

# Cottonmouth Birthing 2022

By Frederick Boyce

Ever since 2019 when I first found female cottonmouths giving birth on August 28, which just happens to be my own birthday, I have arranged to take time off every fall from that day until about September 12 or 13, which is as late as I have seen cottonmouths being born.

“Viper” is derived from the word “viparity,” which refers to the capacity to give live birth. All of our native pitvipers—cottonmouths, copperheads and rattlesnakes—give birth to live young and, what’s more, they stay with their babies, watching over and protecting them until they have had an opportunity to shed their skins for the first time (the natal shed). This can take only a few days in the case of copperheads, but usually takes a week or more with cottonmouths and rattlesnakes.

The newborn snakes are highly vulnerable and almost helpless, being born in an almost undeveloped state, as if they are not quite done yet. Their eyes become blue and cloudy on the day they are born, and their skin has a dull waxy appearance. Unlike the adults, they are colored primarily in shades of brown, causing



Newborn and juvenile cottonmouths are primarily brown in color.—Photos by Fred Boyce

them to be often confused with baby copperheads. In their second to third year or so, they will gradually shift to the adult color scheme of olive green or greenish-yellow with dark brown or black markings.

For their first two or three seasons, baby cottonmouths and copperheads both sport a conspicuous bright yellow lure on the tip of their tails known as the caudal lure. It has recently been shown that these lures are fluorescent under ultraviolet light. The well-camouflaged young snakes can deftly wriggle these bright lures in perfect imitation of small yellow worms to attract lizards and frogs.

Mother cottonmouths carefully select a secure refuge in which to give birth, usually a cavity of some sort located high in a bank near water, or often under the roots of a fallen tree, or sometimes in thick vegetation. Like birds, the individual nest sites are often concentrated in a rookery, a quiet and sheltered area with lots of cover but also enough sun for basking.

In some years I have located and kept track of as many as 7 to 10 nest sites, but this year I was only able to find two. These sites are typically used again and

again, year after year, but for whatever reason many of the choice sites in the rookeries were not used this year. In previous years, the neonates (newborns) would average around eight to each nest site, attended by at least two mothers since desirable sites are often shared. This year one of the two sites held only four neonates, and the other five.

The four babies in the first site, all born on my birthday, had their natal sheds right on schedule exactly one week later, on September 4. Once they shed, their eyes become clear, their skin loses the dull and waxy appearance, and their



A young female keeps watch over five neonates.

colors and markings become bright and vivid. They may hang around the nest site for another day or so, but will soon strike out on their own as newly minted miniatures of the adults. The second nest site was located at the large root ball of a fallen tree along a ditch that was nearly empty of water. At first I found just a single neonate there, attended by a small, younger female who was likely its mother, as first time litters are usually small and often have only one or two babies. The next day was Labor Day, and four more newborns arrived courtesy of a larger and much darker female who remained below, mostly out of sight, among the roots, except for her tail. For the next three days, I photographed and made videos of these youngsters and the dedicated young green female watching over them.

People who are not familiar with these animals might have a hard time believing that baby cottonmouths can be cute, but I find their antics to be irresistible as they first encounter the sights and smells of this enormous and no doubt mystifying new world. They can be startled almost out of their little skins by a puff of wind moving a leaf, by a passing caterpillar or by their own siblings, and I have often had to laugh out loud at their comical interactions as they bump into one another. The babies emerge to bask every morning between 9 and 10 a.m., when the droning chorus of the annual cicadas signals that the sun is high and warm. They spend the entire day in a vaguely bologna-colored pile, occasionally shifting and jostling for position like sunbathers on a beach. At 5:30 p.m., almost on the dot, they put themselves to bed.

Neither the babies nor the mothers eat anything during this week, nor do the mothers provide the babies with any form of nutrition, a practice common in birds and mammals known as matrotrophy. While matrotrophy has been documented in some crocodylians, including the Orinoco crocodiles that we cur-

(Continued on page 7)