

Wildl. Mgmt. 34: 756) data showing that incubation commences approximately 2 weeks earlier in southern Ontario than in Minnesota (Brander 1967, Wilson Bull. 79: 28; Gullion 1967, The Ruffed Grouse in northern Minnesota, Univ. Minnesota, Forest Wildl. Relations Project (multilith); Schladweiler 1968, J. Wildl. Mgmt. 32: 246). Thus, our data not only support Wenstrom et al.'s (op. cit.) findings, but suggest that molt in conjunction with other aspects of the annual cycle of Ruffed Grouse may occur earlier in southern Ontario than in the Cloquet area of Minnesota.—ALLAN GARBUTT and A. L. A. MIDDLETON, *Department of Zoology, University of Guelph, Guelph, Ontario N1G 2W1, Canada*. Accepted 5 Jun. 73.

Flight speed and wingflapping rate of Sacred Ibis.—Meinertzhagen (1955, Ibis 97: 81) gives flight speeds for several species of birds but none for ibises. I calculated flight speeds for adult Sacred Ibis (*Threskiornis aethiopicus*) at the breeding colonies at Lake Shala, Ethiopia (7° 30' N, 38° 30' E, elevation 1,570 m). On 9 March 1969 at midday with little to no wind, 34 Sacred Ibis, flying 2–3 m above the water, took 150 seconds to fly 1.6 km from Pelican Island to Abdim Island (see Brown and Urban 1969, Ibis 111: 206 for map of Shala). These adults traveled at a speed of 38.4 kph (23.9 mph).

Meinertzhagen (loc. cit.), Blake (1947, Auk 64: 619; 1948, Condor 50: 148), and Kahl (1971, Auk 88: 428) also give wingflapping rates of several species of birds, but again none for ibises. I recorded wingflapping rates of Sacred Ibis breeding at Abdim Island on 4–10 April 1967; the birds averaged 4.2 flaps per second (range 3.6–4.8; 19 counts varying from 4.3–12.9 seconds in duration). Charles H. Blake (pers. comm.) reports mean wingflapping rates in the White Ibis (*Eudocimus albus*) of 3.3 ± 0.3 per second (range 2.9–3.6; 9 observations) and in the Glossy Ibis (*Plegadis falcinellus*) of 3.2 per second (range 2.8–3.8; 4 observations).

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Site attachment in the Northern Shoveler.—Territory typically refers to “any defended area” (Mayr 1935, Noble 1939, Tinbergen 1939, Nice 1941) that is thought to arise as the outcome of two distinct tendencies, site attachment and hostility (Tinbergen 1957). Although the concept has been considered to be generally valid for ducks (McKinney 1965), controversy exists over the use and validity of the concept in some species (Dzubin 1955, Bezzel 1959, Lebret 1961, Hori 1963). Although hostility of male ducks towards conspecifics has been shown to occur in several species, the question of the male's attachment to a site has remained unresolved and largely uninvestigated. The present study was designed to assess the possibility that such site attachment does occur in a manner consistent with the territory concept.

Demonstration of site attachment in ducks is rendered difficult under natural conditions because, as McKinney (1965) pointed out, the possibility cannot nor-