NYBG

New York City EcoFlora

Solidago sempervirens L.
Seaside goldenrod

Description: Succulent perennial herb 0.5-2 m tall, with compact caudex (underground stem/root). Stems: 1-10 forming clumps. Leaves: distinct basal rosette; basal and proximal cauline with long, winged petioles with sheathing stems, blades narrowly ovate to oblanceolate, fleshy, entire, acute, glabrous; mid to distal cauline numerous, sessile, lanceolate, fleshy, entire. Inflorescences: 20-500 heads, in paniculiform arrays. Phyllaries: in 3-4 series, unequal, lanceolate, margins ciliate. Ray florets: 8-17, 5-6 x 0.4-0.6 mm. Disc florets: 10-22, corollas 3-3.2 mm, lobes 0.5-1.2 mm. Fruits: cypsela 1.1-1.5 mm, attached pappus 3.8-4 mm, club shaped.

Diagnostic characteristics: Maritime/high salinity habitat; fleshy leaves with entire margins; terminal, paniculiform inflorescences.

Where Found: Native to eastern North America, from Newfoundland along the Atlantic and Gulf Coasts to Florida and Texas. Its range has expanded further inland to the Great Lakes area via roadsides and waterways. The species is found in saline and brackish habitats near the coast, as well as inland in association with industrial zones, railroads and roadways, salt mining activity, and marshes.

Conservation Status: The species is ranked 4 out of 10 in habitat specificity (0 being the least specific), and is ranked S4 in rarity (5 being the least rare) by the New York State Natural Heritage Program. However, the species is threatened by anthropogenic habitat loss.

Natural History: Seaside goldenrod is highly tolerant of high salinity in the soil as well as of airborne salt spray. Their waxy, fleshy leaves help retain water and repel salt spray. This tolerance allows the plants to thrive in maritime coastal environments, as well as inland in areas of high salinity due to natural and industrial processes. The plant is classified as a facultative wetland plant, which usually occur in wetlands, but may occur in non-wetlands. It has been shown that the species is not physiologically dependent on salt, and in fact, grows better in lower salt environments. It is hypothesized that *S. sempervirens* is a poor competitor that thrives in dune and roadside environments due to its salt tolerance and reduced competition from other non-salt tolerant species. Seaside goldenrod blooms in the fall, and its relatively heavy, sticky pollen is transported by a variety of insects including moths, butterflies, and bees. The plants are an important component of dune communities which anchor the substrate and provide shelter to shore birds.

Name Notes: The genus name, *Solidago* is derived from the Latin “solido”, meaning “to make whole or heal”, in reference to the perceived medicinal qualities of the plants. The specific epithet, “*sempervirens*”, is Latin for “always green” (semper + virens), in reference to the plants’ evergreen basal leaves. The common names, including “seaside goldenrod”, and “salt marsh goldenrod” are in reference to its common high-salt habitats.

Genus Notes: *Solidago* is a mostly North American genus in the Asteraceae (Sunflower) family with approximately 100 species worldwide. Nineteen species have been recorded in New York City since 1819. Five have not been documented in 30 or more years and are presumed to be locally extinct (historical); some species are infrequent (< 5 populations) or rare (1 population).

Links: iNaturalist observations from New York City, Specimens from the Mid-Atlantic Herbaria Consortium, Global biotic interactions from GLoBI

References: Flora of North America; Brauer & Geber 2002; Lonard, Judd & Stalter 2015