Natural Heritage Endangered Species Program

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Description: Upland White Aster is a relatively short plant (30–45 cm; 12–18 in.) of the composite family (Asteraceae); though it looks similar to what we commonly identify as an aster, it is actually a goldenrod. Robust plants may have a cluster of numerous slender, straight stems, referred to as a "tuft." Flower heads may be few or many, but are never densely grouped or in one-sided arrangements.

Aids to identification: Stems are mostly glabrous below, but gradually become densely short pubescent above and on the branches. Depending on availability of moisture, basal and lower-most stem leaves may be present during flowering. Its firm, ascending leaves are narrow, and taper to long points. Leaves gradually become shorter higher on stems and branches. Unlike most goldenrods, it forms a flat-topped inflorescence of white-rayed, aster-like flower heads, which are located towards the ends of short branches. This species flowers from late July into early September; peak flowering is during August. Fruit matures within three weeks of cessation of flowering.

Similar species: Upland White Aster is the only white-rayed goldenrod that forms a flat-topped inflorescence. By comparison, Silverrod (*Solidago bicolor*) is typically taller (up to 100 cm; >3 ft.), with an elongate, slender inflorescence bearing numerous heads that are bunched close together at nodes along stems and branches. Upland White Aster is more likely to be confused with two aster species in the genus *Sericocarpus*, specifically Toothed White-topped Aster (*S. asteroides*, syn. *Aster paternus*) and Narrow-leaf White-topped Aster (*S. linifolius*, syn. *Aster solidagineus*). All three of these species have flat-topped inflorescences and heads with both white rays and white disc florets.

Upland White Aster

Oligoneuron album (Nutt.) Nesom

State Status: **Endangered** Federal Status: **None**



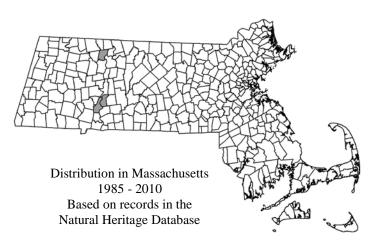
Upland White Aster in its favored open rocky ledge habitat. Photo: Arieh Tal.

However, unlike Upland White Aster, the tips of the phyllaries (involucral bracts) of the two *Sericocarpus* species are abruptly recurved. Moreover, the leaves of the two *Sericocarpus* species are oval- or egg-shaped and short-pointed, rather than narrow and long-pointed as are the leaves of Upland White Aster. Lastly, the leaves of the *Sericocarpus* species are not ascending.

Habitat: This species inhabits open or partially-shaded dry rocky outcrops of sandstone, shale, or limestone. It prefers calcareous or circumneutral substrate. It is often found growing in cracks or fissures in the outcrops; current Massachusetts populations are known from rocky shores of the

Connecticut River. Associated species vary among sites, but include Harebell (*Campanula rotundifolia*), Little Bluestem (*Schizachyrium scoparium*), Big Bluestem (*Andropogon gerardii*), wild ryes (*Elymus* spp.), goldenrods (*Solidago* spp.), and various asters (e.g, *Symphyotrichum* spp.).

Range: Upland White Aster ranges from Quebec to Saskatchewan, south to Oklahoma, Tennessee, and Georgia. However, it is most common in the central and north-central midwestern states. It is at the extreme eastern edge of its range in New England, and is rare throughout the region.



Population status in Massachusetts: Upland White Aster is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. The few documented Massachusetts records are from Hampden, Hampshire, and Franklin Counties.

Management and threats: Upland White Aster requires significant sunlight exposure and should be monitored for over-shading and competition from invasive and aggressive native species; if deemed a threat, pruning or other means of vegetation control may be warranted. As current Massachusetts populations are associated with the Connecticut River, hydrologic regime changes, shoreline development, and recreational use are potential threats. Development and recreation (e.g., trails, boat launch areas) should be directed away from Upland White Aster habitat. All active management of rare plant populations (including invasive species removal) is subject to review under the Massachusetts Endangered Species Act. and should be planned in close consultation with the Massachusetts Natural Heritage & Endangered Species Program.

Flowering time in Massachusetts

Ja	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		ep	Oct		Nov		Dec	