



**Danger lurks in the form of an adult
Five-lined Skink**



The attack of the Assassin Bug nymph

Brunswick Wildlife Breaking News! Lost World Discovered!

Breaking news! This just in! Details at 11! To say these phrases have been diluted over the years by cable news is a British understatement.

You can tell the relative slowness of the news day by how deeply they dig into local news just to have something...anything...to report. As the camera pans out and Wolf gives you the mind-numbing details of a structure lost in a 17-acre wildfire, you can actually see the half moon on the door that was saved.

Though not deserving the level of hyperbole of a car chase on a Los Angeles freeway, I am happy to report the discovery of a new ecosystem in a holly bush just outside my garage door.

Ecosystem? Isn't that also hyperbole? No. You may think of an ecosystem as a large habitat such as the salt marsh, bottomland hardwoods, or pine savanna; however, there is no set size. A rotten log or a puddle in your backyard garden may be an ecosystem. Also, there is an ecosystem nearby that you are very much in touch with...namely your body.

By definition an ecosystem includes all biotic factors (living organisms such as plants, animals, and microorganisms) within its boundary plus its non-living abiotic factors (soil, rocks, minerals, water sources, and atmosphere). These components are linked by energy and nutrient flows and function together as a whole.

An ecosystem's food web (a network of food chains) represents the flow of energy between organisms. The energy transfer begins with plants that form the web's base. They absorb nutrients from the soil and grow to provide a source of energy. A plant-eating organism (herbivore) acquires this energy when it eats the plants.

In turn, the herbivore may be eaten by a meat-eating organism (carnivore) or by an organism that consumes both plants and herbivores (omnivore). Of course, carnivores and omnivores may then be eaten by organisms above them in a food chain.

I have only compiled a partial picture of my ecosystem's food web but it provides a great ecology lesson. In early July, I found six Milkweed Assassin Bug nymphs (*Zelus longipes*) milling around the top of the bush, including one that was stalking a fly.

Assassin bugs belong to a family in the suborder of true bugs and my guys are members of the genus *Zelus*. They are beneficial insects, like ladybugs and praying mantises, which prey on insects that eat garden and farm plants. They are not to be handled, however, because they may inflict a painful bite.

The fly is one of many species of Flesh Flies. It is clear that the assassin wants to welcome the fly to its food chain.

A couple of days later, I stopped a Five-lined Skink trying to sneak into my garage. Back outside, as it started to climb the brick behind the holly I noticed a Carolina Anole coming down toward the skink. I doubt the anole is on the skink's menu; however, I believe the skink is the "taller hog at the trough" given the speed the anole turned and darted off in a different direction.

Five-lined skinks are generally insectivorous preying on a wide variety of insects including grasshoppers, roaches, caterpillars, spiders, and other invertebrates that no doubt includes assassin nymphs. Though they eat beneficial insects, they also help control pest insects.

Juvenile skinks are easily recognized by their bright blue tail. The tail becomes gray in adulthood; however, the juvenile's tail color is responsible for the skink being commonly called a "blue-tailed skink".

Contrary to myth, skinks do not have a poisonous sting. In fact, no lizards in our area are dangerous to humans but if you are fast enough to catch one, expect a sharp nip.

Skinks employ a defense mechanism shared by many lizards including the anole. When a predator seizes its tail, a segment or the entire tail will break off. The tail segment still twitches, distracting the predator long enough for the lizard to escape. Over time, the tail will be regenerated.

The Carolina Anole, also known as the green anole, is sometimes called the American chameleon because it changes colors. It is not, however, a true chameleon that can readily match its background and actually belongs to the iguana family.

Carolina Anoles have two basic shades: bright green or grayish brown, depending on mood, time of day, and temperature. It regulates its body temperature, minimizing or maximizing heat absorption, by turning green when hot and brown in cooler temperatures. A stressed anole is in a constant brown state with black semi-circles behind their eyes. Also, its skin turns green when sexually aroused. Is this not great trivia material or what?

I'll close with the concept of a global ecosystem. The Earth itself is a huge ecosystem with four subsystems: the atmosphere, the hydrosphere (water), the geosphere (soil and the upper portion of the Earth's crust), and the biosphere (all living organisms). These subsystems interact as a whole. John Muir said it best: "When one tugs at a single thing in nature, he finds it attached to the rest of the world."

John Ennis



Predator or prey? The anole quickly departed when it saw the skink



The assassin closes in

