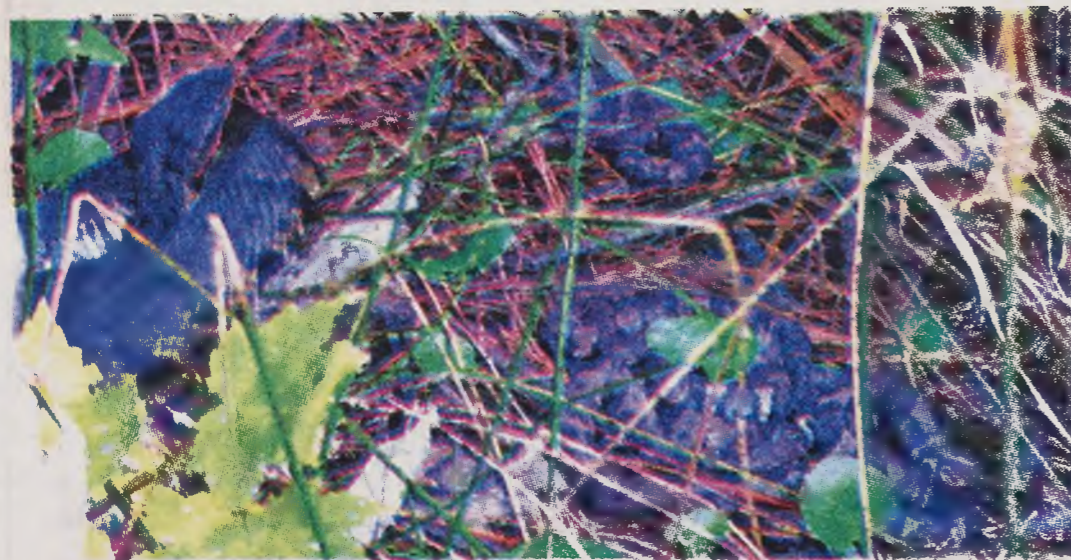


Moccasin Week at Cottonmouth Acres

By Frederick Boyce

Each summer many people look forward to Shark Week. Others enjoy Bike Week. For me, the week that falls roughly between August 28 and Labor Day is Moccasin Week, and it's my favorite week of the year. That's when the babies are being born out at my secluded field study site, "Cottonmouth Acres." It is my practice to take some time off every year around this time so that I can spend as much time as possible documenting this event with photos and videos.

I am especially interested in observing the remarkable and little-known interactions between the cottonmouth mothers and their newborn babies. Cottonmouth females often team up to give birth to communal litters, which is very advantageous as it allows them to share the parenting responsibilities and take turns standing guard. Newborn cottonmouths are extremely curious and ready to explore the world, and it takes a lot of motherly effort to keep the newborns from straying out of the nest. Foregoing food and water, these devoted mothers usually remain motionless as statues at the entrance of the nest for the entire week, forming a protective barrier against the outside world, keeping the restless youngsters in and would-be nest-robbing predators, such as black racers or kingsnakes, out.



A mother cottonmouth keeps watch over her brood of 6 to 8 newborn babies.

—Photos by Fred Boyce

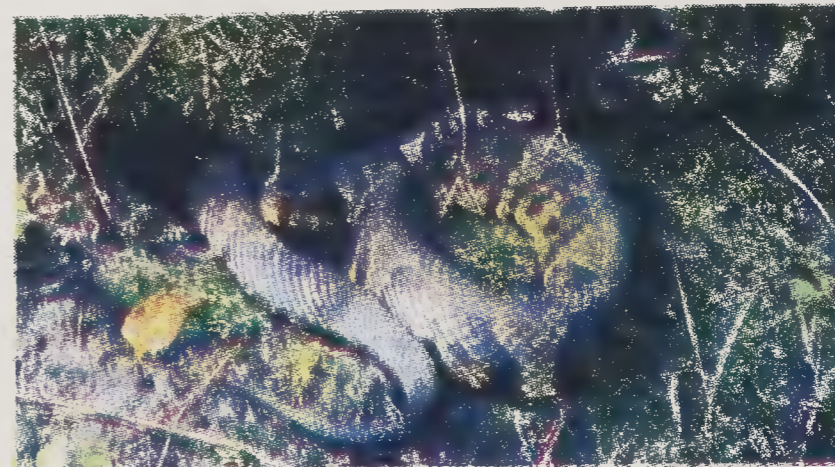
The nest is typically a cavity or hollow in a bank or under the roots of a fallen tree, almost always overlooking water. They prefer very quiet and out-of-the-way places such as ditches, swamps or other shallow backwaters in heavily wooded areas. The mothers keep a wary eye on me, but tolerate my respectful and quiet presence and make no move toward me as I lean in close to take photos, as long as I do not try to reach across them into the nest itself. That would be a very bad idea.

The babies love to bask in the sun from day one, but they quickly melt away into the dark recesses of their nest at my first approach. If I remain perfectly still, however, enduring the heat and mosquito bites, they gradually return and eventually become used to my being there, allowing me to get some good close-ups as long as I make no quick or obvious movements.

I began keeping tabs on two gravid (pregnant) females that were basking along one stretch of a backwoods ditch in early August. Pit vipers, which include our three rattlesnakes as well as cottonmouths and copperheads, are the most advanced of all snakes, and all of our native species give birth to live young. This enables the mothers to regulate the incubation temperatures of their developing embryos and

also to protect them from the elements or nest robbers, so the advantages over laying eggs are obvious.

By August 28, both females were lying next to a cozy-looking moss-lined hole in the bank, about four feet above the water, an ideal nest site. I kept a close watch on them, and when I arrived early on Sunday, August 30, I was thrilled to see a single baby lying alongside his mother at the entrance of the nesting hole. Later on, as many as eight babies were seen basking in a pile at the hole entrance. The second mother, basking under a nearby mat of pine needles, had yet to give birth and was also preparing to shed her skin, which all of the mothers seem to do close to the time of giving birth. Things began to move rapidly after that, and by September 1, I had located two other nest sites. Additional nest sites were found about a week later, for a total of six.



A baby cottonmouth crawls out of the nest onto its mother's back.

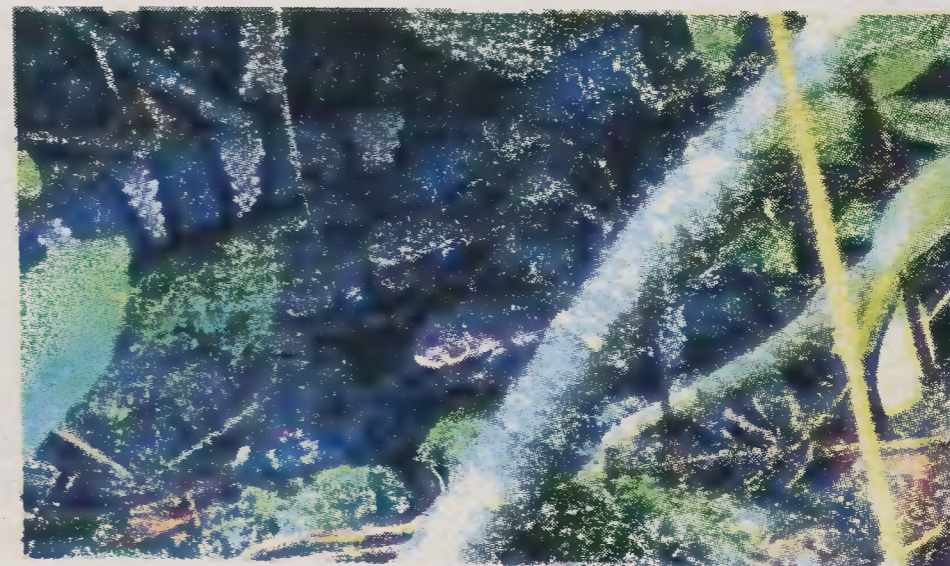
The babies remain in the nests, under the watchful eyes of their very attentive mothers, for about a week. By the second day, their eyes begin to cloud up as they prepare for their first, or natal, shed. Then they shed their tiny skins for the first time and after that begin to disperse.

The newborn cottonmouths are kind of baloney-colored, and a pile of them looks almost like a pile of salami at first glance, but once they shed they are an attractive mix of russet reddish-browns and orange-buff, with bright yellow tails. They retain the juvenile reddish-brown colors through about their second year until they gradually attain the adult colors of green or greenish yellow with dark crossbands.

By Labor Day, most of the babies from the first three nests had shed their skins and moved out into the world, but to my surprise, I began arriving to find adult males invading the nest sites and actively courting the postpartum females, sometimes with a baby or two still present. This is something else I did not encounter last year. The adult males seem to be showing up like clockwork one week after the babies are born to mate with the postpartum females, and an important component of pit viper courtship is ritual combat between competing males.

Tune in next month to find out what happens next, and read a first-hand account of this amazing and complex behavior. More photos and videos of the cottonmouths and other wildlife at my science page, "Cottonmouth Acres," on Facebook.

Frederick Boyce is the staff herpetologist at the NC Aquarium at Pine Knoll Shores.



Three newborn cottonmouths peer out from the entrance of their nest cave (their eyes will remain cloudy for their first week, until they shed).