

**"I think that I shall never see
a poem lovely as a tree!"**

Joyce Kilmer

Oak Island Tree City USA Advisory Board

Jean Harwell, Board Member

Established in 2006

Support Oak Island Tree City USA program

Educate public

- importance of preserving Oak Island's trees
- role trees play in our environment
- Presentation taken Board's pamphlet-
"Trees For Oak Island".



? Tree City USA


- National program sponsored by National Arbor Day Foundation
- Administered by NC Division of Forest Resources.
- Provides direction & technical assistance to urban & community forestry programs
- Recognizes programs meeting standards set forth by National Arbor Day Foundation & National Asso. of State Foresters.
- Communities that meet or exceed these standards are designated a “Tree City USA” community.





*Oak Island recognized for the 11th year as
a Tree City USA community!*

Why preserve & plant trees?

- Trees add beauty
- Help homeowners conserve energy
- Block wind and noise
- Consume excess storm water
- Increase property values
- Beneficial to human health by absorbing CO₂ and filtering pollutants from the air

Role of Trees in Storm Water Management

 Study by US Forest Service in 2006 in Charleston SC which has climate similar to Oak Island

-  Publicly managed trees in city intercepted 28.3 million gallons of storm water annually
 -  1,858 gallons per tree.
-  Most effective trees were laurel oaks, water oaks, & live oaks.
-  Study showed for every \$1 spent on tree maintenance, city of Charleston received \$1.35 payback in storm water management costs.

Trees/Plants on Oak Island

- Subject to environmental conditions different from those planted further inland
- Factors that influence how well trees/plants perform in coastal landscape
 - Blowing sand, poor soils, high temperatures, excessive drainage
 - Most significant on growth is salt spray.
 - Majority of trees/plants do not tolerate salt on foliage for very long
- Trees thrive on mainland or in forested areas north of Davis Canal may not be well suited for the beach area of island
- Most trees planted on Oak Island must have some degree of salt intolerance

Salt Spray



- Ocean waves break –throwing tiny droplets of salty water into air
- On shore breezes blow salt laden air landward coming in contact with plant foliage
- Amount of salt spray plants receive varies depending on the proximity to beachfront
- Only most salt-tolerant species (e.g. eastern red cedar) survive in the frontal dune area.
- As you move away from ocean, level of salt spray ↓ allowing plants with less salt tolerance to survive (e.g.crepe myrtle)



Location & Suitable Plants



1/8 mile (660 ft.) of ocean-trees & plants known to have high level of salt tolerance-live oaks

Brackish water estuaries like Montgomery Slough-trees/plants with some degree of salt tolerance (not as high as oceanfront)

During hurricanes/coastal storms salt laden winds extending further inland than normal can cause extensive damage to trees/plants that are not salt tolerant. Good news! These plants usually recover!

? Lessen Salt Spray



🌿 Physically blocking salt laden winds

- 🌿 Naturally in maritime forest-beachside plants protect landward species-creating layer of foliage
- 🌿 Ocean side of maritime forest plants-"sheared" by salt spray (grow at slant away from oceanfront)
- 🌿 Buildings, fences, other structures-allow less salt tolerant plants to grow landward of structure.
- 🌿 Homes in beach area-built adjacent to marsh will require plants with moderate salt tolerance on both sides of house

marsh

Less salt tolerant trees/plants

Moderate salt
tolerant
trees/plants



House

Moderate salt
tolerant
trees/plants

Moderate salt
tolerant
trees/plants

Ocean ↓

Choosing the right plants/trees

- Other factors to consider
 - Soil type
 - Soil pH
 - Sun and wind exposure
- Great source of information to find the right trees/plants for a particular location:

Brunswick County Extension Service

www.brunswick.ces.ncsu.edu

910-253-2610

You're Invited

 Oak Island Tree City USA Advisory Board meets:

9:00 AM

2nd Wednesday each month

Recreation Center

- Upcoming projects of Board-working with Town
 - landscaping along Oak Island Drive
 - landscaping along new bridge corridor
 - revised tree ordinance.