## **My Favorite Moccasin**

## By Frederick Boyce

The unwieldy word *Agkistrodon*, which means something like "hooked or curved tooth," is the name of a genus of venomous North American snakes that is commonly (and confusingly) referred to as "moccasins." This genus currently includes the copperheads ("highland moccasins"), the cottonmouths ("water moccasins") and the cantils ("Mexican moccasins"), though it once included several close relatives in southeast Asia as well. The theory is that these pit vipers originally arose in Asia and that our native species traveled here via the Bering Land Bridge and dispersed many eons ago, when temperatures were warmer.

As we have covered copperheads in a previous column and since the gaudy cantils occur south of the border in Mexico, I would like to focus on a personal favorite snake I know for a fact to be perhaps the most unjustly maligned and completely misunderstood of all animals: the widely dreaded, but actually shy and inoffensive, "water moccasin." I should first point out that people knowledgeable about snakes almost always prefer to call them cottonmouths, and often take a dim view of the moccasin name. I have known cranky herpetologists to maintain acidly that a moccasin is just a type of Native American footwear. I even knew one who, as part of a native snake display, sank a soft leather moccasin in an aquarium full of water and labeled it "Water Moccasin" next to an enclosure holding an actual live cottonmouth. The reason for this professional disdain is that people have long and erroneously applied the name "water moccasin" to the much more common watersnakes (genus Nerodia), which are almost always misidentified as venomous "water moccasins" simply because of their being in or near water. The cottonmouth is so called because its primary means of defense, other than fleeing as rapidly as possible into water or the nearest brush pile, is to warn an intruder away by gaping widely to expose the cottony-white interior of its mouth, which does indeed show up rather well in the gloomy backwater swamps these snakes like to call home. This display is typically accompanied by a rapid vibration of

the tail, which is audible even without benefit of a rattle. None of the nonvenomous watersnakes engage in either of these behaviors, and the open-mouthed display of the cottonmouth does indeed look very formidable and threatening, I suppose, to the uninitiated person. The thing is, it is just a display-a bluff-and I have tested it on countless occasions by gently placing objects (other than my fingers) in the open mouth, which does not snap shut like a trap, contrary, I am sure, to the expectations of most people. The snake just looks a bit puzzled by it all. I have gotten dangerously close to cottonmouths in this pose, having studied and photographed them in the field for many years, practically putting my camera lens in their open mouths at times, and I have found that they will not strike when gaping, and, in fact, seem incapable of doing so from that position. I have had literally hundreds of close encounters with wild cottonmouths in over 40 years, and I have never managed to get one of these snakes to attack or chase me, or behave in any manner I could describe as being anything other than defensive and frightened. Like most snakes, cottonmouths live in their own private little worlds and want most of all to just be left alone. Cottonmouths are not good climbers and do not drop out of trees into boats-those would most likely be brown watersnakes (Nerodia taxispilota). They also do not congregate in "nests" in hopes of entrapping hapless water skiers, yet another very old and tired myth. While I encountered, and collected, my first wild cottonmouths in the now-vanished maritime forest on the west end of Bogue Banks at Emerald Isle in the



A cottonmouth attempts, unsuccessfully, to frighten away the author.-Photo by Frederick Boyce

1970s, I am now convinced that they have since been entirely extirpated here and no longer exist on the island. They are very specific in their habitat preferences and avoid areas of human activity. While I have known cottonmouths, apparently oblivious to my presence, to swim right up to me (a behavior which I suppose most people would readily misinterpret as an "attack"), they are, in truth, among the most shy and timid of all the snakes I have ever worked with. I walk among rather large numbers of them at my current study site with no fear, just admiration, and usually without a snake hook, just my camera. I can only assume that "I saw a cottonmouth out in the woods today" just isn't as good a story as "a water moccasin chased me for three miles through the woods today and tried to disable my boat motor so I couldn't escape." The myths are almost endless, but I'll have to take this up again in a future column. I can see you're still not convinced.

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