Royer and Dickinson 1999, Invaders 2010, USDA 2010).

### Legal Listings

- Has not been declared noxious
- Listed noxious in Alaska
- Listed noxious by other states (all *Hieracium* species are considered noxious weeds in Washington)
- Federal noxious weed
- Listed noxious in Canada or other countries

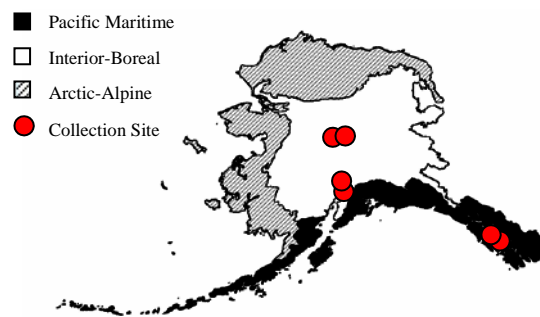
### References:

- AKEPIC database. Alaska Exotic Plant Information Clearinghouse Database. 2010. Available: <http://akweeds.uaa.alaska.edu/>
- Douglas, G.W., G.B. Straley, D. Meidinger, and J. Pojar. 1998. Illustrated flora of British Columbia. V.1. British Columbia. Ministry of Environment, Lands and Parks, Ministry of Forest. 1998. 436 pp.
- eFloras. 2008. Published on the Internet <http://www.efloras.org> [accessed 23 September 2010]. Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA.
- Hitchcock, C.L., A. Cronquist. 1990. Flora of the Pacific Northwest. University of Washington Press, Seattle and London. 730 p.
- Hultén, E. 1968. Flora of Alaska and Neighboring Territories. Stanford University Press, Stanford, CA. 1008 pp.
- Invaders Database System. 2010. University of Montana. Missoula, MT. <http://invader.dbs.umt.edu/>
- ITIS. 2010. Integrated Taxonomic Information System. <http://www.itis.gov/>
- Lapina I., Botanist, Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, Alaska. Tel: (907) 257-2710 – Pers. obs.
- Plants for a Future. 2002. *Hieracium umbellatum*. Available:

### Distribution and Abundance

Narrowleaf hawkweed appears to establish in partially disturbed sites in south-central Alaska. It is found primarily along roadsides, at forest edges, and in openings.

**Native and current distribution:** Narrowleaf hawkweed is native to Europe and temperate Asia (Douglas et al. 1998, USDA, ARS 2004). Its range in North America includes 18 states in the northern half of the continental U.S. and most of Canada (USDA 2010). Narrowleaf hawkweed is considered native to the continental United States (ITIS 2010, USDA 2010). It is listed as a threatened and endangered plant in New Hampshire (USDA 2010). This species has been documented from the Pacific Maritime and Interior-Boreal ecogeographic regions of Alaska (Hultén 1968, AKEPIC 2010, UAM 2010).



Distribution of narrowleaf hawkweed in Alaska.

### Management

Control options have not been investigated.

- <http://www.comp.leeds.ac.uk/pfaf/index.html>  
[July 7, 2004].
- Royer, F. and R. Dickinson. 1999. Weeds of the Northern U.S. and Canada. The University of Alberta press. 434 pp.
- UAM. 2010. University of Alaska Museum, University of Alaska Fairbanks. Available:  
<http://arctos.database.museum/home.cfm>
- USDA. 2010. The PLANTS Database. National Plant Data Center, Natural Resources Conservation Service, United States Department of Agriculture. Baton Rouge, LA.
- <http://plants.usda.gov>
- USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: <http://www.ars-grin.gov/var/apache/cgi-bin/npgs/html/taxon.pl?300618> [July 6, 2004].
- Welsh, S.L. 1974. Anderson's flora of Alaska and adjacent parts of Canada. Brigham University Press. 724 pp.