I remained in the colony. Three hours later a small hawk again flew up from the ocean ridge, the hawk holding a clearly discernible chick. This time there was no mobbing, only a few terns giving a cursory pursuit and for only a few hundred feet. The hawk perched on a post, then, perhaps disturbed by my advance, dropped out of sight on the sand behind a large log. Leaving the prey behind, it flew up and away. It was then identified as a female Sparrow Hawk (*Falco sparverius*). Behind the log I found the remains of a Least Tern chick, well grown but not yet at the flying stage with down feathers still on the tips of the rectrices and upper tail coverts. The head was missing, the breast and upper contents of some of the belly torn out.

Despite the known facts that terns have a variety of predators (gulls, crows, snakes, and owls) and Sparrow Hawks occasionally capture small birds, I can find no previous record of a Sparrow Hawk taking young terns.—Erma J. Fisk, 17101 S. W. 284 St., Homestead, Florida 33030. Received 31 August 1972, accepted 21 September 1972.

Data on nictitation rates in birds.—Anyone who has "looked a bird in the eye" at very close range has noticed the transparent nictitating membrane, sometimes called the "third eyelid." This thin structure lies deep to the other lids and repeatedly sweeps across and moistens the surface of the cornea. The initial or closing movement is from anterior to posterior; an almost instantaneous reverse movement leaves the cornea exposed. This two-way sweep usually requires but a fraction of a second. Such rhythmic activity may be thought of as the bird's way of "blinking," the rate of which is not difficult to measure.

In recent years I have gathered data intermittently on nictitation rates, as I call them, from some 257 individuals representing 44 species. These birds, mostly passerines, were mist-netted and banded in Alabama, Georgia, Florida, and Massachusetts. My method was uncomplicated: for each individual, which was held in hand and viewed from one side only, I simply recorded the number of nictitations or blinks per minute. Although this particular physiological rhythm is readily observed, I have not found quantitative data concerning it in the ornithological literature, hence my decision to put on record these preliminary findings.

In the list beyond, a single number following a species name indicates a sample of one. For samples of two or more, average rates are given. These are followed by numbers in parentheses, which refer to size of samples and to extreme values. Thus, nictitation rates of four Red-bellied Woodpeckers averaged 27.0 per minute, with extremes of 19 and 35. The use of more elaborate statistics (such as *t*-tests or coefficients of variability) seems unnecessary owing to limited sample sizes.

Mourning Dove, 24; Red-bellied Woodpecker, 27.0 (4: 19-35); Red-headed Woodpecker, 12; Great Crested Flycatcher, 23; Barn Swallow, 19.0 (2: 17-21); Blue Jay, 3.0 (6: 0-7); Black-capped Chickadee, 40.7 (9: 19-66); Carolina Chickadee, 30; Tufted Titmouse, 4.4 (7: 0-16); House Wren, 7; Carolina Wren, 20.8 (6: 3-54); Mockingbird, 27.5 (2: 15-40); Catbird, 21.9 (30: 2-44); Brown Thrasher, 19.6 (5: 3-56); Robin, 5.6 (22: 0-17); Wood Thrush, 19.7 (3: 8-38); Gray-cheeked Thrush, 25; Veery, 8; Ruby-crowned Kinglet, 24.3 (3: 19-31); Starling, 17.8 (4: 5-28); White-eyed Vireo, 16.5 (11: 4-26); Red-eyed Vireo, 22.5 (4: 8-37); Black-and-white Warbler, 11.3 (7: 2-24); Prothonotary Warbler, 0; Parula Warbler, 17; Yellow Warbler, 26.0 (3: 12-42); Chestnut-sided Warbler, 34; Kentucky Warbler, 13; Yellowthroat, 23; Hooded Warbler, 7.8 (4: 7-15); House Sparrow, 20-2 (4: 4-40); Bobolink, 35.5 (2: 26-45); Eastern Meadowlark, 10.0 (2: 1-19); Red-winged Blackbird, 40.7 (10: 4-70); Baltimore Oriole, 39.0 (3: 3-62); Common Grackle, 5.7 (3: 0-12); Summer Tanager, 3.2 (4: 0-5); Cardinal, 14.8 (32: 1-41); Purple Finch, 34; American Goldfinch, 23.0 (2: 18-28); Rufous-sided Towhee, 24.8 (11: 2-52); Chipping Sparrow, 9.5 (2: 5-14); White-throated Sparrow, 13.4 (13: 2-34); Song Sparrow, 23.7 (9: 2-53).

The overall average nictitation rate for the aggregate sample of 257 birds was 17.9 per minute. Considering the 13 species represented by samples of six or more individuals, we note that six have rates that are faster then the aggregate average. Both the Black-capped Chickadee and the Red-winged Blackbird exceed that average by 22.8 nictitations per minute; the Rufous-sided Towhee, by 6.9; the Song Sparrow, by 5.8; the Catbird, by 4.0; and the Carolina Wren, by 2.9. An additional seven species have rates that are less then the aggregate average. These are the White-eyed Vireo, which falls short by 1.4 blinks per minute; the Cardinal, by 3.1; the White-throated Sparrow, by 4.5; the Black-and-white Warbler, by 6.6; the Robin, by 12.3; the Tufted Titmouse, by 13.5; and the Blue Jay, by 14.9. Here we notice a striking contrast afforded by congeneric species, the "fast" chickadee and the "slow" titmouse. In some individuals (e.g., several Robins) movement of the nictitating membrane was not seen at all during one-minute observation periods, hence zero values. Only a few individuals nictitated at rates exceeding 60 per minute. The fastest rate was the 70 blinks recorded for a Red-winged Blackbird.

A more extensive study involving larger samples would enable one to focus not only on additional species but also on such variables as sex, age, region, and certain environmental factors (as temperature, insolation, humidity, and wind velocity). Still other sorts of questions might be raised: for instance, what percentage of the nictitations are bilateral blinks as opposed to unilateral "winks?" Within a species, some individuals may prove rather consistent in displaying higher nictitation rates than others. This rhythm measurement could be useful, then, in a multifaceted study of avian individuality. Another possibility is that in given individuals accelerated nictitation rates may prove to be sensitive indicators of increased pollutants in the air.—Robert A. Norris, 320 Eureka Street, San Francisco, California 94114. Received 23 September 1972, accepted 30 September 1972.