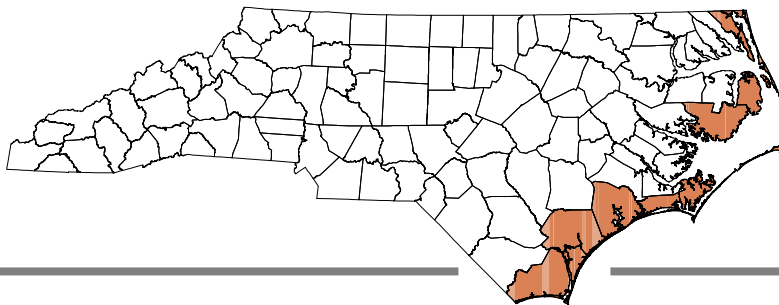


Seabeach amaranth

Amaranthus pumilus

Threatened (April 7, 1993)



Description: Seabeach amaranth is a low-growing annual with stems that trail along the ground but do not root. The stems are pinkish-red and fleshy and grow to 4-24 inches (10-60 cm). Spinach-green leaves are thick, oval-shaped with a slightly notched or indented tip, alternate, 0.4-0.6 inch (1-1.5 cm) long, and clustered toward the tip of the stem. Petioles are winged and are about 1 cm long. Flowers grow in clusters at nodes where leaves attach to the main stalk. The fruit is small, 0.16-0.20 inch (4-5 mm) long, and smooth. Seeds are shiny black, about 0.1 inch (2.5 mm) long.

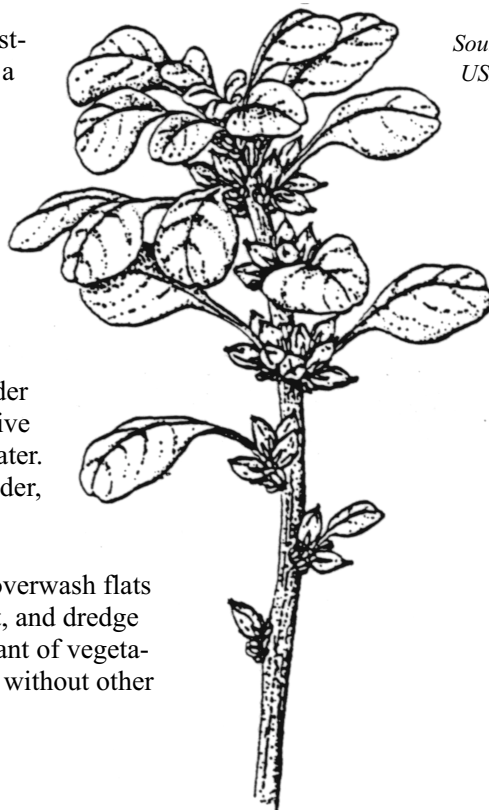
Life History: Flowering and fruiting occur from July to first frost, peaking in September. Seeds are enclosed in a waxy, semi-waterproof indehiscent utricle like an air-filled seed bag which allows seeds to float and be dispersed by water and wind. Germination occurs from April to July. The plant initially forms a small unbranched sprig but branches profusely into a clump, often 10-12 inches (25-30 cm) across and consisting of 5-20 branches. Occasionally a clump may grow to be 3 ft (1m) or more across with 100 or more branches. The length of the reproductive season depends on weather events including rainfall, hurricanes, temperature extremes, and predation by web-worms. The flowering and fruiting seasons can be terminated by these factors as early as June or July. Under favorable conditions, the reproductive season can extend into January or later. The species is an effective sand binder, building and anchoring dunes.

Habitat: Upper beach, foredune, overwash flats and sand/shell beach replenishment, and dredge spoil. Seabeach amaranth is intolerant of vegetative competition and is often found without other plants.

Distribution: Barrier islands of Brunswick, Carteret, Currituck, Dare, Hyde, New Hanover, Onslow, and Pender counties.

Threats: Seabeach amaranth is threatened throughout its range by beach stabilization structures, beach erosion and tidal inundation, beach grooming, herbivory by insects and feral animals, and by off-road-vehicles. It has been eliminated from 2/3 of its historic range.

Management Recommendations: On publically owned lands, including Cape Hatteras and Cape Lookout National Seashores, plants are being protected from beach armoring. Off-road-vehicle traffic is being routed around areas where plants are growing. Collection and storage of seeds and plant material has been initiated by the Center for Plant Conservation and member gardens.



Sources: Mignogno pers. com., Radford et al. 1964, USFWS 1993b, 1996c.