Evil Weevil Found in Fakahatchee
by Olan Ray Creel

It didn’t sink in until I reached home. I had just completed a 30-year long round trip. A trip that began with inspiration and ended with frustration.

In the early 70s, the Fakahatchee and nearby wilderness areas sparked within me a life-long love affair with native airplants. The first time I saw an airplant, I had no idea what it was. Dumbstruck by plants that grew on other plants, I bought a still treasured little book entitled *Orchids and other Airplants of Everglades National Park*, written by Frank Craighead. I just had to know what those strange plants were.

In 1990, I was living in a little condo complex in Broward County. The buildings were carefully carved out of an old cypress strand and every tree was jam packed with wild native bromeliads.

The Value of Bromeliads
adapted from http://savebromeliads.ifas.ufl.edu

Native bromeliads are a valuable component of Florida’s unique ecosystems, and their loss would be significant, not only in ecological terms, but also in terms of the loss of educational opportunities and the aesthetic pleasure that native epiphytes provide to visitors of natural areas.

Bromeliads are life-supporting components of the ecosystems in which they are found. Water accumulates between the leaf axils, especially in the larger tank bromeliads, and many small animals live in what to them are like ponds. The base of large leaf axils of mature *Tillandsia usneoides* may contain water throughout the year in South Florida, and up to 1.3 liters of water have been measured from large plants of this species in the state. Several insect and worm species depend on bromeliads in Florida for their survival, and larger animals such as frogs, snakes, and salamanders use these plants for protection and as a water source.

Even non-tank bromeliads provide protection for a number of insect and other invertebrate species. Dozens of spiders and insects hide within masses of Spanish moss and ball moss. Two species of bats (red bats and pipistrelles) use Spanish moss as resting sites during the day. Spanish moss also constitutes a significant portion of the nests of several bird species (e.g., northern parula warbler (*Parula americana*) and orchard oriole (*Icterus spurius*). Owls may also nest occasionally in some bromeliad species—the great horned owl (*Bubo virginianus*) has been observed nesting on top of clumps of *Tillandsia fasciculata* in Florida.

In addition to their important ecological roles, Florida’s bromeliads are an aesthetic addition to the state’s parks and natural areas. The Florida State Park Service received a National Gold Medal State Park Award for Excellence, designating the Florida Park System as “America’s Best Parks.” During 1999-2000, there were 16.7 million visitors to Florida’s state parks, which are the No. 2 destination for air visitors to Florida. The overall direct economic impact of the state park system on local economies was nearly $464 million in 1999-2000. Bromeliads adorn most of the national, state, and county parks in Florida, contributing substantially to the unique natural features that attract so many visitors each year. Their conservation is of consequence to the growing trend of ecotourism activities in the state.

Finally, epiphytic bromeliads provide an exceptional opportunity for teaching about many biological and environmental themes. In addition to analyzing such concepts as how epiphytic plants can survive in treetops without soil and how the water they collect serves as a home to different kinds of animals, students can appreciate some of the natural treasures of their state and come to understand how easily they can be lost forever. Teachers from elementary to college level and local environmental educators have been bringing groups to Myakka River State Park for hands-on experiences with these distinctive plants and to see the threats they are facing. Opportunities exist for similar programs at other bromeliad-rich parks. Conservation of the state’s bromeliads ensures that teachers and environmental educators have continued access to this valuable resource when using parks for hands-on education.

It was the year those airplants began to fall dead by the thousands. Few remain today.

It was the year that some fellow members of the Bromeliad Society of Broward County told me about a newly arrived invasive species, a weevil.

Not long after, I learned that an entomologist at the University of Florida was desperately tracking this weevil. His name was J. Howard Frank.

Howard Frank saw early on what was at stake—the survival of one of Florida’s greatest natural treasures. He hasn’t taken a break since. Just a few months ago, at a Bromeliad Weevil symposium at Highlands Hammock State Park, (gratefully conceived by a dedicated Park Ranger there named Dorothy Harris) I listened to Howard’s latest presentation. He spoke of extinction. Not only of our native bromeliads but also of the known and unknown life forms they harbor or support. He hinted at the subject of time—and time wasted. Time spent looking for and wondering about the paucity of funding for something so important. Money long needed to make an all-out push to perfect a biological control for the Mexican bromeliad weevil.

Thirty years is a long time too. Two years out of high school and I was being inspired by airplants in the Fakahatchee. On March 20th, 2002, I was there again. I was looking for the half-inch-long weevil that I knew, because I’d seen it happen in so many places, could destroy most of those plants that have surely inspired so many others since.

I wasn’t all that surprised when I did find it. The “evil-weevil,” *Metamasius callizona*, with its official new common name, the Mexican bromeliad weevil, had been found by Howard three years earlier about