## New York City EcoFlora



**Baccharis halimifolia** L. – Groundsel Tree (Asteraceae or Sunflower Family)

**Description:** Shrubs or rarely tree-like, 1–4 m tall, resinous, deciduous or evergreen, dioecious; branches angled, smooth or somewhat roughened; leaves alternate, on short petioles, the blades dark green, leathery, diamond-shaped, elliptic or obovate, toothed toward the apex, minutely gland dotted; flowers clustered in heads called capitula, forming large conspicuous arrays above the foliage; plants producing either male or female flowers, the female flowers especially conspicuous in the fall; fruit cylindrical with long white plumose bristles (pappus) becoming tan at dispersal.

Where found: Indigenous to eastern North America from Nova Scotia, south to Florida, Texas, Mexico and the West Indies; introduced in Europe and Australia where it can be invasive; typically occurs in tidal marshes just above the high tide line and occasionally inland ditches, salted roadsides and old fields; found throughout New York City, especially along the coast. The species is ranked 7 out of 10 in habitat specificity (0 being the least specific) by the New York Natural Heritage Program.

**Natural History:** Numerous insect associates are recorded, including Beetles, Bees, Flies, Wasps, Moths and Butterflies (Palmer, 1987), such as the Monarch Butterfly (Danaus plexippus); foliage is eaten by the Common Buckeye (Junonia coenia). The Baccharis Rust Gall Fungus (Puccinia evadens) is used a biological control in Australia

(Fried et al., 2016). The cottony plumes atop each seed (pappus) are carried on the wind, dispersing the seeds great distances. Seeds are very small, weighing as little as 0.11mg (Panetta, 1975) and up to 1.5 million seeds may be produced by a single mature female grown in full sun (Westman et al., 1975). Groundsel Tree often co-occurs with Marsh Elder (*Iva frutescens*) and is sometimes confused with it. The Marsh Elder is distinguished by having longer, narrower leaves arranged oppositely on the stems. It occupies the intertidal zone (between high and low tides) where *Baccharis* can't grow.

**Cultural History:** Members of the genus produce diverse chemical compounds that have been used medicinally by Native Americans, although the chemical constituents in the plants can be harmful in large quantities. The wood was used for arrow shafts and domestic construction. Groundsel Tree was first sent to England in 1683 where it was celebrated as an ornamental (Taylor, 1996). Here in its native range, it is underappreciated in horticulture. It makes a hardy, low-maintenance foundation planting with <u>fall and</u> winter interest. It grows quickly to form thick hedges and tolerates heat, drought, salt spray and occasional high tides.

**Name Notes:** The genus name is derived from Bacchus, the Roman god of agriculture, wine and fertility, originally applied to a different plant of European origin. The specific epithet, *halimifolia* means leaves like Halimus, a species of Orach or Saltbush (*Atriplex halimus*). The name Groundsel is taken from the Common Groundsel (*Senecio vulgaris*) which produces plumose seeds similar to the Groundsel Tree. The word comes from Old English *grundeswylige* or puss-swallower from the Common Groundsel's use as a <u>poultice</u>.

Species Notes: Baccharis is a large genus in the very large Asteraceae (Sunflower Family) and unusual in the family for being among the few tree-like members of an otherwise mostly herbaceous family. The genus is indigenous to the tropical and warm-temperate parts of the Western Hemisphere (introduced elsewhere) and contains 350–500 species. Four species occur in North America east of the Mississippi River (Baccharis angustifolia, Baccharis dioica, Baccharis glomeruliflora, Baccharis halimifolia). The Groundsel Tree is the northern-most member of the genus and the only one known to occur in the Northeast.

Links: iNaturalist observations from New York City; herbarium Specimens from Symbiota; global biotic interactions from GloBI.

References: Fried, G., L. Caño, S. Brunel, E. Beteta, A. Charpentier, M. Herrera, U. Starfinger & F. Dane Panetta. 2016. Monographs on Invasive Plants in Europe 1. *Baccharis halimifolia* L., Botany Letters, 1–27. Palmer, W.A. 1987. The phytophagous insect fauna associated with *Baccharis halimifolia* L. and *B. neglecta* Britton in Texas, Louisiana and Northern Mexico. Proceedings of the

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