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Stanley E. Trauth
Arkansas State University

David H. Jamieson
Arkansas State University

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Swimming Behavior in the Fox Squirrel, *Sciurus niger* (Rodentia: Sciuridae), from Northeastern Arkansas

Stanley E. Trauth and David H. Jamieson

Department of Biological Sciences, Arkansas State University,
State University, AR 72467-0599

Department of Biological Sciences,
Arkansas State University-Beebe (Newport Campus)
7648 Victory Blvd., Newport, AR 72112

Although both gray squirrels (*Sciurus carolinensis*) and fox squirrels (*S. niger*) are known to be excellent swimmers (e.g., see Mumford and Whitaker, 1982; Hoffmeister, 1989), references to swimming behavior in these squirrels have appeared infrequently in the literature (see Koprowski, 1994). The first published incidence in *S. niger* occurred in Illinois (Applegate and McCord, 1974); since then, no recent information on swimming in *S. niger* is available in state and regional mammalogy textbooks from areas west of the Mississippi River (e.g., Arkansas--Sealander and Heidt, 1990; Colorado--Fitzgerald et al., 1994; Missouri--Schwartz and Schwartz, 1981; Oklahoma--Caire et al., 1989; Choate et al., 1994; Jones et al., 1988; and others). Herein, we report on the first incidence of swimming behavior in *S. niger* from Arkansas.

While running turtle nets on 13 October 1996 at 11 40 hrs., we witnessed an adult *S. niger rufiventer* swimming northward across a 120 m span of the White River in Independence County at a point approximately 7.5 air km SE of Batesville. The sky was clear, and the air temperature was 23.0° C. The White River above Batesville is fed by two hydroelectric dams which contribute to a relatively cool water temperature which, on this day, was 14.4° C. A moderately swift current is present within this section of the river (at the confluence point with Salado Creek); the habitat is characterized by narrow bands of mostly bottomland hardwood forest on either side of the river. We encountered the squirrel at a point approximately three-fourths of the way across the river; although we circled the squirrel twice in an attempt to dissuade its progress, the squirrel continued toward the northern shoreline, stopped momentarily on a log, and then quickly disappeared into the vegetated underbrush. The squirrel's swimming technique (dog-paddling with its head, dorsum, and tail partially out of the water) was comparable to the description summarized by Koprowski (1994). Judging by the water distance the squirrel traveled during our observation, our best estimate of the length of time for the squirrel to transverse the river was 10-15 minutes.

Most literature accounts indicate that fox squirrels can be found in a diversity of habitats which would include

riparian, bottomland communities (Koprowski, 1994); consequently, swimming may be a common occurrence in this species. In addition, the fall months are considered a time of dispersal for *S. niger*; therefore, this unusual sighting may have been associated with the annual emigration of individuals from populated areas (also known as the "fall reshuffle") as described by Sealander and Heidt (1990). Interviews with local fishermen and fishing guides that frequent the White River suggest that squirrels are rarely seen swimming the river. When they are, it usually involves large groups of gray squirrels migrating during the fall months, with fox squirrels being observed less frequently. One such event was described by Jack Hinkle, who has owned a fishing guide service on the White River near Sylamore, Arkansas (Izard County) since 1961. Mr. Hinkle reports witnessing hundreds of gray and fox squirrels (usually in groups of three or four) swimming across the river in October, 1991. All of the squirrels were going from north to south and the swimming behavior lasted for two or three days. This is the only time he can remember seeing squirrels swimming the river even though he has owned the guide service there for more than 35 years. Likewise, Charles Kibbee, a prominent bass fisherman from Batesville, Arkansas reports witnessing a similar migration of squirrels in the fall of 1991. While fishing in a bass tournament on Bull Shoals Lake, a reservoir on the White River system, Mr. Kibbee saw several squirrels swimming across the reservoir over a two-day period. They were all swimming in the same direction and several drowned. He reported seeing gray squirrels primarily, but also observed fox squirrels in lesser numbers.

We also spoke with Arkansas Game and Fish Commission biologists Fred Ward (small-game biologist) and Keith Sutton (editor of *Arkansas Wildlife Magazine*), and they described similar occurrences being reported by the public on other rivers and lakes in the state but could provide no documentation.

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CORRECTION - In the article "Subspecific Recognition in Arkansas Ringsneck Snakes (*Diadophis punctatus*)" by Stanley E. Trauth which appeared in Volume 50 of the Proceedings of the Arkansas Academy of Science, Page 145 and in the Table of Contents "...Arkansas Ringsneck Snakes" should read "...Arkansas Ringneck Snakes".