

# OBSERVATIONS FROM NATURE

WINTER 2, 2013

PHOTOGRAPHS BY  
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## ***Fly Away***

Many plants have wind-dispersed seeds, such as this Groundseltree (*Baccharis halimifolia*), also called Sea-myrtle. It is the only native member of the Aster (Composite) family that reaches tree size in the Eastern U.S. It is very tolerant of salt spray, so it grows well near the seacoast. However, it has been extending its range away from the sea, and is widely found in disturbed ground, for example, along roadways. The specimen above is growing along our driveway, which is far from the sea. The scientific name is derived from Greek for two other plants. *Baccharis* is the name of a plant with fragrant roots named after the god Bacchus; *halimifolia* means having leaves similar to Halimus, or Saltbush, which is a different shrub entirely.





Bald Cypress (*Taxodium distichum*) and Spanish Moss (*Tillandsia usneoides*)





### ***A Place in the Sun***

Here is Joyce looking over a large aggregation of turtles basking in the late winter sun at Magnolia Springs State Park near Millen, Georgia. There were more than 50 turtles in this group, and there were several more groups of comparable size around the pool where the spring emerges. Nearly all of these are Yellow-bellied Sliders (*Trachemys scripta scripta*). In this species the distinctive markings on the top of the shell (carapace) and on the head tend to become indistinct as the animal ages, but on younger specimens, like the one pictured below, the vertical red or yellow stripes can be seen on the carapace. The back portion of the shell is serrated, and the head has a broad yellow stripe behind the eye.







### ***Wolves with Eight Legs***

Wolf Spiders can be found roaming about even in January. The one at the top was crossing our driveway. Wolf spiders do not spin webs to capture prey, but run it down or wait in ambush. The middle photograph is a head-on view of the spider in the top photograph. It shows the eight eyes arranged in three groups which are characteristic of Wolf Spiders (four large eyes in the middle, and two medium-sized eyes on top of the head).

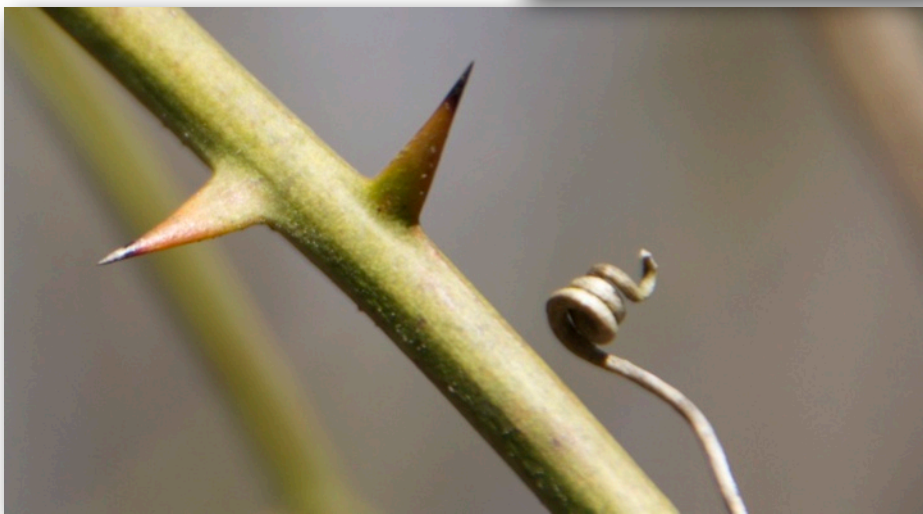
The photograph on the bottom (taken by our friend Brenda last summer) shows a female Wolf Spider with her babies on her back. The female Wolf Spider carries her egg case around attached to the spinnerets on the tip of her abdomen. When the eggs hatch, the babies climb on board and travel with her for a short period.





### ***Sticky Stuff***

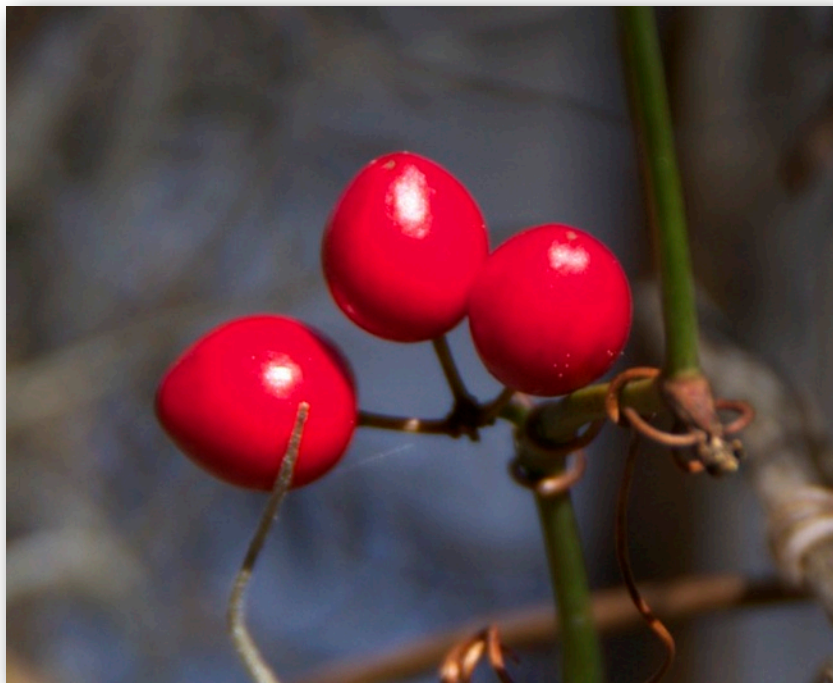
Species of *Smilax* are commonly called Greenbriars or Catbriars. They are woody perennial vines that bear impressive thorns (below) and coiling tendrils that enable them to climb into trees. The fruit of *S. rotundifolia* growing along our driveway resembles a clump of grapes.







*Smilax walteri*, here growing at Clarks Mill Pond near Louisville, Georgia, has bright red fruit. *Smilax* is in the Lily family (Liliaceae), and about seven species are found in Georgia. Greenbriars can be troublesome to get rid of; they have a very long root system. To see how long the root can be, see photos at <http://www.walterreeves.com/landscaping/smilax-id-and-control/>.







### ***Too Many to Count***

At Clarks Mill Pond, the Water Milfoil (*Myriophyllum* sp.) is beginning to show fresh growth. The generic name *Myriophyllum* means in Latin “too many leaves to count”. Some foreign species of *Myriophyllum* have become invasive weeds in American lakes.



### ***Early Butterfly***

This late-winter butterfly is a Carolina Satyr (*Hermeuptychia sosybius*) belonging to a group commonly known as “Browns” or “Wood Nymphs”. Their larvae usually eat some sort of palm, grass or bamboo.

In Greek mythology, satyrs were lustful, drunken woodland gods. They were usually represented as a man with the ears and tail of a horse. I am not sure why these small inoffensive butterflies are called satyrs, but perhaps it is because they flit about through the woods with an irregular flight pattern as if drunk.





### ***Golden Bells...***

...is the only common name I have heard for this plant, which most people call by its generic name Forsythia. The plant is native to Eastern Asia, where there are about 10 species and to Southeastern Europe, where one species occurs. The cultivated varieties that we see in our area are usually hybrids involving *Forsythia suspensa* and *F. viridissima*. These species were growing in gardens in Japan and China, respectively, when they were discovered by European plant hunters in the 18th and 19th century. The plant was named after William Forsyth (1737-1804), a Scottish botanist.

Forsythia blooms in late winter in our area. The flowers open before the leaves are fully expanded, so it makes quite a show.





### ***Suspicious Looks***

We often stop, or turn around and go back, in an effort to photograph birds perched on roadside poles or power lines. These two stayed long enough to have their pictures taken. They are the two largest hawks we commonly see in our area. On the left is a Red-tailed Hawk (*Buteo jamacensis*). Some of the rusty-red feathers on the upper surface of its tail can be seen. On the right is a Red-shouldered Hawk (*Buteo lineatus*). Its tail is black with white horizontal stripes (bottom photograph). The pattern of the feathers on the breast is also very different in these two species.





### ***Finch Cousins***

Late winter has brought big mixed flocks of Goldfinches (*Carduelis tristis*) and Pine Siskins (*Carduelis pinus*). Both species favor sunflower seeds, and they keep us busy filling the feeders.

Characteristic features of the siskin include the heavy streaking on the back and breast, the forked tail (left), and the yellow markings on the wings (below).







## ***Back Yard Birds***

A Yellow-rumped Warbler (*Setophaga coronata*) also has yellow on its head and flanks.

Eastern Phoebes (*Sayornis phoebe*) like the one in the middle photograph like to make mud nests on our downspouts. They perch in a prominent place and dart out to catch insects in true flycatcher fashion.



Purple finches (*Haemorhous purpureus*) are another common winter visitor. The male in the photograph on the left shows the characteristic rosy color on its head and back. Females lack the rosy color.



## ***Tree Skeletons***

Look around in any older forest, and you will often see scenes like these. All three are the last remnants of dead pine trees. Pine tree trunks contain two sorts of wood. The exterior portion is called softwood or sapwood. It is living tissue and functions in transporting substances up and down the tree. The interior portion is heartwood. The heartwood is impregnated with resin, which makes it very hard and resistant to decay. The photograph to the left shows a tree with only the heartwood left standing; the photograph to the right shows heartwood in the lower part with a portion of the sapwood (now dead) sheathing the top part of the trunk.



The image to the right below shows the heartwood remains of the base of a pine tree with a bit of the taproot to the right side. This piece of heartwood is about four feet long, and it has not visibly changed in the 20 years we have lived in our present house. Fallen hickories and tulip poplars have completely decayed away during that same time period.







To the left is the remains of a pine tree that was sawed down many years ago (it was just like this when we arrived here 20 years ago). This stump is composed entirely of heartwood. I used a hatchet to slice off a vertical slab of the stump, and that piece is shown in the photograph below. This bright orange color and the decay resistance conferred by the resin content makes pine heartwood, also called heart pine, a valuable building material. It is nearly as hard as oak and is very resistant to wear and insect damage.

Heart pine was most easily obtained from Longleaf Pine (*Pinus palustris*) which covered vast acreages when the Europeans arrived in the Southeastern U.S. These trees grew to a very large size and contained a proportionately larger amount of heartwood than other pines. However, these large Longleaf Pines were ruthlessly harvested until very few large trees remained. Other pine trees can be used as a source of heart pine, but few are allowed to grow large enough to make it economically feasible. Today much of the heart pine that is available is recycled from earlier structures.



Cross section of a tree showing dark interior heartwood and light-colored sapwood.

The resins that impregnate heart pine are largely composed of terpenes and other compounds; these are highly flammable. Another use of heart pine is as kindling to start fires. Small pieces can be shaved off and will readily ignite. In this capacity heart pine is called “lighterwood” or “fatwood”. A demonstration is shown on the next page.





In the photograph to the left, I am holding a lighter to the piece of heart pine that I hacked off the stump shown on the previous page. Black drops of resin can be seen welling up along the edges of the burnt area. After a short time, the piece of heart pine catches fire and blazes away. It makes quite a nice torch, as can be seen in the photograph below. The flame produced is very hot and emits a lot of black smoke, so it is better to use lighterwood to start outdoor fires rather than indoor fires in a stove or fireplace.







## ***Winter Gold***

Broomsedge (*Andropogon* sp.) has a nice golden glow during the winter. It is a grass, and not a sedge as the name implies. It used to be gathered and tied together to make brooms. The common one around here is *A. virginicus*, but there are many species in the U.S. including *A. gerardii*, Big Bluestem, which dominated the tall grass prairies on the Great Plains. In late fall and early winter, broomsedge produces interesting wind-dispersed seeds. Each seed has a long “tail” called an awn, which twists in responses to changes in humidity and helps to “bore” the seed into the ground.

