

meat. This is only a little more than half the amounts estimated for the wild birds discussed above. Craighead and Craighead (1956. "Hawks, Owls and Wildlife," pp. 312-313) believe that the food requirements of raptors, adjusted to captivity, closely approximate those of wild raptors. Assuming that this is true, the difference in food intake per meal between wild and captive Goshawks may be due to irregular and less frequent feeding in the wild than in captivity.—JOHN P. ROGERS, *University of Missouri, Gaylord Memorial Laboratory, Puxico, Missouri, 23 August 1965.*

An attack and riding of a Red-tailed Hawk.—On 23 June 1965 while driving eastward about 4 miles from Barnsdall, Oklahoma, our attention was attracted to the erratic flight of a Red-tailed Hawk (*Buteo jamaicensis*). Closer scrutiny revealed a Scissor-tailed Flycatcher (*Muscivora forficata*) in close pursuit of the larger bird. As I slowed the automobile, we saw the flycatcher alight on the back of the hawk and ride it down into the roadside vegetation. Both birds became airborne again almost immediately. The flycatcher was still pressing the attack as they flew away.

This observation was made by myself and several of my vertebrate natural history students.—J. LELAND HEPWORTH, *Oklahoma Cooperative Wildlife Research Unit, Department of Zoology, Oklahoma State University, Stillwater, Oklahoma, 23 August 1965.*

Running speed of Bobwhite.—When conducting wildlife research in the spring of 1956 at the Olentangy Wildlife Experiment Station in Delaware County, Ohio, I frequently drove an automobile through a meadow on a road consisting only of two well-worn tracks. The vegetation-free tracks were about 18 inches wide, and there was vegetation on both sides of each track. This vegetation was 6 to 18 inches tall, increasing in height with advance of the season. A male Bobwhite (*Colinus virginianus*), presumably the same bird each time, was often found taking a dust bath or just standing in the track at or near a certain point on this road. When slowly approached, the bird ran down the track ahead of the automobile, so that his running speed was readily clocked with the automobile speedometer. I always followed 5 to 7 yards behind the bird, and it can be assumed his maximum running speed was usually attained. The bird was followed each time until he turned and ran into the adjacent vegetation.

In five observations, this bird was clocked at 8 to 10 (mean, 9.1; standard deviation, ± 0.9) miles per hour. Unfortunately, the accuracy of the speedometer was not checked, and speedometers are known to vary in accuracy. In two of the five observations, the bird started staggering as though tired after running 75 to 85 yards; then he soon turned and ran into the vegetation. The assumption of tiredness is, of course, subjective, and the staggering may have resulted from wavering intentions to stop running as the limit of the bird's territorial range was being approached or passed or from some unsuspected cause. The bird always left the road within 10 yards of the same point.

With birds also running ahead of an automobile, C. Cottam, C. S. Williams, and C. A. Sooter (1942. *Wilson Bull.*, 54:130) reported running speeds of 11 and 14 miles per hour for Gambel's Quails (*Lophortyx gambelii*). These birds were observed over distances of 20 and 30 yards, respectively, but no records were made of their behavior in their final stages of running.

The observations reported in this note were made when I was engaged in research supported by the Ohio Cooperative Wildlife Research Unit. The note was prepared when I was an employee of the U.S. Fish and Wildlife Service, and I am indebted to this agency for typing assistance and editorial review.—PAUL A. STEWART, *U.S. Department of Agriculture, Agricultural Research Service, Entomology Research Division, Oxford, North Carolina, 9 September 1965.*