



Naturalist Notes

Will it smell like vanilla?

I'm not a fungus expert. So, when I spotted this pretty little ($\frac{3}{4}$ ") velvety red ball under the old yaupon in my backyard this spring, I didn't know what it was. I didn't know if it was related to the grey moss-like structure with it. It was just interesting. The next morning, armed with a camera for further investigation, I was dismayed to discover the red ball and the moss-like structure were completely gone. A herd of marauding opossums were the suspected villains.

But throughout the summer, I sometimes noticed bits and pieces of similar red material. Finally, in late July, I saw a whole mushroom — with a snail snacking away on it. The internet gods tell me it is likely a "Roody's Bolete" (*Boletus roodyi*). It's edible (not by untrained me) and has pores rather than fins under the cap. And when it's dried, it will smell like vanilla. Really? Should I believe that? I think I'll dry it and find out.

Info: <https://boletes.wpamushroomclub.org/product/boletus-roodyi/>

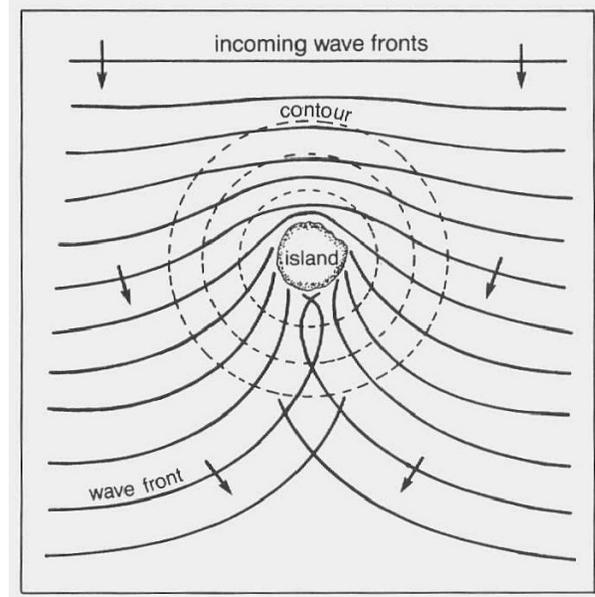
Joy Mullett



Water of the Month - Ripple Map

Ripples in ponds are the equivalent of waves in the ocean. And rocks or steppingstones are good stand ins for islands. When wind blows in one direction, ripples hitting the stone are reflected back, creating an area of choppy water. Ripples bending around the rock create similar patterns on either side. On the downwind side of the rock, the water is calmest close to the rock. Further away, the ripples create another pattern as they meet from both sides.

Pacific Island navigators relied on predictable wind direction and wave patterns to locate distant islands in a vast ocean.



Semantic Scholar – Chapter 8: Shallow Water Waves



Mothing at Exploration Green

More than fifty people attended Moth Night at Exploration Green on July 17th. The highlight occurred at the end of the evening when we were treated to a firefly display between the trail and the lake. Brian Schrock and Rich Sommer did a great job of organizing this community event.



Removal of invasive shrubs from a prairie habitat - Introduction of pollinator host trees to community gardens and riparian restoration sites: A Win-Win situation. (and a learning experience!)

Removal of woody shrubs is a necessary task to maintain a healthy prairie landscape. Katy Prairie Conservancy (KPC) volunteers planned to remove the shrubs and small trees that were growing at the northern end of the Indiangrass Preserve earlier this summer. ([Visit Us — KPC \(katyprairie.org\)](https://www.katyprairie.org))

Many of the plants that needed to be removed to maintain the prairie were small trees and shrubs that are natives sought for riparian restoration and/or pollinator hosts; Hercules Club, Yaupon, Possomhaw and Roughleaf Dogwood. With the abundant rain earlier this summer the ground conditions were perfect to try and remove the plants and to transplant them. As this was not KPC's focus, Houston Audubon agreed to accept the plants, particularly as the species are on both the Houston Audubon Bird-Friendly Habitat [Bird-Friendly Habitat Guide - Bird-Friendly Communities \(birdfriendlyhouston.org\)](https://www.birdfriendlyhouston.org) and NPSOT's Native Landscapes for Birds list. [Native Landscaping Certification Classes - B-B-B-Bird Is The Word! | Native Plant Society - Houston Chapter \(npsot.org\)](https://www.npsot.org).

Over a period of several weeks the small trees / shrubs were removed from the Indiangrass site, taken to Edith L. Moore Natives Nursery and potted up. While the ground was soft to dig the plants, the temperatures during this period were high and not surprisingly the small trees went into transplant shock.



Photo credits (above): Berri Moffet, HAS. Frass tubes extruding from the tree trunk, and a cross section showing the beetle drilled hole into the tree xylem tissue.

Hercules Club (*Zanthoxylum Clava-herculis*), also known as the Toothache tree was one of the tree species to be removed. Once potted up, one of the larger stressed trees (1/2" diameter trunk) was noted to have tubes of white sawdust extruding from the tree trunk a day or two later. . Over time the phenomenon appeared to move up the tree. On investigation it appeared that the tree had been infested with an Ambrosia beetle and the noted sawdust was actually insect frass! The beetle drills into the water transport system of the tree and lays its eggs. These then hatch and feed on the fungi that is being "farmed" within the tree.

With further internet investigation, and the discovery of entire past conferences dedicated to invasive non-native *Ambrosia* spp. infestations of commercial crops, it was deemed prudent to destroy the infested tree and beetle.

Not knowing the source of the infestation, the next tree transplant set was isolated and re-potted at another remote site. Fortunately, both the ELMS Natives Nursery and the new site showed no new infections from the beetles as the small trees recovered.

Hercules Club is a host plant for the Eastern Giant Swallowtail butterfly (*Papilio cresphontes*), and during collection of the trees several caterpillars were noted. They have the classic “bird poop” camouflage, which is a thrill to find on plants that have been dug up, drug through a prairie in a bucket under a wet towel, loaded into the boot of a car, stalled for a day due to “digger” fatigue, transported to a potting site and eventually put into an upright situation for the tree to settle in!

Their camouflage is superb, as shown below.

One large caterpillar formed a chrysalis within days of the tree being relocated, and the newly potted trees at the remote site have been located by local butterflies as the small trees are now hosts to multiple tiny caterpillars. Julie D’ablaing



Eastern Giant Swallowtail chrysalis attached to the lower trunk of a small Hercules Club tree. (left) Tiny Eastern Giant Swallowtail caterpillars starting life on recovering Hercules Club tree transplants. (right) Photo credits: Julie d’Ablaing.

Advanced Training Approval Reminder

I wanted to send a reminder about potential Advanced Trainings. Please make sure if they are not advertised by the chapter to fill out an AT request form and email me. Sometimes certain events are not eligible for AT credit even if offered by our affiliates.

Adrian Medellin



A Choice of Pollinators

The impact of the honeybee, *Apis mellifera*, on our economy is well known. Economists describe the pollination value of the honeybee in the billions of dollars. And who has not had a little plastic bear or other container that is full of honey in their pantry? Since it is so ubiquitous it is easy to assume that the honeybee provides for most, if not all, of the pollination needed by agricultural crops and all the other types of plants, including those in our home plantings. Easy to make that assumption.

The familiar honeybee was in fact imported by early European settlers for, guess what? Yes, its honey. Those imported honeybees escaped into the wild, are now naturalized and are relied upon almost universally for their pollination activity.

But, as with most introduced species there are attributes of the native plant life that are not ideally suited for the honeybee. For instance, the shape of many native flowers or the physical spacing between plants or the distance that is required to travel between flowers can come into play. It turns out that the honeybee can only handle certain shapes of flowers, it does not pollinate in cool conditions, and it only pollinates for a relatively short period each day.

Do you have a tomato garden in your back yard? Have you ever thought about what pollinated your tomato plant so that you end up with a nice fresh home-grown fruit? If you assumed that the honeybee did so you would be wrong. The honeybee cannot pollinate the tomato plant because the plant requires that its pollen be dislodged and essentially shaken and “driven” onto the reproductive parts. The honeybee simply cannot physically do this. A strong wind might manage occasionally to create the necessary conditions. But the insect that does the perfect and efficient job for the tomato is one of our native bees, the bumble bee. The bumble bee grabs onto the tomato flower and vibrates its wings and thorax in such way as to “buzz” the pollen loose into a wide plume inside the flower. And that is the way that the bumble bee pollinates the tomato. This special technique is known as “Buzz Pollination”. Perhaps you might have heard, or even felt, the vibrations of the bumble bee. Commercial tomato growers take advantage of this technique and bring colonies of bumble bees into their greenhouses to have their tomato plants pollinated.



Left to right - Eastern Carpenter Bee; American Bumble Bee; Strand's Carpenter Bee

There are numerous other bees like the bumble bee that are native and are significant in that they pollinate a wide range of wildflowers and other plants much more efficiently than the naturalized honeybee. Native bees are more efficient for the plants found outside of agriculture sites in that they can pollinate significantly more flowers per day, can work in cool to cold temperatures in the spring and the fall seasons, and can pollinate a diverse range of different plant types and flower configurations. So, if you like flowers, wild or home grown, and a variety of plants, you benefit greatly from our native bees.

An additional benefit in the garden is that most native bees, unlike the honeybee and bee relatives like wasps, is that native bees are generally quite docile and non-aggressive. This means that you are less likely to be stung as you work in your garden. Some entomologists report that it is actually rare to be stung by a bumble bee. Of course, you still need to use caution with any bee and avoid closely encroaching upon their nest.

One of the ways to make your home attractive to native bees is to provide nesting materials. Many native bees nest in the ground or in holes in trees, tree limbs, fallen branches, decaying twigs, stumps and the like. Therefore, native bee houses are easy to make – drill a short section of a fallen limb with holes 3/8 inches in diameter and 4 to 5 inches deep and securely hang between 3 to 5 feet up so it does not move in the wind, face it south or southeast in a dry area or with some sort of rain shield. Another easy nest option is to take an old milk carton, cut it open on one end to make an open-ended box, put glue on the back end and fill with paper straws (not plastic), again securely hang that facing south or southeast, add a rain shield or locate under protection, and you will have a perfect native bee nest habitat. For the many ground nesting bees, either scrape away an area of grass from your lawn for the bee to tunnel into or simply provide a pile of sand which is excellent material for the ground nesters. Provide such nesting options and you may attract several of the numerous species of native bees visiting your garden to shuffle your pollen around. Happy pollinating!

Greg Brazaitis