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BIRD NOTES FROM A SICKROOM

By JESSE M. SHAVER

On June 9, 1939, the author was unfortunate in suffering a fracture of the neck of the femur. He returned from the hospital on June 21 and has been confined to his home at 1022 Eighteenth Avenue South, Nashville, since that time. His home is in an unusually large yard having much shrubbery and trees, some of which are close to the windows and the porches. The birds in the yard that could be seen from the windows and from the porches were a constant source of pleasure and delight. Some of their habits appear interesting enough to report in this paper.

A family of Blue Jays out of the nest for some weeks stayed almost constantly in some red oak trees (Quercus Schneckii) in the yard from the beginning of this period into August. In late August and early September, these birds foraged more widely but hardly a day passed that they were not seen at some time in these trees. Early in the season, they ate and fed their young mainly on adult May beetles (probably Phyllophaga sp.) which were abundant in the tree crowns. Early in July, the May beetles disappeared and June bugs (Allorhina nitida) took their place and became equally abundant. From this time until their disappearance at the end of July, June bugs appeared to constitute the principal food of the Jays. This feeding habit of these birds is a distinct benefit to man since both adult May beetles and June bugs feed on the foliage of oak trees and as larvae (grub worms) are very destructive to the roots of grasses and other plants. It also recalls an incident that occurred in July, 1922. Blue Jays were reported as destroying eggs in a hen house at Knapp Farm. At the author's request, some of these birds were shot and brought into the laboratory. They were opened up and examined in order to determine whether they had been eating eggs. In no case were any parts of eggs discovered. Instead their gizzards were crammed with adult June bugs.

The method used by Blue Jays in eating June bugs was to catch the insect in the beak and then transfer it to a limb of a tree. While it was held down by one foot, it was hammered with the beak working like a trip hammer. This method of reducing the insect to small pieces is very similar to that used by Blue Jays in eating the acorns of the oak tree in September.

During June, July and the first half of August, Blue Jays were rather quiet, not giving the jay-call nor singing in a minor key. Later they began to give the jay-call and to sing occasionally their minor song.
Two Ruby-throated Hummingbirds were in the yard during most of July and August. In July the trumpet creeper (*Tecoma radicans*) was in flower in the yard. This is known to be a favorite hummingbird flower and might have been the cause of their presence at this time. However, since none of these flowers could be seen from the windows, it was not possible to determine whether in this instance they were being visited by Hummingbirds. In August, the white single Althea with the red center (*Hibiscus syriacus*) was in flower and Hummingbirds were observed to visit it frequently. It was not possible to determine whether nectar or small insects were taken at these visits.

On several occasions, attacks by these Hummingbirds on two Carolina Chickadees, who were in the habit of foraging through the trees and shrubbery, were observed. A Hummingbird would be sitting quietly on a limb in the open, as is its habit, when a Chickadee would appear ten feet or more away and busily work up and down a limb in search of insects. Suddenly the Hummingbird would dart at the Chickadee, missing him by only a fraction of an inch. Turning quickly, the Hummingbird would dart again and again at the Chickadee. Each time the Chickadee would move slightly around the limb and turn his head to face the charging Hummingbird. This continued for some time until either the Chickadee flew away or the Hummingbird desisted and flew to a limb and perched as before. No attacks by these Hummingbirds on other birds were observed. This behavior against other birds has been noted before near the Hummingbird nest but never away from the nest (Hummingbirds do not nest in our yard or anywhere near). If it is assumed that Hummingbirds recognize and attack only their enemies, the Chickadee would be regarded as the hummingbird's enemy. It might be that Chickadees destroy eggs and young of the Hummingbird when they encounter them in working out small limbs in search for insects. The last Hummingbird seen in the yard was on September 20, visiting the flowers of the Mexican sunflower.

In midsummer, a wild black cherry (*Prunus serotina*) tree in the yard ripened a large crop of fruit. These berries were eaten by numerous Robins, a pair of Catbirds that had earlier nested nearby, and occasionally by a pair of Brown Thrashers, a Mockingbird family and a Cardinal family.

June, July, and August were unusually cool this summer. Mockingbirds were never heard to sing during this time but in the first part of September they began their low, autumn song. Catbirds sang some during the end of June and then stopped until September when they occasionally sang their low, whisper song. They disappeared about September 5. Brown Thrashers were never once heard to sing during the summer but in September they sang their whisper song at least once. They were last seen on October 1. Robins sang consistently in June and some during the first part of July. They were not heard to sing during the last part of July and during August. Occasionally they sang in September. Cardinals sang all summer but less frequently as the season advanced and scarcely at all in September. The Maryland Yellow-throat across the street was very quiet all summer and was heard to sing only once—about the middle of July. The beautiful male Baltimore Oriole that foraged in the yard all summer disappeared at the end
of August. The first part of the summer he sang ever now and then but for most the summer he contented himself with occasional calls. Consistent summer singers were the Carolina Wren and Bewick’s Wren. A Warbling Vireo sang a great deal during the last of June, quit singing in July but resumed early in the morning in early September. He was not heard or seen after September 16. Yellow-billed Cuckoos called very frequently in late June, in July, and during most of August. They were observed to feed upon the August generation of the fall webworm (Hyphantria cunea) which was very abundant. The author sometime ago watched a Yellow-billed Cuckoo feed upon woolly caterpillars from a distance of less than ten feet. The bird took the caterpillar crosswise in his bill, took out a piece near the middle and swallowed it but left behind the two ends. This was the customary method of feeding of this particular bird at that particular time. It may be the typical method of feeding of the species but these observations were not extensive enough to establish this as a fact.

Two Flickers visited the yard to feed on ants in the driveway and to drink at the bathing fountain. However, they were never observed to take a bath. Is it possible that Flickers never take baths?

There were a few birds that were seen in the yard only a few times during the summer such as Crested Flycatcher, Sparrow Hawk, Nighthawk, Chipping Sparrow, Towhee, and Red-headed Woodpecker. Others not mentioned previously that were constantly present were: Bronzed Grackle, Starling, Chimney Swift, and Downy Woodpecker. Purple Martins were common overhead at the end of June and the first of July. Altogether twenty-six species were observed in the yard during the summer.

GEORGE PEABODY COLLEGE FOR TEACHERS, Nashville, October 12, 1939.

PREDATORS IN THEIR RELATION TO BIRD LIFE

By Bruce P. Tyler

FOREWORD: Without accipitrine hawks it is unlikely that the Grouse and Quail would have become the splendid, fast birds that they are. Without the mountain lion and the wolf it is unlikely that the deer would have attained their present grace and speed. There would not have been the need for that matchless sinew and split-second reaction which is the pride of sportsmen and naturalists alike. Without swift, cunning predators to pursue them, vegetarian forms tend to become sluggish in nature.

How desperately our hawks and owls need to be understood.

In the following paper Mr. Tyler presents in a most convincing manner the case for the raptorial birds.—C. W. Quaintance, Department of Biology, East Tennessee State Teachers College.

What are predators and what is their function relative to bird life? The word predator has in it the idea of taking booty or prey, or one thus gaining a livelihood, a robber. In animal life it refers to animals which live upon other animals.
In discussing predators affecting bird life, it might be well to give attention first to the more general aspect of the subject. It appears that if nature is undisturbed, a balance of life will be established—that is to say—there will be enough insects for the birds and enough birds for the snakes, hawks, owls, squirrels, etc. There will be enough squirrels, rabbits etc. for the hawks and eagles.

In insect life the steps of predation may not be so evident except to the specialist. For instance:

In our gardens we have the beautiful gladiolus infested with a minute insect, the thrips. The tiny insect is just visible to the naked eye, but highly destructive to the bloom of the plant it infests. Modern science combats the thrips by liberating a predator to prey upon it. The enemy, a true predator, is harmless to the flowers but deadly to the thrips, and thus renders inestimable service to mankind.

The Japanese beetle, such a tremendous nuisance on our Eastern seaboard, ran riot for some years and continues unto this day. Its radius of activity seems to be advancing about ten miles annually and its devastation is worst in its most recent haunt. The reason being that nature is controlling its increase in the territory first affected, while in new territory it flourishes without molestation. Some sad day this pest will reach Tennessee, unless effective methods—not yet discovered—stay its advance. It is reported to me that in Japan the beetle is not such a great pest as it is here, the reason being that nature has built up enemies which control it.

In retrospect let us look at the Colorado potato beetle. Once it was a terrible scourge, now it is under control, due to the joint efforts of man and nature. This year, 1939, I have in my garden a planting of late potatoes on ground where potatoes have not been grown for some years and I find no beetles. I have seen but one beetle there this season, which, needless to say, was promptly dispatched. The natural enemies of the Mexican bean beetle are fast catching up with it. Today it is not nearly so destructive as it was a few years ago.

I believe that there was no such thing as the depredation of the army worm in our Western States until the hunters had unduly reduced the number of the Prairie Chickens, thereby permitting the enormous fecundity of these insects to be partially unchecked. The plague of grasshoppers in Utah was 'pinched in the bud' by their predators—the gulls. Thus it is in nature—'dog eat dog'—yet there is no destruction of species, but a perfect balance reigns. The hypothesis is that birds if left unmolested will increase to the point of a balanced avifauna.

The principal purpose of this paper is the staying of the slaughter of the hawks, the chief avian predators. They have been so completely destroyed in certain areas that one is seldom seen. The hawks cannot present a 100 per cent 'bill of health', yet they are a very necessary part in the balancing of the bird life, and their beneficial properties far exceed their destructiveness. Let us examine scientific investigations of the diet of our hawks, as summarized by John B. May (1939) in 'Hawks Of North America' from
previous publications, manuscripts, and letters of many authorities. The total number of stomachs examined and the number in which mammals, etc., were found is given.

<table>
<thead>
<tr>
<th>Species</th>
<th>Examined</th>
<th>Mammals</th>
<th>Prey or Game</th>
<th>Other Birds</th>
<th>Insects</th>
<th>Misc.</th>
<th>Empty</th>
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</thead>
<tbody>
<tr>
<td>Sharp-shinned Hawk</td>
<td>1039</td>
<td>33</td>
<td>16</td>
<td>844</td>
<td>45</td>
<td>0</td>
<td>164</td>
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<tr>
<td>Cooper's Hawk</td>
<td>422</td>
<td>66</td>
<td>76</td>
<td>146</td>
<td>6</td>
<td>16</td>
<td>128</td>
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<tr>
<td>Red-tailed Hawk</td>
<td>1013</td>
<td>857</td>
<td>112</td>
<td>88</td>
<td>92</td>
<td>130</td>
<td>148</td>
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<tr>
<td>Red-shouldered Hawk</td>
<td>446</td>
<td>237</td>
<td>7</td>
<td>59</td>
<td>54</td>
<td>166</td>
<td>33</td>
</tr>
<tr>
<td>Broad-winged Hawk</td>
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<td>7</td>
<td>276</td>
<td>11</td>
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<td>63</td>
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<tr>
<td>Marsh Hawk</td>
<td>418</td>
<td>255</td>
<td>10</td>
<td>278</td>
<td>11</td>
<td>72</td>
<td>63</td>
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<tr>
<td>Duck Hawk (rare)</td>
<td>102</td>
<td>3</td>
<td>31</td>
<td>76</td>
<td>12</td>
<td>9</td>
<td>29</td>
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<tr>
<td>Sparrow Hawk</td>
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<td>0</td>
<td>69</td>
<td>43</td>
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The real value of predators in nature is the cleaning up of the stock of the species preyed upon, the destroying of the old, the wounded, and the less vigorous. Thus reproduction is secured from the best stock, and there is more abundant food supply for the survivors. If inferior stock abounds there may be shortage of food, weakening the species locally.

There will be no general rehabilitation of our quail until the destruction of the hawks is discontinued and their increase encouraged, to the end that once more the balance of nature may be reestablished and the arch enemy of the quail, the rodents, held in check.

From 'Food Habits of Common Hawks' by W. L. McAtee we quote:

"... the relations between predators and prey constitute a maze that the most fully informed cannot thread unerringly, and one that all others rather than attempt by force had much better avoid entirely. Interference with animal relationships has effects that cannot be undone, and should be undertaken only after the fullest consideration of all the information obtainable."

"... A rule to be borne in mind, even when hawk control is found necessary, is that aggressive action should be directed against the offending individuals only, not against the entire race."

Frederick C. Lincoln in 'The Migration of American Birds' says:

"There is a tendency for man to blame predators for his own mishandling of wild-life resources, ignoring the fact that he is the most predatory of all animal species."

"Control of over-abundant predacious animals is a matter that is best left in the hands of trained biologists. Certainly the constant crusade against such fine birds as our hawks and owls is a little short of sheer idiocy."

We also quote from the 'Proceedings of Provincial Dominion Wild Life Conference':

"... the full native complement of animal life should be left absolutely undisturbed, save to the extent incidental to making the park accessible to the visiting public. I mean exactly this, that no so-called 'vermin', such as wildcats, coyotes, weasels, hawks, or owls should as a rule ever be killed inside of National Park boundaries. Within large parks such as Yosemite and Sequoia, not even the mountain lion should be disturbed. All animals belong in the territory, have been there from time immemorial, as parts of the perfectly normal biotic complex, to the presence of which the population of every other native animal is, by reason of its long-established and wholly adequate rate of reproduction, adjusted. " (Dr. Joseph Grinnell).
"Predation is normal, not exceptional, and when man undertakes to tamper with what is normal as between one animal and another, especially when only part of the truth is understood, he is starting a chain of events the results of which cannot be foretold and which will almost certainly be surprising and injurious to man’s best interests."

"The natural control of the herbivorous animals whether mice, rabbits, or deer is a task given by nature to the predators. Man will interfere at his peril."

"Game administrators should do everything that is possible to meet mistaken ideas about birds of prey and to discourage the killing of them. We cannot afford to do without the services of these birds in the killing of rodents, of which they are one of the most efficient natural checks. Even if some of the larger birds do prey upon game birds, it is not proven that they do harm, and on general principles it is quite probably they do good to the species upon which they prey."

JOHNSON CITY, November, 1939.

RUBY TREE

BY BENJ. R. WARRINER

For a good many years I have tried to decide solely for my own satisfaction which is the prettiest of all the birds I know. First I have selected one, then I have switched to another. It is a matter that I have not been able to settle, due, of course, to the fact that many of the birds are truly beautiful. At last, however, I have at least been able to narrow the problem down, not to a particular kind, but to a certain spot on a certain kind. I do not say that the male Ruby-throated Hummingbird is the handsomest or prettiest among all the birds, but I do say that the patch of burnished red that covers his throat is the most beautiful bit of color I have ever seen anywhere.

During an eleven o’clock church service last summer, a Ruby-throated male flew through a window at the Fillmore Street Presbyterian Church here in Corinth. The little fellow beat his body against the walls until finally he fell exhausted on a window sill. In a few minutes he died. A friend brought the body to me and I had my first opportunity to hold in my hands a ‘Ruby-throat’.

When the light fell at a certain angle upon the bird’s throat there was no color there, but a slight change in the position in which I held the tiny body brought out a faint trace of red; then another turn and there was a lovely ruby the size of a five-cent piece, made up of scores of scale-like facets, each a small but brilliant gem. Each had been polished to shine like a miniature metallic sun whose rays startled the eye with their brilliant beauty.

My grandson, aged six, assisted me in finding a little tin box to use for a casket. We placed the Ruby-throat in it and dug a grave in the backyard. We agreed that early next spring we would go into the woods and find a young wild cherry tree and plant it at the spot. If our plans materialize, in a few years many birds will feast on the delectable fruit, but none will ever know that it is a tree not of cherries but of rubies.

CORINTH, MISS., December, 1939.
PROTHONOTARY WARBLER NESTING STUDIES
AT REELFOOT LAKE
BY LAWRENCE H. WALKINSHAW

In undertaking a nesting study of the Prothonotary Warbler (Protonotaria citrea) at Reelfoot Lake this year I made three trips to the lake from my home in Battle Creek, Michigan. The first was on April 9, when I placed thirty bird houses along the canal south of the Spillway. On that date R. W. Morris, a local resident, showed me a nest of the Prothonotary Warbler where it had been tipped out of an upturned motorboat. I visited the area a second time during the last half of May and found eggs in the majority of the nests. Evidently most of the egg laying started the first half of May. During the summer twenty-four nests were found in the thirty bird houses I had placed and an additional seventeen nests were discovered elsewhere.

The breeding season lasted from the first egg laid on April 6 until August 10, when the last young left the nest, a period of 126 days. This last date was sent to me by Carlos Woods who examined the bird houses periodically for me. Most of the May nests contained complements of five eggs and those in June four eggs each. Out of 30 nests studied, 19 or 63.3% were successful. Of 139 eggs the outcome of which were known, 78 young successfully left the nest. This is a percentage of 56.11% and is much higher than for our Michigan studies. The incubation period of 19 eggs in four nests ranged between 12 and 13½ days, averaging 13 days, 10 hours. The 14 young left the nest within 9 to 12 days after hatching, averaging about 11 days. The average size based on thirty-two sets of eggs was 4.65 eggs per set. Eighty-eight eggs averaged 17.87x14.25 millimeters in measurement and 1.94 grams in weight.

Thirty adults were marked with Biological Survey bands and most of them with colored bands. Sixty nestlings were banded. Two of the females were found attempting second broods in the same bird houses where they raised an earlier brood. In both cases I was not able to tell whether they did raise the second brood. One pair raised a brood in one bird house then a second brood in July in another house about 150 yards distant. Woods caught the adult female on the second nest; she bore band number 39-54147 which I had previously placed on her at an earlier nest in another house.

BATTLE CREEK, MICHIGAN, September 5, 1939.

Note—A very comprehensive article by Dr. Walkinshaw on nesting studies of the Prothonotary Warbler near Battle Creek, Michigan, was published in Bird-Banding, Vol. IX, January, 1939, pp. 32-46. This species is abundant at Reelfoot Lake and we are glad to see such a project initiated there by Dr. Walkinshaw. In our June issue we reprinted an article on Reelfoot Lake by Frank A. Pitelka of the University of Illinois and this current article, hurriedly compiled at our request, again emphasizes the appeal of this Tennessee lake to naturalists of other states.—Environ.
AS OTHER SEE US

In The Migrant for June, 1938, we quoted an interesting account of Dr. Louis Leroy's Prothonotary Warblers which was given in 'STROLLING with ELDON ROARK', a very popular and widely read column of the Memphis Press-Scimitar. Below we again quote from Mr. Roark as he writes, September 28, 1939.

"NO DULL HOUR FOR ORNITHOLOGISTS—"I doubt that any hobbyists in and around Memphis have more fun than the ornithologists. Life holds no dull hours for them.

"On holidays and week-ends they form little parties and hike thru the woods and fields, or hide in trees or in the bushes around ponds and lakes, spying on the business and domestic life of the birds and keeping detailed records of their studies.

"You fishermen may think you get a thrill when you land an eight-pound bass, but you just don't know anything. You ought to see an ornithologist when he discovers the first Dowitcher of the season, or when he walks unexpectedly upon a Wilson's Phalarope.

"And don't think the ornithologists' fun is confined to the hikes. Oh, no! They have plenty of work to keep them busy during their evenings at home. They work on their records, play games of identifying birds from their pictures, plan expeditions and projects, read books on their favorite subject.

"The ornithologists have their favorite lakes, just as the fishermen and hunters have. Probably the most popular spot near Memphis is Mud Lake, south of the city on the Tennessee-Mississippi line. Eugene Wallace, writing in the current issue of The Migrant, official magazine of the Tennessee Ornithological Society, reports that he and Jim Vardaman made 16 trips to Mud Lake in August.

"1300 WATER BIRDS IN ONE PLACE—'During periods of high water Mud Lake extends into the trees and undergrowth bordering it,' he says, 'but dries up toward late summer, becoming a mecca for herons and shorebirds. On Aug. 12 I recorded approximately 1000 American Egrets, 200 Little Blue Herons and 100 Wood Ibises congregated in this narrow stretch of water. Shorebirds were lacking at this early date, but this absence was made up entirely when a Willet alighted near us. This bird, the first collected here and the third for Tennessee, is very gray and is undoubtedly of the western species (Catoptrophorus semipalmatus hornatus).

"The following day Coffey and party recorded practically the same birds. Several Snowy Egrets were also seen and Wood Ibises had increased to 250. Eight Red-shouldered Hawks and two Red-taileds were seen soaring overhead . . . ."

"And in like manner the report goes on giving all the details of the 16 trips to Mud Lake. Those fellows make a note of every bird—almost every tweet—they hear. And when those reports are printed, they eat it up.

They have such a good time that I'm thinking of building me a blind at Mud Lake and taking up the hobby.'
MORE ABOUT THE BLUEBIRD NEST-BOX PROJECT
BY AMELIA R. LASKEY

As last year the Bluebird nest-box project in Percy Warner Park has been carefully observed throughout the 1939 season. Fifty-five trips, representing almost two hundred hours in the field, were personally made to examine the boxes, record progress in nesting activities, band the young and remove the old nest material. Arthur McMurray cooperated enthusiastically during the summer vacation and rendered valuable assistance. As in 1938 these field data were tabulated, analyzed, and presented before the Wilson Ornithological Club in a paper which will probably be published in *The Wilson Bulletin*. However a very brief summary of some of the results is given herewith for those who do not see the other journal.

The 1939 season opened with 38 boxes ready for use but 18 were added at various times during March and April with the help of Arthur McMurray, William Simpson, and Conrad Jamison. Of these 56 boxes, 53 were used at least once by Bluebirds although the new boxes were placed too late in the spring for best results. Bluebirds investigate nest sites during winter and early spring in Tennessee and usually by March have selected their nesting cavity and are busy building nests and defending territory.

This year the nesting season started from two to four weeks later than in 1938 as weather conditions were not so favorable. Therefore Bluebird nesting activities were carried on into late August. A number of park improvements such as road paving and building of entrance gates were in progress this season, and disturbed the occupants of nearby boxes, causing a number of desertions. Notwithstanding the various handicaps, 290 nestlings matured this year. This is an increase of 25 over last year and makes a total of 811 young for the four years that boxes have been made available.

In two-thirds of the 134 nesting attempts females were captured for identification and of these 67 individuals, 13 had been banded while brooding in 1937 or 1938. Eight of these were occupying the same boxes used in previous years. The occupants of Boxes 9 and 22 were using them for the third consecutive year. Nine of the brooding females of this year had been banded as nestlings in the park in 1937 or 1938.

Plans are already made for next season and work has been started which it is hoped will make the coming year still more successful. Several additional boxes have been placed and a number moved to more desirable locations. The work is to be completed this month so that by early spring about 70 Bluebird boxes will be ready for those delightful little birds. In addition, a number of smaller boxes were placed in the wooded sections of the park with the hope of enticing Chickadees, Titmice, Wrens, and other small birds to build in them.

NASHVILLE, TENN., December, 1939.
THE SEASON

MEMPHIS AREA:—Chimney Swifts were uncommon until after Oct. 1 and only 2200 were banded, the smallest number since 1934. After a few days’ apparent absence we noticed a flock of about 50 downtown on Oct. 26 and 21 Swifts there the next night. We did not see them there on our next visit, Oct. 30. Fordyce Mitchel reported about 100 at Sacred Heart chimney on Oct. 27.—The first Ring-billed Gull was seen Nov. 2, a late date, and the species has not appeared often on the Wolf River directly in front of town.—Field work has been slack since Mud Lake, our favorite haunt at this season, has been dry. Austin Burdick, Jr. furnishes several records: Joe Mason saw 10 Red-shouldered Hawks migrating overhead about 10 A.M., Sept. 23. The first White-throats were seen Oct. 10; White-crowns on Oct. 16 although they didn’t appear at his Yates Ave. banding station until Oct. 21. The latter species is very local but we seem to find them more readily during recent years. The fall field day at Shelby Forest, Oct. 29, was a delightful outing. Three Pied-billed Grebes were seen on Piersol Lake and several flocks of Double-crested Cormorants were seen moving south. Daytime reports of geese made by casual observers in recent seasons were often mistakenly based on flocks of this species which were also seen at the same time by our Scout naturalists. Burdick’s group on the field day went down to the river and recorded: Great Blue Heron, 10; Mallard, 20; Black Duck, 8; Lesser Scaup, 3; Green-winged Teal, 8; Ruddy Duck, 2; Herring Gull, 26; G. Yellowlegs, 7; Tree Swallow, 5,000; Starling, 10,000.—Burdick reports of special interest 26 Bufflehead at Old River near Hughes, Ark., Oct. 30; 500 Ruddy Ducks on Horseshoe Lake (Ark.), Nov. 6; 350 L. Scaup and Ring-necked Ducks in front of town on Nov. 12; 225 Cormorants, 2 Golden-eyes, 1 Woodcock, 2 Great Horned Owls, and 16 Rusty Blackbirds at Old River on Nov. 12.—On Oct. 15 we found a Phoebe, Blue-headed Vireo and Oven-bird in Overton Park.—We examined an immature Red-tailed Hawk shot near Stuttgart, Ark., about Dec. 10; the underparts were unusually white and the crown was white save for a few feathers tipped with brown.—Ben Coffey, Memphis.

NASHVILLE AREA:—All migration has taken place relatively normally here. A late summer drought extending thru early fall and comparatively mild weather caused many migrants to pass thru unseen. On Oct. 22 the Nashville chapter held its annual fall field trip, visiting the new Montgomery Bell State Park which is about 35 miles southwest of Nashville. 50 species were listed that day. The variety of water birds found there on the newly constructed 53-acre lake was most pleasing. The following were listed: 6 Wood Ducks, 7 Lesser Scaups, 20 Ring-necked Ducks, 5 Blue-winged Teals, 10 Coots, 1 Hooded Merganser, 3 Horned Grebes, 16 Pied-billed Grebes, 2 Blue Geese. The Blue Geese were immature ones and were very unwary. About 200 Snow Geese were seen flying high overhead. Among the other birds listed were the Lesser Yellowlegs, Woodcock, Red-tailed Hawk, Marsh Hawk.
Short-billed Marsh Wren, Winter Wren, Brown Thrasher, Hermit Thrush, Fox Sparrow, Savannah Sparrow, and Swamp Sparrow.—Geese were seen and heard mostly on Oct. 20, 21, and 22. A local newspaper printed a picture of a single flock of 189 geese that flew over on Oct. 20. Conrad Jamison saw flocks of 74 and 80 on Oct. 21.—4 Little Blue Herons, one an adult, were present at Radnor Lake during the last days of August and the first week of September. 2 American Egrets were also seen there during that period. At least 2 Double-crested Cormorants were present in late September and the first days of October. A lone Cormorant was seen on Dec. 3 (Ganier). A Great Blue Heron has remained there all season.—The great majority of Chimney Swifts left before Oct. 15 although Mrs. Laskey and crew trapped and banded a flock of nearly 500 on Oct. 22. Mrs. Laskey’s group banded about 8500 swifts this fall and retrapped more than 1000 of the 15,500 banded last fall. Bill Simpson and Conrad Jamison saw the last Swifts reported in middle Tennessee,—namely 3 on Oct. 29 near Columbia.—Flocks of Mourning Doves seem to have been scarce this fall; they apparently chose to vacate this area soon after the opening of the dove shooting season on Sept. 1. H. C. Monk reports having seen a tail-less Brown Thrasher Nov. 19 and again Nov. 22. 16 Blue Jays were seen migrating together over the city on Sept. 26.—An injured American Bittern that was found on the Lebanon Road was placed in Mrs. Laskey’s hands Nov. 1 by Dr. Vaughn. The Bittern’s left wing, which was broken in 3 places, has now healed; in all probability, however, the bird will never again be capable of flight. Meanwhile, Mrs. Laskey is debating as to what fate holds in store for her rapacious guest.—A local bird-lover recently paid a dollar for a Great Horned Owl, to a trapper who had caught it in a steel trap. It was given to Mrs. Laskey who banded and cared for it several days, after which it was released.—Robins and Starlings have been very abundant all fall, probably as a result of a successful hackberry crop. Bronzed Grackles migrated southward at their usual time, being practically all gone by mid-November.—Arthur McMurray, Nashville.

KNOXVILLE AREA:—The fall season has been unusually dry and slightly above normal in respect to temperature. Neither of these conditions is conducive to migration ‘waves’ and according to my own observations and reports from others, we found only a steady migration season. The first Marsh Hawk was reported about ten days later than usual, or on Sept. 3. A flock, or flocks, of Nighthawks varying from 15 to 50 in number remained in the Sharps Ridge area of Knoxville from Sept. 16 to Sept. 20. None were reported after the first week of October.—Trips to Lake Andrew Jackson during the summer months revealed only one pair of Catbirds. However, on Sept. 23, an estimated dozen birds were distributed throughout the territory, all busily feeding on wild grapes, pokeweed berries, weed seeds, and insects which they found among the willows along the lake shore.—Over a period of several months everyone experiences some unusual event, which for me was a hawk migration. The situation, briefly, is that the writer lives over the hill approximately one-half mile south of Mr. H. P. Ijams. About 9 o’clock on the morning of Sept. 24 Mr. Ijams phoned me to look at a group of hawks that were circling overhead. I rushed out and
looked up but nothing was in sight. Then I began looking in the direction of Mr. Ijams’ place; still no hawks in sight. About this time Mrs. Walker saw them far to the south of us. With the aid of the binoculars we were able to identify three birds as Red-tailed Hawks. All seven that were in sight were Buteos; they circled high and drifted rapidly to the south. Within 4 or 5 minutes from the time they were sighted they were mere specks in the sky, even thru the binoculars. Later Mr. Ijams told me the birds were south of his house when he first saw them. The big oak in his front yard impaired the view but he counted at least ten hawks and felt sure there were more in the group. — The season moves on, and on Oct. 10 we find a belated Warbling Vireo singing feebly among the leafless hackberry trees along First Creek. Three days later a lonely Hummingbird was seen at the Ijams’ greenhouse. — Pipits appear to be more plentiful this fall, while to date there have been no reports on flocks of Purple Finch. Mrs. Meyer found the Palm Warbler ‘in nice numbers’ at Woodlawn Cemetery from November 12 to 18 inclusive. — Reports of large flocks of ducks on Norris Lake from Nov. 4 to 11 coincided with the increase of ducks on Lake Andrew Jackson and on the Tennessee River. — A Loon made an error in judgment and broke into print in one of the local papers. On Nov. 9 a Mr. Cannon was driving along the Rutledge Pike about ten miles east of Knoxville when he noticed a large bird struggling in the ditch along the roadside. An investigation revealed a bird thoroughly bewildered but apparently unhurt. The bird was brought to Mr. Ijams who identified it as a Common Loon. It was photographed and an article about the incident appeared in print. That night the Loon was released on the Tennessee River near Island Home, where it remained for a couple of days. — It is of further interest to report that in addition to the Loon two Pied-billed Grebes have been picked up unhurt on the Rutledge Pike this fall and brought to Knoxville for identification. This road is an old type penetration asphalt surface and the ‘shine’ of the asphalt must resemble water to the birds in the sky. Since the Grebe and the Loon cannot take flight unless on water, once they alight they are practically doomed if not found and taken to water. — W. M. Walker, Knoxville.

THE ROUND TABLE

BARN OWL NESTS NEAR NASHVILLE: — On the morning of April 15, 1939, Leo Rippy and I went to the site where Jack Calhoun found the Barn Owl on the Christmas census last year. I could not see the bottom of the hollow but I found fresh pellets on a ledge near the top. That afternoon Steve Lawrence and I returned to the tree with a rope. I let myself down into the hollow and found the old bird, two young birds, and three eggs. The oldest of the fledglings was about four weeks old, so that incubation evidently began about March 25. I banded the old bird and left. On the Spring Field Day we flushed the old bird in order to get her on the list. — On Dec. 3, 1939, Conrad Jamison and I, while enroute to Radnor Lake, were attracted to a large hollow tree near Woodmont Boulevard by the unusual
number of Crows flying around it. Upon investigation we found in the hollow an adult Barn Owl and two young ones about 16 and 20 days old respectively. This would establish the date of the laying of the first egg as about Oct. 23. We obtained bands from Mrs. Laskey and banded all of them. The old bird was quite docile but the young ones were very hard to handle, throwing themselves on their backs and hissing violently.—Both nests were in large hollow trees. The earlier one was in a tree about 35 feet tall and 3 feet in diameter. The entrance to the cavity was 20 feet above the ground but the cavity extended down to within 4 feet of the ground. The late fall nest was in a tree about 60 feet tall and 4 feet in diameter. The young were on the litter in the cavity about 6 feet below its entrance which was 20 feet above the ground.—According to the records of H. C. Monk, only two nesting sites of this species have been previously found in the Nashville district. One of these was found by Dr. Vaughn on April 15, 1922, in a hollow tree limb over a lawn on Franklin Road. At the time it contained eggs. The other site was found by Vernon Sharp, Jr. on May 16, 1926, in a cave in the side of a cliff. It contained six eggs.—Both of the 1939 nesting sites were verified by Dr. Vaughn and Mr. Ganier.—Wm. Simpson, Nashville.

BARN OWL NOTES:—The unusual find reported above by Wm. Simpson, of a Barn Owl's nest with young on Dec. 3, was followed on Dec. 6 by a report of four more of these 'monkey-faced' owls at a point about two miles farther east. The latter birds were making headquarters in a hollow limb about 70 feet up in a large elm near the Franklin pike. Apparently two were parent birds and two were nearly grown young, judging from the noise the latter made while begging for food. In fact, this noise became so annoying that irate householders below found their slumber disturbed, shot one of the old birds and threatened the others. A bit of missionary work was promptly done in their behalf.—On Dec. 2, a Barn Owl was shot near Dickson, Tenn. and came into the hands of Mr. W. P. Morrison who sent it to me. The writer prepared the specimen for his collection and found it to be a male. This bird was not in breeding condition so it was probably a transient.—A. F. Ganier, Nashville.

Note:—The above species has proved most erratic in its nesting activities. While early spring is the usual time, there are a number of records in other states of late fall nests of this owl. See also The Migrant, 1933, p. 49 and 1935, p. 72.—Editor.

YELLOW PALM WARBLER IN MID-WINTER:—Three of these birds were observed on Jan. 1, 1939, about five miles northwest of Springfield, Tenn., by G. R. Mayfield, H. C. Monk, Leo Rippy and the writer. This sub-species (Dendroica palmarum hypopyrea) was not included in the writer's list of the birds of Tennessee because its range had been assigned to the Atlantic coast states. The birds were flitting among the button-willow bushes at the edge of a small marsh, at mid-day. We observed them
at from 30 to 60 feet, noting the yellowing underparts and their tail jerking habit. A week later I returned to this two-acre marsh in order to collect a specimen for verification and this I succeeded in doing. Four of the birds were present. The winter home of the Yellow Palm Warbler is given by authorities as from Florida to Louisiana so the above record would seem considerably north of its normal winter range.—ALBERT F. GANIEL, Nashville.

YELLOW PALM WARBLERS AT JOHNSON CITY:—During the winter of 1938-1939 there appeared at Johnson City a considerable number of Yellow Palm Warblers. Notations of this should have been made in the 1938 Christmas Census but it was not reported because we were not sure as to the subspecies. However, our doubts were removed after we had opportunity to discuss the observation with Dr. Arthur A. Allen. Examination of the last Christmas Census reveals that the bird was observed at only one other reporting station in Tennessee, namely, Springfield. Here these warblers were observed in a flock of some twenty-five to forty birds near Cox’s Lake and singly in gardens in Johnson City. We hope to have them with us again this winter and will keep a sharp lookout for them.—BRUCE P. TYLER and ROBERT B. LYLE, Johnson City.

LATE NESTS IN 1939 AND BOB-WHITE BEHAVIOR:—With the cooperation of several observers, a number of late nestings have been noted, the young banded, or data obtained on their development. On July 30, along the Harpeth River near Linden, a White-eyed Vireo brooded two nestlings 4 or 5 days old and a Yellow-breasted Chat had 3 nestlings nearly ready to leave. In the Belle Meade section, 3 Mockingbird nests with young were found in August as follows: Aug. 1, 4 nestlings about 9 days old; Aug. 4, 3 young leaving a nest; Aug. 11, 1 nesting ready to leave its nest. On Aug. 12, 3 Carolina Wren fledglings left their nest in a garage. During August, 11 nests in the Warner Park Bluebird boxes contained eggs or young, two of the broods not leaving until the last week of the month. A Field Sparrow nest in a boxwood beside the driveway at the home of Fred Webber contained a set of 2 eggs which had not hatched when last noted the morning of Aug. 12, but 6 days later the young were seen leaving as the parents called them from the nest bush.—Five Mourning Dove nests were noted during September and the last week of August in Nashville. From two of them, broods of two were seen leaving on Sept. 12. On Oct. 12, 4 Bob-white, not more than half-grown, were caught in a trap at the home banding station. As they were examined, the parents ran in circles about 12 feet away, giving short call-notes; the mother bird flopped about as if injured. The chicks, with one exception being too small to wear the proper size band, were soon released and ran quickly into the shrubs in the opposite direction from their parents who were apparently trying to attract my attention to themselves. This observation is much like one made on Aug. 8, 1935 under similar circumstances when a parent dragged itself about a hundred feet across the lawn and the released chicks ran the other way into tall weeds.—AMELLA R. LASKEY, Nashville.
THE MIGRANT
A QUARTERLY JOURNAL DEVOTED TO THE STUDY OF TENNESSEE BIRDS.
PUBLISHED BY THE TENNESSEE ORNITHOLOGICAL SOCIETY.
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Regional Editors: Albert F. Ganier, Nashville; W. M. Walker, Knoxville;
Bruce P. Tyler, Johnson City; Alfred Clebsch, Clarksville.

"The simple truth about birds is interesting enough,
it is not necessary to go beyond it."

PLEASE NOTIFY THE SECRETARY OF A CHANGE IN ADDRESS

CHRISTMAS CENSUS LIST SHOULD BE MAILED TO US BY JAN. 15
We Take This Occasion to Thank Our Contributors for Their Cooperation
and to Wish Our Members a Merry Christmas and a Happy New Year.

"BIRDS OF TENNESSEE IN VERSE AND STORY" has recently been
issued by the Educational Service, Department of Conservation, Nashville,
and furnishes a much needed elementary bird study booklet for the use of
teachers and classes who include topics on bird life and related conservation
subjects in their programs. Several pages necessarily touch briefly on points
of general interest. Thirty species of birds are discussed individually, in­
cluding a bit of verse for each. The kinds listed were limited to those for
which the well-known Arm and Hammer Soda pictures were available,—
10,000 sets being furnished by Church and Dwight. These cards, from paint­
ings by Fuertes, considered one of the best bird artists of all time, are to be
pasted in the booklet in their proper places. The list includes: Cuckoo,
Nighthawk, Flicker, Downy Woodpecker, Kingbird, Crested Flycatcher, Phoebe,
Barn Swallow, Purple Martin, Chickadee, White-breasted and Red-breasted
Nuthatches, Brown Creeper, Brown Thrasher, Robin, Bluebird, Cedar Wax­
ing, Red-eyed Vireo, Black and White Warbler, Black-throated Green War­bler, Yellow-throat, Redstart, Bobolink, Meadowlark, Baltimore Oriole, Scarlet
Tanager, Rose-breasted Grosbeak, Goldfinch, Vesper Sparrow, and Song
Sparrow. The use of these picture cards will explain the absence of such
common southern birds as the Mockingbird, Cardinal, Orchard Oriole, and
others. Some of our most common winter residents, the White-throated
Sparrow and Slate-colored Junco, are also not included. In Memphis this
booklet has been supplied each teacher needing same; so, very brief notes
on the local status of the species described were prepared for mimeographing
and distribution by the Board of Education. This could be done similarly for
other localities where this booklet may be extensively used.—Three plates
showing nesting boxes and feeding shelves should be of great practical
value. It is our belief that a reference list of the more essential ‘government
bird pamphlets’ and similar material would have been helpful if included—
Single copies can be obtained from the above for 20 cents. Orders of from
10 to 25 will cost 18 cents each, and over 25, 16 cents each.—B. C.
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EASTERN HAWKS—What They Look Like in the Air

Atlantic Coast West to the Great Plains

All Birds Drawn to Same Scale

BROAD-WINGED or MOUSE HAWKS
- Rough-legged Hawk
- Red-shouldered Hawk
- Broad-winged Hawk

POINTED-WINGED FALCONS
- Duck Hawk
- Pigeon Hawk
- Sparrow Hawk

SHORT-WINGED or BIRD HAWKS
- Goshawk
- Cooper's Hawk
- Sharp-shinned Hawk

SMALL-HEADED or CARRION BIRDS
- Turkey Vulture
- Black Vulture

WHITE-HEADED or WATER-FREQUENTING BIRDS
- Bald Eagle
- Osprey

Some of These Hawks are Among Our Most Useful Birds
Our Wildlife is in Your Hands

Nature has a place and a need for every Native Hawk. They are all part of our wildlife, and each plays an essential part in regulating the abundance of the animals on which they prey.

KNOW YOUR HAWKS

TRY TO INCREASE THE ONES THAT ARE NEEDED TO HELP US PRESERVE HEALTHY BALANCES IN OUR WILDLIFE POPULATIONS.

MOUSE HAWKS
- SOARING IN CIRCLES
- PERCHING IN OPEN
- LARGE SIZE
- TAMENESS
- SLOW FLIGHT
- WIDE WINGS
- SHORT, BROAD TAIL

FALCONS
- RAPID FLIGHT
- LONG, POINTED WINGS
- DEEP WING STROKE
- STREAMLINED SHAPE

BIRD HAWKS
- FLAP AND GLIDE FLIGHT
- PERCHING UNDER COVER
- DIRECT RAPID PURSUIT
- SMALL SIZE
- LONG TAIL
- SHORT, BLUNT WINGS

MARSH HAWK
- LOW COURSING FLIGHT
- LONG WINGS AND TAIL
- HIGH WING ANGLE

Species With Simple Feeding Habits:

VULTURES
These useful scavengers eat only dead animals.

BALD EAGLE
Our National Emblem is such a slow and heavy flier, that it lives chiefly as a scavenger, eating fish, carrion, and any sick or crippled birds and animals it is able to catch.

OSPREY
Lives entirely on fish, chiefly non-commercial varieties that swim near enough to the surface to be caught.

Species That Are Generally Very Rare:

GOSHAWK
A northern Hawk, coming south only in certain years. Eats poultry, game, rabbits, squirrels and mice.

DUCK HAWK
Eats shore birds, sparrows, and other non-game birds. Now very rare. Don't shoot it!

PIGEON HAWK
Eats small birds and insects. Is never common, and is too small to harm game.


Additional copies and further information may be obtained from the National Association of Audubon Societies, 1775 Broadway, New York, N.Y.
THE BLUE GRASS CHAPTER held a most successful Fall Field Day on Oct. 29, near Columbia, with an attendance of thirty. The location selected was the country estate of Dr. O. J. Porter, on Duck River, a hilly diversified area of woodlands, thickets, and bluegrass meadows. It had been decided that a series of late October census lists here would be an interesting and well worthwhile project. During the morning the group deployed in parties over the several hundred acres and returned at one o'clock for lunch. Our hospitable host, Dr. Porter, had arranged his well-equipped lunching ground and the lunch committee, headed by Mrs. Sam H. Rogers of Pulaski, had spread out a feast that for variety and goodness, coupled with the crisp autumn air, left each guest yearning for a greater 'storage capacity'. Following an informal meeting after luncheon, the group again went afield and were able to add more birds to the morning's list. Common species were Crow, Carolina Chickadee, Robin, Carolina Wren, Myrtle Warbler, Cardinal, Slate-colored Junco, Field, White-throated, and Song Sparrows. Of Chimney Swifts there were 3 (a late record). Kingfisher, 1; Flicker, 9; Phoebes, 6; Downy Woodpecker, 3; Red-bellied Woodpecker, 4; Yellow-bellied Sapsucker, 2; Hairy Woodpecker, 1; Downy Woodpecker, 5; Phoebe, 1; Blue Jay, 9; Tufted Titmouse, 9; Bewick's Wren, 1; Mockingbird, 4; Hermit Thrush, 8; Bluebird, 7; Golden-crowned Kinglet, 1; Cedar Waxwing, 16; Migrant Shrike, 1; Starling, 2; English Sparrow, 5; Meadowlark, 2; Bronzed Grackle, 1; Red-eyed Towhee, 7; Fox Sparrow, 1; Swamp Sparrow, 2; -in all, 42 species.-A. F. Gams, Nashville.

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