Cape Hatteras

National Park Service
U.S. Department of the Interior

Cape Hatteras National Seashore

Protected Species - Seabeach Amaranth

Description and Status

Seabeach amaranth is a low-growing plant found along Atlantic Ocean beaches. This plant is an effective sand binder as it grows closer to the high tide line than any other coastal plant. Once established, it builds and anchors dunes by collecting wind-blown sand. The stems are fleshy and pink-red or reddish with small rounded green leaves. Flowers and fruits are small and grow in clusters along the stems. The seabeach amaranth was listed as Threatened under the Federal Endangered Species Act on April 7, 1993.

Life History

An annual plant, the seabeach amaranth germinates from April to July. Upon germination, the plant forms a small unbranched sprig but soon branches. This spreading plant often reaches 10-12 inches in diameter, consists of 5-20 branches, and may grow to be three feet or more across with 100 or more branches.

Flowering begins as soon as the plants have reached sufficient size, typically commencing in July. The reproductive season for the plant can extend to January with favorable conditions. Weather events and predation by webworms can terminate the reproductive season early.

Seabeach amaranth requires dynamic beach areas on barrier islands including the upper strands of non-eroding beaches, foredunes, overwash flats, sand/shell beach replenishment areas, and dredge spoils.

Seabeach amaranth is intolerant of vegetative competition and does not occur on well-vegetated sites. This plant seems to require extensive areas of barrier island beaches and inlets and often shares habitat with piping plovers, another federally Threatened species. Seabeach amaranth's populations are widely scattered and highly dynamic with great fluctuations in numbers.

Threats

Historically, seabeach amaranth occurred in nine states from Massachusetts to South Carolina. Currently, this plant is found in New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, and South Carolina. At the time of listing in 1993, only fifty-five populations were known.

Current threats to the survival of the seabeach amaranth include:

- Habitat modification and destruction including: beach stabilization, especially beach armoring; beach grooming; and beach erosion, including storm-related erosion and tidal inundation
- Weather events
- Fragmentation (surviving patches of suitable habitat tend to be too far apart for seeds to travel and recolonize)
- Predation – insects and feral animals
- Intensive recreational use of the beaches
- Off-road vehicles

The Seabeach Amaranth on the Cape Hatteras National Seashore

Many of the largest populations of seabeach amaranth in North Carolina are on publicly owned lands including Cape Hatteras and Cape Lookout National Seashores and other undeveloped beaches.

In 1988, over 15,000 seabeach amaranths were documented on the Cape Hatteras National Seashore. Since then, the plant's populations in the Seashore have been declining. In 2003, there were thirty seabeach amaranth plants in the Seashore with the largest number found at Cape Point. This is a decrease of two-thirds from the year before. Later in 2003, Hurricane Isabel completely wiped out all known populations of the seabeach amaranth. One plant was discovered in 2004.

A current survey is yet to be completed for 2005 but so far two plants have been found.