

(1) The plant species included in this brochure, while all naturally occurring in the area, were strategically chosen and planted here to help support wildlife and improve the health of the marsh. As you explore CBI, try to locate and identify some of these (native) wildflowers, grasses, shrubs, and trees, and think about the role they play in the ecosystem.



**Smooth cordgrass** (*Spartina alterniflora*) typically dominates the low marsh (the seaward edge of the salt marsh, between the average low and high tide lines). Not only can smooth cordgrass withstand the twice daily flooding and high salinity of the low marsh, but it provides cover for waterfowl, wading birds, shorebirds, and muskrats; and habitat for ecologically and commercially important fish and shellfish.

(5) As the elevation continues to increase, drainage is such that the soil no longer becomes saturated for extended periods of time. In a maritime upland forest habitat, the trees and vegetation are subject to stresses like salt spray, high winds, and occasional flooding. This unique habitat contains some of the following species:

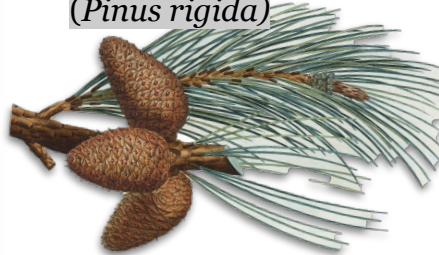
**Eastern red cedar**  
(*Juniperus virginiana*)



**Sassafras**  
(*Sassafras albidum*)



**Pitch pine**  
(*Pinus rigida*)



[www.fws.gov/refuge/edwin\\_b\\_forsythe/](http://www.fws.gov/refuge/edwin_b_forsythe/)  
[www.thegardencluboflbi.com/](http://www.thegardencluboflbi.com/)

# Native Plants of Cedar Bonnet Island



presented by  
Edwin B. Forsythe National Wildlife  
Refuge, in partnership with the  
Garden Club of Long Beach Island

Cedar Bonnet Island (CBI) is the largest of several bay islands found in the middle of Manahawkin Bay in Ocean County, New Jersey. When compared with the heavily developed areas surrounding it, the island appears to be a relatively untouched landscape. However, the dynamic salt marsh environment and abundance of native plant species that exist here today are the result of a large-scale restoration project undertaken by the U.S. Fish and Wildlife Service.

Use your phone camera  
to scan this code for an  
accompanying  
interactive Storymap:



(2) As the elevation rises and we transition into the high marsh, **saltmeadow cordgrass** (*Spartina patens*) and **saltgrass** (*Distichlis spicata*) become the two most common species we see. Both grow in dense stands, and during unusually high tides and flooding events these dense patches catch suspended materials (like sand and soil), allowing them to settle rather than be lost to erosion. This stabilizes the habitat and helps protect our shorelines.

Found in both low and high marsh, salt pannes are unique microhabitats where only a few highly specialized plants can grow. From repeated flooding and evaporation, these depressions in the marsh develop extremely high salinity levels. **Pickleweed** or **sea asparagus** is an edible succulent plant from the genus *Salicornia* that has uniquely adapted to thrive in salt pannes.



(3) Beyond the high marsh lies a maritime scrub transition zone between the salt marsh and upland habitats. This area contains vegetation from the high marsh, like saltmeadow cordgrass and saltgrass, and is also where different woody vegetation, like the following will begin to occur. See if you can locate any of these species:



**Winged sumac**  
(*Rhus copallinum*)



**Northern bayberry**  
(*Myrica pensylvanica*)



**Common elderberry**  
(*Sambucus canadensis*)



**Groundsel bush**  
(*Baccharis halimifolia*)

(4) Meadow habitats maintain an open character, typically vegetated by grasses, herbs, and other non-woody plants. They provide space for pollinating insects, birds, and mammals to perform courtship displays, nest, and feed. Additionally, native grasses and flowers like the following have complex root systems that help filter water, reduce runoff and control erosion.



**Seaside goldenrod**  
(*Solidago sempervirens*)



**Common milkweed**  
(*Asclepias syriaca*)



**Virginia wildrye**  
(*Elymus virginicus*)

**Black-eyed Susan**  
(*Rudbeckia hirta*)