

common mouse-ear chickweed

Cerastium fontanum ssp. *vulgare* (Hartman) Greuter & Burdet

sticky chickweed

Cerastium glomeratum Thuill.

Family: Caryophyllaceae

Introduction

Common mouse-ear chickweed and sticky chickweed share similar biological and ecological attributes. Their ecological and community impacts are believed to be comparable, and we therefore treat these species together.

Invasiveness Rank: 36 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.

Synonyms for *Cerastium fontanum* ssp. *vulgare*: *Cerastium adsurgens* Greene, *C. caespitosum* Gilibert, *C. fontanum* ssp. *holosteoides* auct. non (Fries) Salman, van Ommering & de Voogd, *C. fontanum* ssp. *triviale* (Link) Jalas, *C. holosteoides* auct. non Fries, *C. holosteoides* var. *vulgare* (Hartman) Hyl., *C. triviale* Link, *C. vulgatum* L. 1762, non 1755, *C. vulgare* Hartman, Handb. Skand. Fl., 182. 1820, *C. vulgatum* var. *hirsutum* Fries, and *C. vulgatum* var. *holosteoides* auct. non (Fries) Wahlenb.

Other common names: big chickweed

Synonyms for *Cerastium glomeratum*: *Cerastium acutatum* Suksdorf, *C. glomeratum* var. *apetalum* (Dumort.) Fenzl, and *C. viscosum* auct. non L.

Other common names: none

Description

Common mouse-ear chickweed is a biennial or short-lived perennial plant that grows from a taproot. Flowering stems are prostrate, root at the nodes, and form clumps up to 38 cm across. Stems are 5 to 38 cm long and are covered with stiff, glandular hairs. Stem leaves are opposite, lanceolate to ovate, up to 2½ cm long, single-nerved, and coarsely hairy on both surfaces. Leaves of the flowering stems are larger, up to 4 cm long. Commonly, several to many flowers are arranged in open clusters. Flowers are small, erect or spreading, and inconspicuous. Each flower is composed of five white, two-cleft petals. Petals are about 6 mm long and equal or nearly equal to the sepals. Sepals are hairy with papery margins. Capsules are cylindrical, 10-valved, and up to 13 mm long. Seeds are small (Hultén 1968, Welsh 1974, Douglas and MacKinnon 1998).

Sticky chickweed can be distinguished from common mouse-ear chickweed by its viscid stems and leaves.



Cerastium fontanum ssp. *vulgare*. Photo by M. Harte.



Cerastium glomeratum. Photo by L. Allain.

Flowers of sticky chickweed are tightly clustered. Petals are shorter or only slightly longer than sepals (Hultén 1968, Douglas and MacKinnon 1998).

Similar species: A number of native *Cerastium* species are known from the meadows and rocky slopes of Alaska and Yukon, including field chickweed (*C. arvense*), Fischer's chickweed (*C. fischerianum*), and Bering chickweed (*C. beeringianum*). These *Cerastium* species are usually matted, perennial plants with petals that are longer than the sepals (Douglas and MacKinnon 1998, Cody 2000). Common chickweed (*Stellaria media*) can be distinguished from common mouse-ear chickweed and sticky chickweed by the presence of a single line of hairs along each internode (Hultén 1968, Welsh 1974, Johnson et al. 1995)

Ecological Impact

Impact on community composition, structure, and interactions: Common mouse-ear chickweed and sticky chickweed have not been observed in undisturbed plant communities in Alaska, and their impacts on native community composition have not been documented. These species are known hosts for some nematode species (Townshend and Davidson 1962).

Impact on ecosystem processes: The impacts of common mouse-ear chickweed and sticky chickweed on ecosystem processes are unknown.

Biology and Invasive Potential

Reproductive potential: Common mouse-ear chickweed and sticky chickweed reproduce sexually by seeds and vegetatively by stems that root at the nodes (Ohio perennial and biennial weed guide 2006).

Role of disturbance in establishment: Anthropogenic or natural disturbances are essential for the establishment of common mouse-ear chickweed and sticky chickweed from seeds (Jesson et al. 2000, Broughton and McAdam 2002, Ryan et al. 2002).

Potential for long-distance dispersal: Seabirds probably have some role in the transportation of seeds. Viable seeds of *Cerastium* species were found in the pellets of sea gulls (Gillham 1956).

Potential to be spread by human activity: Common mouse-ear chickweed grows in gardens and lawns. It can be transported with horticultural stock (Hodkinson and Thompson 1997).

Germination requirements: Seeds germinate throughout the year with peaks occurring during the fall and early spring. Maximum germination occurs in the presence of light with temperatures alternating between 20°C and 10°C (Grime et al. 1981, Williams 1983).

Growth requirements: Common mouse-ear chickweed and sticky chickweed are adapted to a wide range of habitats from dry open areas to moist woods and from

rocky mountain slopes or river bars to nutrient rich seabird colonies (Jesson et al. 2000, Ryan et al. 2003). These weeds thrive in lawns and gardens but do not tolerate cultivation (Ohio perennial and biennial weed guide 2006).

Congeneric weeds: Field chickweed (*Cerastium arvense*) and nodding chickweed (*C. nutans*) are listed as noxious weeds in Manitoba, although both species are considered native to North America (Invaders 2010, ITIS 2010, USDA 2010).

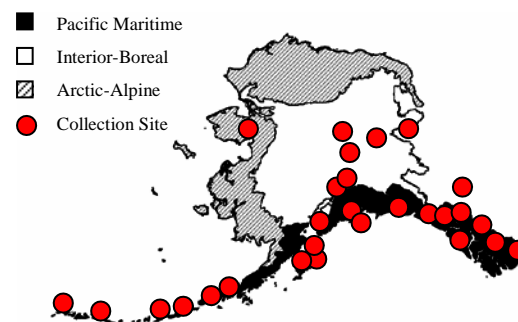
Legal Listings

- Has not been declared noxious (*Cerastium glomeratum*)
- Listed noxious in Alaska
- Listed noxious by other states
- Federal noxious weed
- Listed noxious in Canada or other countries (*Cerastium fontanum* ssp. *vulgare*: MB)

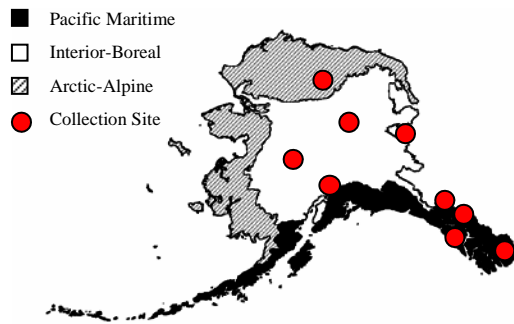
Distribution and abundance

Common mouse-ear chickweed grows in roadsides, waste places, gardens, and fields. Sticky chickweed grows in arable fields, waste places, and roadsides (Welch 1974, Flora of North America 2003).

Native and current distribution: Common mouse-ear chickweed is native to Europe, Asia, and North Africa. It grows throughout the world. It has been documented from all three ecogeographic regions of Alaska (Hultén 1968, AKEPIC 2010, UAM 2010). Sticky chickweed is native to Eurasia. It is widespread in North America. It has been documented from all three ecogeographic regions of Alaska (Hultén 1968, AKEPIC 2010, UAM 2010).



Distribution of common mouse-ear chickweed in Alaska



Distribution of sticky chickweed in Alaska

Management

Small populations of common mouse-ear chickweed and sticky chickweed can be controlled by hand-pulling. Herbicides can be effective when applied during active growth (AKEPIC 2010).

References:

- AKEPIC database. Alaska Exotic Plant Information Clearinghouse Database. 2010. Available: <http://akweeds.uaa.alaska.edu/>
- Broughton, D.A. and J.H. McAdam. 2002. The non-native vascular flora of the Falkland Island. *Botanical Journal of Scotland* 54(2): 153-190.
- Cody, W.J. 2000. *Flora of the Yukon Territory*. Ottawa: NRC Research Press; 669 p.
- Douglas, G. W. and A. MacKinnon. Caryophyllaceae. In: Douglas, G. W., G. B. Straley, D. Meidinger, J. Pojar. 1998. *Illustrated flora of British Columbia*. V. 2. Ministry of Environment, Lands and Parks Ministry of Forests. British Columbia. 401 pp.
- Flora of North America. Editorial Committee, eds. 1993. *Flora of North America North of Mexico*. 7 vols. New York and Oxford.
- Gillham, M.E. 1956. Ecology of the Pembroke Islands: V. Manuring by the colonial seabirds and mammals, with a note on seed distribution by gulls. *The Journal of Ecology* 44(2): 429-454.
- Grime, J.P., G. Mason, A.V. Curtis, J. Rodman, S.R. Band. 1981. A comparative study of germination characteristics in a local flora. *The Journal of Ecology* 69(3): 1017-1059.
- Hodkinson, D., K. Thompson. 1997. Plant dispersal: the role of man. *Journal of Applied Ecology*, 34: 1484-1496.
- Hultén, E. 1968. *Flora of Alaska and Neighboring Territories*. Stanford University Press, Stanford, CA. 1008 p.
- Invaders Database System. 2010. University of Montana. Missoula, MT. <http://invader.dbs.umt.edu/>
- ITIS. 2010. Integrated Taxonomic Information System. <http://www.itis.gov/>
- Jesson, L., D. Kelly and A. Sparrow. 2000. The importance of dispersal, disturbance, and competition for exotic plant invasions in Arthur's Pass National Park, New Zealand. *New Zealand Journal of Botany* 38: 451-468.
- Johnson, D., L. Kershaw, A. MacKinnon, J. Pojar. 1995. *Plants of the western boreal forest and aspen parkland*. Alberta, Canada: Lone Pine. p. 103.
- Ohio perennial and biennial weed guide. 2006. Mouseear chickweed. The Ohio State University. Available: <http://www.oardc.ohio-state.edu/weedguide/> [January 18, 2006].
- Ryan, P.G., V.R. Smith and N.J.M. Gremmen. 2003. The distribution and spread of alien vascular plants on Prince Edward Island. *South African Journal of marine science* 25: 555-562.
- Townshend, J.L. and T.R. Davidson. 1962. Some weed hosts of the northern root-knot nematode, *Meloidogyne hapla* Chitwood, 1949, in Ontario. *Canadian Journal of Botany* 40: 543-548.
- 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>
- Welsh, S. L. 1974. *Anderson's flora of Alaska and adjacent parts of Canada*. Brigham University Press. 724 pp.
- Williams, E.D. 1983. Effects of temperature, light, nitrate and pre-chilling on seed germination of grassland plants. *Annals of Applied Biology* 103: 161-172.