

THE MIGRANT

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DEVOTED TO TENNESSEE BIRDS

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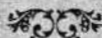
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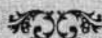
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NOTES ON A CAPTIVE GOLDEN EAGLE

By HERBERT C. SANBORN

During late February, 1930, a Golden Eagle was captured with a steel trap a few miles north of Chattanooga, near the gorge of the Tennessee River. It had previously been observed near the carcass of a pig, where the trap was set which resulted in its capture. The bird was brought to the city and turned over to officers of the Isaac Walton League, who finally sent it to Nashville on February 28. It was placed in a large cage in Centennial Park, where it remained for nearly four weeks. A number of adverse comments were registered in the daily press and elsewhere, the substance of which was that in this land of freedom a bird naturally so free in its life should not be kept a captive. Members of the T. O. S. had planned to take the bird back to its mountain home and release it, but the park authorities, apparently becoming annoyed with criticism, opened the cage and released it without formality, on March 24.

As might have been expected, the bird was shot down and badly wounded the same day, in the outskirts of the city, three miles north of the point of release. It had lit in a tree to cast hungry eyes on a barnyard flock, whereupon the owner of the place stalked the bird and poured two loads of squirrel shot into it. The usual boastful announcement of "farmer shoots big eagle," came out in the afternoon paper and upon reading this Dr. H. S. Vaughn and I motored in the evening out to the place and after considerable dickering with the farmer, we secured the bird and conveyed it to my aviary. When shot, it had a bell about its neck, alleged to have been put on it before leaving the park. It had lost considerable blood and was very weak. Shot holes were found all over its body, its beak was badly torn and the wings and wing feathers were so damaged that the bird could neither open nor fully close them. A toe on its left foot had been cut off by the trap.

For several days it would not eat and drooped so that its survival was doubtful. The bird, however, finally began to take food and from then on its recovery was gradual, but steady. The quills of nearly all of the wing feathers had been damaged by shot and very soon these began to come out, followed by new ones which developed rapidly, so that by July it could hop up on a perch three feet high and by August was able to fly from this perch to the side of its cage some twenty-five feet distant. Its captivity had also caused it to become tame.

By mid-October, the eagle had shed every quill feather on its body, had grown a new beak, and was again the magnificent creature that had been captured eight months before. It became active and restless, and at times made strong efforts to release itself from the wire-covered enclosure in which it had recuperated. Plans were again made to take the bird back to the mountains, but a week before the appointed time it succeeded in tearing a hole in the now somewhat rusted poultry wire and without waiting to say "adieu," it launched itself once more into freedom. This was on November 1, 1930.

It was reported several weeks afterward, between the Hillsboro and Harding

roads, near the estate of Mr. James Ryan, which is in Elmington Park about half a mile north of the estate of Dr. A. L. Sharber, where the bird had been kept in a disused pheasant cage. The eagle was seen in this vicinity on perhaps a dozen occasions, from that time until February, after which it disappeared, presumably, as breeding time approached, having left to seek its former mountain home. On one occasion, January 3, it swooped down and caught up a rooster by the head, carrying it away dangling from its talons. A dog was at once set in pursuit, and, through its barking, caused the bird to drop its prey before it was able to get fairly under way. The house-boy buried the fowl, but the eagle was observed to return the next day to dig it up and eat a portion. The boy stated that eight inches of soil had covered the rooster. In order to test its ability to find the carcass again, by a sense of smell—the problem investigated by Audubon, Darwin, Rouse and Strong—I had it again buried, at night, and all traces of the digging obliterated. My students relayed in watching the place, but after several days their interest lagged, and by January 13 the watching ceased. Two days later it was found that something had scratched up a furrow in the earth around the fowl, but it had not been exhumed. Another cache, containing chicken heads and feet, was empty. This may or may not have been done by the eagle. A further account of this experiment is included by me in an article, "Observations of Apparently Unlearned Behavior," published in the *Journal of Comparative Psychology*, Vol. 14, No. 1, August, 1932.

One of the most surprising things about this bird is that it succeeded in existing without being shot, from November 1 into February, in a fairly well settled area within a mile of the city limits. This area, however, was well wooded and included a number of wooded hills. Mr. Ryan and his neighbors took an interest in the bird and extended such protection as they could. On its leg was placed a copper band bearing the number 700,003, Bureau of Biological Survey, and it is hoped that by means of this mark we may be able some day to present another chapter in the life of this bird.

Nashville, Tenn., November, 1932.



THE PILEATED WOODPECKER

By VERNON SHARPE, JR.

One of the most fascinating experiences I can recall is that of finding my first nest of the Pileated Woodpecker, after four years of fruitless searching. I had very nearly given up the task, so one can well imagine my satisfaction in finally attaining my goal; a satisfaction which looms anew in my mind as I remember this event, to some perhaps unimportant, yet one which will always sustain my interest in this splendid bird. On this particular day, three hours of strenuous tramping over the hills and dales, through a woodland of virgin timber near Radnor Lake, in the warm sun of early April, had brought on a weariness and a temptation to forsake the search, when suddenly I was startled by the ringing call of the Pileated Woodpecker, a half mile away. The cry came from the lower end of "Short Hollow," which for years had been the nesting place of the Black Vulture, Hooded Warbler and Red-tailed Hawk. After listening for some minutes to definitely locate the position of the elusive bird, I set forth with renewed energy, and after quiet, careful stalking, had the pleasure of coming upon the object of my quest in a huge sycamore that proved to be the nesting site.

The keen joy of that momentary conquest and the close-up experiences which followed make this bird stand out in my mind as one of the most interesting and unique of all the feathered tribe. A denizen of the deep woods,

it is known to but few and its therefore regarded somewhat as a bird of mystery. As to size, its wing-spread is twenty-eight inches, and while in flight it appears to be nearly as large as a crow. In the matter of flight, the Pileated, apart from other members of the family, does not conform to the customary dips and irregular flight of the other Woodpeckers. Instead, it possesses a stately, continuous wing-beat that propels his body on a direct, level course, and frequently for long distances. This attribute, along with the bright coloring of red, black and white, enables the species to be easily distinguished at some distance. The call note is most similar to that of the Flicker, except the latter has less volume and is repeated more often. Probably because of its imposing size and noisy habits, the Pileated Woodpecker has been given such colloquial names as "Log-cock," "Wood-chuck," "Stump-cock," etc. Its scientific name, *Ceophloeus pileatus*, means pecker of trees with a prominent (red) crest.

For a nesting site a dead tree is invariably selected and preferably one of large size, from which the branches have fallen. The cavity is situated from 20 to 85 feet above the ground, with a depth ranging from 20 to 26 inches. Generally the four-inch opening is broader at the base and angular at the top, forming somewhat of a triangular shape. While incubating, this species will continue to enlarge the nest cavity, as was proved by personal experience. One season, a pair at Radnor Lake, near Nashville, had a fresh set of four eggs on April 16. The following year, April 1, the nest of this pair was again located and one of the birds inside was heard steadily digging. On April 15 this nest was found to contain young, proving beyond doubt that the cavity had been enlarged in view of eighteen days required for incubation. Concerning the two nests referred to above, the first was approximately 85 feet up in the sycamore above-mentioned, and required two hours to climb, while the latter was less than 30 feet from the ground. An old cavity is never used a second time for nesting purposes, and knowledge of this fact is useful in locating breeding localities. Once excavation has begun, the ground will be literally covered for some distance with chips of wood, some as large as the end of one's finger. This bird apparently has little regard or anxiety over nearby neighbors, as I have seen Down Woodpeckers, Red-bellied Woodpeckers, Fox Squirrels, Flying Squirrels and Pileated Woodpeckers all having homes in one dead sycamore. After the young have hatched, the old birds are less wary, as might be imagined, and will sometimes alight within twenty feet of one who may have climbed the nest.

For food, grubs, wood-borers and beetles constitute the major portion of their diet, and to secure these, the bird will rip off large areas in rotten logs and stumps with its powerful, chisel-like bill. On rare occasions this big woodpecker may be seen awkwardly perched on some small branch, eating berries. The winter roosting place of this bird is rather interesting. A live hollow tree is selected and there two or more holes are dug, presumably with the thought of using one for escape should any attack by some night marauder take place. These roosting places are used year after year; in fact, there is one site in the Overton Hills, south of Nashville, that has been used for so many seasons it has become essential for the woodpecker to cut away a portion of the tree that is trying to heal over the cavity.

The Pileated Woodpecker remains with us throughout the year. And though they at one time were apparently rare, they now seem to be on the increase. Almost any trip into the country where suitable woodlands are to be found, will be rewarded with either hearing the loud call, a tapping as the bird digs for food, or viewing the slow, steady wing beat propelling the bird as he flies over some open meadow or valley to woodlands beyond.

NASHVILLE CHRISTMAS CENSUS FOR 17 YEARS

By W. M. WALKER

For ready reference I have compiled below the Christmas bird lists prepared by members of the Tennessee Ornithological Society during the past eighteen years. All of these except 1914, 1920 and 1925, were published annually in Bird-lore. The 1920 list is missing. Arranged as they are below, they are readily comparable and form an accurate and useful cross-section of the winter bird life of the country around Nashville. The winter status of the species, as established by listings, through the winter months, is shown in the second column, by means of the following symbols: + = common; ** = fairly common; - = rare, and X = accidental or extremely rare. The letter M indicates 1,000 individuals; for example, 5M = 5,000. Certain gregarious birds, like the Grackle, Cowbird, Starling, Redwing and Robin, are in some years extremely abundant at Christmas time, and again are entirely absent. They are often absent or nearly absent through December until late January. Observers participating in 3 or more censuses are A. F. Ganier, 15; G. R. Mayfield, 10; H. C. Monk, 10; Mrs. Sanford Duncan, 6; J. M. Shaver, 5; H. S. Vaughn, 4; Mrs. Mayfield, 4; J. K. Baker, 4; A. C. Webb, 3; and E. M. McNish, 3. The total number of species recorded is 88; deducting those listed only once, this number becomes 70.

Year	1914	'15	'16	'17	'18	'19	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31
Date	December																
No. of Species	26	26	24	23	24	27	24	24	23	25	26	26	24	23	22	21	55
No. of Observers	1	2	1	1	1	5	1	7	8	8	2	6	7	4	8	10	13
Loon													1				
Grebe Holboells	X												1				
Grebe Horned									3								
Grebe Pied-billed										4		5					
Cormorant Doub-crest.																5	1
Heron Gt. Blue										1							
Goose Canada											55						
Duck Mallard	**		1	8		35				40	50	35	100	75	90	105	43
Duck, Black									42	12	6	8	6	12		47	
Duck, Pintail										30			12	6			
Duck, Gr-wing Teal										40			2	10			
Duck, Bl-wing Teal			1 sp?							200	10		10	10			
Duck, Shoveller													4				
Duck, Lesser Scaup	+					25		5?	6	100	15	40	90	50	25	45	40
Duck, Ringnecked	+													35	75	110	89
Duck, Redhead						2								3			
Duck, Canvasback										20				1			
Duck, Goldeneye																	1
Duck, Old Squaw																8	
Duck, Ruddy						9							8				
Duck, R-br. Merganser											3						
Vulture Turkey	**	1	2	2	2			2	1				18			5	1
Vulture, Black	**	8		1	24	8	7	50	17	19	4	1	11	2		2	5
Hawk, Sharp-shinned		1															
Hawk, Coopers	**					1		4		1		1	1		2		1
Hawk, Red-tailed	**	2		3	3	1	4	2	5	6	4	1	1	1	2		2
Hawk, Red-shouldered			2														
Hawk, Marsh								5					1				1
Hawk, Sparrow	**	3	4	6	2	2	6	2	11	11	4	1	9	4	4	1	6
Bob-White	+	12	10	6	6	6	8	11	14	23	8	50	1	31	12	15	8
Amer. Coot	**												150	200	150	62	51
Killdeer	+	26	34	6	3	2	16	34	52	39	24	14	11	35	11	4	12
Snipe, Wilson's								2	3	3	1		1	4		2	
Yellowlegs, Greater	X								1								
Yellowlegs, Lesser	X								1								
Dove, Mourning	+	28	60	2		6	6	65	95	3	60	64	75	44	32	1	6
Owl, Screech	**				1	1			1		1		1		1		3
Owl, Great Horned					1	1	1	2		1			1			1	
Owl, Barred						1			2	1							1
Kingfisher		1	1					2	2		2	1	1	1	1	3	4
Flicker, Northern	+	7	12	40	25	6	60	13	47	85	33	25	31	15	32	24	43
Woodpecker, Pileated				1	1		2	2	1	4	1	3	1	1	1	4	2
Woodpecker, Red-bellied	**	2	6	4	5	3	7		26	28	8	9	4	11	12	6	7
Woodpecker, Red-headed				2					5			1	1	3		18	2
Sapsucker, Yellow-bellied*	3	6	2	6	2	3	1	3	3	2	2	3	2	1	4	2	2

Woodpecker, Hairy	**	2	2	1	4	5	5	7	4	2	6	4	1	5	5			
Woodpecker, Downy	+	3	8	3	7	4	8	5	18	26	8	5	8	9	7	10	9	
Phoebe											1						1	
Lark, Prairie Horned	+	312	12	370	75	40	25	25	19	11	60	47	27				61	
Blue Jay	**		3	2			8		8	57	4	16	14	13	2	2	12	9
Crow	+	25	66	13	12	18	5	26	90	336	1	300	58	215	50	130	127	36
Chickadee, Car.	+	10	8	15	8	10	28	23	37	43	17	18	21	18	18	20	25	48
Titmouse, Tufted	+	3	4	13	4	4	7	5	45	26	14	8	20	11	15	7	18	15
Nuthatch, Wh.-br.	---	1		1	2	1	12	6		3	2		1	2		2	3	3
Brown Creeper	---		5	1				5	5	5	1	1	2	3	1		3	2
Wren, Winter	**				1		1	3		2	2	2	4	2	1	10	3	
Wren, Bewicks	**	1	2	2	2	1	1	1	9	9	2		5	3	1	1	4	
Wren, Carolina	+	6	15	12	4		5	14	43	48	9	12	16	16	11	8	17	19
Mockingbird	+	10	20	25	12	8	32	16	40	38	20	8	47	84	30	22	31	68
Robin	+			105		8M	8M		160	25M	11	15	27	16	176	2	22	36
Thrush Hermit	---				2		4								1	1	3	
Bluebird	+	5	14	17	8	14	17	18	54	57	10	16	44	27	33	11	31	84
Kinglet, Gold-crowned	**		5					4	11	23		8	6	1	8	5	3	8
Kinglet, Ruby-crowned	---	1		1														
American Pipit	---										2							
Waxwing, Cedar	**			2			1		35			6		12	26		20	32
Shrike, Migrant	---		2			1			1							1		2
Starling	+								20M							6	75M	1.8M
Vireo, White-eyed	X											1						
Warbler, Myrtle	+		1	4	3		40	8	95	13	2	4	8	7	20	16	10	22
Warbler, Palm	X																	
Meadowlark	+	327	22	80	50	6	11	45	200	173	18	15	138	44	17	26	3	113
Blackbird, Red-wing	---										20			2	200	2		
Blackbird, Rusty	---																	20
Grackle, Bronzed	+		2	21	1	4M	12M	26	1	400M			200	17	50	3M	2.5M	
Cowbird	**		2M				3M		38	50M						20	50	2
Cardinal	+	17	42	20	15	25	65	33	95	112	100	50	75	114	48	65	23	116
Purple Finch	**					4	5		21	24			9		12	4	6	
Goldfinch	+		8	6	4	8	12	22	48	37	4	8	43	21	7	10	33	24
Towhee	+	5	13	35	8	12	22	15	19	47	15	30	27	16	23	34	62	31
Sparrow, Savannah	**	7	5	5		4		1	4						1	16	5	5
Sparrow, Fox	---		6	1	2	2	2	3	20	4			4	3	6	1	5	7
Junco, Slate-colored	+	35	70	75	60	110	140	60	120	170	17	75	125	122	100	115	267	81
Sparrow, Field	+	60	40	6	14	20	140	34	60	178	25	6	50	38	9	9	77	105
Sparrow, White-crown	**				1	4		14	10	6			27	18	5			7
Sparrow, White-throat	+	10	38	45	60	15	70	37	175	400	70	40	58	86	94	150	73	69
Sparrow, Swamp	**	3						80	18			2	4	1	4	2	3	4
Sparrow, Song	+	60	7	27	9	18	90	57	130	71	26	35	36	24	41	48	69	85

Nashville, Tenn., November, 1932.



A STATE BIRD FOR TENNESSEE

By BEN B. COFFEY, President.

Inasmuch as Tennessee is one of only five states which have not selected a state bird, and there has been some local agitation for such an emblem, the Tennessee Ornithological Society is the logical and authoritative organization to originate and conduct the project of selecting a suitable choice to be presented to the Legislature for official action. While it might seem best to defer such a campaign until our recent expansion and educational efforts have reached more people, notably teachers, we might, by delay, have our leadership taken away from us by some organization which may not get out as representative a vote or present the necessary facts on our Tennessee birds to enable an intelligent vote to be cast. Such a campaign with ample newspaper publicity, and using the enlisted support of the schools, should, I believe, be timed to start about next March. Interest in nature becomes more widespread with the awakening of spring. While real bird lovers, whose numbers are not legion, are better qualified to elect a state emblem, the main value of the campaign would be not so much the having of an official emblem, but in taking this opportunity to awaken an interest in birds and their value on the part of the average person. After consulting with some of our mem-

bers, I have concluded that it is our duty to direct the campaign and give the benefit of our experience.

One method of presenting this matter to the public would be to have a committee present a list of 15 suitable birds in an article introducing the subject, this matter to be passed on to the newspapers. Following this there could be a series of two or three articles describing the birds thus nominated. These articles could be prepared by the committee and an invitation extended to the public to champion their favorites with supporting articles in the press. These articles could be followed in the next issue by a summary of all of them, written by our local representatives, and ballot solicited from the public, including school children.

The details of such a campaign are to be planned by a committee which it is my pleasure to appoint. The above suggestions are given space merely to elicit more and probably better ones, and every T. O. S. member is urged to communicate his or her thoughts on the matter to a member of the following committee: Dr. George R. Mayfield, Nashville, chairman; R. A. Wilson, Nashville; John Bamberg, Knoxville; Miss Jacqueline Hall, Memphis; Robert Sparks Walker, Chattanooga, and Bruce P. Tyler, Johnson City. In addition, our members, where we have no organized chapters, are to consider themselves in charge locally, and are urged to help secure representative publicity and voting.

As additional background for the planning of this campaign I would direct all interested to the April, 1932, issue of Nature Magazine, and also to the issues of October and December. The fact that a bird has already been selected by another state should not militate against it. Since almost all states have selected their emblems, practically all our most common birds which are found here the year round, have been selected by other states. The Mockingbird is the state bird of Arkansas, Florida, Mississippi and Texas. Its selection by Tennessee would accentuate the fact that this famed songster is truly a Southern favorite. (The Western Meadowlark represents seven Western states.) The Cardinal is state bird for Delaware, Illinois, and Kentucky, and a favorite in Indiana. Other of our old stand-bys chosen are Bob-white (Oklahoma and Rhode Island), Carolina Chickadee (North Carolina), Carolina Wren (South Carolina), Goldfinch (Minnesota), Bluebird (Missouri and New York), Tufted Titmouse (West Virginia), Flicker (Alabama), Robin (Michigan, Wisconsin and Virginia), and Brown Thrasher (Georgia). The latter two are probably uncommon during winter over most of Tennessee. Among our summer residents are the Baltimore Oriole (Maryland), and the Wood Thrush (District of Columbia).

The Downy Woodpecker, while common and a favorite with bird students, is, I have found, unknown to the vast majority of children, Scouts, and even adults. Perhaps the Towhee may be popular and widely distributed in the state. It does not nest at Memphis, but is common except in summer. There are many others to be suggested. Nature Magazine suggested (April) the Painted Bunting for Tennessee. This was amusing to me, as we eagerly seek this species each spring here at Memphis and have only seen it a few times, these instances constituting our only Tennessee records. Robert Sparks Walker, poet and naturalist of Chattanooga, commented on this in the December issue of the same periodical.

Let us each rally to the praise of our favorite and lend an attentive eye or ear to the briefs in behalf of other feathered friends, so as to know and appreciate them all the more and to pass on this zealous interest, which is its own reward, to those about us.

Memphis, Tenn., Nov. 22, 1932.

MARGINAL NOTES ON THE MOCKINGBIRD

By MRS. ARCH COCHRAN

A long time ago some one said something about the value of "a bird in the hand." Little did he know what his words could mean to the bird student engaged in bird banding. Probably he never gave a thought to what it means to hold a bird long enough to examine, measure and weigh it. Long enough to count each feather and note every variation in shade and color. Nor did he take into consideration the fact that if one desired, the two in the bush would some time or other land in the hand for the same sort of study. And certainly there are times when the two in the bush are worth more for study than in any other place.

For example, let us take the Mockingbird. In the hand it is a bewildering thing. Spirited creature that it is, it fights and struggles every second. It makes such a thing as examining plumage and measuring areas of color an arduous task. It leaves one uncertain about its sex and, most exasperating of all, when once captured, it seldom returns for further study.

Facing all these discouraging notes, a start was made with a dingy, soot-covered Mocker captured on Jan. 16, 1932. This bird had been pugnaciously defending its feeding station for several months. It had been accustomed to sitting on a nearby telephone pole, where it could rout a dozen sparrows with one dash toward its food. It had not been heard singing, so no sex was marked opposite the band number. The feathers were examined, the white areas in wing and tail measured, and the light umber color of the eyes noted. The legs were slaty black.

On April 14 of the same year another Mockingbird appeared. This one was given a Biological Survey band on one leg and, on the other, another Survey band that had been painted red. The red lead was rubbed deeply into the numerals and thickly painted with a quick-drying enamel. This made identification easy at some distance. As far as scale and ruler could show, there was no difference between the two birds. The number of feathers with white was the same, the tail was the same in length and coloring, and there seemed to be as much soot on one as the other. When the bird was released, it alighted on a limb about twenty feet away, where it was immediately joined by another Mocker, which sat calmly by, watching while the newly-banded bird pecked furiously at first one band and then the other. In a few seconds both flew a short distance, and before many minutes passed one of them poured out a charming song, one that was pleasant in more ways than one, and which definitely proclaimed it as the male and most likely the mate of the other Mocker. But which bird was he? Did the singer wear the two bands just adjusted, or the one put on in January? Or was he an altogether new bird at the station? The red band could not be seen at this distance, and the birds had shifted from side to side as they flew away, making an accurate check impossible.

To capture both birds was the next step. It should have been the easiest of all things to do, and with some birds it is easy, but not with the Mockingbird. Not much could be done in finding a difference between the sexes unless both birds were in the hand at the same time. The first two captures had been made with a drop trap, the pull-string type, and for fear they had become trap wise, a ground clap net was used. One measuring four feet square would have been large enough, but fearing that eagerness would interfere with judgment in springing the trap, an eighteen foot net was set up. The mesh was large enough to allow the head of a Mocker to slip through and hold it securely without injury.

All other birds entering the net area were allowed to feed freely and undisturbed. And such a banquet as was spread before them! There were fat white grubs (in the shiny cover of a coffee can), circling around and around the bottom, keeping in motion just enough to attract Catbirds and Wood Thrushes. There were two coffee cans sunk in the ground and filled with worms and soil which held the attention of the Robins to such an extent that a new supply had to be put there several times a day. There was grain of every sort grown in Tennessee. There was bread, pie-crust and cake, which proved irresistible to the Flickers and Jays. There was even a constant drip of water kept in a basin where any Mocker approaching it would be caught. All the water did was to attract a few Warblers. With the coming and going of all these birds, bathing, dining and quarreling, not a Mockingbird came to the net. They came close enough to have the two bands clearly visible on one of them and once when they were together the other bird was seen to be also wearing a band. That looked very much as if the latter bird was the one banded in January. But which bird was the singer was still uncertain. All other trapping was discontinued for a week. Finally, so many birds feeding freely in and out of the territory that had originally belonged to the one Mocker must have proved too much for them.

The bird with the two bands was captured about eight o'clock one morning. While examining the feathers of the belly and flanks, a small firm substance was felt that had never before been noticed in any bird. Otherwise the bird seemed just as it was when first caught in April. It was placed in a roomy glass jar with a net cover over one end and the jar was anchored near the trap. If the mate was anywhere in the neighborhood it would surely come to the captive. Two hours was the time limit set for holding the bird. The day was warm, so two hours would not be too long to keep a female from the nest in case she was incubating. That this was a female seemed very certain since finding the little lump that felt so much like an egg. In just an hour and ten minutes the other bird came close. At first it uttered little calls, to which the captive responded with much excitement, turning and fluttering and pulling at the net covering the end of the jar.

* Two more minutes passed. Then the mate flew to the ground, hopped within ten feet of the net, cocked his head to examine the jar, then flew directly to the mesh of the trapping net and bit viciously at the threads. After fluttering up and down the net, taking a bite here and there, it seemed satisfied there was no harm in it, and it flew to the ground, still uttering cries of displeasure. A moment more and it hopped directly to the jar. That was the zero hour for the trapper. Taking an extra tight hold of the trip cord, a pull was made and to my great satisfaction there, near one corner of the net, was the second Mocker. Its head was safely struck through the net, and it was fluttering and jumping as much as any normal Mockingbird.

The band on this bird proved to be the one placed there in January. Since it was supposed to be a male, another band was put on the other leg, this one a white one. The note book for that day showed that the birds looked alike and acted alike. There was no variation in color or shade; the eyes of the bird with the white band were deeper in shade than in January, while the eyes of the red-banded bird were lighted, almost straw in color. The legs of both were the same in color and size. Weighing them showed the one with the red band to be heavier than the other. The position of the small lump, thought to be an egg, had perceptibly changed in the two hours of captivity. The feathers were again measured and counted and again found to be the same in number. Measuring the white areas came next and when that was finished the bird with the red band (first taken in April) was found to have less

white than the other; this, according to authorities, being a characteristic of the female.

Ten days after capturing both birds, the one of the red band returned to the trap for a bath and was captured. During examination the brood spot was found to be as bare as though feathers had never grown on the breast. And now for the first time there was absolute certainty that it was the female which wore the red band. An interval of rest from traps now seemed to be wise for these birds until the brood was well advanced. Besides, another pair of Mockingbirds were under observation at this time and determining and marking their sex was as difficult as the first pair.

Now comes one of the entries in the note book that makes one feel that the fascination of bird-banding lies in the certainty with which one may prove today the things guessed at yesterday. On September 9 a small flock of Mockingbirds, about eleven in number, was seen hovering about the net. They all appeared to be juveniles; at least, they all had speckled breasts. The plumage above was a beautiful clear gray, while below here and there, the breast feathers terminated in olive brown, making the breast look spotted. Over the whole bird was an overtone of buff, even the white in the primaries ended in the same tinge.

For an hour they were watched at their play and while waiting tensely to get as many as possible in one drop of the net, one bird was seen to have a band. A moment more and two bands were seen on the one bird. This was puzzling. Waiting no longer to see how many of the eleven birds could be trapped at one time, the net was dropped with the intention of capturing only the banded bird. Fortunately, four others were caught. It was well, too, else no accurate comparison could have been made. The bird with the two bands was the female banded in April. The red was entirely worn from the band, but under the magnifying glass the red lead was seen ground in the numerals. Her bill was dark, almost black; her legs, too, were slaty black, and she looked adult about the head, but what was she doing with the same spots on her breast that the youngsters had? The other birds had a look of immaturity that was unmistakable. Their legs were light bluish-gray, their bills had a pinkish buff color very different from the older bird, and they were much lighter in weight.

During the next week thirty-five more Mockers were captured, but though all of them had speckled breasts, none of them had dark legs and bill, and they acted and looked like young birds. Finally, on Oct. 14, the same two-banded bird was recaptured. This time the plumage was no longer washed with buff; even the subdued sheen of September was gone, and, of greater interest, the spots on the breast, too, were gone. From this observation it would seem that the adults, as well as the young, complete their fall moult with a tinge of buff and with spotted breasts, and that these features are worn off after a short time.

Nashville, Tenn., November, 1932.



BIRD-LORES XMAS CENSUS, the thirty-fourth, may be taken this year on any day between Dec. 22 and 27. Our members are urged to co-operate in this winter survey of bird life. The magazine, "Bird-Lore," has published a number of other Christmas census lists from Tennessee, mostly from the eastern part. Back volumes are on file in the larger State libraries. At Nashville the Carnegie Library has volume 7 (1905) complete to date. Our Curator has the volumes issued prior to 1905.

THE ROUND TABLE

THE SEASON AT MEMPHIS: An Upland Plover noted in the Zoo here, was caught September 3, south of Memphis, near the Mississippi line. Most of our winter residents were here by the middle of October. On November 6, a White-crowned Sparrow was seen and four or five heard singing; my only other record of this species during my five years here is for two seen on May 5, 1929. A small number of Cedar Waxwings will probably be with us throughout this winter, but Purple Finches have not been seen yet and will probably be scarce as usual. A flock of 50 birds seen October 24 proved shy, but were thought to be Starlings. This species has been rarely seen here since our 1928 and 1929 early spring records, when small numbers were observed. Ring-billed Gulls, a few Herring Gulls and a few of the "Hooded" Gulls (probably the Bonapartes Gull) appeared on the river about the middle of October and several Ring-bills are now to be seen in front of town. Small numbers of Lesser Scaup are to be seen there also. Ducks are reported unusually common this year, Mallards and Rink-necked Ducks being the most abundant species. Blue-winged and Green-winged Teal have both passed through this section, while Lesser Scaup and a few Black Duck, Pintail and Shovelers are now to be found here. Canada Geese are more common than for the last several years. The writer banded 500 Chimney Swifts on October 20, with the assistance of Mrs. Coffey, and older members of Scout Troop 1 (member T. O. S.), Rutherford Gartside, Robert Reinert and Erie Henrich. Probably 800 Swifts were released through a safety opening in the trap as they came out of the chimney, in order to prevent congestion in the trap, and approximately another 800 passed into the receiving cage. The 300 for which we had no bands were also released, after being examined for bands. None of the 800 captured bore a band from elsewhere. This is our first attempt here, and we hope to repeat this work next spring and fall. Gartside assisted me in the arduous construction of the cage and the trap necessary for the large chimney on top of the Masonic Temple, Fourth and Washington streets.—Ben B. Coffey, Memphis.

BLACK-BELLIED PLOVER AT KNOXVILLE: On October 6, one of these birds was taken on the field which comprises the municipal airport, about four miles east of Knoxville. Mr. W. O. Shelley, while out with his dog about noon, saw some boys shoot at a bird on the field, and on his approach they ran away, so he secured it. He was at some distance when the shot was fired, and if there was more than one of the plovers he did not see them. The specimen was prepared by S. A. Ogden and added to our local collection. It was in fall plumage, but measurements and the presence of the small fourth toe enabled accurate identification. I believe this is a first record for this species in Tennessee.—H. P. Ijams, Knoxville.

HAWKS AT BRISTOL: F. M. Jones of Bristol, Va., has given most of his leisure time during the past spring to searching for hawks' nests and reports considerable success. Since he is stationed at the State line, his data will apply to Tennessee as well as Virginia. In "The Raven" for May, he describes six nests of the Red-tailed Hawk, found between March 14 and April 30, containing from two to three eggs or young. In the June number he describes six occupied nests of the Coopers Hawk, found between April 21 and May 20, each containing four eggs. In the July issue he tells of eight occupied nests of the Broad-winged Hawk, found between April 25 and May 30, containing from two to four eggs each.

"BLUE DARTERS": For those who have trouble in distinguishing between the Coopers and the Sharp-shinned Hawks in the field, we give below their average measurements in inches:

	Sharp-shinned Hawk		Coopers Hawk	
	Male	Female	Male	Female
Total length.....	11.25 in.	13.50 in.	15.50 in.	19.00 in.
Wing	6.60 in.	8.00 in.	9.50 in.	10.50 in.
Tail	5.50 in.	7.00 in.	7.75 in.	9.00 in.

It will be noted that there is but little difference in size between the female Sharp-shinned and the male Coopers; in fact, some female Sharp-shins are as long as 14 inches, while some small male Coopers are of the same length. The former has a square-ended tail, while the latter is rounded, but this is rarely apparent in flight. We are inclined to think the Sharp-shinned is a rather rare bird, at least in Middle and West Tennessee during the summer.

WINTER FEEDING: When this number reaches our readers, winter will be upon us in full force, most of the natural bird food in the way of berries and seeds will have been garnered, and the birds will be down to "hard tack" and scant rations. There is scarcely one of our members but whom can indulge in a feeding shelf, and those who would have more birds about their places in winter should set about installing one. A 12x24-inch board with a slat around the rim, nailed on a post or set at shoulder height in a tree, is all that is necessary. As the birds become accustomed to it, the shelf may be moved closer to a window. The birds prefer bread crumbs and suet, but gradually learn to eat nearly everything. English sparrows may have to be put up with unless one prefers to trap them out. For more complete details on winter feeding, look up Mrs. Laskey's article in our last December issue.

FAVORITE BIRDS: The following is submitted by one of our members. Perhaps it may lead you to prepare a similar list for yourself from your own experience.

"In looking through the long list of our Tennessee birds I find the following which appeal to me most:

Cardinal—Most lovable and a harbinger of Spring.

Mockingbird—Most admirable bird of all.

Bewicks Wren—A homey fellow with a sweet song.

Chickadee—A jolly sport, no matter what the weather.

Wood Thrush—With his spotted breast and sunset chimes.

Bob White—Nothing more cheerful than his call.

Pileated Woodpecker—A noble fellow, when you know him.

Red-wing—What more joyous than his "honk-a-ree-ree?"

Hummingbird—Tiny, yet hardy; the embodiment of vigor.

Kingfisher—His rattling call brings the stream to life.

Duck Hawk—Such a splendid savage.

Turkey Vulture—Who so enriches the landscape.

Meadow Lark—The meadows would be poorer without him or his song.

Titmouse—A pal for our walk through the winter woods.

Louisiana Water Thrush—Active sprite of babbling brooks.

Sycamore Warbler—Constant singer of the sycamores.

Hooded Warbler—Voice of the deep woods."

MEETINGS: The Nashville Section of the T. O. S. will meet bi-weekly during 1933, as follows: Jan. 2, 16, 30; Feb. 13, 27; March 13, 27, etc., at 7:30 p. m. in S-R. building of Peabody College. Bi-weekly meetings have been held regularly during the Fall. The Fall Field Day was held on Oct. 23, at Cave Spring, on the Hillsboro Road in Williamson County.

REVIEW: "The Water Birds of Radnor Lake" is the title of a paper by Harry C. Monk, in the October, 1932, number of the Journal of the Tennessee Academy of Science. This lake is a 90-acre reservoir, without marshy borders, situated in the high hills eight miles south of Nashville. Fifty-six species are annotated in such a way that their relative abundance can readily be understood and herein are recorded a number of species that have not been recorded elsewhere in this area. Mr. Monk has improved the opportunity presented by the presence of this lake by making a most painstaking study, the basis of which includes 337 trips to the lake during the past fourteen years.—A. F. G. (Copies of the Journal may be procured from J. M. Shaver, Editor, Peabody College, Nashville, for fifty cents.)

The Migrant is sent to all members not in arrears for dues. Active membership is one dollar a year; associate membership is fifty cents. Subscriptions to non-members is fifty cents. All articles, correspondence and dues should be addressed to the Editor-Treasurer, George B. Woodring, East Woodmont Bldv., Nashville, Tenn.



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