



At Loggerheads with Beach Vitex



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abstract

Beach vitex, *Vitex rotundifolia*, a woody shrub from the Pacific Rim, was planted as an ornamental and for erosion control on South Carolina beaches in the early 1990's. In recent years, sea turtle volunteers raised concern after observing rapid spread of vitex plantings and displacement of native vegetation on sand dunes, the primary nesting habitat for the threatened Loggerhead sea turtle. Vitex plants have also been observed growing as "volunteers" in dune and salt marsh habitats several miles from planted sources. A workshop hosted by the North Inlet-Winyah Bay NERR in fall 2003 led to the formation of the South Carolina Beach Vitex Task Force. Task Force objectives include detection and mapping of vitex populations on beaches, removal of seedlings from public areas to prevent further spread, and ecological assessment to determine vitex's impact on native plants and animals and whether it should be regulated. Research on environmentally sound methods for removal coupled with restoration with native plants, and education of homeowners and landscapers is also underway. Other states in the Southeast and Gulf regions should be on the lookout for this plant and be prepared to take similar actions if it has been introduced.



introduction: kudzu of the coast?

Beach vitex (*Vitex rotundifolia*) is a deciduous woody shrub native to the Pacific Rim that was introduced to the Southeastern United States in the mid-1980's for use as an ornamental and for beach stabilization. In recent years, sea turtle volunteers began to notice vitex spreading from plantings on South Carolina beaches. It crowds out native dune plants and poses a potential threat to the nesting habitat of the threatened Loggerhead sea turtle. Vitex seedlings have also been found several miles from planted sources indicating that it can spread by seed and/or broken root fragments.

plant identification

Beach vitex leaves are round, silvery gray-green, 1-2 inches long, and opposite. They have a spicy eucalyptus-like fragrance. The flowers are purplish-blue, 1 inch in width, and produced in small clusters at the ends of branches. The round fruits are 1/4 inch in diameter and purplish-black when ripe. The plant typically grows up to 12 feet or more in diameter, and can produce rooting runners up to 60 feet long.



actions

taskforce In the fall of 2003, a workshop hosted by the North Inlet-Winyah Bay NERR was held for scientists and concerned citizens to discuss the issue of beach vitex and its potential threat to native plants and animals. The South Carolina Beach Vitex Task Force was formed during the workshop. Its primary objectives include: detection and mapping of vitex populations on SC beaches, removal of new seedlings to prevent further spreading, ecological assessment of the vitex's impact on native flora and fauna, research on methods of removal, and education of coastal property owners and landscapers.

training In the summer of 2004, the first of several beach vitex identification training workshops was held. Participants walked portions of Huntington Beach State Park, learning to identify native plant species and beach vitex. These trained volunteers are urged to contact a member of the Task Force when a beach vitex plant is discovered. If a positive identification is made, the plant's location is added to the GIS database. The plant is then uprooted, if possible.

seedling control On several occasions in 2004, members of the North Inlet-Winyah Bay NERR staff joined Taskforce members to uproot vitex seedlings on the beaches surrounding the reserve.



mapping Laura Schmidt, GIS Analyst at the North Inlet-Winyah Bay NERR, represents the reserve on the Task Force. Her contributions include the initial mapping of vitex locations and maintaining a GIS database of all reported locations.

research Dr. Chuck Gresham with Clemson University and local high school student Amber Neal conducted experiments that suggest that vitex drives out native dune plants. Results indicate that vitex starves other plants of sunlight and deprives them of water. Neal and Gresham discovered that water has a difficult time percolating through the soil in which beach vitex grows. Additional studies are underway to identify environmentally sound methods to remove established plants.

website Jeff Pollack, GTP Coordinator at the North Inlet-Winyah Bay NERR, produced a website for the South Carolina Beach Vitex Task Force. The site features pictures of each stage of the plant's life cycle, links to task force agencies, and helpful information for those wanting to get involved.

For more information: visit the SC Beach Vitex Task Force website: www.northinlet.sc.edu/stewardship/vitex2.htm