

Look, I Found a Snake... COOL!

By Greg Sykes (greg@grsykes.com)

Snakes: those scaly, creepy crawlies slithering in yards and parks that send shivers up and down people's spines—or at least that is the common misperception. All too often, when people find a snake, the reaction is to scream, run, and/or injure the creature. If people think a box turtle is “cute,” why are their reptilian cousins greeted with fear and animosity? That answer rests in a blend of:

- 1) learned behavior—a child learns from the parents' actions and carries those lessons through adulthood.
- 2) ignorance—fear of the unknown is a common survival instinct.
- 3) evolution—some human brains are hardwired to avoid all long, legless animal instead of identifying only the potentially harmful varieties. In this same way, brains are hardwired for face recognition, which is why people see faces in virtually everything from clouds to potato chips.

While desensitization techniques may assist the third issue, this article can help with the first two points. The best way to tackle #2 is by learning about the different snakes found in KPW and surrounding parks. The most common species is the Northern brown snake (*Storeria dekayi dekayi*). These little guys grow to a foot long and live under rocks. They are nocturnal and seen absorbing the pavement's radiating heat at night, though sometimes they are spotted sunning themselves on a sidewalk. Their mouths may be tiny, but gardeners take note: they are great at cutting into the slug population.

Ring-necked snakes (*Diadophis punctatus*) are another small species. Its name comes from the bright ring around its head. Although it is common, most people rarely see this beauty because it lives under leaves on the forest floor. Another harmless critter, ring-necked snakes eat worms and salamanders.

Rough green snakes (*Opheodrys aestivus*) are also a non-venomous species frequenting our parks, especially near the lake. Even though it may be in plain sight climbing shrubs or on the ground, this emerald animal is rarely noticed because it looks like a vine. An invertebrate menu of crickets, roaches, caterpillars, and a few spiders helps this gem grow to three feet long.

In the ponds and streams, Northern water snakes (*Nerodia sipedon*) are at home, gobbling up fish, frogs, and the occasional rodent venturing too close to shore. These dark, mottled grayish-brown snakes are stocky and grow to over four feet long. Though non-venomous, they are often mistaken for water moccasins (which, in Virginia, are limited to the Southeast—in the Dismal Swamp area) or copperheads (discussed later). However, if they are caught, Northern water snakes will likely inflict repeated, painful bites. Reminiscent of skunks, water snakes also emit a foul musk when frightened, so best leave them alone. Most snakes use biting and/or musk secretion to ward off natural predators, such as owls, hawks, and even other snakes.

One of the neighborhood's best friends is the black rat snake (*Elaphe obsoleta*). Growing to 6.5 feet long in Virginia (over eight feet in more Northern regions), this species feasts upon birds and more importantly rodents. Keeping the rodent population in check is imperative for local farmers and for controlling illness such as Lyme disease. Whereas Lyme disease is primarily spread by deer ticks, those ticks do not parasitize deer until they are adults. Emerging from eggs free of the disease, larval deer ticks become “inoculated” with the *Borrelia burgdorferi* bacteria after feeding upon an infected host—often, but not always, a rodent such as chipmunks, mice, or voles. The now-infected tick spreads the disease once it molts into a nymph when it feeds on a new host (human, dog, another rodent, etc.). Fortunately, the black rat snake controls those little disease vectors. This large, yet shy, constrictor would rather run than fight a human any day, or best of all be left alone in trees, meadows, and forests.

The only poisonous snake native to this immediate area is the Northern copperhead (*Agkistrodon contortrix mokasen*). This snake is common in Lake Accotink and Burke Lake Parks, so encountering one in the KPW vicinity is possible. It is an absolutely gorgeous snake, with coloration matching the warm brown hues of dried leaves. The triangular head is copper-colored with pits to detect heat of warm-blooded prey. It is another reptile that helps control rodent populations. This snake is more docile than

other pit vipers, and the poison is not strong enough to kill a healthy human adult, but a bite requires hospitalization.

The sad part of this story is the way people mistreat snakes. In and around Royal Lake over the years, I have found mutilated snakes, such as a rat snake slashed in half, the bodies of a couple of water snakes with crushed heads lined up on the boat ramp, and most recently a baby rat snake near the tennis courts with its back broken. When you encounter a snake, the best action to take is to leave it alone. Snakes are shy but may become aggressive if cornered or annoyed. When push comes to shove, snakes bite as a last alternative. They prefer not biting to avoid possibly snagging their teeth on an attacker, which could actually cause greater damage to themselves. Even copperheads prefer not to bite or might not inject venom (i.e. "dry bite") because they want to save that dose for prey.

Now that we know more about these beneficial reptiles, parents can address point #1 and teach their children about the types of snakes, what they eat, and that snakes are, "best observed and not disturbed." Hopefully, you want to learn even more about snakes and other such creatures. Visit a Fairfax County Nature Center, such as Hidden Oaks, Hidden Pond, or Ellanor C. Lawrence Parks, and meet these snakes in person! Also, try these excellent websites with pictures and/or video:

<https://www.fairfaxcounty.gov/wildlife/reptiles>

<https://www.fairfaxcounty.gov/news2/guide-to-snakes/>

http://virginiaherpetologicalsociety.com/reptiles/snakes/snakes_of_virginia.htm

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/420/420-021/CNRE-56.pdf

Many field identification books are available at bookstores. For more intense reading, a fantastic book is: Mitchell, Joseph C. 1994. *The Reptiles Of Virginia*. Smithsonian Institution Press, Washington, D.C. pp. 352.

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