

Summer 1944

## Kentucky Warbler (Vol. 20, no. 3)

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# Kentucky           Warbler

*"To sift the  
sparkling from the  
dull, and the true*

*from the false, is  
the aim of  
every Ornithologist."*

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## GEOGRAPHICAL ALTERATIONS IN THE HABITATS OF BIRDS

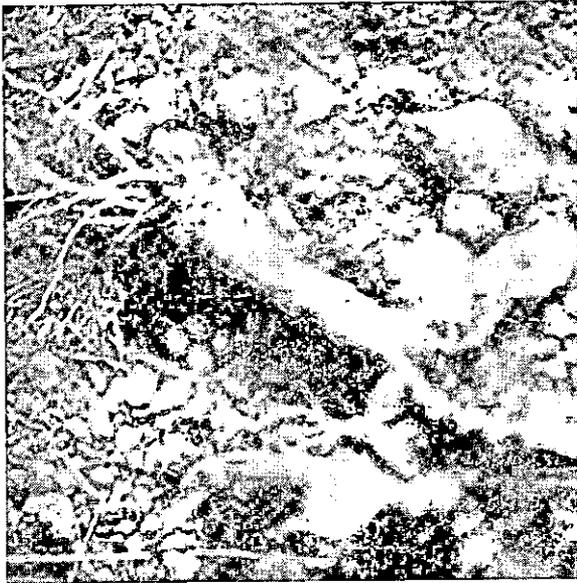
By F. D. FIGGINS, University of Kentucky

Researches in connection with Kentucky birds have been doubly useful through their having contributed to the evidence that avian populations make distinct changes in their habitats and that such alterations have, in some instances, attained large geographical proportions. Further, these changes are not less apparent in resident species than in summer visitors. After citing instances of such movements reference will be made to a local example in which the process is observable. Studies of the above character reveal past alterations in avian populations as well as in modern. They assume exceptional proportions when the birds of circumscribed regions are under consideration.

When pioneers reached western Pennsylvania and Ohio and Kentucky, early in the nineteenth century and late in the eighteenth century, they found the Greater Prairie Chicken, then known as the Pinnated Grouse, very numerous. These birds preferred the "Barrens" and areas that were cleared of timber, but since cover was essential for their protection against predators, their range did not extend over the treeless, short-grass prairies of the West. However, as Bison disappeared and open cattle ranges contracted westward, trees and shrubbery advanced at like rate, as did agricultural activities. Cereals were the major crops, and as it was customary to allow corn fodder to stand in the fields, birds were insured an abundance of food and adequate protection. Through these means the Greater Prairie Chicken ultimately became established as far west as the high prairies adjacent to the foothills of central Colorado as well as in eastern Wyoming, the Dakotas, and southern Saskatchewan. When cottonwoods, hackberries, thickets of wild plum, dwarf wild cherry, and blue grapes had established themselves about the streams of eastern Colorado, the Prairie Sharp-tailed Grouse appeared, along with such eastern birds as the Brown Thrasher, the Catbird, the Wood Thrush, the Ovenbird, the Blue Jay, the Baltimore Oriole, the Orchard Oriole, and many others. Many types of weeds followed the breaking of the prairie sod, and dense growths of sunflowers covered uncultivated fields. Into such environments came many finches, among them the Dickcissel.

Prior to 1870 the Dickcissel was a common summer resident east of the Allegheny Mountains, especially in northern Virginia and in Maryland. By 1872 it had disappeared from the entire region. Casual visitors were taken near Jefferson, Frederick County, Maryland, in

August, 1889, and others were observed in Montgomery County, Maryland, about 1914, but nowhere did these birds reestablish themselves east of the mountains. In the meantime there had developed a westward trend in their breeding range, and by 1911 a few birds had reached the vicinity of the Kansas-Colorado boundary. In less than ten years they were breeding about the high prairies of central Colorado, two hundred miles to the west.



NEST OF PRAIRIE HORNED LARK  
In Woodford County, Photograph by V. K. Dodge

In the spring of 1937 Major Victor K. Dodge called the writer's attention to Prairie Horned Larks on River Farm, in southern Woodford County, Kentucky, stating that the birds had been present during the previous summer and winter. Major Dodge also expressed the intention of making an effort to discover the nest. It was therefore not surprising when he announced the finding of it in early May of that year. When able to fly, the young birds made frequent visits to a nearby source of water, accompanied by their parents, and shortly thereafter they were joined by a second brood of young and a pair of adults.

With a view to affording the birds every opportunity to establish themselves permanently, Major Dodge set aside about fifteen acres of bluegrass pasture, from which all but a few head of young cattle were excluded. The water supply was greatly enlarged, and liberal use of cornstalks was made as a means through which the birds might conceal themselves. Not only were the birds prompt in accepting these accommodations, but they became very tame.

In 1938 some of the birds extended their range to other pastures on River Farm, and by 1941 a second flock had developed. In early May of 1943 the writer observed a pair of these birds at a distance

of about three miles from River Farm, and Major Dodge enjoys the privilege of having them on display at all seasons. The summer visitor to the preserve on River Farm will see many other birds about the clear water of the artificial lake during the hour he may have to await the return of the Prairie Horned Larks.

In addition to the above evidence that these birds have established permanent residence in Kentucky, the writer is obliged to others for additional records, among them Dr. Harvey B. Lovell, of the University of Louisville. Dr. Lovell refers to finding a nest containing three eggs, in Louisville, Jefferson County, on April 4, 1943. Those who are familiar with the habits of Prairie Horned Larks are likely to conclude that the doctor plays golf, since it is of common occurrence for these birds to select golf courses as nesting places. In NOTES ON THE BIRDS OF KENTUCKY Dr. Alexander Wetmore refers to a specimen's being taken near Monticello, Wayne County, on June 17, 1938, and Mr. John Patten, in his master's thesis at the University of Kentucky, records it near Berea, Madison County, on July 17, 1940. Through THE KENTUCKY WARBLER, Volume XVI, we learn that Mr. Virgil King discovered a nest in Grant County, on June 11, 1940. Following his training period of 1940, Major Joseph F. Spears reported the Prairie Horned Lark as abundant about the practice ranges at Fort Knox, in Hardin and Bullitt Counties, where the birds paid the scantest attention to noisy tanks and artillery fire.

Prairie Horned Larks nest as early as the latter part of March, and by patient observations of the birds the site is sometimes located. As a rule, however, it is discovered through flushing the birds directly from the nests. The nests are thick-walled, composed entirely of fine grasses, and located in depressions of sufficient depth to insure their rims being on a level with the surface of the ground. Deep cattle tracks beside low objects, such as a weed or prickly pear cactus, are preferred. The finely-spotted eggs and the markings of the young are of a character that do not lend themselves as aids in the finding of the nests. Add weathered cornstalks to this ensemble, and we have a satisfactory explanation of the abundance of Prairie Horned Larks.

As the number of birds have increased on River Farm and vicinity, and as they have been observed there during consecutive summers since Major Dodge discovered the first nest, in May, 1937, it appears reasonable to assume that they are established, but whether they are representative of a late extension of their range or reoccupancy of the state is not entirely established. Neither Audubon nor Wilson mentions Horned Larks in connection with Kentucky. They credit these birds to more northern states and specify the Far North as the breeding habitat. Both authors were, of course, discussing the Northern Horned Lark, *alpestris*, for the reason that the Prairie Horned Lark, *praticola*, was not described until 1884. The writer has discovered nothing that is suggestive of its breeding in Kentucky prior to modern times. North of the Ohio River it appeared, yes, but not south.

In the West, where *praticola* is the most abundant species of the prairies, it sometimes perches on fence posts and, occasionally, on the backs of cattle, but never does it resort to trees or bushes. Alighting in weeds and tall grasses is equally foreign to its habits, and there appears small prospect that it formerly occupied the "Barrens" of the south-central part of Kentucky. It would, therefore, seem improbable that it nested in Kentucky prior to cultivation of the land and the introduction of bluegrass.

There is a wealth of evidence through which to prove that many

birds abandon large regions because of man's activities. Agriculture has not been beneficial to all species of birds, and studies of these factors are indispensable, if we are to gain useful conceptions of avian populations of the past as well as of the present. This is most important when we are dealing with the birds of circumscribed regions.

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### OBSERVATIONS ON THE NESTING OF A HUMMINGBIRD

By DANIEL H. CANNON

In the summer of 1943 I studied the nest of a Ruby-throated Hummingbird in Silver Hills, a residential suburb of New Albany, Indiana. The nest was located in a silver maple, eight feet and three inches from the ground, directly over a much traveled sidewalk and about seven feet from a busy street, in the yard of Mrs. Margaret Wentzell. There are no running streams within a half mile, and the water supply seems to have been a birdbath in a neighboring yard. Flowers of the more common cultivated varieties were plentiful. It is not known when the bird first began to build the nest, but it was complete on July 5, when the first egg was laid. The second followed the next day.

The nest was astride a small, down-sloping branch, 1.8 cm. in diameter, and located in a small crotch. It was constructed of bud scales, lichen, moss, plant-down, and spider webs. The main body of the nest was of bud scales, fastened together with web; and between these was fastened and woven the moss. This was well covered with webbing, and pale green and gray lichens were stuck to the outside. This made the nest blend perfectly with the limb. The lining was of plant down, to which the seeds remained attached. The nest was built entirely by the female, the male never appearing while we were watching. The female also raised and fed the young unassisted.

The incubation period was twelve days, the young hatching on July 18, 1943. They were very tiny (about 1 cm. long) and almost naked. They grew rapidly and after ten days were well above the rim of the nest. By this time the birds were well feathered. In color they were a dirty gray below and dark brown above. The flight feathers were also developing, but were yet not mature. The throat had definite yellow-tan streaks running toward the breast.

During the incubation period the mother seemed to spend more time away from the nest than on it. Now, with the birds hatched, she was often absent for intervals lasting over an hour. In feeding, the mother would approach the nest with some care. Hovering and occasionally perching on the rim of the nest, she would thrust her beak far down the throats of the little ones and pump food from her throat into their stomachs.

The nest was very public, and many people visited it each day. During these times the mother could often be found perched on a nearby limb, watching. As soon as the observers left, she would fly down and feed her brood. I spent over an hour photographing the young, and never once did the female come near or offer to attack, although I was within two inches of the nest, and she was perched on a twig fifteen or twenty feet above me. She did fly restlessly from one twig to another for some time. I finished my work and was scarcely thirty feet away before she was at the nest, feeding the young.

The first bird left the nest late in the afternoon of August 1. He perched on the rim of the nest for a few minutes and then flew

directly away. The second remained in the nest until August 5, when it left the nest and perched on the branch just below the nest. During the night there was a storm; in the morning the bird was found above the nest. It had not apparently reentered the nest. It, too, flew away about noon on the morning of August 4. They have not been seen since then.

In preparing this life history of the Ruby-throated Hummingbird we have checked our observations with those of Winsor M. Tyler in Bent's LIFE HISTORIES (Bulletin 176, Smithsonian Institution, 1940). The position of the nest on a down-sloping limb is quite typical. The presence of streams and suitable flowers are the two chief factors in determining the selection of a nesting site. The latter factor seems to be the important one in the present case. Tyler reports that the nest period is very variable (fourteen to twenty-eight days), which is probably due to the rate of feeding. The present brood remained in the nest only thirteen and fifteen days, an unusually short period, indicating warm weather and favorable food supply. We think it is especially noteworthy that the nest was a success in so open a location.

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TO AN INDIGO BUNTING

By SUE WYATT SEMPLE

Wee bird, you wear a suit of velvet blue,  
 Much bluer than the summer skies, which pale  
 When you flit your rich plumage into view  
 And make your concert stage an old fence rail.  
 Among the brambles, weeds, and bushy tangles  
 You dodge about, or tilt on swaying reeds;  
 Near minnow pools, where the Kingfisher angles,  
 You search for caterpillars, bugs, and seeds.

With short, erratic flights you mount a birch—  
 Still higher, higher—singing rapidly,  
 You reach your favorite, conspicuous perch  
 And pour forth spritely notes in ecstasy.  
 O little flash of feathered indigo,  
 Teach me to warble in this world of woe!

\* \* \* \* \*

SHORT NOTES

A WINTER PALM WARBLER—On February 16, 1944, I saw a Western Palm Warbler in my back yard. The bird was flitting back and forth against the sunny side of the house, always alighting on or near the gutter. I opened the window and for a moment thought it was coming indoors. I hurried downstairs, only to find the bird perched on an Arbor Vitae only two feet from the porch. The constant wagging of the tail was sufficient identification, but the bright yellow under-tail coverts were also very evident. Since then I have seen the bird on two other occasions, the last one being April 4. As far as I know, this is the first record of a winter Palm Warbler in this vicinity. I have consulted the records of Burt Monroe and Mabel Slack. Mrs. Dorothy M. Hobson reported two Palm Warblers on a recent Christmas Census at Bloomingdale, Indiana. The average date of the arrival of the Palm is the latter part of April. Although the Western Palm and the Yellow Palm have entirely different breeding ranges, they are often found together in winter and in the migration.

—Mrs. F. W. Stamm, Louisville.

A CAPTIVE COMMON LOON—On Sunday afternoon, March 26, 1944, a strange creature was seen stalking through the alfalfa near the home of the caretaker of the chicken house. This unusual bird attracted the attention of several men, who gave chase. It put up a good fight but was captured and placed in a small covered pen, inside the chicken house. Food of various kinds was offered, but it showed a definite preference for corn. After three days it was taken out of the covered pen, its wings clipped, and it was allowed the run of a large pond.

About this time I was informed of this strange-looking "duck" and hurriedly drove over to the pond. I immediately recognized my first female Common Loon. She was in winter plumage, a wild but handsome bird. She moved about on the water with all the arrogance of a great battleship, with high head and long, straight, pointed bill. My interest was stirred to the extent that much of my spare time was spent in observing this rare wild bird. Visits were made twice daily, at the noon hour and after 4:00 P. M. On two occasions visits were made after dark.

The bird had a way of raising herself out of the water, flourishing and flapping her wings, and displaying her beautiful white breast, giving utterance meanwhile to a weird and uncanny call. Her keen eyes were ever alert. On several occasions I caught the bird out of the pond on the bank but never more than a few inches from the water's edge. If I ventured too near, she at once slid into the water. What impressed me more was the same position she seemed to acquire while resting on land, with head pointing up the bank, body straight, tail probably not more than four or five inches from the water. In the water the bird was well adjusted, but was ill at ease on land.

Another thing that is unforgettable was that lonesome little cry; at other times it was mournful and uncanny. The bird appeared to be in dire distress, giving out a lonesome wail, probably calling for her mate.

Food placed on the bank daily was untouched, for she seemed to be getting her food from the water. The night visits found the bird on land, near the water.

While in captivity the Loon laid an egg, which was broken. The shell was dark olive-gray, slightly spotted with black.

On the night of April 10 this pond did one of the queer things that occur in this cavernous country: the bottom of the pond dropped out, all the water disappeared during the night and the next morning we found my "lonesome" Loon dead, exhausted with wings and body covered with mud.

—Dr. Cynthia C. Counce, Western State Hospital, Hopkinsville.

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LATE WINTER BIRDS AT AUDUBON STATE PARK—On March 2 and 3, 1944, I visited the Audubon State Park and the Audubon Museum, near Henderson, Kentucky. At the entrance a Mockingbird had established territory in a clump of dwarf sumac. It was eating the berries, and whenever other birds came near, it drove them away vigorously. A second Mockingbird was similarly established in another stand of sumac about two hundred yards to the right. Back of the museum there are some fine old beeches. Other winter plant foods noted include sycamore, dogwood, coral-berry, tulip tree, honey locust, and sweet gum. There are two artificial lakes in the park on which there were forty to fifty ducks of seven species. A pair of Buffleheads were especially interesting because of the frequency of their diving. Since they were by them-

selves and the sexes easily distinguishable, I timed them to see how long they remained under water. The male's performance was as follows: 30, 24, 25, 27, 23, 28, and 30 seconds, an average time of 26.5 second per dive. About five seconds elapsed between dives. He was therefore under water 84% of the time. The female did nearly as well. Six consecutive dives were timed at 24, 28, 25, 21, 25, 28 seconds, an average of 24.8 seconds per dive. Flocks of Tree Sparrows were feeding along the shores of both lakes. A small covey of Bobwhites were flushed in the grassy area near one lake. Bluebirds were surprisingly plentiful, and Mourning Doves were already giving their spring mating calls. Coming across the crest of a rolling hill, I surprised a red fox less than a hundred feet away. He trotted leisurely across a little valley without once looking back.

Miss Nell Dishman, the curator, was most cooperative and again expressed the hope that the K. O. S. would prepare a checklist of the birds of the park. She said that their most valuable Audubon exhibit is a set of eight original bird paintings by the master, painted on tin and wood. The museum also has his famous painting of Daniel Boone. Many natural history books from Audubon's personal library, including his set of Alexander Wilson's AMERICAN ORNITHOLOGY with critical notes by Audubon on the margins, are on display. The museum is chiefly devoted to the display of the hand-colored prints from the double-elephant folio. Among these is the famous one of the Mockingbird's nest being attacked by a rattlesnake. This painting was much condemned when first issued, both because rattlesnakes were said not to climb trees and because the position of the head and fangs was objected to. However, many naturalists came to the rescue and reported the presence of rattlesnakes in trees, and the head was found correct for the southern rattlesnake.

The following birds were all seen on March 3 within the park area: Mallard, 2; Baldpate, 2; Pintail, 7; Ring-necked Duck, 20 plus; Canvasback, 1; Lesser Scaup, 1; Bufflehead, 2; Turkey Vulture, 1; Cooper's Hawk, 1; Bobwhite, 4; Killdeer, 1; Mourning Dove, 6; Belted Kingfisher, 3; Flicker, 3; Red-bellied Woodpecker, 4; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 1; Downy Woodpecker, 5; Blue Jay, 7; Crow, 6 plus; Carolina Chickadee, 9; Tufted Titmouse, 12; Brown Creeper, 1; Carolina Wren, 8; Mockingbird, 2; Robin, 6; Bluebird, 10; English Sparrow, 15 plus, around the museum; Meadowlark, 2; Cardinal, 20; Goldfinch, 1; Towhee, 7; Slate-colored Junco, 28; Tree Sparrow, 24; Field Sparrow, 6; Song Sparrow, 5. Total, 36 species, 234 plus individuals.

—Harvey B. Lovell, Louisville.

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**BREAKING ALL RECORDS**—It seemed impossible while it was in progress; it seems no less impossible, now that it is over. It was the weekend of May 6-7, 1944, at Dr. Lancaster's cabins, fourteen miles northwest of Bowling Green. The weather was very cold for the time of year, with a large frost on the night of May 6. The winter residents had been delayed until all the spring migrants had arrived. Thus I was able to see on this weekend trip 113 species of birds, to break all previous records, even though I have tried for many seasons to see all the birds possible in a single day or weekend. When I reach 80 species, I know that additional species will cost a lot of effort. I worked hard at seeing the whole array of birds, knowing that opportunities such as this one are extremely rare. Weather conditions such as those of the spring of 1944 probably are not duplicated in twenty years.

Mere numbers of species did not represent alone the joy of the trip. Everywhere I went I found birds that are common in migration, but I also saw several species that are very rare in my experience. On the river bank a Mourning Warbler bobbed up within twenty feet of me and sat in bright light long enough for me to get several good looks at him. I saw the Blue-headed Vireo many times and heard its distinctive note everywhere. Once a Philadelphia Vireo came close and remained for several minutes. The woods were full of Gray-cheeked, Olive-backed, and Wood Thrushes, but I found only one Veery. Of the winter residents the following were still present: Cedar Waxwing, Purple Finch, and Fox, Swamp, White-throated, and White-crowned Sparrows. The biggest single thing was the finding of 27 species of warblers, another life record. Practically every species of resident and summer resident appears on the list, the exceptions being three species of hawks, two species of owls, the Migrant Shrike, the Grasshopper Sparrow, and the Whip-poor-will.

Wild-woods birds came right up to the cabins. I could hear the Blue-winged Warbler singing as I ate my lunch at the cabin. Within a few yards of the cabin I found the Ovenbird. Many of the tree-inhabiting warblers flitted around in the yard or just over the edge of the cliff.

These big records in the spring migration early became a distinct part of my life as an ornithologist. They are part of the *Ornithomania vernalis*, "spring bird-madness," that I described in the *WARBLER* four years ago, a malady that returns with "ever-returning spring."

Here is my list of species, printed as a record and as a challenge to all of us: Green Heron, Wood Duck, Turkey Vulture, Black Vulture, Red-tailed Hawk, Red-shouldered Hawk, Osprey, Sparrow Hawk, Bobwhite, Killdeer, Spotted Sandpiper, Solitary Sandpiper, Mourning Dove, Yellow-billed Cuckoo, Barred Owl, Chuck-will's-widow, Night-hawk, Chimney Swift, Ruby-throated Hummingbird, Belted Kingfisher, Flicker, Pileated Woodpecker, Red-bellied Woodpecker, Red-headed Woodpecker, Hairy Woodpecker, Downy Woodpecker, Kingbird, Crested Flycatcher, Phoebe, Acadian Flycatcher, Wood Pewee, Prairie Horned Lark, Rough-winged Swallow, Barn Swallow, Purple Martin, Blue Jay, Crow, Carolina Chickadee, Tufted Titmouse, White-breasted Nuthatch, House Wren, Bewick's Wren, Carolina Wren, Mockingbird, Catbird, Brown Thrasher, Robin, Wood Thrush, Olive-backed Thrush, Gray-cheeked Thrush, Veery, Bluebird, Blue-gray Gnatcatcher, Ruby-crowned Kinglet, Cedar Waxwing, Starling, White-eyed Vireo, Yellow-throated Vireo, Blue-headed Vireo, Red-eyed Vireo, Philadelphia Vireo, Black and White Warbler, Prothonotary Warbler, Worm-eating Warbler, Blue-winged Warbler, Tennessee Warbler, Yellow Warbler Magnolia Warbler, Myrtle Warbler, Black-throated Green Warbler, Cerulean Warbler, Sycamore Warbler, Chestnut-sided Warbler, Bay-breasted Warbler, Blackpoll Warbler, Pine Warbler, Prairie Warbler, Palm Warbler, Yellow Palm Warbler, Ovenbird, Louisiana Water-thrush, Kentucky Warbler, Mourning Warbler, Maryland Yellowthroat, Yellow-breasted Chat, Hooded Warbler, Wilson's Warbler, Redstart, English Sparrow, Bobolink, Meadowlark, Red-wing, Orchard Oriole, Baltimore Oriole, Bronzed Grackle, Cowbird, Scarlet Tanager, Summer Tanager, Cardinal, Rose-breasted Grosbeak, Indigo Bunting, Dickcissel, Purple Finch, Goldfinch, Towhee, Lark Sparrow, Bachman's Sparrow, Chipping Sparrow, Field Sparrow, White-crowned Sparrow, White-throated Sparrow, Fox Sparrow, Swamp Sparrow.

—Gordon Wilson, Bowling Green.

BECKHAM BIRD CLUB'S SPRING FIELD DAY—April 30, 1944, was ideal for our annual spring field day. Miss Marie Peiper, one of our members, invited the Beckham Bird Club to use her home, out the River Road, as a meeting place. We assembled there at nine in the morning and divided into four groups, each of which was in charge of one or more experienced bird students.

The location was a choice one for bird study because of the variety of habitats to be found within easy walking distance of the Peiper property. One group, using binoculars and a telescope, surveyed the river for water birds and found a flock of thirty Lesser Scaups and a Forster's Tern, as well as Herring Gulls. The party that went to the Indian Hills ponds looked among the cattails for nesting Red-wings and in more open places for shore birds. They found Solitary Sandpipers, Blue-winged Teal, and Coots. Their most important find was a Long-billed Marsh Wren. Another group followed an abandoned interurban track for several miles through an overgrown wooded area at the foot of a hillside covered with deep-blue delphinium, yellow celandine poppies, and lavender camassia (wild hyacinths). Here all kinds of warblers were found in the bushes and trees that were not yet in full leaf. Particularly interesting was a Kentucky Warbler that kept about five feet ahead of the party for half an hour or more. It would hide under a wild ginger leaf or among the trilliums and bloodroots. Then it would again hop a few feet ahead. The fourth group went to the open fields south of the Ohio River, where they found many birds and several interesting nests: a Cardinal's with two eggs, a Carolina Wren's with young, and a Brown Thrasher's with eggs. A Blue-gray Gnat-catcher attracted attention when it flew from its nest in the fork of a shrub elm tree about fifteen feet above the ground. Almost immediately a Cowbird hovered over the nest but was frightened by the group and flew away.

We assembled at one o'clock in the wooded park-like area far in the rear of the Peiper home, where we compared notes while we rested and ate. After dinner some of us went up to Goose Creek, about a mile away, to search for the Prothonotary, Myrtle, and other warblers known to frequent that area. In the soft mud along the stream we found the Black-crowned Night Heron's footprints. While we sat by the creek waiting for the birds, a beautiful Prothonotary alighted on the low branch of a budding sycamore that hung over the stream. The bird and its reflection in the still water thrilled us, a fitting close to a perfect day.

Ninety-two species of birds rewarded the efforts of the thirty-two people who participated in the field day. Here are the people: Mrs. Mame Boulware, Mr. and Mrs. Leonard C. Brecher, Ruth Brecher, Helen Browning, Floyd S. Carpenter, Warren Dennis, Mr. and Mrs. Otto Dietrich, Mrs. Eugene Doelckner, Caldwell Dugan, Thelma Gentry, Louis Geisel, Alice Horneman, Carl Kerbel, Henrietta Link, Harvey Lovell, Louis Peiper, Marie Peiper, Lt. William Randall, Evelyn Schneider, Mabel Slack, Mr. and Mrs. F. W. Stamm, Charles Thacher, Gladys Wheeler, Virginia Winsteadley, Audrey A. Wright, Mr. and Mrs. Henry Zimmer, Henry Zimmer, and Mary Zimmer.

And here are the birds: Pied-billed Grebe, Double-crested Cormorant, Green Heron, Black-crowned Night Heron, Blue-winged Teal, Lesser Scaup, Turkey Vulture, Black Vulture, Cooper's Hawk, Osprey, Sparrow Hawk, Bobwhite, Coot, Killdeer, Solitary Sandpiper, Herring Gull, Forster's Tern, Mourning Dove, Whip-poor-will, Chimney Swift, Ruby-throated Hummingbird, Belted Kingfisher,

Flicker, Red-bellied Woodpecker, Red-headed Woodpecker, Hairy Woodpecker, Downy Woodpecker, Kingbird, Crested Flycatcher, Phoebe, Wood Pewee, Rough-winged Swallow, Blue Jay, Crow, Carolina Chickadee, Tufted Titmouse, White-breasted Nuthatch, House Wren, Winter Wren, Carolina Wren, Long-billed Marsh Wren, Mockingbird, Catbird, Brown Thrasher, Robin, Wood Thrush, Olive-backed Thrush, Bluebird, Blue-gray Gnatcatcher, Cedar Waxwing, Starling, White-eyed Vireo, Red-eyed Vireo, Warbling Vireo, Black and White Warbler, Prothonotary Warbler, Worm-eating Warbler, Golden-winged Warbler, Tennessee Warbler, Yellow Warbler, Cape May Warbler, Myrtle Warbler, Black-throated Green Warbler, Cerulean Warbler, Blackburnian Warbler, Sycamore Warbler, Blackpoll Warbler, Prairie Warbler, Ovenbird, Louisiana Water-thrush, Yellow-breasted Chat, Hooded Warbler, Canada Warbler, English Sparrow, Meadowlark, Red-winged Blackbird, Orchard Oriole, Baltimore Oriole, Bronzed Grackle, Cowbird, Cardinal, Rose-breasted Grosbeak, Goldfinch, Towhee, Grasshopper Sparrow, Chipping Sparrow, Field Sparrow, White-crowned Sparrow, White-throated Sparrow, Song Sparrow.

—Audrey A. Wright, Louisville.

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SOME NOTES FROM PROVIDENCE—All winter we fed the birds under a pine tree and in its vicinity. In April we counted as many as twelve different pairs of birds feeding under the tree. One that pleased us especially was the female Downy Woodpecker that condescended to feed on the ground with the others; she could not resist the nuts scattered there. Then to our delight she drilled the neatest little hole in the weeping willow that stands by the fishpool and is beginning to die. She scattered chips all over that part of the yard. One morning later we laughed to see a baby Downy perched on the clothes wire pole, looking as saucy as you please. It was the first baby Downy we had ever had the pleasure of seeing, and what a treat!

A pair of Bluebirds built in a special home we had previously prepared for them. I have seen and heard more Bluebirds than for many years. Mother hung an old pair of pants up in the coal house, and a pair of House Wrens have built a nest in them and already hatched out their young. I know where there are at least half a dozen Doves' nests and at least as many Robins'. One Brown Thrasher's nest in a weeping mulberry bush has afforded me an interesting study. For one whole day we had a half dozen Golden-crowned Kinglets that fed in the pine tree. I watched for the Ruby-crowned but never did see any. Just last week I identified the Yellow-breasted Chat for the first time. I heard him long before I could locate him, and what a clown he is! I have been hearing him at nights along with the Whip-poor-wills. The Orchard Orioles have been plentiful around here, and I have seen one Baltimore Oriole. We have with us the Wood Thrush—and how I love its song—, Catbirds, Tufted Titmouse, Cardinals, Blue Jays, Purple Martins, and Bronzed Grackles. I think I am gradually getting my sparrows straightened out. I have had plenty of trouble, but I have accomplished the identification largely by a process of elimination. I believe my favorite is the Vesper, that is, his song. However, the White-crowned Sparrows have fed under our pine just like chickens, scratching somewhat like the friendly Towhees.

About two weeks ago I had a wonderful experience with some Indigo Buntings. Just a little way from town, by a stream bordered

by willows and patches of brambles and blackberry briars, I beheld flashes of half a dozen Indigo Buntings darting here and there, and seeming to vie with one another in song. Anywhere from two to six were singing at the same time. I believe that the Indigo Bunting is my favorite songster, and I love its color. From this trip I returned home and composed the sonnet, "To an Indigo Bunting," which appears elsewhere in this issue.

—Sue Wyatt Semple, Providence.

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### BECKHAM BIRD CLUB NOTES

By HENRIETTA LINK

Since my last report in the WARBLER the Beckham Bird Club has had many interesting speakers and features at its monthly programs. In January, Dr. Harvey Lovell gave a talk on "The Nesting of the Horned Lark in Louisville." He supplemented his interesting discussion with slides taken in Seneca Park, Louisville. At the same meeting a most delightful film, "Hummingbird Home Life," was shown.

At the February meeting, Mrs. Lovell spoke on "A Bird in the Hand." She was assisted by Dr. Lovell, who showed many slides. Who could be better qualified to speak on this subject than Dr. and Mrs. Lovell, who do so much banding and whose actual experiences in their own back yard have been so unusual? Mr. Warren Dennis spoke at this meeting on "Gull Oddities." He supplemented his notes with diagrams drawn by himself. Miss Mabel Slack concluded the meeting by discussing "Our Unusual Winter Visitants," also illustrated with slides. One can hardly imagine the great number of visitants that sometimes appear in Louisville.

At the next meeting Mrs. Frederick Stamm gave a talk on "Why Sanctuaries?" All who heard her hope for a local sanctuary. Mrs. Stamm also gave this talk before another club. All of us envision a sanctuary in the near future. Miss Bernice Ruckman reported on the Ivory-billed Woodpecker at the same meeting.

At the February meeting Miss Audrey Wright made a suggestion that the Beckham Bird Club feels most worthwhile. She suggested that for future programs it would be helpful for some one to present the migrants that could be expected from one meeting to the next. Miss Wright gave the first of this series at the March meeting. In April Mr. S. Charles Thacher spoke on "Summer Arrivals," and in May Miss Thelma Gentry reported on "How to Find Our Common Summer Birds." We have all enjoyed this new feature, especially those who are not so well acquainted with all our birds. These talks have also given the club a chance to show off its splendid new slides. There are ninety-seven of these slides. They were reproduced by a group of our members: Messrs. Leonard Brecher, Floyd Carpenter, and Kent Previette and Misses Evelyn Schneider and Audrey Wright, the latter two helping in mounting. We are proud of these slides, all our very own. We hope that they will be used further and that they will be a means of introducing our birds to others.

At the April meeting Miss Marie Peiper gave a report on "The Life History of the Blue Goose," a most interesting study. Miss Evelyn Schneider read a paper on "The Chuck-will's-widow in Kentucky," which appeared in the spring, 1944, issue of the WARBLER.

## THE DIFFERENCE BETWEEN PUDDLE AND DIVING DUCKS

By WARREN P. SIGHTS, Paducah

Ducks are divided into two great classes, puddle ducks and diving ducks. Among the puddle ducks are the Mallard, Gadwall, Baldpate, European Widgeon, Blue-winged Teal, Green-winged Teal, Cinnamon Teal, Shoveler, Wood Duck, Pintail, and Black Duck. Among the diving ducks we find the Ring-necked, Golden-eye, Barrows's Golden-eye, Harlequin, Bufflehead, Greater Scaup, Lesser Scaup, the Sea Scoters, and the Eiders. The Mergansers and the Ruddy Duck also fall in the last category.

As the name implies, the diving ducks obtain most of their food by diving to more or less great depths and feeding off the bottom; thus they have more compact and heavily muscled bodies than the puddle ducks, which obtain their food by feeding in shallow water, where it is necessary only to tip up to obtain the food. In addition to being more heavily muscled, the diving ducks have much coarser plumage; and their feet, in comparison with the size of the body, are much larger.

I weighed and measured the following: 25 Mallards, 10 Black Ducks, 7 Pintails, 16 Wood Ducks, 5 Green-winged Teal, 3 Ring-necked Ducks, 25 Lesser Scaup, and 1 Ruddy Duck and was able to compile the following table:

PUDDLE DUCKS		
Name	Average Weight	Average Length of Middle Toe
Mallard	3.4 pounds	63mm.
Black Duck	3.5 pounds	55mm
Pintail	2.5 pounds	54mm.
Wood Duck	1.75 pounds	45mm.
Green-winged Teal	.75 pounds	38mm.
DIVING DUCKS		
Ring-necked Duck	1.5 pounds	67mm.
Lesser Scaup	1.5 pounds	64mm.
Ruddy Duck	1.0 pounds	60mm.

It is regrettable that I was not able to obtain any of the larger diving ducks, such as the Canvasback, Redheaded, or Greater Scaup; consequently, the table seems to contradict itself because I have only the smallest of the diving ducks, whereas the puddle duck table covers all sizes. The reason for this heavier makeup of the diving ducks is apparent when we consider the great depths to which they dive.

Canvasbacks have been caught in fish traps at depths of over a hundred feet, according to Indians at Bachawana Bay whom my father has known and trusted for ten years. As we know that the air pressure at sea level is almost fifteen pounds per square inch and water pressure increases fifteen pounds for every thirty-two feet we go down, we find that these birds are subjecting their bodies to the tremendous pressure of sixty-one and two-tenths pounds per square inch.

An excellent way for the beginner to tell the difference between diving and puddle ducks in the hand is by the hind-toe formula. The hind toe of the diving duck has a lobe so that it resembles a paddle; the puddle ducks lack this membrane.

As indicated above, the puddle duck's plumage is finer in texture and generally more beautiful. An exception to this is the Harlequin Duck, which, although a diving duck, is very beautiful. The puddle

ducks also possess a characteristic which is, in general, lacking in the diving ducks. This is the speculum, a square patch of iridescent feathers, colored green, blue, or violet, found on the secondaries of the wings.

As can be seen from these characteristics, the diving ducks live on large bodies of water and are never far from such bodies. Their wings are proportionately smaller than those of puddle ducks, because the diving ducks would have all the room they would need for a run on the surface of the water to gather speed for a take-off. The puddle ducks often feed on small sloughs and puddles, sometimes on solid ground; therefore they would have no room for such a run and would be obliged to take off from a stationary position. This they do in a single vertical bound, which often carries them six feet above the surface of the water. Many a pot-hunter has pulled the trigger a second too late and has seen his charge of number fives rip the water where a moment before a dozen Mallards or similar ducks sat peacefully.

When in flight the wings of the puddle ducks beat much more slowly than those of the diving ducks. An exception to this are the teals, which fly with their throttle wide open all the time. The diving ducks beat their wings rapidly; the smaller the duck, the faster the wing beat. A regular gradation is seen from the tiny Bufflehead to the big Canvasback.

It is my opinion that as a group the divers are faster than the puddle ducks, while the Canvasback is the fastest of them all, with the Pintail coming in second. "But," you say, "what about the teals, I thought they were fastest." My answer to that is that the apparent speed of the teal is an optical illusion, resulting from their smaller size and habit of flying close to the ground.

The diving ducks are more apt to be found in large flocks or rafts, numbering up to a hundred individuals. The puddle ducks, except in unusual feeding conditions, are likely to be in small flocks. I have seen over three thousand Mallards, Pintails, and Black Ducks on one sandbar.

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- AUK, care John T. Zimmer, Editor, American Museum of Natural History, 79th Street and Central Park, West, New York City.  
 Fish and Wildlife Service, Chicago, Ill.  
 Indiana Audubon Society, care Dr. Earl Brooks, Noblesville, Ind.  
 JACK PINE WARBLER, Kingman Memorial Museum, Battle Creek, Michigan.  
 Library of the Smithsonian Institution, Washington, D. C.  
 National Audubon Society, 1006 Fifth Avenue, care Marie V. Beals, New York City 28.  
 Tennessee Ornithological Society, care A. F. Ganier, Editor, 2112 Woodlawn Drive, Nashville, Tenn.  
 WILSON BULLETIN, care J. Van Tyne, Editor, Museum of Zoology, University of Michigan, Ann Arbor, Mich.