

# The Red Pygmy— A Coastal Carolina Specialty

By Frederick Boyce

North Carolina is known for beaches, mountains, furniture, sweet potatoes, Blackbeard and Krispy Kreme doughnuts, but to snake researchers and avid aficionados all over the world, our state is better known for something else. There is a remarkable tendency for certain snake populations in our Coastal Plain to exhibit a very high degree of red, reddish or reddish-orange coloration. This condition is known among scientists as “erythrism,” and such animals are said to be “erythristic.”

The mole king snake (subject of last month’s article), the corn snake (sometimes known locally as the “red oak”), the eastern garter snake, the banded water snake and two types of small, closely related litter snakes (the northern brown snake and the red-bellied snake) are all known to display erythristic color variations in the Coastal Plain. The best-known example, however, and the only one that’s venomous, is the red-phase Carolina pygmy rattlesnake, *Sistrurus miliarius*.

Carolina pygmies range down through South Carolina and across central Georgia to north-central Alabama, but they reach the extreme northeastern apogee of their range on the Albemarle Peninsula around Lake Mattamuskeet, and that is where the coastal red variants are brightest and most prevalent. Hyde County is, in fact, the most renowned location for red pygmies, but this color phase also occurs in Beaufort, Pamlico and Carteret counties, though down our way they tend to be more of a dull brick-red or reddish-purple color. To the south of us their ground color switches to gray or grayish-brown, while farther inland toward the Sand Hills, especially in Moore County, some specimens will display a beautiful lavender color.

In their 1871 survey, Elliott Coues and H.C. Yarrow of Fort Macon listed pygmy rattlesnakes as occurring on Shackleford Banks, but no specimens have been found there in modern times. Pygmy rattlesnakes do not occur at all on Bogue Banks, but they can be found in certain parts of the Croatan Forest as well as Down East. They have very specific habitat preferences, being most often found in coastal scrub and wiregrass habitats as well as in pine flatwoods, being especially fond of longleaf pine savannahs and mixed pine-oak forests. They are not evenly distributed along our coast, and are impossible to find in some areas, while locally common in others. Any reptile enthusiast who has travelled far and long to get pictures of one will readily assert that they are not easy to come by. It’s a matter of timing as much as anything else. They seem to be most active in the fall, but can also be found in the summer if conditions are right.

The world’s smallest rattlesnake species, Carolina pygmies reach a maximum length of about two feet, putting them at the opposite end of the scale from the mighty eastern diamondback rattlesnake, the state’s (and world’s) largest rattlesnake species. While their venom is rather potent drop-for-drop, pygmy rattlesnakes are so small that they are incapable of delivering a fatal dose to anything as large as a person, and there has, in fact, never been a human fatality attributed to them. As with any of our venomous snakes, the best way to avoid a painful bite is to leave them strictly alone and allow them to go on their way unmolested.

While there is a small isolated population in northern Georgia, these very pretty little red rattlesnakes are primarily a North Carolina coastal specialty. Along with many of our other snakes and non-game wildlife, they are most populous in remote backwater areas, off the beaten path and well away from the principal tourist destinations. Such rural areas often suffer from depressed economies, and while they might get a boost from waterfowl hunters in the fall, they are typically side-stepped by the mainstream of tourist dollars.

Residents of these areas should realize that their snakes—all of their snakes—have very real economic value. There are people all over the world who will happily fly here (much like the scuba divers who come to our coast from all over in the hopes of seeing a sand tiger shark), just to get photos of our famous little red

pygmies (as well as our other local snakes and reptiles). They spend money on gas, food and lodging just like any other tourist, and are by and large very desirable as visitors go, being typically well-educated and environmentally conscious. They are well-behaved and very unlikely to litter or otherwise deface natural areas. Wise business owners, such as the proprietors of the Hotel Engelhard in Hyde County, realize this and gladly welcome “herpers,” the reptile/amphibian equivalents of birders.

People in Hyde County are very much aware of the value and fame of their little red rattlesnakes, as are wildlife officials, so it is best not to try collecting or killing one. Like all of our rattlesnakes, pygmies are strictly protected in North Carolina, but you can see one up close anytime (with far less effort and fewer bug bites) in the Snake Pavilion at the North Carolina Aquarium at Pine Knoll Shores.

Sources for this article: *Reptiles of North Carolina* by Palmer and Braswell; Sean P. Bush, MD.

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Red-phase Carolina pygmy rattlesnake in Pamlico County. This one was a gravid (heavy with young) female, basking alongside a highway to incubate her brood.

—Photo by Fred Boyce



Red-phase eastern garter snake, another coastal Carolina red snake specialty eagerly sought by herpers.—Photo by Sam Bland