

Hawkweed (*Hieracium* spp.)

Identification Invasive hawkweeds in Montana include several species in the genus *Hieracium* including *H. aurantiacum*, *H. caespitosum* (formerly *H. pratense* and *H. floribundum*), and *H. praealtum* (formerly *H. piloselloides*). *Hieracium aurantiacum* is commonly known as orange hawkweed while the meadow hawkweed complex includes the other species listed above. Hawkweeds form low-growing rosettes with many hairy, elliptic to spatula-shaped leaves. Leaves are typically 4-6" long and excrete a milky sap when injured. Hawkweeds usually produce one flowering stem 10-36" tall that bears 5-30 flowers. Orange hawkweed has orange flowers while meadow hawkweeds have yellow flowers. Distinguishing between invasive and native hawkweeds is difficult but important. Unlike invasive hawkweeds, natives lack stolons, have branched stems with many leaves, and bear flowers in an open panicle. There are no orange-flowered native hawkweeds in Montana. Look for be more information on I.D. in the February Weed Post.

Impacts Hawkweeds can quickly form dense patches that can expand into large areas and displace desired species. Livestock, deer and elk consume hawkweed foliage and buds. Research has shown that the hawkweeds have moderate to high nutritive values, and may be used by cattle and sheep, although questions about palatability and utilization still remain to be answered. Under intensive grazing, however, hawkweeds displace nearly all other vegetation.

Habitat Hawkweeds typically occur along roadsides, in moist mountain meadows, forest meadows and clearings, permanent pastures, hayfields, cleared timber units, and abandoned farmland. They prefer well-drained, coarse-textured soils with moderately low organic matter, but they can tolerate a range of conditions from gravelly to acidic soils and full sun to partial shade.

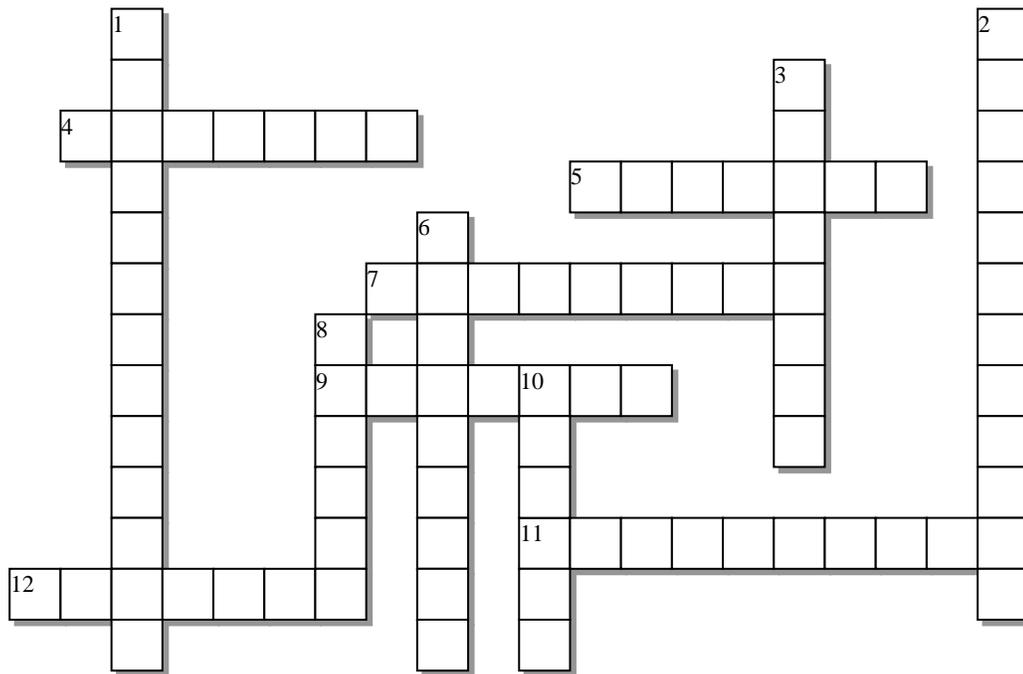
Spread Each flower can produced 12-50 seeds. A tuft of hairs assists in wind dispersal. Minute barbs on the seed help them to stick to hair, fur, clothing and vehicles. Seeds can remain viable for up to 7 years. Hawkweeds also spread through under- (rhizomes) and aboveground (stolons) creeping stems. Most vegetative reproduction occurs on the periphery of an infestation where plant density is typically lower, thus such areas should receive priority during management.

Management Priorities Hawkweeds are common in some areas of Montana but not widespread across the state. Small patches can be controlled with herbicides, but larger patches require integrated methods. General

recommendations for hawkweed management include: hand-pulling, mowing, cultivation, grazing, and fire—not recommended; revegetation—moderately effective; fertilization—moderately effective when combined with herbicides and revegetation; biological control—not available; herbicides—moderately effective. For more information, see the Extension MontGuide *Orange Hawkweed and Meadow Hawkweed Complex* <http://msuextension.org/publications/AgandNaturalResources/MT199816AG.pdf>.



Test your knowledge of Hawkweed



Across:

- 4 - Hawkweeds typically increase if this land use practice is excessive
- 5 - Common habitat of hawkweeds
- 7 – Hawkweed seeds can do this immediately after dropping from the plant*
- 9 - Botanical term for a creeping underground stem
- 11 - A biological control agent for hawkweeds has been released in this country*
- 12 - If you see these structures on the plant, you know it's not a native species

Down:

- 1 - This management tool may be effective when combined with herbicides and revegetation
- 2 - One reason hawkweeds were originally introduced to North America (two words)*
- 3 - Length of time hawkweed seeds can remain viable (two words)
- 6 – Focus on controlling the _____ of infestations, as this is where more vegetative reproduction occurs
- 8 - This ancient civilization believed the sap of hawkweed was responsible for the keen eyesight of hawks*
- 10 - This flower color will only be found on an invasive hawkweed

*Refer to Extension MontGuide for answer

Solutions are posted to the MSU Extension Invasive Rangeland Weed website:

<http://www.msuextension.org/invasiveplantsMangold/extensionsub.html>

