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Palmetto

A New Species of Native Orchid? • A Conversation With Doug Tallamy • Florida's Botanical Art

Dancing In The Scrub

BY STEVE MORRISON

Chapmannia floridana is unique to Florida, but is quite common in upland habitats. Why it takes to dancing becomes clear with closer observation.

Chapmannia floridana flowers. Photos by Shirley Denton (top) and Paul Rebmann (bottom).

In the dim light of dawn, an ancient ritual persists in the scrub, not far from where you perform your morning rituals.

This one is a subtle rite; by no means a spectacle. Its first clue comes in a curious form: the nodding of flowers in the morning stillness. Being surrounded by nodding *Chapmannia floridana* flowers is to become lost in a silent, undulating ballet. Are little fairies working merrily down in the sand pulling on the stalks? What else could create this wonderful display of moving color in the saturated air at daybreak?

These mustard-colored flowers are perched along a long, erect stem almost waist high. Named after the famous botanist, Dr. Alvin Wentworth Chapman, who scoured Florida in the 1800s, *Chapmannia floridana* is unique to Florida, but is quite common in upland habitats. Why it takes to dancing becomes clear with closer observation.

The answer is quite simple: early-rising bumblebees are making their rounds. The frail architecture of the long stem and the habit of the flowers to lean over to one side set the stage. As it lands in search of nectar and pollen, the bee weighs down the flower in a graceful arc. Only in the first light of day does this species seem to be drawn to *Chapmannia*. The mutually beneficial exchange between this plant and this insect has been occurring for a very long time. Bumblebees were bending down *Chapmannia* flowers long before humans arrived in Florida. However, the bees that arrive each spring are a new generation, and with no instruction, they somehow know to continue the age-old pilgrimage to these flowers.

Does *Chapmannia* depend on this species of bumblebee for pollination? Does the bee depend on this plant, or is this just a dance of strangers? It is quite possible that no one knows. There are so many interactions like this between plants and insects. And what other, subtler rituals does this humble plant sustain? Are its seeds hauled off by a specific ant to its colony, unintentionally aiding in the dispersal of the seeds?

Perhaps fire plays a role in *Chapmannia's* life cycle, for it occupies Florida's dry places that have been frequented by wildfires for millennia. Does fire remove ground debris and open up places for the plant to establish itself? Or does fire in some way prepare the seed for germinating, or perhaps it changes soil chemistry to favor this plant? And what requisite relationships take place below ground between *Chapmannia's* roots and soil-dwelling microbes? So much goes on in the life of every plant, every insect. We observe the most obvious, the undulating flowers. But there is much more. Most of nature's dances go unnoticed.

We know just snippets about *Chapmannia floridana* and the bee that pollinates it. But we don't need to know anything at all about either of them to marvel at the sight of dancing flowers in the morning ether. And what is a dance, but the coming together of two separate lives for just a moment, together creating the wonder that is life on earth.

Chapmannia floridana flowers are perched along a long, erect stem almost waist high. Photo by Paul Rebmann.

About the Author:

Steve Morrison lives on former (and future) oceanfront property on the eastern slope of the Lake Wales Ridge. With scrubby flatwoods outside his back door and Tiger Creek out the front door, he is immersed in the daily happenings of the natural world. Although he has no formal science background, he has been a curious observer of Florida's natural landscape for a long time. Finding equal fascination in the workings of the European honey bee, Steve has spent a good bit of his free time over the years as a beekeeper, and as a result has come to be called "Sticky Steve" by his friends. For his day job, he manages The Nature Conservancy's preserves on the Lake Wales Ridge.

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The purpose of the Florida Native Plant Society is to conserve, preserve, and restore the native plants and native plant communities of Florida.

Official definition of native plant:
For most purposes, the phrase Florida native plant refers to those species occurring within the state boundaries prior to European contact, according to the best available scientific and historical documentation. More specifically, it includes those species understood as indigenous, occurring in natural associations in habitats that existed prior to significant human impacts and alterations of the landscape.

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Editorial Content
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