



Green Gazette

The Australian Pine, *Casuarina equisetifolia*

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I am Liana McKenna, native of Revere, Massachusetts, a coastal city about 4 miles Northeast of Boston. I had never even heard of an invasive plant until I started the Master Gardener Program.

I originally began my project on all invasive plants and narrowed my research to the Australian Pine. I thought, "What a super tree."

The Australian Pine is a Category 1 invasive according to the Florida Exotic Plant Council, IFAS Center for Aquatic and Invasive Plants, and the Florida Noxious Weed List. The Florida

Environmental Protection Agency prohibits the possession, collection, cultivation, and importation of this pine.

IFAS definition of a Category 1 invasive is "a plant that invades or disrupts plant communities." I would like to add any plant that displaces wildlife and sea communities.

The Australian Pine is native to Australia but is not a pine. It is a flowering tree with separate male and female flowers. The needles are twiglets with close-set circles of leaves.



The Australian Pine was originally planted as a windbreak for farms, canal stabilization, and to prevent beach erosion. They are well suited to our climate, seeding prolifically in stands reaching 150 feet tall, growing as much as 5 feet per year. The pines produce so much leaf trash that they smother anything growing underneath, and if that isn't enough, they emit an herbicide that kills any plant in their drip zone. The root system has leguminous root nodules that fix the nitrogen in

the soil for their own fertilizer and can tolerate much saltiness. One would think that this is just a perfect tree for Florida, but what we have found out is that the Australian Pine is replacing the normal ecosystem of plants and animals that inhabit beaches. Loggerhead turtles, green sea turtles, and the American crocodile have lost nesting sites because the root systems of these trees are so shallow and dense that it is impossible to dig under the sand to lay eggs. Birds and water carry the seeds to islands where the pines are out-competing the mangroves which are rookeries for small fish and crustaceans. Inland, the marsh rabbits and gopher tortoises are being displaced because they are losing the native plants they feed on.

I don't want this to be just about doom and gloom. People are making great strides in taking out the pines and replacing the native plants. In Key West at the naval station they have taken out all the pines and are restoring the beaches. On Keewaydin Island the pines were removed and the loggerhead turtles are making a comeback. We can have a happy ending. The Australian Pine Task Force is working with community governments to rid areas of the pine and restore the native plant community, and the Center for Aquatic and Invasive Plants is working with teachers to provide curriculum to students to teach them the importance of eliminating invasives of all kinds.

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