



## Seabeach Amaranth



### A Disappearing Landscape

Would you believe that Assateague's wild beaches give refuge to a little known plant whose story is one of hardship, survival and success? Once common on east coast beaches, seabeach amaranth (*Amaranthus pumilus*) is now listed as threatened with extinction under the Endangered Species Act. Today, this rare plant primarily occurs on a few protected, undeveloped beaches where coastal processes maintain a natural beach landscape.

*"If future generations are to remember us with gratitude rather than contempt, we must leave them more than the miracles of technology. We must leave them a glimpse of the world as it was in the beginning, not just after we got through with it"*

*-Lyndon B. Johnson (1908-1973)*

### Is that an amaranth?



Seabeach amaranth is an annual plant with reddish stems and leaves that are thick, shiny and wrinkly. Its seeds are tiny and plants must produce enormous quantities to sustain new populations each year.

This low growing plant historically occurred in coastal environments from Massachusetts to South Carolina. Its decline has largely been attributed to a reduction in suitable habitat due to coastal development and other human disturbances.

Seabeach amaranth habitat is generally open and sparsely vegetated, with low plant diversity. On Assateague, some other state or federally listed species

requiring similar habitat include tiger beetles (*Cicindela dorsalis media*), piping plovers (*Charadrius melodus*) and seaside knotweed (*Polygonum glaucum*).

By protecting seabeach amaranth and its habitat, we are also protecting essential habitat for these and many other vulnerable species, which in the company of seabeach amaranth may also prosper.

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## Amaranth Anyone?



Seabeach amaranth's rediscovery on Assateague occurred in 1998 when a single plant was found by a park biologist. This occasion marked the first time in over 30 years that amaranth had been observed on the island.

By 2000 a total of 7 wild plants were discovered. With these 7 plants, the National Park Service, along with other State and Federal agencies, began the

hard work of trying to restore a viable population of this threatened species to its native habitat on Assateague.

Between 2000 and 2002, offspring from the original plants were planted at many locations along the Maryland portion of the island. Since then, surveys have estimated that the annual amaranth population on Assateague has ranged between 500 and 600 plants.

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## A Survivor?



Even with a helping hand, survival is not a sure thing. Amaranth must compete with other plants for space, sunlight, water and soil nutrients. Therefore, plants depend upon frequent storm surges to reduce competition and create new unoccupied habitat.

In areas where amaranth habitat remains relatively intact, the plant may still struggle to survive. On Assateague horses and deer are known to graze on seabeach amaranth.

Over Sand Vehicle (OSV) use also impacts the species since Assateague's OSV zone occupies a portion of what would otherwise be available habitat. In the open OSV zone, it is difficult for seabeach amaranth to germinate and grow due to heavy traffic experienced during the plant's growing season (June – September).

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## Not your typical walk on the beach



Each year a portion of Assateague's amaranth population is protected from deer and horse grazing, as well as OSV effects, by placing wire mesh cages around individual plants though some plants are intentionally left uncaged for monitoring purposes.

In the OSV zone, caged plants are also marked with orange posts, in order to enhance their visibility to drivers on the beach.

National Park Service staff will continue to monitor seabeach amaranth on Assateague Island. These efforts will ultimately lead to a better understanding of such things as seed viability and the effects of grazing on the population's distribution and abundance.

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## What can you do to help?

- Please do not disturb the protective cages placed around individual plants throughout the island.
- While driving in the OSV zone, keep an eye out for caged plants marked by orange posts.
- When driving in the OSV zone, please remain within permitted driving areas. Seabeach amaranth frequently occurs just outside the line of white posts that delineates the travel boundary.
- Finally, keep your eyes open for our little green friends, recently back from their extended absence. Let's hope that this time, with a little luck, they're here to stay.