

scribe the behavior of Purple Grackles (*Quiscalus quiscula stonei*) in anointing themselves with a juice, apparently an acid, from the hulls of English walnuts (*Juglans regia*). This activity has been noticed casually in a number of trees just beyond the southwest edge of Lancaster, over a period of about 15 years; large and noisy flocks of birds have gathered to spend hours at it, day after day through much of each summer. In 1945, the grackles were repeatedly watched at their performance for the particular purpose of presenting an account.

The grackles, of both sexes, began to come to the walnuts when these were about three-fourths developed—during the first half of June. The activity was at its height during July. After that it waned sharply, but was continued by a few birds until about the middle of August. On some mornings the birds had already gathered at 4:40 o'clock, Eastern Standard Time; on one evening the last did not leave until 7:25 o'clock. As many as 20 and 30 birds worked at a time in single trees. The numbers were largest on hot, sunny days. Sometimes the activity went on even during light rains; hard downpours stopped it, but as soon as the trees had dripped off a bit the birds were back.

The walnuts grow in clusters of as many as five and six, at the ends of branches. The grackles would alight upon these clusters—just one bird to each—and begin pecking a hole in the sticky hull of one of the nuts, usually throwing away the pieces of hull they gouged out but occasionally seeming to swallow a piece. When a good-sized hole had been made, the birds would dip their bills into it, undoubtedly wetting them against the pulpy interior, and then thrust their bills over and into their plumage. A great part of the body was thus anointed—the breast, the under and upper surfaces of the wings, the back, and very often apparently the rump at the base of the tail. Sometimes the birds made just one stroke of the bill after a dip into the nut, and sometimes many. Occasionally, after a period of this activity, they would shake themselves vigorously and then begin it all over again. When they had finally finished they would often move to a branch and preen.

Particular birds that were watched worked as long as 10 to 15 minutes at a stretch. Many males sang at intervals, with display, and there was also much noise because of commotion among the birds, two or three of which would often contest for the same cluster of nuts.

Neighboring black walnut trees (*Juglans nigra*), which contained nuts during this same period, did not attract the grackles. It is to be noted that the hulls of black walnuts are extremely hard, and also dry in contrast to the gumminess of the English walnuts. The indication that it was an acid the birds were using was obtained when one of the English walnut hulls was cut open and litmus paper quickly placed against it; the paper instantly gave a strong acid reaction.—MARY EMMA GROFF, *Charles Road, Lancaster, Pennsylvania*, and HERVEY BRACKBILL, *4608 Springdale Avenue, Baltimore, 7, Maryland*.

Chipping Sparrow's nest without hair lining.—In the vicinity of New York City, especially in suburban areas, there has been a marked decrease in nesting Chipping Sparrows (*Spizella passerina*) in the last 30 years, possibly correlated with the decreasing availability of horsehair with which they used almost invariably to line their nests. In this connection a 1945 Chipping Sparrow nest from Millwood, N. Y., brought to the writer by Dr. Libbie Hyman, is of interest. It is normal, of fine twigs, dried grasses and what appear to be rootlets, but there is no differentiable lining, or trace of hair in its interior, which is of material similar in character to that of the rest of the nest only finer, more exclusively of the 'rootlets,' and more smoothly moulded. The nest, which is very frail though deep, was sheltered on a flat area in

the dead top of a small pine tree about ten feet high. It had held only two young, in August—a late brood.

Certain warblers that at times use a hair lining for their nests obviously substitute it for hair-like black 'moss-stems' (Auk, 36: 226-227, 1919), but this nest gives no clue as to how the Chipping Sparrow acquired its hair-lining habit, which was so universal when horsehair was readily available.—J. T. NICHOLS, *American Museum of Natural History, New York, N. Y.*

Death of a Trumpeter Swan from multiple parasitism.—The current interest in the Trumpeter Swan (*Cygnus buccinator* Richardson) and its management has served to increase the awareness of waterfowl biologists to the almost complete lack of information concerning the causes of natural mortality in this species. In view of this lack it seems worth while putting on record the results of the examinations of two of these swans that were forwarded to our laboratory during the early spring of 1945.

On February 28, 1945, a sick swan was found wandering along the railroad track near Vanderhoof, B. C. The game warden of the district captured the bird and forwarded it to Vancouver. Despite the best of care it died two days after capture and was sent to me by the B. C. Game Commission.

This bird, an adult female, measuring 58 inches in total length, was extremely emaciated and weighed just eleven pounds. This is less than half the weight of a bird in good health.

Examination for parasites revealed that the small intestine contained 952 tapeworms (452 mature and 500 immature). Dr. A. McIntosh of the Zoological Division, United States Department of Agriculture Bureau of Animal Industry, who identified the parasites from this swan, finds the tapeworms to represent an apparently undescribed species of *Hymenolepis*.

In the caecum were 12 trematodes representing three genera. Six were *Zygodontyle lunatum* (Diesing, 1835), a widely distributed species occurring in ruminant mammals as well as in birds (Caballero, 1940); five were *Echinostomum revolutum* (Froelich), a fluke we have found to be widely distributed in British Columbia in birds feeding upon marsh vegetation, pond snails and lesser vertebrates; one was *Orchipeum tracheicola* (Braun, 1901). The latter, described from specimens removed from the trachea of the White-winged Scoter, *Oidemia fusca*, of Europe, was not again found until Cheatum (1938) reported specimens from the respiratory tract of a White-winged Scoter from eastern North America. This is apparently the first recorded occurrence in a Trumpeter Swan.

The pericardial cavity contained about 30 cc. of brownish fluid. The heart muscle was pale and flabby and had imbedded in it 25 filarial worms of the species *Sarconema eurycerca* Wehr, 1939. Blood smears revealed no haematozoa but large numbers of microfilaria were present. These were presumed to be the larvae of *Eurycerca*. This parasite was described by Wehr (1939) from specimens taken from the heart muscle of Whistling Swans (*Cygnus columbianus*) in Washington, D. C., Wisconsin and Utah. The present record seems to be the first for the Trumpeter Swan.

This swan had succumbed to gross multiple parasitism. Both the cestode *Hymenolepis* and the filarial nematode *Eurycerca* were present in numbers apparently sufficient to induce pathological changes in the host and it is not possible to determine in this case which of the two was most harmful.

On March 13, 1945, an adult female Trumpeter Swan, one of a group of four wintering at Qualicum, V. I., B. C., was found dead. Another of the four gave evidence of illness. The dead bird weighed 16 lbs. and was moderately emaciated.