

OBSERVATIONS FROM NATURE

FALL, 2012-PART 1

PHOTOGRAPHS BY
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Three Dutchmen

This unusual looking flower is an Asiatic Dayflower (*Commelina communis*). It has two large, bright blue petals, and one small transparent, whitish petal at the bottom of the flower. Linnaeus gave this plant its generic scientific name, *Commelina* after three Dutch people surnamed "Commelijn". Two became distinguished botanists (the two blue petals), and the third died young (he got the shrunken bottom petal). The plant is native to East Asia and the northern part of Southeast Asia. It is called "Dayflower" because the flowers only last one day. The plant is regarded as a noxious weed in North America. It is pretty though...



Aster Time

Asters are one of our most common Fall wildflowers. Some of the species flower in profusion, such as the one pictured above at the base of an Oak tree. The common name “Aster” comes from the Greek word for “star”, and refers to the shape of the flower. There are about 600 species in this group, and they are hard to identify to species. They all used to be in the genus *Aster*, but now the New World species have been split up into several other genera.



More Aster pictures

These are probably a species of *Symphyotrichum*, which is one of the new genera into which New World Asters have been placed. Asters are in the plant family Asteraceae, along with sunflowers, goldenrod, daisies, and many other plants in which each, apparently single, flower is actually a group of small flowers. In this one pictured here, the flowers in the center of the “Head” start out yellow and turn deep violet as they age.



Beetle Wings

Here is a head-on view of a Long-horn Beetle that was attracted to our moth lights.

Beetles are in the insect order Coleoptera, which means “sheathed wing” in Greek. They have two pairs of wings, but the front pair have been altered to form protective covers called elytra (singular form is elytron). In order to fly, the beetle must raise the front pair of wing covers, extend the rear wings (which have been folded in under the elytra), and take off.

In the photograph below the beetle has raised its elytra and extended its rear wings for takeoff.





Devil's Darning Needles

A lot of people grow *Clematis* vines on their mailboxes or on some sort of trellis in their yards. These are horticultural varieties, with large, colorful flowers. They are mostly hybrids of plants originating in China or Japan. *Clematis* is in the Buttercup family (Ranunculaceae). There are about 300 species worldwide.

However, we have a native species of *Clematis* in the Southeast. It is *C. virginiana*. The flowers are small, white, and fragrant. In the Fall, the plant displays the very interesting structures shown here. The brown seeds that have formed in the center of the flower each have a long white, curving structure attached to them. This gives them their very shaggy look.



Another common name for this plant is “Virgin’s Bower”. Bower means “a pleasant shady place under trees or climbing plants in a garden or wood”. I am not sure why only virgins are specifically mentioned as being able to enjoy the pleasant shady area under these plants.



Free Lunch

We saw an interesting array of creatures on the campus of Georgia Southern University in Statesboro. There is a large lake on campus next to the cafeteria. Students often eat on an outside patio area and throw bits of food into the lake. The denizens of the lake have learned to anticipate a treat every time they detect someone on the patio. In this photograph in addition to the turtles on the surface, the shadowy figures of fish can be seen below. Bluegills (*Lepomis macrochirus*) and Largemouth Bass (*Micropterus salmoides*) were present on this day.

It is hard to be sure of turtle identification unless you have them in hand. However, the lower photograph appears to be a River Cooter (*Pseudemys concinna*). It is a male; the long fingernails on the front feet are used in a courtship ritual. The male gets in front of the female and waves these long fingernails alongside her head to announce his intentions.



Mossbacks

Many aquatic turtles have algae growing on their shells. As the turtle grows, new, larger scales (scutes) grow below the older ones on the surface of the shell. When the older scutes are shed, the new scutes are free of algae for a time. The photograph on the left shows this contrast quite well.

The fish in the background of this picture just above the turtles is a Bluegill. The black spot at the base of its dorsal fin gives it away.

The turtle to the right is a Yellow-bellied Slider (*Trachemys scripta scripta*). Its long front fingernails identify it as a male. The broad yellow bars on the pleural scutes are characteristic of this subspecies. (The row of plates down the middle of the back are the vertebral scutes, the next row outward are the pleural scutes, the row along the edge are marginal scutes). Almost all of the older scutes have recently been shed. Only two algae-covered vertebral scutes remain.





One last turtle from the Statesboro lake. This one is the Red-eared Slider (*Trachemys scripta elegans*). Notice that this one differs only in the third part of the scientific name from the Yellow-bellied Slider on the previous page. This means they are very closely related. They are a subspecies of the species *Trachemys scripta*, which is the most variable of all turtles. About 15 subspecies are known.

Hatchlings of *Trachemys scripta* were once very popular as pets, and millions of them were exported all over the world. Lots of them were farm-raised; there were more than 150 turtle farms in existence by 1960. Large numbers of adults still had to be collected in the wild to supplement breeding stocks. A U.S. law, enacted in part because turtles as pets carried a risk of transmitting *Salmonella* bacterial infections to their human owners, banned the sale of small turtles. Even today, three or four million baby turtles are still exported.



Omnivores

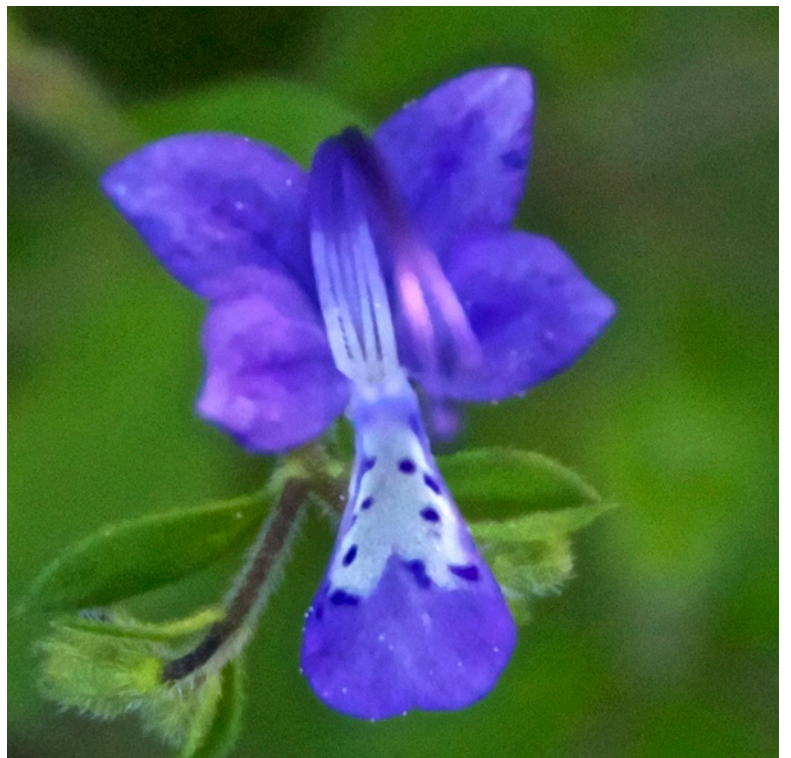
American Crows (*Corvus brachyrhynchos*) will eat just about anything. Here they are finishing off a watermelon on our driveway. Crows are very intelligent and adaptable birds. Among their many talents is an ability to distinguish individual human faces. They have adapted to human encroachment quite well. Their social structure is well-developed; one seldom sees a crow alone.

Crows are particularly susceptible to the West Nile Virus, but no cases of crow-human transmission have been recorded.



Blue Curls

A small plant growing along our driveway was covered with these tiny blue flowers. The common name of this plant is “Blue curls”, and the scientific name is *Trichostema dichotomum*. It is a member of the Mint family (Lamiaceae) and is found throughout the Eastern U.S. and into Southern Canada. The flowers have two “lips”, and the upper lip is 4-lobed. The lower lip is partly blue and partly white with blue spots. The blue color in this little flower is very intense.





The reproductive parts of the flower (stamens and pistil) curve up out of the flower in a distinct curl, hence the common name. The flowers open in the morning and stay open only until about noon.

Relaxing Time

Here is a Gray Squirrel (*Sciurus virginiana*) taking it easy on the driveway. I have seen squirrels adopt this pose many times, but I am not sure why they do it.



Queen of the Night

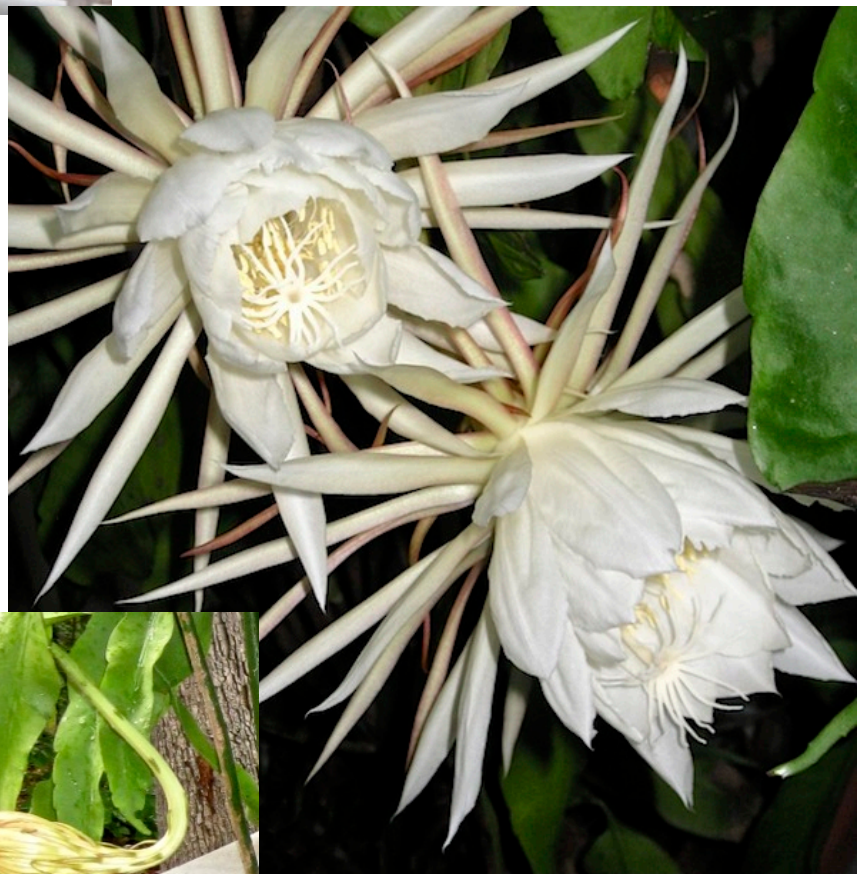
Our friend Brenda has a keen interest in nature and photography. She provided these great pictures of her *Epiphyllum oxypetalum* plant with its spectacular flowers. Cuttings of this plant have been passed down to members of Brenda's family from a plant owned by her grandmother. She says the plant blooms about three times a year. The blooms typically open about midnight and begin wilting early the next morning.

This plant is a member of the cactus family (Cactaceae), and it has several common names including Jerusalem Cactus, Dutchman's Pipe, Gooseneck Cactus, Night Queen, and Night-blooming Cereus (actually *Cereus* is another type of cactus that is columnar in form, but a number of night-blooming cacti related to *Cereus* are lumped together under the common name "Cereus"). The plant is native from Mexico to Venezuela and Brazil. The flowers have a strong aroma, and since



they bloom at night and are white, one would suspect that they are moth-pollinated. Brenda says, however, that she has never seen any insects around her plant when it flowers.

An interesting group of stories from owners of these plants can be accessed at: http://kendruse.typepad.com/ken_drusereal_dirt/night-blooming-cereus/. This site is part of a garden podcast produced by Ken Druse.



Right: a bud of the plant showing how the stem curves so that the stem and bud resembles a "Dutchman's Pipe".



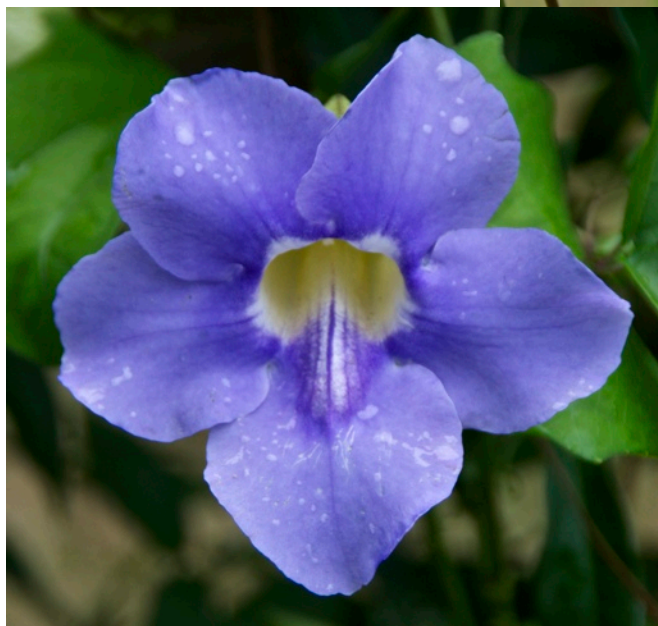


Blue Beauty

My neighbors Jack and Peggy have a brilliant blue flowering vine growing on one of their fences. They bought it in Panama City, Florida and transplanted it here. It is

Thunbergia grandiflora, a native of India, Bhutan, and Southeast Asia. There are many common names for this plant including Sky Vine, Blue Sky Vine, Blue Trumpetvine, Bengal Trumpet, and Bengal Clockvine. It is apparently called “clockvine” because it coils around its support in a clockwise direction when it climbs. The generic name is for Carl Peter Thunberg, a Swedish botanist and pupil of Linnaeus. The flowers mature to form a seed pod, and the seeds are flung up to several meters away from the parent plant when the pod matures and opens. The plant is quite

The upper photograph shows the toothed opposite leaves characteristic of the plant. Below are three stages in flower development.



hardy, although it dies back to the ground in colder climates.

T. grandiflora has become naturalized in many parts of the world and is a serious weed in Australia where it climbs over and smothers other vegetation. This is similar to the way Kudzu (*Pueraria lobata*) grows in the American Southeast. *T. grandiflora* has been classed as an invasive in Florida and a rampant weed in Hawaii.