

Silky or icky?

Spiders, the eight-legged, fear-inspiring arthropod often mistakenly called a 'bug,' produce one of the most unusual fibers - spider silk. Spiders create up to seven different kinds of silk which can be used in capturing and immobilizing prey, making shelters or nests and aiding travel. Only the central part of the web is sticky, not the



Jumping Spider

Joseph Beeger, www.fairfaximages.org

spokes, letting the spider move around without getting stuck. Dragline silk, the long thin threads that spiders dangle by, is both strong and flexible. Stronger than steel, dragline silk is often compared to Kevlar (used in bulletproof vests).

Spiders are feared for their bite, and some do use poison to kill their prey, but only a very few, like the **black widow** and **brown recluse**, are toxic to humans.



Artist rendering of spider silk glands.

It's not easy being a snake

Perhaps the most underappreciated creature in Fairfax County is the snake. Snakes can be seen basking in the sun throughout our woods, wetlands and streams – although most of the time they are resting in a crevice, a hole or under a log. It is when the snake is threatened, cornered, having a hand waved in its face, picked up, or poked that it may act defensively. Even then, only one of Fairfax County's snakes, the **copperhead**, can produce venom strong enough to affect a human.

"The bird a nest, the spider a web, man friendship."

William Blake

Long live the king snake

The **king snake** is the easiest snake to begin a long friendship with. Black and yellow markings make it easy to spot this distinctive creature. King snakes don't have the tendency to enter houses (like the **black ratsnake**) nor is it camouflaged like the copperhead. Best of all, the king

snake eats other snakes. In fact, all snakes serve as stewards in our urban parkland by eating nuisance rodents and insects, and sick or dying fish and by providing food for other wildlife. Snakes are, for example, one of the favorite foods of hawks.



The rings on the eastern king snake make it easy to recognize.

If not you, who? Small things.

◆ **Try to avoid disturbing wildlife in nature.** Just like we have regular routes between school, work or home, wild things do too, and daily routines work best when not interrupted. Observing wildlife from a distance helps protect you and our natural resources.

If not you, who? Small things.

◆ **Dead wood is not useless wood.** That dead tree in the forest serves as shelter for several different species of plants, animals and slime molds too. Collecting logs and dead trees from park land could be dangerous and it robs the natural area of habitat for wildlife.

What is that thing?

One of the most fascinating forms of life on the planet, the plasmodial slime mold is not really a mold or fungus. It is a



James Sogaard

harmless organism that has its own role in our local habitats. Dispersed all over the globe, the slime mold in your backyard is likely the same species found in Argentina and China. If the right light, moisture and warmth conditions are met, a slime mold can pursue its gentle existence. However, if the environment becomes unfavorable, it is easy for plasmodial slime molds to hibernate for as long as 75 years.

Slime Mold biology

Unique chemistry and structure (each cell may have many hundreds of nuclei) allows slime molds to share characteristics with animals AND plants. If you see one

in your backyard or park, watch it closely. Slime molds can form slug-like masses that move at the amazing speed of 2/1000 inch an hour! Alternatively, slime molds will spread out across a leaf or log to eat dead wood or bacteria. In this feeding stage, a slime mold can range from an inch to three feet square.

For more information on these or other topics, visit www.fairfaxcounty.gov/parks/stewardship.

Of Snakes and Things



Wolf spider with hatchlings riding piggyback.

Occasionally you'll meet a person who is comfortable with snakes or maybe even has a pet tarantula. But the rest of us usually have an aversion to the less cuddly aspects of our animal community. The natural world is full of an amazing assortment of adaptations and oddities that can be found enchanting or disgusting, life-saving or life threatening, silky or icky. Despite these primal fears, snakes and spiders serve important roles in our natural areas and for those reasons we should coexist tolerantly.

And why slime molds? Well, they're just cool.

Other creepy creatures

Many plants and animals are mimics of commonly found objects in nature, like the moth that looks like bird poop or the insect that looks like a stick. Most animals are simply trying to avoid being eaten, but it does make for an amazing array of forms and functions that are wondrous to discover and interesting to explore. Sometimes, the creepiest things turn out to be the ones that spark the most curiosity.



The beautiful wood nymph (Eudryas grata), a moth that resembles bird poop.



Care, Educate, Inspire

Stewardship is about working together to care for the environmental and cultural resources of Fairfax County. People become stewards for different reasons. They may want to help ensure clean water and air. They may wish to share something with their children. They may be inspired by spiritual beliefs. Whatever prompts our commitment, it is easy to take an active role in stewardship. It can be a small and simple thing, or it can be much bigger. Either way, it all adds up to a Fairfax County that looks to its past with pride and to its future with confidence.

You can learn more about Fairfax County Stewardship, the Board of Supervisor's 20-year environmental vision and the Fairfax County Park Authority at www.fairfaxcounty.gov/parks/stewardship



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Fairfax County Stewardship



Spiders, Snakes and Slime Molds



Argiope Spider



Kevin Munroe and Tony Robison



Pretzel Slime Mold

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Garter Snake



Kevin Munroe and Tony Robison

Jim Occi, BugPics, www.forestryimages.org



Barn Spider

Coral Slime Mold



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John White



Queen Snake

Black Widow Spider



Clemson University - USDA Cooperative Extension Slide Series, www.forestryimages.org

Kevin Munroe and Tony Robison



Northern Water Snake

Eastern Hognose Snake



John White

Joseph Berger, www.forestryimages.org



Jumping Spider



Coral Slime Mold - poroid form

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Brown Recluse Spider



James O. Howell, The University of Georgia, www.forestryimages.org

Kevin Munroe and Tony Robison



Wolf Spider

Copperhead Snake



John White

James Sogaard



Unidentified Slime Mold - plasmodial form

Kevin Munroe and Tony Robison



Black Rat Snake