

down-reaching head as it was being lowered; rarely was it brought forward over the wing as in normal scratching of head and face. Treatment of toes, when it occurs at all, takes place invariably after the tarsi have been oiled. With head bent down upon the lifted foot, the bird rapidly plays the bill over its toes. The act seems to involve more or less circular movements of both bill and foot, in lateral planes. Feathers proximal to the bill seem to be touched also by the toes. It is a question whether the bird is oiling its bill or its toes. Perhaps it is doing both.

An interesting feature of the entire oiling procedure is that treatment of legs and feet is never seen except immediately after the bath, and is always preceded by the taking of oil from the gland. The bird seems not to take oil during preening unassociated with bathing. I have never seen it preen directly after touching the gland. Sometimes the Lark Sparrow will bathe twice, with a period of a minute or two between. At such times, touching of the gland and oiling of legs and feet are done immediately following the first bathing but not after the second bath. However brief its bath sometimes may be, the bird never fails to oil its legs subsequently.

I have seen no published reports of this behavior, and none of several ornithologists with whom I have discussed the matter had knowledge of it. Yet, Mrs. Aven Nelson, Colorado Springs, Colorado, and formerly a member of the botany faculty at the University of Oklahoma, writes me that she has observed this same activity in a pet House Sparrow (*Passer domesticus*) belonging to her sister in Long Beach, California.

Elder (*op. cit.*) found that ducks with ablated oil glands developed, in addition to plumage abnormalities, dryness and cracking of skin on feet and legs. The bills of these birds became dry and peeled. He showed that the uropygial secretion is necessary in ducks for normal condition of bill but he did not say whether this also holds for normal condition of feet and legs. He offered no explanation for the fact that his experimental birds regained normal conditions of bills, feet and legs during their third summer.

The question of relating tarsal preening in the Lark Sparrow with the probable shedding of its tarsal scutes arises. Robert W. Storer (MS. 1952. The problem of the molt of the tarsal scutes of birds.), pointing out the paucity of information concerning molt of tarsal scales, states that ". . . it would appear that the scales of the feet of birds are molted at least once a year and that this may be under the influence of the annual endocrine cycles. This, however, remains to be proved experimentally."

There seems to be no description of such molt for *Chondestes grammacus*, and I have not been aware of it in this present individual. The bird's manner and frequency of anointing its tarsi have remained the same throughout the seasons and during plumage molt.

Behavior of the captive Lark Sparrow suggests that a primary purpose of the oil gland, at least in some non-aquatic species, may be other than providing oil for the plumage. Perhaps Eugene Law's paper (1929. *Condor*, 31:148-156), showing absence of oil in feathers of certain birds, should not be summarily dismissed (Elder, 1954:11) after all.—LOVIE M. WHITAKER, 1204 West Brooks Street, Norman, Oklahoma, July 1, 1956.

Feeding behavior of Red-tailed Hawks.—An uninjured immature Red-tailed Hawk (*Buteo jamaicensis*) was captured by hunters near Dearborn, Michigan, in December, 1948. The bird was placed in a cage two and one-half feet wide, six feet long and five feet high, with a broom handle providing a perch. When I banded the hawk on December 19, 1948, it weighed 793 grams. Periodically, dead mice and live English Sparrows (*Passer domesticus*) were introduced into the cage. The hawk captured the sparrows expertly. It would hold a sparrow under its talons, on the ground, for a minute or more.

Then, taking the sparrow in its beak, it would walk to the part of the cage farthest from the observer, lower its head and raise and spread its wings so as to completely hide its head and body from the observer. It would then pull out some remiges and proceed to eat the sparrow. If the observer moved so as to obtain a front view of the hawk, it would turn quickly, always keeping its back toward the observer and keeping the prey well hidden. When the bird was liberated on February 6, 1949, it weighed 892 grams.

An opportunity to observe the feeding behavior of a wild nestling Red-tailed Hawk was provided in the spring of 1956. One young was hatched in a nest within range of my window. At 1:10 p.m., June 20, the two-months-old young pounced upon the prey brought to the nest by its parent, but did not start eating immediately. The adult flew from the nest and for a few seconds the young one merely pecked at the food. Then, following violent back and forth movements of the head, it regurgitated two pellets within a few seconds. It then fell to eating ravenously. Suddenly it raised and spread its wings just as the captive hawk had done. In a few seconds, it folded its wings. After 10 minutes, it stopped eating and jumped to a small branch beside the nest (not for the first time). On June 21, it left the nest tree (for the first time), but on June 23, at 5:05 p.m., it returned to the nest and began to feed on prey brought there by one of the adult hawks. A Flicker (*Colaptes auratus*) flew over the nest tree, calling. Instantly, the young hawk raised and spread its wings, while continuing to eat, as it had done on June 20. After the Flicker had gone, the hawk folded its wings again. Perhaps this behavior serves to hide the prey from possible competitors.—ALICE D. MILLER, 1150 Brewer Road, Leonard, Michigan, August 21, 1956.

Specimens of three birds uncommon in New Jersey.—A collection of birds recently made by me in New Jersey contains specimens which supplement the recent list of the birds of that state (David Fables, Jr., 1955. "Annotated list of New Jersey birds." Urner Ornithological Club, xi + 95 pp.). This collection of 108 skins and 94 skeletons is deposited in the University of Kansas Museum of Natural History, with which I was connected at the time.

Podiceps caspicus californicus. Eared Grebe.—I secured a male (K.U. 32994) with testes that measured 4 x 4 mm., weighing 256 gm., on February 16, 1955, at Wreck Pond, Spring Lake, Monmouth County. Fables (*op. cit.*:15) lists "two, or possibly three, sight records" through September 1, 1954. Several Eared Grebes have been observed in winter since this date by members of the Urner Ornithological Club (personal communication), but I believe my specimen is the first to be taken in the state. Comparison with the series at the American Museum of Natural History indicates the specimen is *P. c. californicus*.

Branta canadensis leucopareia. Canada Goose.—On December 21, 1954, I discovered a small, white-cheeked goose accompanying a flock of some 30 Coots (*Fulica americana*) and semi-feral Mallards (*Anas platyrhynchos*) on a fresh-water pond in Point Pleasant, Ocean County. The specimen was obtained the next day. The bird (K.U. 33003), which I identified as *B. c. leucopareia* on the basis of size and dark coloration, was a female (ovary 25 x 6 mm.) weighing eight pounds and was very fat. The brown rectrices indicate the specimen is a bird-of-the-year. The measurements are as follows: wing (chord), 407 mm.; tail, 133 mm.; exposed culmen, 45 mm.; tarsus, 77 mm.; middle toe without claw, 65 mm. There seems little possibility that this goose had escaped from captivity. Fables (*op. cit.*:20) lists several records of birds believed to be of this subspecies, but apparently no specimen had been critically examined.

Sterna fuscata fuscata. Sooty Tern. On August 13, 1955, shortly after hurricane