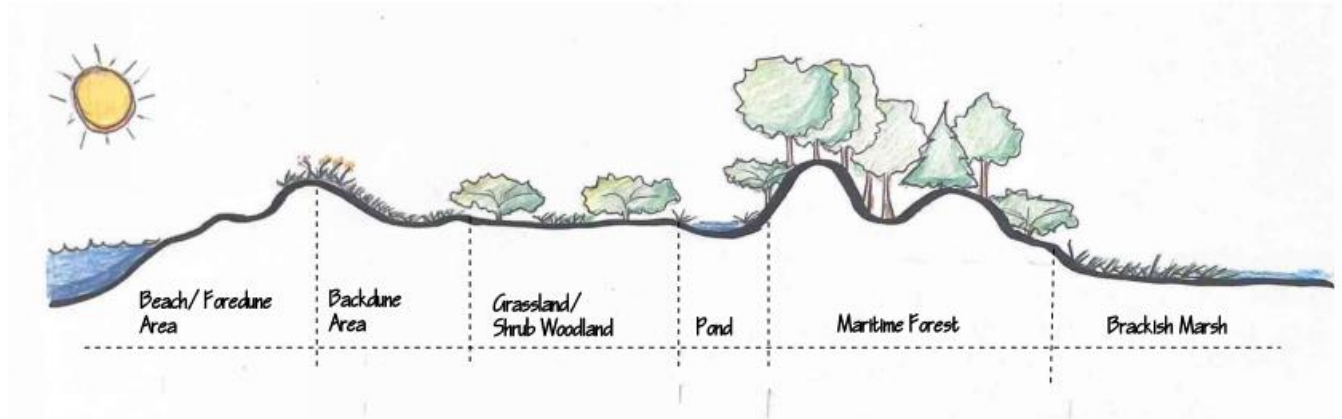


Town of Nags Head Dune Vegetation Planting Guidelines

Introduction

Nags Head is located on a barrier island that has been shaped through time by wind and waves. While many of the landforms and habitats exist as a result of natural processes, many of the ocean frontal dunes were constructed by concerted efforts to protect life and property. These dunes change with time, and the presence of dune vegetation provides additional stability when planted with appropriate dune vegetation species.



Foredune Area/Backdune Area

American beachgrass (*Ammophila breviligulata*)

American beachgrass (*Ammophila breviligulata*) (Figure 2) is a native, cool-season grass also known as dune grass that grows most prolifically in the zone of accretion in the foredune area, and the eastern most locations of the backdune area.

American beachgrass is a cool-season dune grass native to the North, Mid-Atlantic, and Great Lakes coasts. North Carolina is at the southern end of its natural range. American beachgrass is a vigorous, upright grass that grows in dense clumps and is capable of rapid lateral spread by runners. Hence, it is widely used for initial stalling of blowing sand. It is easily recognizable by its dense, cylindrical spikes or seed heads. Several characteristics make American beachgrass suitable for dune building and stabilization in North Carolina:

- Quick establishment and effective trapping of sand the first growing season.
- Ease of harvest, storage, and transplanting, with an excellent survival rate.
- Commercial availability from nurseries at a low cost.

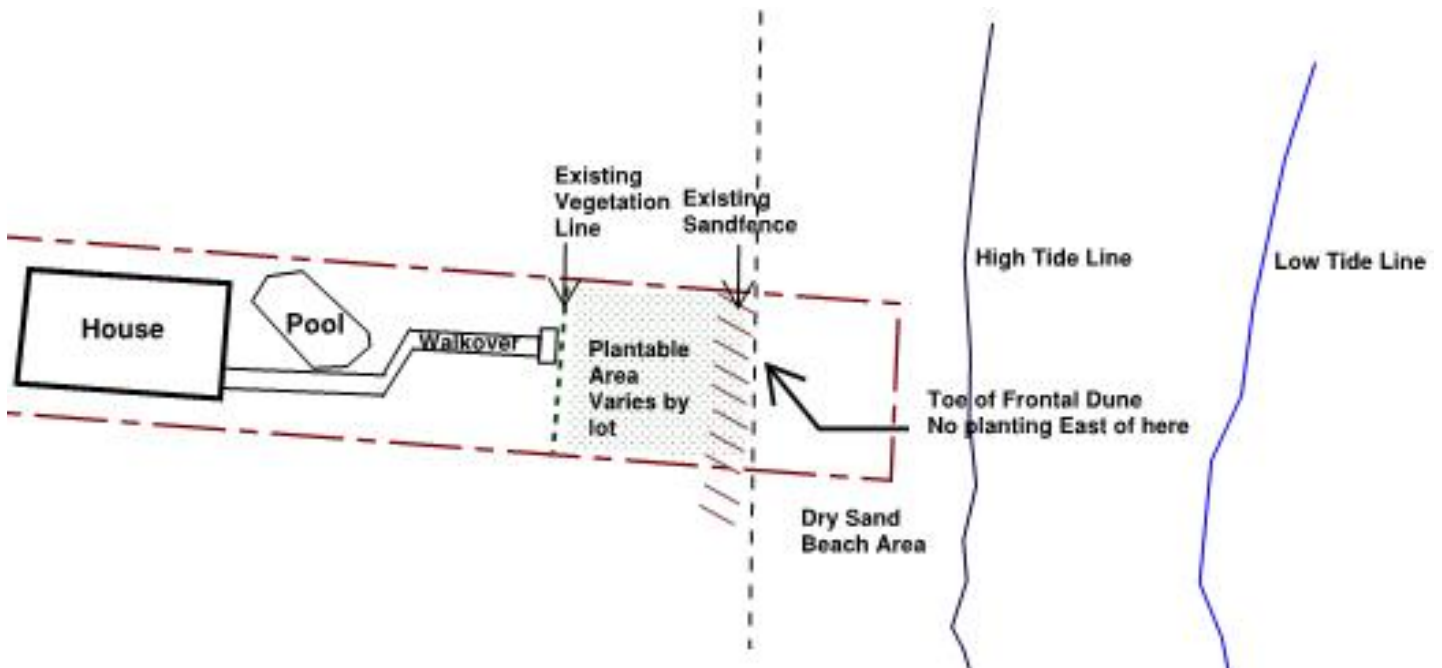
Recommended cultivars include Hatteras, Bogue, and Cape. Hatteras is a fine-leaf type that produces good results in the Carolinas. Bogue is another selection being used in the state. Cape, a northern strain that declines rapidly after the first growing season, is not recommended. Hatteras and Bogue are both available from commercial producers.

After establishment, American beachgrass will grow through as much as 4 feet of sand accumulation during one growing season. Although it grows quickly where sand accumulates on the seaward dune

edge, it tends to die out behind the dune crest after only a few years. This die-out is caused by climatic effects, fungal disease, and insects. Dead patches of beachgrass should be replaced with sea oats, bitter panicum, or seashore elder. To further increase the diversity and stability of the beach-dune system, sea oats and bitter panicum should be included in beachgrass plantings.

Because American beachgrass is a cool-season grass, the best planting dates are November through March.

Figure 1: Planting Area- Lot Level



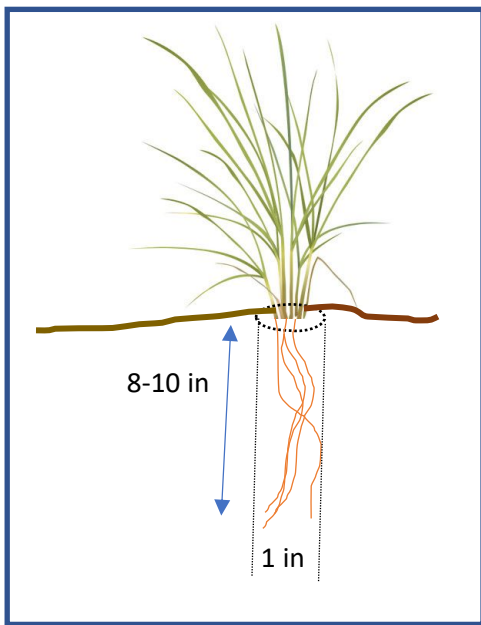


Figure 2: American Beach Grass Planting Detail

Plant small areas by hand using a dibble to open a hole 1 inch in diameter and 8 to 10 inches deep. Pack sand firmly around the plants after they are placed in the holes. Space the plants 18 to 24 inches apart at the crest of the dune and increase the spacing to 2 feet and then to 3 feet for several rows on each side of the crest. If no existing dune is present, grass spacing may vary. Please confirm with Town of Nags Head staff. Beachgrass should be fertilized. Broadcast fertilizer over the planting at a rate equivalent to 1.4 pounds per 1,000 square feet. (NC State Extension: Restoration and Management of Dune Vegetation)

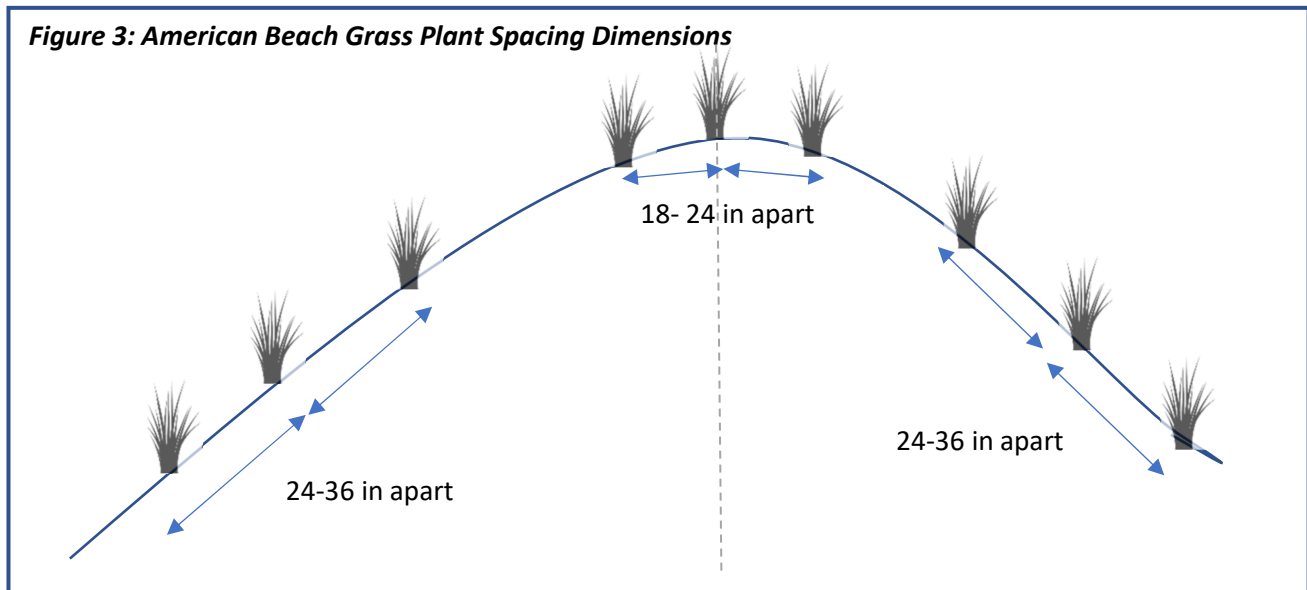


Figure 3: American Beach Grass Plant Spacing Dimensions