

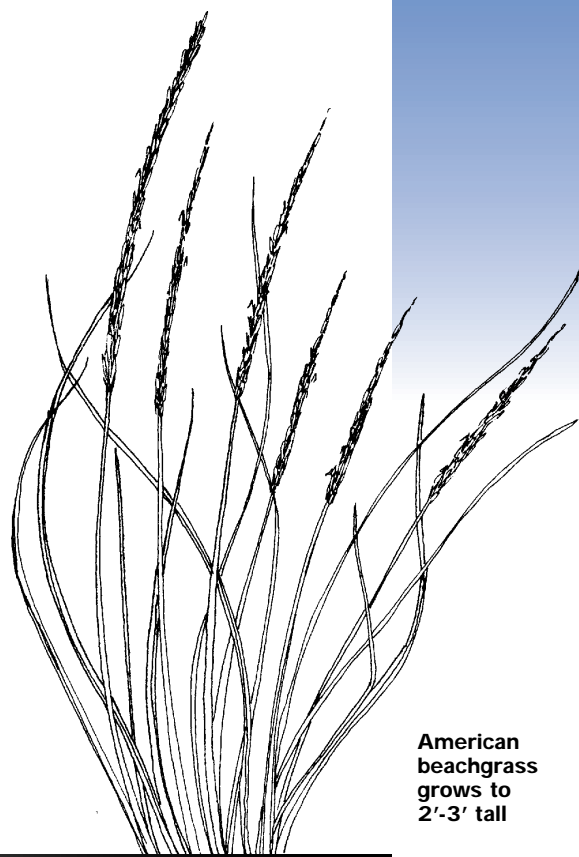
American Beach Grass

Introduction

Maritime beach communities are found above the mean high tide line. Wind erosion and storm waves shape these communities. Plants that grow there need to be tolerant of dry and salty conditions and of the constant burial by shifting sand. The most common plant species found in the maritime beach is American beachgrass (*Ammophila breviligulata*). American beachgrass is able to live in this very hot and salty environment characterized by coarse sand, little organic matter and almost no water. American beachgrass does not only grow on dunes by the ocean, it can be found on beaches along the bays, harbors, and at the base of bluffs along Long Island Sound. Given its dense root structure and ability to grow through accreting sand, American beachgrass helps in the formation of dunes. Dunes play a very important role in protecting the coast, by buffering incoming waves. Although American beachgrass is adapted to life in a tough environment, it can not withstand people walking on it. Once the American beachgrass starts to die off, the stability of the dune is threatened. Dunes are also affected by natural forces such as storms and floods. Planting American beachgrass can restore damaged dune systems.

American Beachgrass Characteristics

American beachgrass has a range that extends from New England to North Carolina. It has the ability to continue to grow even as nature buries it with sand. As the grass captures sand that winds blow across it, dunes are built. The grass responds to being buried by sending up a new rhizome (underground stem). From the new rhizome, a new shoot forms. The rhizomes also help the plant spread horizontally up to 6'-10' annually. American beachgrass grows up to 2'-3' tall. The plant does produce a seedhead and seeds, but much of the spreading is through the rhizomes. Seedlings have a tough time getting established in a hot, dry environment.



American beachgrass grows to 2'-3' tall



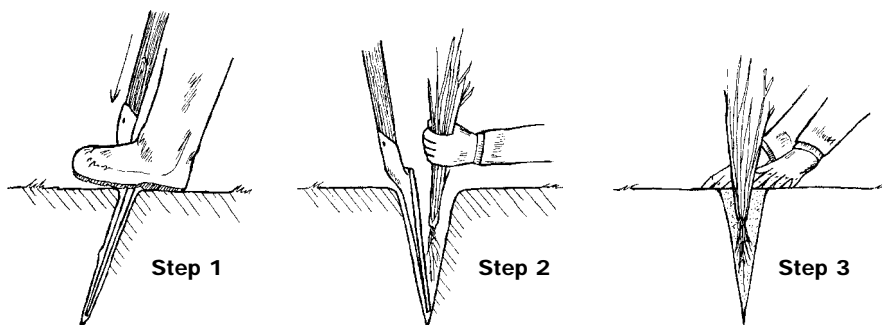
American Beach Grass

Planting Tips

American beachgrass comes in more than one variety. The variety recommended by the United States Department of Agriculture Natural Resources Conservation Service for our area is called "Cape." Some Long Island nurseries are propagating beach grass from our Long Island dunes. Some groups feel it is better to use beachgrass from this local source. The United States Department of Agriculture Natural Resources Conservation Service offers this advice:

1. Plant strips of beachgrass parallel to the coastline. It is easily done by hand. The row closest to the ocean should be at least 100' above the mean high tide line. Along the ocean, if space permits, plant a 40'-50' wide strip, but no less than 20', and 10 rows deep. This permits the planting to trap blowing sand, and to build a dune.
2. American beachgrass can be planted from October 15th to March 31st in the Mid-Atlantic, as long as the sand is not frozen.
3. Plants and roots must be kept moist before and during planting. Try using wet burlap. On most sites, the recommended plant spacing within a row is 18". Where erosion is severe, decrease the spacing to 12" apart.
4. Plant two 18"-24" stems in a hole, approximately 7"-9" deep.
5. Stagger the rows. An 18' by 18' spacing requires 38,000 culms or stems per acre, or 889 culms per 1,000 square feet.
6. Compact the sand firmly around the plants.
7. Beachgrass should be fertilized. Broadcast fertilizer over the planting at a rate equivalent to 1.4 pounds per 1,000 square feet. Fertilizer should be applied 30 days after the planting date, but not before April 1st.
8. Protect your new planting from foot/vehicle traffic by placing snow fencing around it.

American beachgrass is easily planted by hand.



and
**Cornell
Cooperative
Extension of
Suffolk County**

Marine Program

Obtaining Help

It's a good idea to obtain some professional advice before implementing a beach grass planting. Good sources of help are:

Cornell Cooperative Extension of Suffolk County Marine Program, 3690 Cedar Beach Rd., Southold NY 11971 516-852-8660

New York Sea Grant Extension Program, 3059 Sound Ave., Riverhead, NY 11901 516-727-3910

USDA Natural Resources Conservation Service, Riverhead County Ctr., Room N-210, Riverhead, NY 11901 516-727-2315

These three organizations can also help you locate sources of American beachgrass plants.