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The Evil Weevil Is Here

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The Buckthorn Grove on SCCF trails has always been a place to observe many of the seven species of native bromeliads (*Tillandsia spp.*) found on the islands. The crevassed bark of the Buckthorn Tree is a perfect landing place for air born seeds of these epiphytic plants to take root. Fall walks through the grove often produce close encounters with the *Tillandsia* which have ended up alive and well on the ground following summer storms.

But all is not well in the Buckthorn Grove. A recent walk produced -- not whole -- but just the hearts of *Tillandsia utriculata* laying on the ground.

I had heard stories about an invasive non-native insect, the "Evil Weevil," devastating native airplants in Florida, spreading even into the heart of the Everglades. After collecting all the downed bromeliads and visiting the University of Florida's "Save Florida's Native Bromeliads" website, I began looking for larvae or pupae of the "Evil Weevil" (*Metamasius mosieri*). Unfortunately larvae, pupae, and even an adult were found.

The "Evil Weevil" was first encountered in Florida in 1989 at a Ft. Lauderdale bromeliad nursery and is thought to have entered the state in a shipment of plants from Veracruz, Mexico. By 1991 the weevil was present in four counties in southern

Florida; by 1999, it was present in 16 counties. As a direct result of attack by *M. callizona*, two species of *Tillandsia* -- *utriculata* and *fasciculata* -- have become endangered species. A look through the recorded sightings of this

invasive insect found reports in 1999 at the Koreshan Historic site in Lee County, on Sanibel in 2000, and the Sanctuary Golf Course in 2001. An island bromeliad raiser found the insect in her garden 10 years ago.



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In 1992 research was begun by Dr. Howard Frank at the University of Florida to find a natural enemy to import that kept the insect population under control in its home range. The natural enemy found was a tachinid fly of the genus *Admontia* that parasitizes the weevil larvae. In July 2007 the first release of 60 female and 35 male flies happened in the Loxahatchee Wildlife Refuge in Palm Beach County. There have been 11 other releases since then, with two releases at the Fakahatchee Strand and two at Big Cypress.

The “Evil Weevils” of the SCCF Buckthorn Grove have been



reported to Dr. Frank. According to Dr. Frank, a fly release is possible here on Sanibel when the research populations are larger. This research program seems to be run on

donations from the Florida Council of Bromeliad Societies. If the hearts of your bromeliads, native or not, can be easily pulled out, the weevil is the problem.

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