TWO WHIP-POOR-WILL (*CAPRIMULGUS VOCIFERUS*) BREEDING RECORDS FROM CALHOUN COUNTY, ALABAMA

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Although the Whip-poor-will (*Caprimulgus vociferus*) is common in summer in the mountains of north Alabama (Imhof 1976), and is well known by voice, it remains one of the least known of Alabama birds and the least known of the three caprimulgids occurring in the state.

On 8 May 1998, the author was successful in finding a Whip-poor-will's nest in the Talladega National Forest in eastern Calhoun County, only the second nesting record for the state and 55 years since H. M. Stevenson (1944) discovered the first nest on 10 June 1943, near Mentone in Dekalb County. Stevenson's reference to a nest was made in a footnote regarding the sighting of a Whip-poor-will, listed among 61 other species, observed on a summer bird count on Lookout Mountain. The footnote stated only, "one young in nest". The nest described in this paper is therefore the only currently available description of a Whip-poor-will's nest from Alabama. Also reported in this paper are egg dates obtained from the dissection of a gravid roadkill female found on 12 April 1999, in the Talladega National Forest in eastern Calhoun County.

Whip-poor-wills return in spring to the mountains of north Alabama as early as the first week in March, three weeks to a month in advance of the first Chuck-will's-widows (pers. observ.). By the middle of April, as the breeding dates in this paper will show, some Whip-poor-wills may already be on eggs, before, or at about the same time as, the first Chuck-will's-widows begin calling in the valleys (pers. observ.).

In the spring of 1998, I decided to focus my efforts on a purposeful search to find a Whip-poor-will's nest. In theory the strategy was simple: hike over every square meter of a block of mountains where I had heard Whip-poor-will's calling until I flushed a female from a nest. Covering every square meter of forested, mountainous terrain is not literally possible of course, but some sort of disciplined, methodical approach was better than walking randomly through the woods hoping to flush a Whip-poor-will.

An indispensable aid when searching for Whip-poor-will nests is a light, dry, flexible cane pole, about six ft (2 m) long and an inch (2 cm) or less in diameter at the hand-held end. By reaching out and tapping the ground on either

side as one walks along, and probing around logs and fallen tree tops and under over-hanging limbs, a strip of forest 12 ft to 15 ft (4 to 5 m) wide can be covered without physically walking over every likely looking spot.

At gray light on 8 May 1998, I set out methodically contouring and walking back and forth over an area in the Choccolocco Wildlife Management Area where I had heard a male calling almost every morning throughout the month of April. The area, which I assumed roughly defined the male's territory, encompassed approximately 100 acres (40 ha) of mixed pine-hardwood ridges and deciduous draws and hollows. The elevation ranged from 920 to 1200 ft (280 to 366 m).

Since there was no way of knowing where the female might be, and having little to go on, I assumed nothing and tried to cover the area completely, including what I considered to be such unlikely places as stream bottoms, dense thickets and steep mountain sides. By early afternoon I had covered about half the area with no luck.

Pressing on, I crossed a narrow stream bottom and started working my way up a steep incline toward the point of a ridge. After reaching the point and after I had just started walking up the ridge, I was suddenly startled by a Whip-poor-will that fluttered from the forest floor 15 ft (5 m) directly in front of me. It flew toward me and hit the ground 10 ft (3 m) to my left, wings spread and tail fanned, feigning injury. I glanced quickly at the spot from which she had flushed, but saw no eggs, and then I focused my attention back on the bird, which was still fanned out on the ground with her head up, looking at me. I took a step or two toward her to give the impression her decoy was working, and she responded by fluttering as though injured over the contour of the ridge and out of sight. I then turned my attention back to the place where she had flushed and approached the spot slowly and carefully.

I first spotted a discarded eggshell, complete with the cap attached. About 18 in (46 cm) from the eggshell was a newly hatched, downy chick, beautifully camouflaged against the forest floor. It was lying motionless in the "nest" which was at best only a slight depression in the leaves caused by the weight of the female while incubating the eggs and brooding the young. Glancing about, I found the other chick hidden under the trunk of a dead pine top about 30 in (76 cm) away. I placed it back with the other nestling and put the eggshell beside them for comparison (see front cover). They were not much larger than the end of my thumb and only a little larger than the eggshell. I judged them to be no more that one or two days old. Their tawny brown color, about the shade of pine straw or the pale brown of oak leaves, almost perfectly matched the leaves on the forest floor. Assuming the incubation period to be at least 19 days (Harrison

1975), and the chicks no more than one or two days old, the eggs would therefore have been laid around 17-19 April.

An examination of the area revealed the nest site to be on a fairly level, but gently sloping, rather open area near the end, or point, of a long ridge which dropped off steeply on both sides into deep hollows. The elevation of the ridge at the nest site was 1120 ft (341 m). The woods on the ridge consisted of mixed pine and deciduous trees including shortleaf (*Pinus echinata)* and loblolly (*P. teada*) pines 25 to 35 feet (8-12 m) in height, chestnut oak (*Quercus prinus*), northern red oak (*Q. rubra*), white oak (*Q. alba*), hickories (*Carya* spp.), black gum (*Nyssa sylvatica*), red maple (*Acer rubrum*), sourwood (*Oxydendrum arboreum*), and flowering dogwood (*Cornus florida*). The ground cover consisted of dense patches of blueberries (*Vaccinium* spp.), except in the area of the nest, which was relatively open (Figure 1). The adjacent slopes and hollows consisted of open deciduous woods composed of the hardwood species noted above, plus tulip poplar (*Liriodendron tulipifera*), American beech (*Fagus grandifolia*), umbrella magnolia (*Magnolia tripetala*) and big leaf magnolia (*M. macrophylla*).

FIGURE 1. Eggshell and newly hatched Whip-poor-will chicks, 8 May 1998, Talladega National Forest, Calhoun County (photo by Bill Summerour).

At first glance the site appeared much the same as numerous other places in the forest, but a closer look suggested otherwise. The nest was enclosed on one side by an old, weathered, fire-charred log, and on another by the dead top of a Virginia pine (*P. virginiana*), which had lost most of its limbs to fire and decay (Figure 2). These natural barriers probably served to steer or detour predators such as coyotes (*Canis latrans*), gray foxes (*Urocyon cinereoargenteus*), red foxes (*Vulpes fulva*), raccoons (*Procyon lotor*) and opossums (*Didelphis marsupialis*), around the nest. In addition to the protection provided by the log and tree top, the spot chosen to deposit the eggs was about an inch (2.5 cm) from a small limb, which appeared to serve as a barrier on the down slope side of the eggs (Figure 2).

FIGURE 2. Whip-poor-will nesting site in Talladega National Forest, Calhoun County, 8 May 1998. An arrow marks the location of an eggshell and newly hatched chicks (photo by Bill Summerour).

I returned to check the nest the following day and was surprised when the female flushed about six ft (2 m) from the nest site. The two chicks immediately scattered when she flushed, bounding and clambering over the leafy ground cover with surprising speed and energy. Within seconds they covered 10 ft (3

m) before freezing in the undergrowth and relying on their cryptic coloration for concealment. The effect of the female suddenly flushing and the young scattering and bounding about was startling and confusing, as I imagine it would be to a predator. I managed to find one of the chicks under some thick ground cover, but in spite of much searching could not find the other one. It was obvious this tactic of "flush and scatter" and changing locations daily if disturbed, would make it increasingly difficult to find the birds, so I did not return and no further observations were made.

Having succeeded in finding one nest, I set out a few days later to find another. For the next week I hiked over what seemed like most of the mountains in the Talladega National Forest and found nothing. In the spring of 1999, I continued the search, again using the proven contour and cane pole method, but again with the same results. However, I was able to obtain egg dates in quite an unexpected way. On 12 April, while driving out of the Talladega National Forest on FS 532 in Calhoun County, I came across a Whip-poor-will killed in the road. When I stopped to examine the bird, I discovered it was a female and in excellent condition. It appeared to have been killed around daylight, only a few hours earlier. While examining the specimen in hand, I noticed that the abdomen felt hard as though there might be an egg in the body cavity.

Back home, I dissected the specimen and found a fully formed, shelled, pigmented egg in the uterus (Figure 3). Pigmentation usually takes place during the last few hours the egg is in the uterus (Welty 1982), so the egg would probably have been laid that day, 12 April. Further dissection revealed two ruptured follicles in the ovary, evidence that the first of the two eggs had already been laid (Figure 4). Assuming the time from ovulation to laying to be around 60 hours in the Whip-poor-will as it is in some other caprimulgids (Welty 1982), the first egg would therefore have been laid on 9 or 10 April.

In summary, the egg dates extrapolated from the roadkill female found on 12 April 1999 and from the nest found on 8 May 1998 containing the newly hatched young, show that Whip-poor-wills are on eggs as early as the middle of April. Stevenson's (1944) 10 June record in 1943 of "one young in nest" suggests the possibility of more than one brood, or of renesting following a failed nesting attempt.

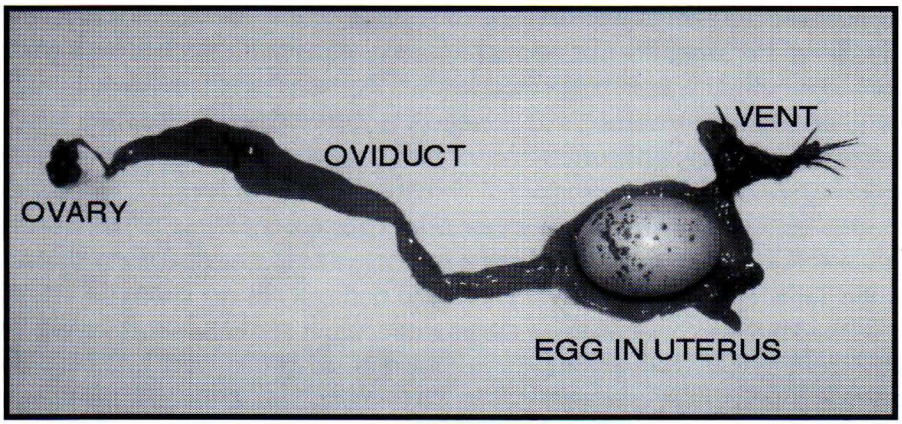

FIGURE 3. Whip-poor-will egg in opened uterine region of dissected reproductive tract, 12 April 1999 (photo by Bill Summerour).

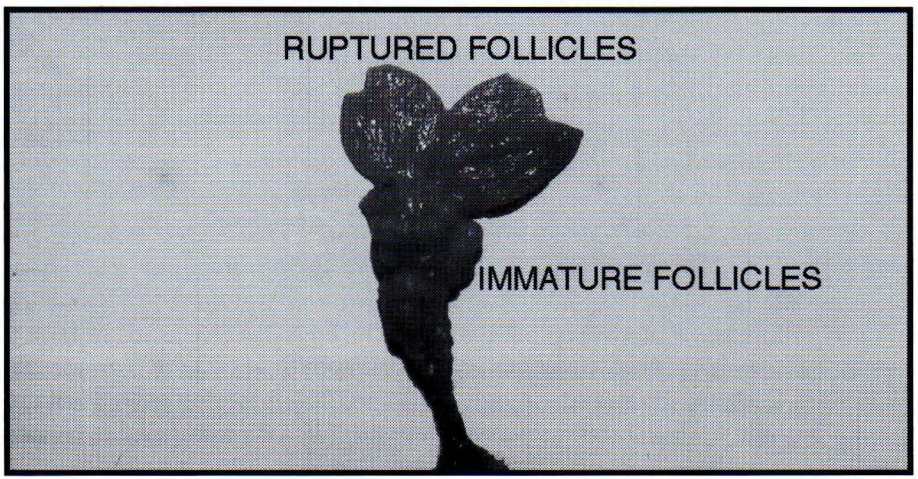

FIGURE 4. Whip-poor-will ovary showing two large ruptured follicles, evidence that two ova had been released. Note immature follicles of the ovary (photo by Bill Summerour).

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