

The Northern Pacific Rattlesnake

By G. Patrick Daubert, MD, FACMT

Master Gardeners of El Dorado County

This article appeared in the 05-29-24 Mountain Democrat

Spring is here, although we experienced late snow in April, and aside from all the wonderful sprouting plants and trees in bloom, it also means our local snakes are making an appearance. This includes our native rattlesnake, the northern Pacific rattlesnake, *Crotalus oreganus*, less commonly referred to as the Western rattlesnake. Our native rattlesnake ranges from Santa Barbara County to British Columbia, Canada.

There is a wide scope of colors and patterns in the northern Pacific rattlesnake with colors typically matching the environment. Snakes may be olive-green, gray, brown, golden, reddish brown, yellowish, or tan. Young are born without a rattle but rather a single button. A new rattle segment is added each time the skin is shed, which can be more than one time per year. Therefore, the number of rattles is not descriptive of the age of the snake. The northern Pacific rattlesnake is primarily nocturnal and crepuscular (active in twilight) during periods of midsummer heat. They may be active during daylight when the temperature is more moderate. Diet consists of birds, lizards, snakes, frogs, insects, and small mammals, including mice, rats, rabbits, hares, and ground squirrels.

Rattlesnakes typically avoid human contact, with most rattlesnake strikes occurring with disturbance of the snake. There is ongoing research and debate on severity of adult versus juvenile rattlesnake envenomation, by which the venom is injected. People often believe juvenile rattlesnakes have more potent venom or they have less control of their venom. There is no definitive research or expert opinion to support this claim. What is supported is that adult rattlesnakes have far more venom to inject than juveniles so the potential danger from the bite of an adult is significantly higher than the danger from the bite of a juvenile. Regardless, a strike from a rattlesnake of any age or any size should be treated as a serious medical emergency.

The wide range of habitat for our rattlesnake correlates with significant diversity of venom toxins. Rattlesnake toxin varies within rattlesnake populations, by season, by individual rattlesnake genetics, and by other factors. The northern Pacific rattlesnake venom contains inflammatory mediators, causing pain and swelling, and compounds that modulate our blood clotting cascade. After envenomation, it takes only a matter of seconds before symptoms become visible. The most common symptoms presented by patients with a rattlesnake bite is pain and swelling.

If an envenomation has occurred, the most important next step is getting that person to a medical facility. We do not advise tourniquets, suction devices, or cutting the envenomation site. Patients with signs and symptoms of an envenomation should be evaluated for antivenom treatment. There are two antivenom medications currently available. The type of antivenom received depends on hospital availability. There is no data currently available suggesting one antivenom treatment is more effective than the other.

As we welcome spring, our local rattlesnake is likely to be out. Be aware of typical habitats while working in the yard or garden. A calm demeanor when seeing a snake goes a long way. Happy gardening!

Master Gardener classes are offered monthly throughout the county. You can find our schedule at: mgeldorado.ucanr.edu/Public_Education_Classes/?calendar=yes&g=56698, and recorded classes on many gardening topics here: mgeldorado.ucanr.edu/Public_Education/Classes/

The Sherwood Demonstration Garden is open through Spring and Summer on Friday and Saturday from 9:00 - noon. Please check our website for further information about activities at the Sherwood Demonstration Garden at:

ucanr.edu/sites/EDC_Master_Gardeners/Demonstration_Garden/

Have a gardening question? Master Gardeners are working hard to answer your questions. Use the “Ask a Master Gardener” option on our website: mgeldorado.ucanr.edu or leave a message on our office telephone: 530-621-5512. We’ll get back to you! Master Gardeners are also on Facebook, Instagram, and Pinterest.

For more information on the UCCE Master Gardeners of El Dorado County, see our website at mgeldorado.ucanr.edu. To sign up for notices and newsletters, see ucanr.edu/master_gardener_e-news.