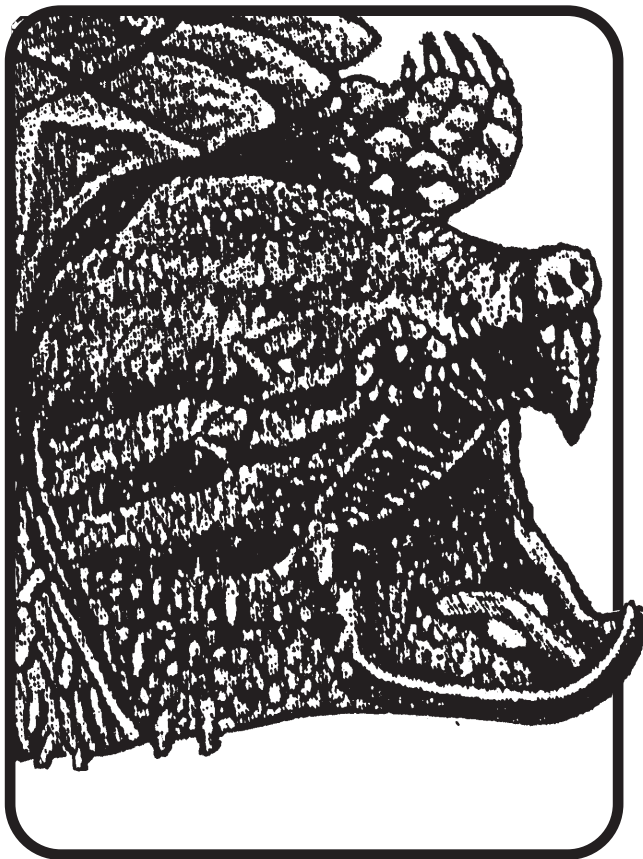


Arkansas's Monster Turtle:

The Alligator Snapper

by *Brian Wagner*



After jumping our johnboat over numerous log jams, we see a rope tied to a cypress alongside the stream channel. It's attached to one of six nets set the previous evening by crew leader Jimmy Barnett in an attempt to capture alligator snapping turtles in Wattensaw Bayou. We check it and find three small alligator snappers inside. The remaining five nets yield eight more.

It was June 1994. Barnett and I were part of an Arkansas Game & Fish Commission research team attempting to learn where alligator snappers live in Arkansas, and how common, or rare, they might be. Populations have declined drastically throughout their range, including parts of Arkansas. The rarity and exploitation of the species led the U.S. Fish and Wildlife Service to consider listing it as threatened under the Endangered Species Act.

One obvious reason for the alligator snapper's decline is overharvest. The flesh is a delicacy, often fetching \$10 a pound. It is popular in New Orleans, and nearly all alligator snappers sold there previously originated in Arkansas. In recent years, markets also emerged for their shells, which are used to make clocks and wall decorations, and for live snappers, which are sold as pets. Hefty individuals may fetch more than \$100 apiece.

In October 1993, the Game & Fish Commission issued an emergency proclamation banning the taking of alligator snappers from the wild. "Our staff people have found alligator snappers are vulnerable to over-exploitation due to their slow growth to maturity, vulnerability to capture and their value on the commercial market for meat, ornaments and overseas export," said Director Steve N. Wilson when the ban was announced.

Alligator snappers live up to 70 years in captivity. One wild-caught specimen weighed 316 pounds. They are the only reptiles with a predatory lure in their mouth. Lying motionless on the bottom with mouth open, they twitch this small appendage on the tongue. Fish investigating the wiggly "worm" become dinner for the turtle.

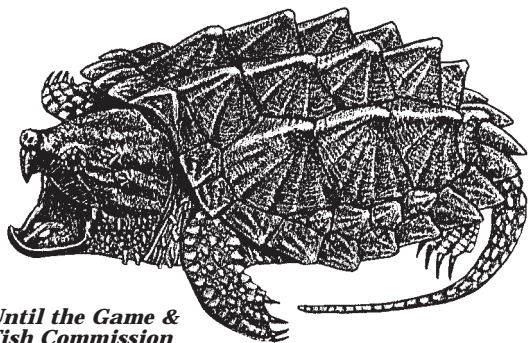
Alligator snappers are sexually mature at 11 to 13 years. Males mature when their shell is 14.5 inches long, compared to 13 inches for females. Adult females lay nine to 44 eggs every one to two years.

Hatchlings emerge from the sandy-soil nest three months later. Adults provide no nest protection, so predation is high, and hatching success varies.

The Study

Although some alligator snappers are gigantic, we know little about their everyday behavior and distribution in natural habitat. These are secretive, deep-water, bottom-prowling animals. They seldom, if ever, bask in the sun. Study in the wild is difficult. To learn more, our six Game & Fish teams went to work. In 1994 and '95, we set out baited hoop nets to catch the turtles. Four sites were sampled in each county. During the study, we caught, measured and released 445 alligator snappers in 56 counties, 41 of which did not have previously documented records. Previous reports documented the turtles in only 20 of our 75 counties.

The teams did not capture alligator snapping turtles in five counties—Baxter, Marion, Boone, Lafayette and Union—where they previously were documented, but an angler caught one in Baxter County the week after our netting attempt, and alligator snappers have been captured in backwaters of the Ouachita River on the Union County line. Our nets yielded no alligator snapping turtles in Columbia County either, an area where we expected to find them.



Until the Game & Fish Commission banned their taking in 1993, many wild alligator snappers were harvested. Arkansas turtles often became the entrée in upscale New Orleans restaurants.

Study results indicate adult alligator snappers could have been overharvested in some areas. The Game & Fish Commission is particularly concerned about this because continued harvest could jeopardize the long-term health of these populations.

Management Implications

This is the most comprehensive alligator snapper status and distribution study ever completed in Arkansas. We caught more turtles than we expected, but it appears populations in some parts of the state are in jeopardy. Dr. Stan Trauth at Arkansas State University is conducting a more detailed study to gather information on population densities, size and age at maturity, and growth rates. This information will help determine the species' overall status and allow us to manage alligator snappers more effectively.

Arkansas is one of the last areas where alligator snapping turtles remain fairly abundant. The long-term conservation of these giant reptiles may depend on our efforts to protect them here in the Natural State.



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