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Wilson Bull., 111(3), 1999, pp. 426–427

Wild Turkeys (*Meleagris gallopavo*) Renest After Successful Hatch

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ABSTRACT.—Wild Turkey (*Meleagris gallopavo*) hens frequently renest after disturbance on the nest, especially while laying or early during the incubation period. However, no record exists of Wild Turkey hens renesting after a successful hatch. We document three Wild Turkey hens that renested after having hatched a brood. None of the renests were successful. *Received 2 Dec. 1998, accepted 6 March 1999.*

Nesting success of Wild Turkeys (*Meleagris gallopavo*) varies widely across their range and is influenced by many factors (Vangilder 1992). A successful nest generally is defined as one in which at least one poult hatches. Researchers have documented many instances of Wild Turkey hens renesting after their initial nest was disturbed or depredated (Everette et al. 1980, Williams et al. 1980, Vangilder et al. 1987), most often while laying or during early incubation (Williams et al. 1976). Causes for nest failure and subsequent renesting include nest destruction by predators (Speake 1980, Vander-Haegen et al. 1988), severe weather (Roberts and Porter 1998, Kimmel and Zwank 1985), and disturbance by researchers (Still and Baumann 1990). Renesting after a successful nest was not thought to

occur. In his *Book of the Wild Turkey*, Williams (1981:53) stated, “No example is known of a hen nesting again in the same year after her brood hatched, and there has been no reported case of a turkey hatching two broods in one year.” Below, we document three cases of hens renesting after having successfully nested but with early loss of broods.

In 1983, while working in southern Alabama, J.H.E. found a Wild Turkey hen that renested three times after hatching a brood that did not survive more than two days. This particular hen hatched all 11 eggs in her initial clutch after a normal incubation period (28 days). On the day after hatching, five of the poults were found dead in the nest from unknown causes. The hen had no poults with her two days after hatching, and the fate of the remaining six poults was never determined. Twenty-five days after hatching, the hen renested. This nest was disturbed by investigators, which prompted the hen to abandon that nest and eventually renest two more times. None of the renests was successful.

In the southern Appalachians of North Carolina, C.A.H. monitored two wild turkey hens that renested after hatching clutches of 11 and 14 eggs. These nests were initiated in early April of 1996, and incubated 29 and 27 days. Both broods were killed within five days. One hen initiated a second nest 17 days after her initial clutch hatched. This renest contained nine eggs that were incubated 65 days, 37 days beyond the normal 28-day incubation period. Subsequently, this nest was abandoned, and the eggs were determined to be infertile.

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The second hen began incubating another nest 27 days after her initial clutch hatched. This reneest was incubated for 11 days and abandoned for unknown reasons.

None of the reneests we documented was successful, either because of infertility or nest abandonment. Ultimately, infertility could be a primary factor limiting success of late reneests. Sperm may be contained in a hen's oviduct up to 56 days after copulation (Blankenship 1992) and remain viable for a 'normal' reneesting attempt. However, the reneests we documented were initiated considerably later than most reneests because they occurred after an entire incubation period plus some additional days. Thus, a hen might need to copulate again in order to lay fertile eggs two months after the primary mating season (i.e., April–May). However, copulation in July would be exceptional because the urge to breed, which is associated with the rise in testosterone (for males) and prolactin (for females) levels, is regressing (Blankenship 1992).

The ability of Wild Turkey hens to reneest after having hatched a brood did not contribute to productivity in these cases. However, we now know it is possible for hens to reneest after a successful nesting attempt and it is conceivable that such nesting could be successful.

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