## The Brazoria Palm

## By Celeste Silling

Did you know that Brazoria County has been the subject of a long and spirited botany debate? Palm botanists puzzled over (or pointedly ignored) the problem of the Brazoria Palm for years. They couldn't agree on what exactly what it was or where it came from.

Biologists classify organisms taxonomically, naming and defining them based on shared characteristics and relations.



Taxonomy is a very useful study when we are looking at the natural history of a species, but it can be extremely frustrating when we can't nail down what exactly something is or where it belongs. This was the case with the Brazoria Palm.

To the layperson, many palm species look the same, especially when they are young. Age brings fruit and trunks, which make them more distinguished, but still not easily identifiable. There are a few native species of palm in Brazoria County and frankly they all look almost identical to me.

However, a palm expert can tell you that the Brazoria palm has smaller fruit than the Texas palmetto *S. Mexicana* and is more costapalmate than the dwarf palmetto *Sabal minor*, which means it has a slightly denser arrangement of leaves around the midrib. On the *Sabal minor* palms, the leaves come out like fingers on a hand. On the *Sabal x brazoriensis* palms, the leaves come out like fingers on a hand but also continue to grow out to the wrist.

These differences would seem to indicate that the Brazoria Palm is its own species, and that is where the debate began. Scientists were hesitant to call this a new species for a few reasons. For one thing, as I've said, it looks almost exactly like the other palm species. For another thing it had only been found in a single county and was relatively difficult to find and study. Taxonomists couldn't be sure whether these few strange plants were a new species or just a different version of an existing species.

The answer turned out to be somewhere in between. With DNA technology, scientists like Douglas Goldman were able to test these plants and know where they belong on the palm family tree. It turns out that the Brazoria Palm is a cross (hybrid) between *Sabal palmetto* and *Sabal minor*. It was the first known hybrid in the Sabal species and one of the few known palm hybrids that naturally occur in the United States.

The Brazoria Palm is a very special plant and kind of a treasure hidden in plain sight. It is rare, specific only to this region, and very difficult to identify. I personally have spent hours walking through the jungle on our property looking for this plant and can assure you that it was extremely gratifying when I finally found it. Or, well... got someone else to show it to me. If you are looking for a fun and challenging natural history mystery, I recommend going out and trying to find the rare and infamous Brazoria Palm.

Thanks to Warren Pruess and Chris Kneupper for researching and cultivating the Brazoria Palms on the Gulf Coast Bird Observatory property and kindly trekking through the jungle to show them to me!