WILD TURKEY POULT MORTALITY IN NORTHEAST ALABAMA AS A RESULT OF SWIMMING

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Identifying specific causes of mortality in Wild Turkey (*Meleagris gallopavo*) poults is important in understanding the dynamics of Wild Turkey populations, knowledge of which is critical for their successful management (Peoples et al. 1995). Although numerous studies have focused on poult mortality rates throughout the range of the Wild Turkey (Glidden and Austin 1975, Hon et al. 1978, Everett et al. 1980, Sisson et al. 1991), few have identified specific causes of poult mortality (Speake et al. 1985, Peoples et al. 1995). In those studies, Speake et al. (1985) and Peoples et al. (1995) reported predation, exposure, starvation, disease, flooding, and hatch defects as specific causes of mortality. Here, we report the first incidence of poult mortality caused by a combination of extreme exhaustion and prolonged exposure to water as a result of swimming.

On 14 June 2001 while running a Breeding Bird Survey (BBS) river route, four wild turkey poults were observed swimming across the Coosa River between St. Clair and Talladega counties, Alabama (33° 40' 17.9" N, 86° 09' 16.1" W). The poults were first observed swimming in a straight line from the north bank in St. Clair County to the south bank in Talladega County, a distance estimated to be approximately 250 m. Despite a strong cross-current, the poults were quite buoyant in the water and able to swim well enough to maintain a straight bearing. They swam by rapidly propelling their legs behind them with their wings closed, similar to the description made by Audubon (1831). While swimming they continually emitted high peeps. The poults were covered with natal down, except for partially developed remiges, and were estimated to be approximately two weeks old.

While we were studying the poults, a hen flew from the north bank directly over the poults and lit on an exposed limb on the south bank, about 4.5 m above ground level. After alighting on the limb, the hen began to call. The poults responded by peeping more rapidly and swimming directly toward the calling hen. As they reached the south side of the river, they immediately tried to climb the steep bank to reach level ground. However, the embankment was a 1.2 m vertical wall of slick mud which made climbing impossible. Unable to climb or fly from the water, the poults became noticeably exhausted. They

ceased climbing efforts and floated nearly motionless on the water. At this point, we intervened and assisted the poults individually onto level ground. The first two poults were easily captured. When held, both felt cold and put forth little effort to escape. Once released, they slowly moved towards the calling hen despite their exhaustion. The third poult became entangled in large roots dangling from the embankment and had to be pulled out with a paddle. Like the first two, the third poult was cold and easily captured. We placed it on level ground where it immediately collapsed. It was so exhausted that it could not stand or fold its wings. The fourth poult was found dead, and had apparently drowned as a result of extreme exhaustion from swimming, attempted climbing, and prolonged exposure to the water. Throughout the course of the rescue, the hen remained on the tree limb and continued to call to the poults. The first two rescued poults slowly disappeared into the brush while the third remained where we had placed it, unable to move. The elapsed time from our initial observation to when the poults were removed from the river was approximately 25 minutes.

The sequence of events, which led to the poults attempting to cross the river, is unknown. To our knowledge, only two observations of Wild Turkey poults swimming have been reported (Martin and Atkeson 1954, Taber 1955). There was no mention of mortality as a result of swimming in these accounts and only Taber (1955) cited exhaustion following swimming.

Prior to the attainment of flight, young poults are susceptible to rapid chilling when they become wet, and often perish following prolonged exposure to rain (Lewis 1967, Eaton 1992, Yarrow and Yarrow 1999). In addition, when poults are unable to keep up with the hen they often perish as a result of starvation and exposure (Speake et al. 1985). Therefore, it is conceivable that the surviving three poults eventually perished as a result of prolonged exposure to water. Our observation is also consistent with the evidence that most poult mortality occurs within the first two weeks following hatching (Everett et al. 1980, Speake et al. 1985, Peoples et al. 1995). Although unusual, our observation of a poult death as a result of swimming contributes to the list of known causes of mortality in Wild Turkey poults.

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