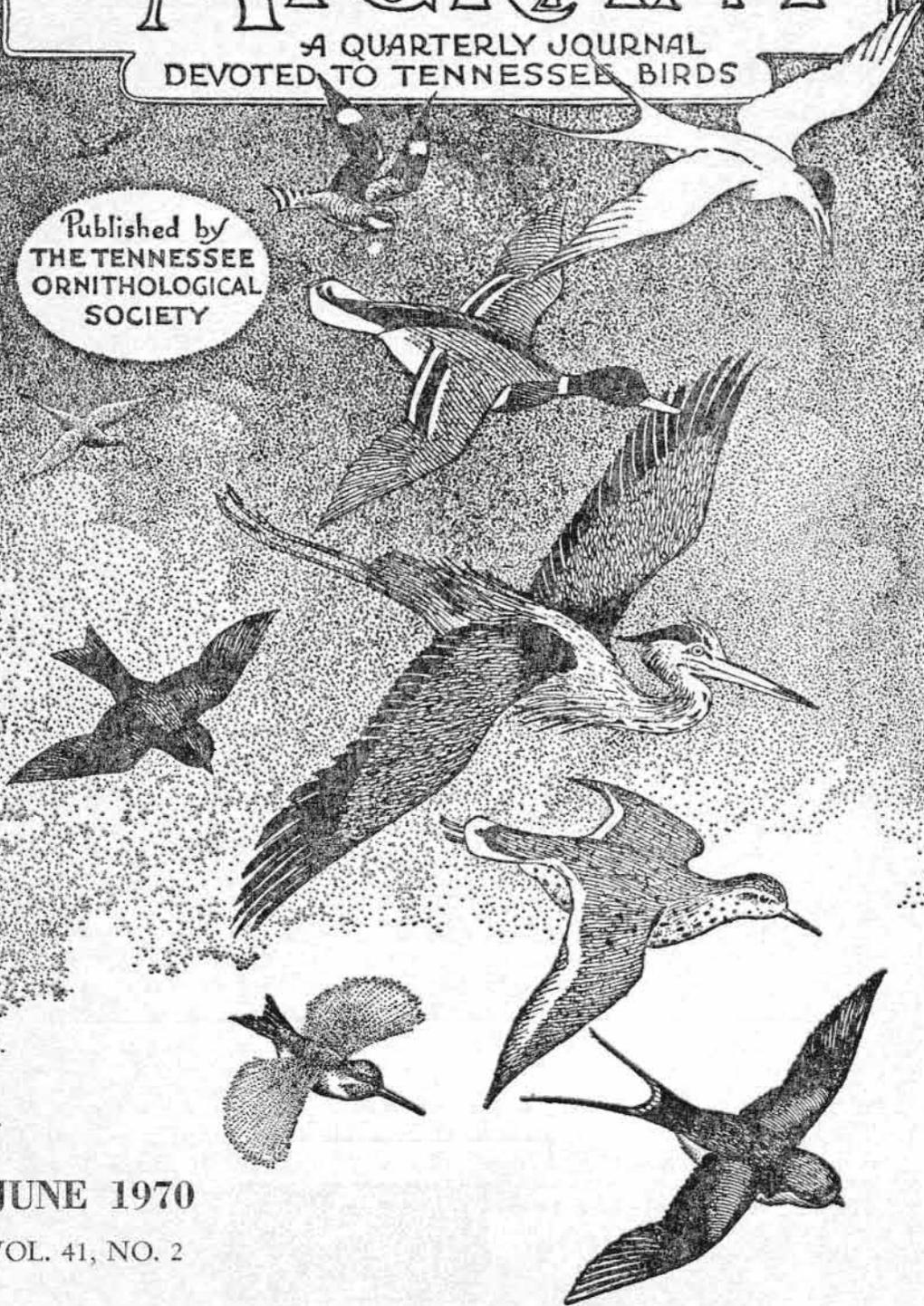


THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

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WINTER FLOCK STRUCTURE AND BEHAVIOR OF THE CAROLINA CHICKADEE

GARY O. WALLACE

This study was part of a larger research project involving the winter behavior and ecology of the Carolina Chickadee (*Parus carolinensis*). The study area was located on the University of Tennessee Cherokee Farm, which is located about one mile south of Knoxville (Wallace, 1967).

Once young chickadees become independent of their parents, the young from several different family groups may combine to form loose flocks. Brewer (1961) states that early summer flocks are composed mostly of young birds. The adults tend to remain on their breeding territory for a time but later join these wandering flocks.

Carolina Chickadee flocks apparently are not led by any one bird. The first bird to move into a new feeding area might be one of the last to leave the area. Odum (1942) reported this to be true also for the Black-capped Chickadee (*Parus atricapillus*) on the Edmund Niles Huyck Preserve, Rensselaerville, New York.

I was unable to obtain much data on dominance in winter flocks of chickadees. Occasionally a "deedle-up" note was heard which Brewer (1961) calls the dominance note in the Carolina Chickadee. This note was generally heard just before or after a fight or what appeared to be a near fight. Moving birds were often seen to displace sitting birds. I was unable to tell if this was a case of a dominant versus a subdominant individual or just a moving bird having a positional advantage over a nonmoving individual. Odum (1942), working with the Black-capped Chickadee, reported that there was a well-defined dominance order in the winter flocks with males mostly dominant over females and newcomers being placed at a low position in the dominance order. Dixon (1963), working with the Carolina Chickadee in Texas, states that the organization of flocks was hierarchical with resident pairs dominant. Dixon (1965) states that the Mountain Chickadee (*Parus gambeli*) travels in small, cohesive flocks that exhibit linear or peck-right dominance relations.

TABLE I
THE AVERAGE RATE OF MOVEMENT IN FEET
PER HOUR OF 28 CAROLINA CHICKADEE FLOCKS

Time	Dec.	Jan.	Feb.	March	Total
Morning 7:00-10:00 A.M.					
No. Observations	2	2	5	3	12
Average	1,614	1,991	1,416	1,593	1,589
Mid-day 10:00 A.M.-3:00 P.M.					
No. Observations	3	3	6	0	12
Average	767	1,230	1,105	-	1,052
Afternoon 3:00-7:00 P.M.					
No. Observations	0	2	2	0	4
Average	-	1,943	906	-	1,425
Total Observations	5	7	13	3	28
Average	1,106	1,051	1,195	1,593	1,186
Variation	0-1,635	1,048-2,598	492-2,241	1,257-1,825	0-2,598

MOVEMENT OF FLOCKS

The movement of 28 flocks was plotted on separate maps. These flocks were followed from one to three hours each. The average rate of movement was about 1,200 feet per hour. The flocks did not move at a uniform rate. Sometimes they would feed in an area with little movement and then for no apparent reason move to a new area with very little feeding during the movement. At other times they would slowly drift through the woods feeding as they went. Up to at least 825 feet might be covered in a single movement. Hinde (1952), working with the Great Tit (*Parus major*) in England, reported the same type of erratic periods of movement. He defined two types of movement: drifting movement, which takes place in the course of feeding, and integrated movements in which there is almost no feeding at all. He reported that as much as 200 yards could be covered at one time during integrated movement. Foster and Godfrey (1950), working with the British Willow-Tit (*Parus montanus*), and Odum (1942), working with the Black-capped Chickadee, reported the same type of behavior.

Table I shows rate of movement of chickadee flocks in relation to time of day. The average rate of movement was greater in the morning and less in the middle of the day. Odum (1942) reported the rate of progression to be

greater in the morning than in the afternoon for flocks of Black-capped Chickadees. Hinde (1952) states that Great Tit flocks have their highest rate of movement in the morning and move much less in the afternoon.

An attempt was made to determine the approximate size of the winter flock range (Dixon, 1963). This was done by following 28 flocks and plotting their path on separate maps. These were later combined on a single map. On the basis of the limited data obtained in this study the average size of the winter flock range of the Carolina Chickadee was determined to be 22 acres with a variation in size from 15 to 25 acres. Dixon (1963) reported the flock range of the Carolina Chickadee in Texas to be 10 to 12 acres. Lawrence (1958) reported the winter feeding range of the Black-capped Chickadee to be 21 to 55 acres with an average of 36 acres. Butts (1927) stated that Black-capped Chickadees have a winter range similar to the White-breasted Nuthatch (*Sitta carolinensis*), which had a feeding range of 25 to 48 acres. The routes that the flocks followed within the winter range were very irregular, but they seemed to have favorite feeding areas and usually visited those places several times each day.

The distance between individual birds within a flock was by no means constant. At times the members of a flock would be within inches of each other while at times they would be dispersed over hundreds of cubic feet. Hinde (1952) reported that flocks of the Great Tit were well integrated in the morning but became scattered later in the day. I frequently saw large mixed flocks containing chickadees and other species of birds separate into smaller flocks which later would unite again.

FLOCK SIZE

Flock size probably varies with many internal and external factors. It is possible that such factors as vegetation, temperature, precipitation and wind affect flock size but the data in this study did not produce such information. The size of the chickadee flocks did not seem to vary with the time of day. Based on 70 flocks in which the size was estimated, the flocks were smallest in the last three hours before sunset. The average chickadee flock for this time of day was 3.6 birds per flock while the average for flocks observed throughout the day was 4.1 birds per flock. This corresponds to what Hinde (1952) found in flocks of the Great Tit. The data on flock size in the Carolina Chickadee is summarized in Table II. In Table II the columns under Carolina Chickadee include only the number of chickadees present in a flock regardless of how many other birds were associated with the chickadees. The columns under "mixed flocks" include Carolina Chickadees and any other species that were in an apparent association with the chickadees.

Odum (1942), working with the Black-capped Chickadee, reported the average number of birds in a flock to be seven or eight individuals. Kluyver (1961), working with the same species, stated that summer flocks were composed of five to ten birds. Hinde (1952) stated that Great Tits are normally found in flocks of about a dozen. Pielou (1957) reported the average number of Tufted Titmice (*Parus bicolor*) in Michigan to be six birds per flock during January. Bent (1946) says that the average Tufted Titmouse flock

TABLE II

AN ESTIMATE OF FLOCK SIZE FOR THE CAROLINA CHICKADEE
AND FOR MIXED FLOCKS INCLUDING ALL SPECIES PRESENT

Month	Carolina Chickadee		Mixed Flocks	
	Number of Observations	Average birds per flock	Number of Observations	Average birds per flock
December	13	4	3	6
January	26	4	4	10
February	20	4	4	12
March	11	5	5	10
Totals	70	4.1	16	9.8

includes two to six birds. Smith (1967) reported that Black-capped Chickadee flocks contained six to twelve chickadees. Brewer (1961), working with both the Black-capped and Carolina Chickadees in Illinois, found the average flock size for both species to be 3.3 birds per flock. Wallace (1941), working with the Black-capped Chickadee in Michigan, stated that winter flocks averaged six to eight individuals and were remarkably constant from day to day in individual composition.

FLOCK COMPOSITION

Carolina Chickadees were often found in flocks composed of a number of species. The Tufted Titmouse was found to be the most frequent associate with chickadee flocks. Titmice were associated with chickadee flocks about 55% of the time. Other species frequently seen with the chickadees were White-breasted Nuthatch, Red-breasted Nuthatch (*Sitta canadensis*), Downy Woodpecker (*Dendrocopos pubescens*), Brown Creeper (*Certhia familiaris*), Golden-crowned Kinglet (*Regulus satrapa*) and Ruby-crowned Kinglet (*Regulus calendula*).

Odum (1942), Kluyver (1961), working with the Black-capped Chickadee, Brewer (1961), working with both the Black-capped and Carolina Chickadees, and Hinde (1952), working with the Great Tit, reported a similar list of associates. Butts (1927) stated that Black-capped Chickadees spent about one-sixth of their time with White-breasted Nuthatches. Bent (1946) reported Carolina Chickadees, various sparrows and woodpeckers, Carolina Wrens, goldfinches and juncos feeding with Tufted Titmice.

SUMMARY

Carolina Chickadee flocks apparently are not led by any one bird. The first bird to move into a new feeding area might be one of the last to leave. The average rate of movement of Carolina Chickadee flocks was about 1,200 feet per hour. Their movement was not at a uniform rate. The average rate of movement was greater in the morning. The average number of Carolina

Chickadee per flock was 4.1 birds. Carolina Chickadees frequently flock with other species. The Tufted Titmouse was found to be their most frequent associate.

ACKNOWLEDGMENT

I wish to thank Dr. J. C. Howell for his valuable suggestions and critical reading of this manuscript.

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Department of Zoology, The University of Tennessee, Knoxville, Tennessee, 14 October 1969.

PRESIDENTIAL MESSAGE FOR TOS

In this first presidential message since our Annual Spring meeting at Reelfoot Lake, I would like to express the appreciation of the Society to the members of the Memphis Host Chapter who worked so hard to bring us a very enjoyable meeting. Several members of our Reelfoot Lake Chapter also helped especially at the banquet and social hour on the preceding night.



The Board of Directors' meeting produced, I believe, several important decisions which should be passed on to you at this time. In the first place our proposed joint meeting with the Kentucky Ornithological Society on the week-end of 30 April - 1 May 1971 at Mammoth Cave Kentucky was approved by the Board and is anticipated by the membership of both societies with considerable enthusiasm. Our Middle Tennessee Vice President, Mr. John Ellis, and the Members of the Nashville Chapter of the TOS will work with the Kentucky Ornithological Society in the arrangement for this meeting.

For the first time in several years, we look forward to a fall meeting of our Society, which will be held at the Holiday Hills Resort in Crossville, Tennessee on the week-end of 10 October 1970. For those who can spend the week-end there, we invite you to come on Friday night and stay until Sunday noon. If your time is more limited, plan to arrive by noon on Saturday in time for lunch and a brief Board of Directors meeting immediately followed by interesting papers on the subject of ornithology during the afternoon and an evening program related to conservation activities going on at the present time within our state. Informal field trips will be available for those who may wish to attend on Saturday morning and Sunday morning and the earliest hint of fall color should be upon the beautiful foliage of the Cumberland Plateau. You should make your reservations directly with Holiday Hills Resort as soon as you plan to attend.

Our Board of Directors has voted to participate as an organization in the Tennessee Environmental Council. This newly formed coalition of organizations throughout our state interested in the preservation of a quality environment and in pollution control is seeking a wide variety of participation from groups of many interests, and I feel that this action is significant in the future of our organization. A report on the progress of this environmental council will be given at the fall meeting in Crossville.

The Committee on self-study and future plans continues to function as a source of ideas for the benefit of our society and I am happy that some of these have been translated into constructive action.

In closing this message, let me urge each of you who is capable of doing so to get out into the field, make observations of value in the study of birds, and report your findings in articles to the Migrant.

I look forward to seeing as many of you as possible in Crossville, on 10 October.

GEORGE R. MAYFIELD, JR. *President*

TENNESSEE ORNITHOLOGICAL SOCIETY ANNUAL BOARD OF DIRECTORS' MEETING

9 May 1970

The 55th Annual Meetings of the Board of Directors of the Tennessee Ornithological Society was held at 14:00 on 9 May, 1970 at the Ellington Center at Reelfoot State Park.

The meeting was called to order by the Chairman, Dr. George R. Mayfield, Jr. with 32 members present in fact and two by proxy.

Mr. Ganier moved to dispense with the reading of the *minutes of the meeting of May 1969*, since they had been printed in the Migrant. The motion was approved.

The Treasurer's Report was presented by Mr. Ken Dubke, the summary of which follows:

Balance on hand 3 May, 1969	\$1818.51
Income for the year	2341.44
Total	4159.95
Disbursements during year	1990.11
Balance on hand	2165.84

Endowment Fund — 346.482 shares of M.I.T. at \$12.69 or 4396.86. The Treasurer's report was approved by the Board.

Report of Finance Committee: Mr. Miser Richmond for the Finance Committee reported that the audit was correct. Dr. Mayfield reappointed the same finance committee for the ensuing year.

Report of the Editor: Dr. Herndon first reported on the new cover for the Migrant and discussed the depletion of the Editorial Staff. Mr. Wallace Coffey is no longer on the Staff and Charles Smith is going away to school. There was considerable discussion of the role of the Editor in accepting or rejecting certain unusual records of birds listed in state counts. The Board of Directors reaffirmed the policy stated on the inside of the back cover of the Migrant requiring detailed verification of such unusual bird records and reaffirmed the Editor's right and duty to reject any such records which in his judgment were not adequately verified. There was a discussion of publication of a membership list which is ordinarily done every third year. The Board voted to publish this list separately from the Migrant but to include it in the mailing of the Migrant. The species index is to be continued as a part of the format of the Migrant. There was discussion of the publication of the Christmas and Spring counts in the Migrant. Some members including Mr. Ganier favored deleting the Spring count, but the Board did not take any action on this matter at this time. Mr. Ganier moved that the President, Dr. Mayfield, appoint an editorial advisory board which would furnish advice and assistance to the Editor upon request. This motion was passed and Dr. Mayfield appointed Mr. Ben Coffey, Mr. Ken Dubke, Mr. Bill Senter, Mrs. Katherine Goodpasture, and Mrs. Maxie Swindell to this board, with Mr. Coffey to serve as Chairman. Dr. Herndon requested that a new Editor-Elect be desig-

nated as soon as practicable so that this person might begin to learn the duties of Editor prior to the end of his term in May 1971. Dr. Mayfield requested the Nominating Committee to act on this matter and report to the Board of Directors at the Fall meeting 1970 for their approval.

Report of the Curator: Mr. Ganier discussed his private collection and renewed his invitation for individuals to study his bird skins and to avail themselves to back issues of the Migrant.

Report of the Nominating Committee: The Nominating Committee, consisting of Dr. Herndon, Mr. John Ellis, and Mrs. Edward Carpenter reported the nomination of Dr. James Tanner as President-Elect. Dr. Mayfield reappointed the Nominating Committee.

Committee on Self Study and Future Plans: The Chairman, Mr. Wallace Coffey, reported that two meetings had been held, one at the Fall symposium in Cleveland and on 8 May, 1970, at Reelfoot. He stated that most of the members had been able to attend both meetings. He turned the meeting over to Dr. Mayfield to lead a discussion of matters brought before the Committee.

Dr. Mayfield called on Mr. John Ellis who had visited the annual Kentucky Ornithological Society Meeting recently as the official representative of our Society. He stated that the KOS wanted to have a meeting jointly with the TOS on the week-end of 30 April, 1971 at Mammoth Cave, Kentucky. The Board of Directors voted favorably upon this proposal and directed Mr. Ellis and our Nashville Chapter to work with the KOS on the arrangements for this meeting.

A discussion of a Fall meeting for 1970, primarily for the presentation of scientific papers and for an additional meeting of the Board of Directors, followed. A motion to proceed with such a Fall meeting was made by Mr. Ganier and was passed. Wallace Coffey, Ken Dubke, and Dr. Mayfield agreed to act as a Committee on initial arrangements. Crossville, Tennessee was designated as the most likely site for this meeting.

Plans for a foray in June 1971 in the Mountains West of Oak Ridge were mentioned and Fred Alsop was designated as Chairman of this event.

There followed a discussion of the desirability and possible ways in which information on meetings and forays could be sent out to all members at an early date and this matter is still being explored by the Committee.

New Business: Dr. Mayfield reported that he had been informally attending meetings of the newly formed Tennessee Environmental Council. He briefly explained the purpose of this organization and the provisions of its constitution. He recommended that the TOS participate as one of the member organizations of this council and such action was voted and passed by the Board of Directors.

There was a general roll call of representatives of the various chapters, and each chapter presented a brief discussion of its membership and activities for the past year. The present status of the Kentucky Lake Chapter and the

Reelfoot Chapters was discussed briefly and these were to be further investigated prior to the Fall meeting. The new Murfreesboro Chapter represented by Mr. Larry McFarlin was particularly welcomed by the Board.

There being no further business, the meeting adjourned at 16:00.

DANIEL GRAY, JR., *Secretary*

RESOLUTIONS

Whereas, the Tennessee Ornithological Society, assembled for its 55th annual meeting May 8, 9, and 10, 1970 at Reelfoot Lake, recognizes a debt of gratitude to those who unselfishly gave of themselves to contribute to the success of the meeting; therefore,

Be it resolved, That the Society here express its sincere appreciation to its host, the Memphis Chapter, and to

Mrs. Ed Carpenter, vice-president from West Tennessee, and her committee for planning and arranging the meeting, and to

The members from the Reelfoot area for the open house and the decorations: Mrs. Betty Surma, Mrs. John Lamb, Mrs. Cecilia Hudson, Mrs. William Moody, Mrs. Frank Markham, and to

Mr. Ralph Burrus, Superintendent of Reelfoot State Park, and Mrs. Ralph Burrus for their generous assistance, and to

Mrs. Arlo I. Smith, Chairman, Miss Mary Davant, and Mrs. Henry Dinkelspiel, committee for registration, and to

Mrs. Robert W. McGowan for art work, and to

Mrs. Ben B. Coffey, Jr. and Mr. Henry Dinkelspiel for arranging the display of pictures graciously loaned by Mrs. Thase Daniel, Dr. Carroll Turner, and Mr. Henry E. Parmer, and to

Mr. Ben B. Coffey, Jr., Chairman, Dr. and Mrs. Arlo I. Smith, Mr. Ken Leggett, and Mr. John DeLime, hike committee, and to Mr. and Mrs. Ben B. Coffey, Jr. for the Saturday night program.

Respectfully submitted, Kirby Stringer, Lois Herndon, Frances Abernathy.

THE 1970 SPRING FIELD DAYS

Counts were submitted from eleven locations across the state. Information on each of the individual counts, working from west to east across the state, will be found in the paragraphs below.

MEMPHIS—6 May 1970; Shelby Forest and, enroute, two parks, Lakeview, Miss.-Tenn.; weather fair. The Sora and bulk of the Dickcissels were in Mississippi.

Mr. and Mrs. Ben B. Coffey (compilers).

REELFOOT LAKE—8, 9, 10 May 1970; Reelfoot Lake area, Obion Co. and Lake Co.

Ben B. Coffey (compiler).

SAVANNAH—Noon 7 May to noon 8 May; Olive Hill to Savannah to Pickwick Lake; Clear; little wind; temperature 60-80°. Four observers in one party.

David (compiler), Gloria, Mike and Paul Patterson.

COLUMBIA—1 and 2 May 1970; partly cloudy with rain showers; temperature 55-85°. Six observers.

Daniel Gray, Jr., George Mayfield, Jr. (compiler), Mark Mayfield, Rad Mayfield, Delton Porter, Paul Porter.

NASHVILLE—25 April 1970; from dawn to dark, but rain at noon actually resulted in a half day count; area about the same as the Christmas Count, plus Buena Vista Marsh, Bush Lake, and a small part of Old Hickory Lake. Nine parties with 35 observers.

Clyde and Vivian Anderson (compilers), Mr. and Mrs. Kenneth Bunting, Ruth Castles, Mrs. Charles L. Cornelius, Annella Creech, Milbrey Dugger, Roy Elliott, John and Evelyn Ellis, Erlene Elmore, Clara Fentress, Albert Ganier, Katherine Goodpasture, Ben Groce, John and Martha Herbert, Mrs. A. B. Herron, Helen Hodgson, Louise Jackson, Mrs. J. C. Lorange, Harry Monk, Fanny Murphy, Anne Nichols, Henry Parmer, Mr. and Mrs. Oscar Patrick, John, Heather, and Natasha Riggins, Lawrence Trabue, George Woodring, Virginia Workman.

LEBANON—Noon 24 April to noon 25 April, 1970; moderate rains and overcast; temperatures 70-50-76°. Area covered the same as in previous years, Wilson Co. including homes, Boxwell Boy Scout Reservation, Old Hickory Game and Wildlife Experimental Feeding Station, Laguardo, Baird's Mill, Shop Springs, Gladeville, and Lebanon (cultivated fields—50%, deciduous woods and hills—30%, bottom land—5%, bogs and marsh—5%, yards and roadside—10%).

Rev. William Senter (compiler), Rev. Jim Martin, James Martin, Dr. and Mrs. R. D. Wilkison, Dr. and Mrs. M. S. Howard, Mr. and Mrs. Clay Couch, Mr. and Mrs. Dixon Merritt, Mrs. Henry Waters, Mrs. Clyde Sellars, Dan Denny, Bill McCrary, Phillip Williams, Mrs. William Welty, Mr. Neil Welty, Dr. and Mrs. L. McFarland, Mrs. Sam Gilreath, Mrs. Alyne Eastes, Mrs. Glenn B. Burchett, Mrs. Frank Bloodworth, Mrs. George R. Bouton, Mrs. Carter M.

Farris, Mrs. Gould Smith, Mrs. Emmett Gaston, Mr. Willie Taylor, Mrs. Louise Chambers, Miss Mary Wharton, Bill Sellars, Mr. and Mrs. Byron S. Paul, Mr. Bob Mason, Dr. and Mrs. James Leathers, Dr. S. A. Berry, Mrs. Winstetad Bone, Jr., Mrs. William Bouton, Mrs. Ed Kass, Mrs. Roy Lawrence, Mrs. Ray Clark, Mrs. Gordon White, Mrs. Jess Crawford, Mr. and Mrs. Porter Taylor, Mr. and Mrs. Edward Turner, Mrs. William Smith.

COOKEVILLE—2 May 1970; 06:00 to 18:00. Areas included were within 15-mile diameter circle of the town. Yard and garden space, open country—field and woods, city lake area, were represented in the count. The day was cloudy; temperature 55-65°.

Miss Beulah Clark, Mr. C. H. Clark, Miss Jo Ann Clark, Mr. Roy T. Hinds, Dr. Paul L. Hollister, Mrs. Amy Johnson, Mrs. E. B. Knight, Mrs. An-nice Moore, Mr. Ray Jordan, Mr. Miser R. Richmond, Mr. Roy H. Sullivan, Mrs. Thelma Tinnon, Mr. F. R. Toline, Miss Marie White (compiler).

CHATTANOOGA—3 May 1970; Parts of Christmas Count area plus other areas to the north on Chickamauga Lake. The day was completely over-cast and dark with rain showers at intervals throughout the day. Tempera-ture range, 52-60°.

Frances Barnwell, Jon DeVore, Roberta Doub, Mike Lilly, Mary Lou and Howard Meadors, Lillian Richards, Veta and Henry Slinger, Roger Swanson, Mary Tunsberg, Jack and Mark Wagner, Harvie B. Wilkinson, Gene West, Adele West (compiler).

KNOXVILLE—26 April 1970; selected areas from all of Knox County were included in the count, as in previous years. Rain fell most of the morn-ing, cloudy and cool during afternoon; temperature 62-69°. Thirty observers. The Greater Scaup were seen by Fred Alsop, and James M. Campbell; the Barn Owl by Alsop; the Forster's Tern by J. C. Howell; and the Evening Grosbeak by John Elson.

J. B. Owen (compiler).

KINGSPORT—2 May 1970; same area covered as in 1969; 07:00 to 22:00; weather overcast; temperature warm.

Lillius Adams, Marie Brown, Tom Finucane (compiler), Bill Hincke, Martin King, Arthur Smith, Ann Switzer, Jonathan Wert.

ELIZABETHTON—2 May, 18:00, to 3 May, 18:00, 1970. Most of Carter County was included on the count, along with adjacent parts of Sullivan, Unicoi and Washington Counties, to include Boone, Patrick Henry, Watauga, and Wilbur Lakes, and Lake Phillip Nelson, Roane Mountain, and the Erwin National Fish Hatchery. The weather was clear to partly cloudy with rain during the afternoon of 3 May. Temperatures ranged from 58 to 68° F. during the count period.

Mr. and Mrs. Fred W. Behrend, Bill Bridgforth, Mr. and Mrs. J. C. Brown-ing, Mrs. Kenneth Bryan, Mrs. Harold Dillenbeck, Mrs. George N. Dove, Glenn Eller, Mr. and Mrs. W. C. Hardin, Dr. and Mrs. Lee R. Herndon, Ralph Keffer, Ralph Kiser, Roby D. May, Dr. and Mrs. Milton Parker, Pete Range, Mrs. J. M. Sams, Charles R. Smith (compiler) Mr. and Mrs. Thomas Swindell, Bill Yambert.

ANNUAL SPRING FIELD DAYS, 1970

	Memphis	Reelfoot	Savannah	Columbia	Nashville	Lebanon	Cookeville	Chattanooga	Knoxville	Kingsport	Elizabethton
Common Loon	--	--	--	--	--	--	--	--	--	--	1
P.-Bl. Grebe	--	--	1	5	4	3	--	1	1	--	1
Gr. Blue Heron	--	10	1	--	--	8	--	1	--	--	--
Green Heron	--	7	3	5	21	3	1	5	7	6	21
L. Blue Heron	--	20	1	--	--	4	--	--	--	--	--
Common Egret	--	3	--	--	1	--	--	--	--	--	--
Snowy Egret	--	1	--	--	--	--	--	--	--	--	--
Cattle Egret	--	7	--	--	--	--	--	--	--	--	--
Bl.-cr. N. Heron	--	--	--	--	15	2	--	--	--	--	--
Yl.-cr. N. Heron	--	1	--	1	--	--	--	--	--	--	--
Least Bittern	--	--	--	--	--	--	--	2	--	--	--
American Bittern	--	--	--	--	--	--	--	1	1	1	--
Canada Goose	--	--	--	--	--	36	--	--	--	--	--
Mallard	5	10	1	5	3	100	--	--	12	9	1
Black Duck	--	--	--	--	--	2	--	--	--	--	--
Gadwall	--	--	--	2	--	--	--	--	--	--	1
Bl.-winged Teal	--	4	2	29	6	102	--	7	10	--	--
Shoveler	--	--	--	2	--	--	--	--	--	--	--
Wood Duck	3	32	1	2	11	56	--	7	8	5	19
Redhead	--	--	--	--	--	2	--	--	3	1	--
R.-necked Duck	--	--	--	--	--	--	--	--	15	--	--
Greater Scaup	--	--	--	--	--	--	--	18	10	--	--
Lesser Scaup	--	14	--	40	17	--	--	--	--	--	--
Common Goldeneye	--	--	--	--	3	--	--	--	--	--	1
Bufflehead	--	--	--	--	4	--	--	--	--	--	18
Hooded Merganser	--	--	--	--	--	2	--	--	--	--	--
Red-br. Merganser	--	--	2	--	--	--	--	--	--	--	7
Turkey Vulture	--	8	6	4	34	32	2	1	8	4	1
Black Vulture	--	5	--	4	13	5	--	--	--	2	--
Mississippi Kite	1	3	--	--	--	--	--	--	--	--	--
Cooper's Hawk	--	--	--	--	2	--	--	1	1	--	--
Rd.-tailed Hawk	--	1	2	5	4	3	--	2	1	1	2
Rd.-shld. Hawk	1	3	2	1	2	--	1	--	--	--	--
Br.-winged Hawk	--	1	2	2	8	--	--	2	7	2	4
Marsh Hawk	--	--	--	--	--	--	--	--	1	--	--
Osprey	--	--	--	--	2	--	--	--	6	2	2
Sparrow Hawk	--	1	--	8	13	11	--	1	4	1	1
Ruffed Grouse	--	--	--	--	--	--	--	--	--	2	--
Bobwhite	33	12	15	29	86	70	28	66	84	20	53
Turkey	2	6	--	--	--	--	--	--	--	--	2
King Rail	--	--	--	--	--	--	--	1	--	--	--
Virginia Rail	--	--	--	1	--	--	--	--	--	--	--
Sora	4	1	2	1	1	--	--	7	1	--	--
Purple Gallinule	--	--	--	--	--	--	--	1	--	--	--
American Coot	8	18	3	45	73	22	4	4	--	--	4
Semipal. Plover	--	14	--	--	--	--	--	--	--	--	--
Killdeer	5	20	3	8	24	14	4	16	28	4	11
Amer. Woodcock	--	--	1	2	2	4	1	1	--	--	--
Common Snipe	--	--	--	--	--	27	--	6	19	5	--
Spotted Sandpiper	--	12	1	5	1	--	1	9	13	6	23
Solitary Sandpiper	2	4	2	1	--	--	--	14	26	1	7
Willet	--	--	--	1	--	--	--	--	--	--	--
Greater Yellowlegs	--	--	--	--	--	--	--	--	23	1	5
Lesser Yellowlegs	--	--	4	--	1	--	--	23	3	3	14
Pectoral Sandpiper	1	2	--	--	--	--	--	--	--	--	--
Least Sandpiper	--	4	--	4	--	--	--	--	1	--	--
Herring Gull	--	--	--	--	--	--	--	--	1	--	--
Rng.-billed Gull	--	--	--	--	2	--	--	3	10	--	--
Bonapartes Gull	--	--	--	--	--	--	--	--	1	--	--
Forster's Tern	--	8	--	--	--	--	--	--	12	--	--
Common Tern	--	2	--	1	--	--	--	--	--	--	--
Black Tern	--	1	--	--	--	--	--	--	--	--	--
Mourning Dove	41	70	43	39	84	120	87	113	179	28	59
Yl.-billed Cuckoo	--	8	12	1	6	--	2	5	9	2	3
Bl.-billed Cuckoo	--	1	--	1	--	--	--	1	--	1	5

	Memphis	Reelfoot	Savannah	Columbia	Nashville	Lebanon	Cookeville	Chattanooga	Knoxville	Kingsport	Elizabethton
Barn Owl	--	--	--	1	--	--	--	--	1	--	--
Screech Owl	--	--	--	1	1	1	--	1	1	1	3
Gr. Horned Owl	--	--	--	1	--	2	--	--	1	--	--
Barred Owl	--	6	1	5	1	--	--	--	--	--	--
Chuck-wills-widow	3	--	3	2	2	2	3	--	7	--	1
Whip-poor-will	--	--	10	6	1	4	2	1	1	1	8
Common Nighthawk	2	20	2	2	1	3	1	--	4	5	4
Chimney Swift	8	50	21	45	288	83	39	60	247	23	249
R.-thr. Hummingbird	1	28	1	3	--	6	2	1	4	1	4
Belted Kingfisher	--	2	5	5	13	8	1	4	6	2	9
Yl.-sh. Flicker	8	12	3	5	33	10	16	27	47	11	56
Pileated Woodpecker	8	8	10	5	26	5	4	3	16	4	7
Red-bell. Woodpecker	13	30	13	21	56	16	14	9	29	5	3
Red-head. Woodpecker	6	11	--	3	10	1	9	5	7	2	--
Yl.-bell. Sapsucker	--	--	--	--	--	--	2	1	--	--	1
Hairy Woodpecker	4	5	2	4	10	2	4	--	4	--	3
Downy Woodpecker	5	24	5	20	46	16	5	7	25	3	19
Eastern Kingbird	40	32	17	28	22	23	14	7	40	2	13
Gr. Cr. Flycatcher	25	35	24	25	19	5	16	12	15	4	4
Eastern Phoebe	--	7	7	6	11	6	5	7	21	2	29
Acadian Flycatcher	18	18	10	6	8	--	1	--	4	5	4
Least Flycatcher	--	1	--	--	--	1	--	--	--	--	9
E. Wood Pewee	18	43	10	17	13	4	13	15	4	8	20
Ol.-sd. Flycatcher	--	--	--	--	--	--	--	1	--	--	--
Horned Lark	1	30	--	6	--	--	2	2	6	--	3
Tree Swallow	--	50	2	11	10	--	--	--	1	--	26
Bank Swallow	--	15	--	5	--	2	--	--	6	--	--
R.-winged Swallow	2	17	7	33	13	3	--	19	45	5	109
Barn Swallow	8	120	45	76	164	144	86	70	193	19	166
Cliff Swallow	--	1	60	--	39	8	--	115	4	--	3
Purple Martin	5	100	24	8	97	30	5	173	155	18	62
Blue Jay	22	24	41	38	276	241	73	125	276	52	127
Common Raven	--	--	--	--	--	--	--	--	--	--	4
Common Crow	5	60	14	49	68	105	52	57	187	26	106
Fish Crow	4	8	--	--	--	--	--	--	--	--	--
Carolina Chickadee	20	60	10	25	89	29	7	40	107	24	38
Tufted Titmouse	38	46	16	44	105	40	16	43	86	39	49
Wh.-br. Nuthatch	--	2	--	2	4	--	4	--	1	2	2
Rd.-br. Nuthatch	--	--	--	1	2	--	4	--	2	6	23
Brown Creeper	--	--	--	--	--	--	1	--	--	--	--
House Wren	--	--	--	--	--	--	4	1	8	2	16
Winter Wren	--	--	--	--	--	--	--	--	--	--	5
Bewicks Wren	--	--	4	1	4	1	--	--	3	--	--
Carolina Wren	58	60	15	13	36	7	22	31	101	7	31
L.-bl. Marsh Wren	--	4	--	--	--	--	--	--	--	--	--
S.-bl. Marsh Wren	--	--	--	--	--	1	--	1	--	--	--
Mockingbird	44	23	9	35	182	169	17	111	214	22	77
Catbird	10	16	8	11	25	13	28	22	17	5	95
Brown Thrasher	15	22	6	27	52	110	42	42	91	11	55
Robin	33	27	22	26	230	112	89	83	488	44	210
Wood Thrush	34	30	15	23	26	6	19	49	56	14	76
Swainson's Thrush	9	14	3	11	6	--	--	--	7	1	--
Gr.-cheeked Thrush	2	11	3	1	1	--	--	--	--	--	--
Veery	--	12	--	9	1	--	--	--	5	--	5
Eastern Bluebird	5	20	5	15	77	51	27	26	52	12	21
Bl.-gr. Gnatcatcher	28	90	20	56	69	3	--	5	34	10	8
R.-cr. Kinglet	--	3	--	--	2	1	--	1	13	2	1
Cedar Waxwing	2	2	--	--	--	4	1	38	78	--	1
Log.-hd. Shrike	3	16	3	16	16	7	5	3	--	--	3
Starling	160	96	30	72	385	507	131	751	797	62	433
White-ey. Vireo	24	56	34	14	70	--	8	4	29	10	15
Yl.-thr. Vireo	4	12	2	3	15	--	6	--	10	2	--
Solitary Vireo	--	--	--	--	--	--	--	--	--	--	5
Red-eyed Vireo	15	40	19	23	52	1	14	37	129	24	48
Phildelphia Vireo	--	1	1	--	--	--	--	--	--	--	--
Warbling Vireo	1	25	--	1	3	--	--	--	1	--	4
Bl. & W. Warbler	--	16	17	2	11	--	--	8	24	7	12
Prothonotary Warbler	18	40	16	8	28	2	--	--	2	--	--
Swainson's Warbler	1	5	--	--	--	--	--	--	--	--	--
Worm-eating Warbler	--	2	13	2	4	--	--	1	8	1	2

	Memphis	Reelfoot	Savannah	Columbia	Nashville	Lebanon	Cookeville	Chattanooga	Knoxville	Kingsport	Elizabethton
Gl.-winged Warbler	--	--	--	2	1	--	--	--	9	--	3
Bl.-winged Warbler	--	--	5	4	29	--	--	--	6	--	--
Tennessee Warbler	135	90	11	30	28	--	--	9	13	3	--
Nashville Warbler	--	10	1	1	3	1	--	--	4	--	--
Parula Warbler	9	40	--	4	6	--	--	--	2	4	3
Yellow Warbler	--	21	2	16	31	--	5	5	41	5	52
Magnolia Warbler	--	15	1	--	1	--	1	4	--	--	--
Cape May Warbler	--	3	--	1	--	--	--	6	5	1	15
Bl.-thr. B. Warbler	--	--	--	--	2	--	--	--	--	--	9
Myrtle Warbler	--	11	--	8	79	51	6	27	223	7	4
Bl.-thr. G. Warbler	3	12	4	4	1	--	--	--	26	2	2
Cerulean Warbler	14	13	8	10	6	--	--	--	16	2	--
Blackburnian Warbler	--	21	--	--	1	--	--	2	16	5	--
Yl.-thr. Warbler	4	10	--	3	9	--	2	--	2	7	--
Chest.-sid. Warbler	4	10	1	3	2	--	--	5	10	--	32
Bay-br. Warbler	--	10	1	5	2	--	--	1	1	--	5
Blackpoll Warbler	4	80	1	4	30	--	4	12	25	--	9
Pine Warbler	--	--	3	--	--	--	--	1	2	--	--
Prairie Warbler	--	1	8	11	37	9	--	6	33	3	3
Palm Warbler	--	2	--	10	28	20	--	2	17	--	--
Ovenbird	1	7	4	8	2	2	--	3	27	18	29
North. Waterthrush	4	7	--	3	--	2	--	--	--	--	4
La. Waterthrush	--	2	7	10	14	--	1	7	3	11	18
Kentucky Warbler	21	27	8	17	28	--	4	6	13	11	8
Connecticut Warbler	--	1	--	--	--	--	--	--	--	--	--
Mourning Warbler	--	1	--	--	--	--	--	--	--	--	--
Yellowthroat	24	72	43	18	48	11	9	29	69	6	43
Yel.-br. Chat	28	40	31	14	41	--	8	17	16	11	28
Hooded Warbler	7	3	3	2	14	--	--	4	5	9	8
Wilson's Warbler	--	3	2	--	--	--	--	--	--	--	--
Canada Warbler	--	--	1	--	1	--	--	1	2	1	3
American Redstart	33	36	4	3	4	--	--	1	6	4	2
House Sparrow	150	COM.	18	120	87	102	58	150	138	34	168
Bobolink	19	170	50	--	--	--	--	200	22	--	4
East. Meadowlark	61	88	18	106	277	201	128	104	322	40	144
Redwing. Blackbird	110	450	69	212	153	109	41	180	592	16	100
Orchard Oriole	51	38	12	30	66	17	4	7	29	3	8
Baltimore Oriole	27	53	1	4	22	2	2	3	2	1	7
Rusty Blackbird	--	--	--	--	4	20	2	--	--	--	--
Brewer's Blackbird	--	--	--	--	--	--	25	--	--	--	--
Common Grackle	140	150	49	445	778	519	152	303	1029	86	365
Br.-hd. Cowbird	66	200	24	65	94	77	42	43	185	13	56
Scarlet Tanager	3	6	8	8	29	2	1	11	17	9	11
Summer Tanager	33	25	14	19	54	27	15	19	28	5	6
Cardinal	145	90	52	46	265	276	78	136	407	68	167
Rose.-br. Grosbeak	1	23	1	6	16	--	3	20	28	3	33
Blue Grosbeak	--	--	9	2	8	1	2	4	6	--	--
Indigo Bunting	120	260	80	70	92	12	27	66	51	27	36
Dickcissel	612	170	116	30	2	--	1	--	--	--	3
Evening Grosbeak	--	--	--	--	15	--	--	2	1	--	25
Purple Finch	--	--	--	--	12	47	1	--	17	--	2
Pine Siskin	--	15	10	--	70	57	--	120	202	6	328
Amer. Goldfinch	6	53	10	18	396	148	75	8	130	27	161
Ru.-sided Towhee	19	4	22	41	120	66	30	61	208	40	134
Savannah Sparrow	1	2	8	6	2	6	4	4	11	--	--
Grasshopper Sparrow	4	--	14	21	--	--	--	--	5	--	3
Vesper Sparrow	--	--	--	--	2	--	--	--	--	--	--
Lark Sparrow	--	2	--	--	--	2	--	--	--	--	--
Sl.-col. Junco	--	--	--	--	--	--	2	--	--	1	22
Chipping Sparrow	1	5	7	14	71	8	9	15	43	7	53
Field Sparrow	1	30	13	43	93	49	11	50	119	15	39
Wh.-cr. Sparrow	2	12	3	4	--	28	--	--	42	4	17
Wh.-thr. Sparrow	5	5	3	41	135	17	9	19	198	27	30
Lincoln's Sparrow	--	2	1	2	1	--	--	1	--	--	--
Swamp Sparrow	--	3	2	--	--	4	--	4	3	--	1
Song Sparrow	--	1	--	--	--	--	7	37	119	21	100
TOTAL SPECIES (201)	91	142	115	131	133	98	86	116	141	103	127

ROUND TABLE NOTE

NORTHERN PHALAROPE IN THE GREAT SMOKY MOUNTAINS NATIONAL PARK.—On Wednesday, 20 August 1969, Park Naturalist Richard Zani and I turned off on the short gravel road which leads to the Cades Cove sewage lagoons. We had spent a rather uneventful morning looking at birds in Cades Cove and this was to be our final stop. It was 10:30 (EDT), the temperature was about 80°F, and the sun was shining to our backs through scattered clouds. Standing on a drainage pipe connecting the two lagoons was a Solitary Sandpiper (*Tringa solitaria*) and swimming on the upper (eastern-most) lagoon was a small, whitish, buoyant bird that could be nothing else but a phalarope. Since the bird was in winter plumage the initial problem was to ascertain which of the three species of phalaropes this individual represented.

We approached cautiously at first, but the bird proved quite confiding. It was quite easily approached and sometimes it swam to within twenty feet of us as we stood on the bank of the lagoon observing it. Both Dick and I used 7x35 binoculars. All field marks were called out and written down as we had only a copy of Peterson's *A Field Guide to the Birds* (1947) with us and wished to check other references later.

The following characteristics were noted: mandibles black and about the length of the head; crown, slaty-gray to blackish; nape, white with slate gray median stripe extending from crown to back; iris, very dark brown; black "phalarope-patch" through eye; rest of the head, the neck, and underparts white; upperparts and tail dark gray, most dorsal feathers margined with light edges producing whitish stripes on the back; wings, dark gray; legs and feet, blackish. There was a light streak of cinnamon wash extending down the left side of the neck from the posterior end of the eye mark. It was much smaller and very indistinct on the right side of the neck. Chapman (1939) marks this trace of rufous as an occasional characteristic seen on adult birds in the winter plumage.

By clapping my hands I was able to get the bird to raise and momentarily hold its wings over its back. In this position a white wing strip was clearly visible contrasted against the dark wing.

The bird was clearly a Northern Phalarope (*Phalaropus lobatus*). This constitutes the first record of this species for the Great Smoky Mountains National Park (Arthur Stupka, personal contract) and the third record for Tennessee.

I observed the bird on four different occasions during the day: the initial observation from 10:30-11:10 during which time the identification was made; from 14:00-14:30 when I made color photographs to confirm the identification; again from 15:30-16:05 in the company of Bill and Irene Williams using a 15-60x60 zoom spotting scope; and finally at 18:25.

On all occasions the bird's behavior was essentially the same. It was very tame and easily approached. It was always on the water where it gave an appearance of being very busy and purposeful. It swam lightly on the water, rather rapidly, and with frequent changes in course in a zigzag manner or in slow circles. It often pecked at the water's surface

as it fed on aquatic organisms. The head was held high and carried with a nodding much like that of an American Coot (*Fulica americana*) as it swam.

Once the bird was observed bathing on the water. This consisted of water being tossed over the body by ducking the head or fluttering the wings between short periods of preening. And once when pressed too closely the bird flew about 8 feet only to settle lightly onto the lagoon once more. One other aspect of the phalarope's behavior is worthy of note. Two Common Crows (*Corvus brachyrhynchos*) flew over the area at a height of approximately 80 feet. As they approached the phalarope, which had been actively feeding, assumed a "crouching" position with the head and neck extended forward, low and parallel with the water. The bird remained motionless in this position for some seconds until the crows had passed over and flown on, after which it resumed its feeding.

During all observations the bird seemed normal and healthy.

The bird was not present on the lagoons the following day, nor was it seen thereafter.

How a Northern Phalarope could stray to the mountains of East Tennessee is a matter of speculation, but it is of interest to note that hurricane Camille hit the Gulf Coast on 17 August 1969 three days prior to the sighting.

Other members of the Knoxville Chapter T.O.S. that observed the bird on 20 August 1969 were: Mrs. E. E. Overton, Mr. and Mrs. James M. Campbell, Mr. and Mrs. Louis F. Smith, and Mr. and Mrs. J. B. Owen.

The Solitary Sandpiper seen with the phalarope on 20 August is the earliest fall record for the species in the Park. It beats the previous earliest date by three days (Stupka, 1963).

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Stupka, A. 1963. Notes on the Birds of Great Smoky Mountains National Park. The University of Tennessee Press.

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THE SEASON

CHARLES R. SMITH, *Editor*

Data in the reports which follow are from the months of February, March, and April. The months of February and March continued the cold and dry trend established earlier in the winter. The mean departures from the normally expected monthly average temperatures for February and March for the state of Tennessee were -4.6° and -2.5° , respectively. Mean departures from the normally expected average monthly precipitation for February and March were -1.1 and -1.1 , respectively. There were at least two periods of significant snowfall in February. These occurred on 3-5 February, with up to three inches accumulation in the eastern mountains, and 9-10 February, with up to ten inches accumulation in the mountains of northeastern Tennessee. The greatest period of rainfall occurred during 15-16 February, across the state. March experienced no significant snowfalls and little heavy rainfall.

The month of April was unusually stormy with heavy precipitation. This was the wettest April recorded by the Weather Bureau since 1964. Ten tornadoes occurred in the state with most of the storm activity during 19-27 April. Precipitation for April showed a mean departure of $+3.4$ inches from the expected normal precipitation average for that month for Tennessee. Temperatures were only slightly higher than usual for April, with a mean departure of $+1.2^{\circ}$ from the expected normal average temperature for the state.

The larger waterfowl are well represented by observations in the state for this report period. Among the more notable observations are the following: Whistling Swan from the Plateau and Basin Region, Mute Swan from the Ridge and Valley Region, Barnacle Goose from the Plateau and Basin Region, White-fronted Goose from both the Plateau and Basin and Ridge and Valley Regions. Among the raptors, reports of the Rough-legged Hawk from the Plateau and Basin Region and the Harlan's Hawk from the Ridge and Valley are of interest. The Laughing Gull near Nashville is also an interesting observation. Other noteworthy observations include Sandhill Crane from the Ridge and Valley, Catbird wintering at Elizabethton, Henslow's Sparrow from near Memphis, and Oregon Junco and Snow Bunting from the Plateau and Basin Region. Details of these and other observations may be found in the reports which follow.

WESTERN COASTAL PLAIN REGION—*Cormorant*—*Sparrow*: Double-crested Cormorant (1)* Blue-winged Teal (52)* Lesser Scaup (20)* Ruddy Duck (2,400)*. Bald Eagle (3, immature)* American Golden Plover (138)*. Greater Yellowlegs (2)*. Lesser Yellowlegs (16)*. Pectoral Sandpiper (127)*.

Water Pipit (4)*. Henslow's Sparrow: 1 Mar. (1) Dr. W. L. Whittemore, at his home, Memphis *vide* Ben and Lula Coffey, third Memphis area record.

*all 5 Apr., Reelfoot Lake, Mike Bierly and Roger O. Harshaw.

DAVID E. PATTERSON, Harbert Hills Academy, Savannah 38372.

CENTRAL PLATEAU AND BASIN REGION—*Loons-Ducks*: Common Loon: 8, 10 Apr. (2) with (1) all Mar., LD (RTH). Horned Grebe: 4 Apr. (6) BL (JNR) and (4) RL (AT), 9 Apr. (1) RL (SB). Pied-billed Grebe: 21 Feb. (145) WR (ROH, MLB), last NA 25 Apr. (4) NA (NC). Great Blue Heron: 23 Mar. (42) DRU (JNR, MLB), scarce rest of area. Green Heron: 4 Apr. (1) BL (JNR), 11 Apr. (1) WB (MCW), 15 Apr. (1) LD (RTH). Common Egret: 30 Mar. (1) DRU (JNR, MLB) 14 Apr. (1) WB (FB), first Cannon Cty. record! American Bittern: 28 Mar. (1) WB (FB), 23, 24 Apr. (1) TJ (KAG, CEF). Whistling Swan: 10 Feb. (4) (Carl Barstow *vide* MLB) and 6 Mar. (4) (MLB, WmS) both HP. Canada Goose: 9 Feb. (175) WR (KHD), 14 Feb. (100) RL (AT), 28 Feb. (29) RL (MLB), 1 Mar. (250) BS (KAG, MG) all in flight, late were (5), to 24 Apr. DRU (GNB). Barnacle Goose: 1 Mar. thru 24 Apr. (1) DRU (GNB *et al.*) (see Round Table Note) White-fronted Goose: 9 Feb. (1) WR (KHD). Snow Goose 22 Mar. (1) ACM (ROH, MLB). Blue Goose 28 Feb. wintering imm. last seen BL (MLB). Mallard: 13 Feb. (75) HP (MLB, WmS), otherwise scarce. Black Duck: 2 Mar. (300) HP (MLB), last 22 Mar. (2) ACM (ROH, MLB). Gadwall: last 31 Mar. (1) RL (MLB). Pintail: 7 Mar. (1) HP (JHR), 23 Mar. (1) DRU (JNR, MLB)*. Green-winged Teal: 8 Mar. (12) HP (JHR), 27 Mar. (4) ACM (JHR), 30 Mar. (10) DRU (JHR). Blue-winged Teal: very early (1) 2 Mar. HP (MLB); 30, 31 Mar. (1) LD (RTH), 25 Apr. (6) BV (JHR). American Widgeon: 2 Mar. (300) HP (MLB), 7 Mar. (60) HP (JHR), 18 Apr. (6) RL (JHR) to (2) RL 21 Apr. (MLB). Shoveler: 14 Mar. (5) (MLB) thru 19 Apr. (14) (MLB, HCM), RL*. Wood Duck 3 Feb. to 30 Apr. (2-5) BT (RH), 2 Mar. (2) LD (RTH), 27 Feb. (2) RL (MLB), 8 Mar. (4) HP (JHR, MLB). Redhead: 21 Feb. (80) WR (MLB, ROH), 8 Mar. (6) HP (JHR), 27 Mar. (55) ACM (JHR), 4 Apr. (1) RL (AT), (2) BL (JNR). Ring-necked Duck: scarce in winter, then 2, 7 Mar. (300+) HP (JHR, MLB) 20 Mar. (99) RL (MLB), 11 Apr. (2) WR (HCM, MLB). Canvasback: scarce, 21 Feb. (7) WR (ROH, MLB), 28 Feb. (2) (JHR) to 20 Mar. (3) (MLB) RL. Lesser Scaup: scarce until 21 Feb. (227) WR (ROH, MLB), 28 Feb. (40) to 20 Mar. (227) then down to (3) 28 Apr.; all RL (JHR, AT, MLB). Common Goldeneye: 28 Feb. (30) RL (JHR, MLB) to 31 Mar. (2) RL (MLB, AT). Bufflehead: 21 Feb. (116) WR (ROH, MLB), RL with last, 25 Apr. (4) (MCW). Oldsquaw: 24 Mar. (1) (MLB), 4 Apr. (1) (AT), both RL. White-winged Scoter: 21 Feb. (1) WR (ROH, MLB), 25 Feb. (1) RL (MCW). Ruddy Duck: 23 Mar. (6) DRU (JNR, MLB), 28 Apr. (1) RL (AT). Hooded Merganser: 9 Feb. (80) WR (KHD), 8 Mar. (6) HP (JHR, MLB) 24 Mar. (4) (AT), 1 Apr. (2) (MLB) both RL. Red-breasted Merganser: 21 Mar. (100) DRU (MLB, ROH)*.

Vultures-Rails: Turkey Vulture: first report, 1 Mar. (6) Dickson Cty. (JHR) and (14) BS (KAG, MG), 22 Mar. migrating flock (80) WB (MCW). Sharp-shinned Hawk: to early Feb. (1) taking birds at H feeder BT (RH)*. Red-tailed Hawk: scarce over area. Broad-winged Hawk: 11 Apr.

(1) BS (KAG, MLB) and (3) RL (JHR), 28 Apr. (5) over H (JHR, MLB). Rough-legged Hawk: 9 Feb. (1) near Manchester (WmS)*. Golden Eagle: 27 Feb. (2), 7 Mar. (1), 24 Mar. (2) WB (MCW, FB). Bald Eagle: 9 Feb. (3) BT (DH), 23 Mar. (4) DRU (JNR, MLB. Marsh Hawk: 8 Mar. (1) HP (JHR), 25 Mar. (2) WR (MLB, JNR), 30 Mar. (1) DRU (JHR). Osprey: 19 Apr. (1) H (LOT), 20, 25 Apr. (1) LD (RTH), 24 Apr. (1), 25 Apr. (2) RL (MCW). Pigeon Hawk: 4, 5 Feb. (1) LB (WmS). Sandhill Crane: 4 Mar. (104) and (24) BT (RH), 11 Mar. (125) LD (RTH). Sora: 19, 25 Apr. (1) BV (JNR)*.

Sandpipers-Gulls: Woodcock: 24, 27 Feb. (1), 16, 18 Mar. (1) LD (RTH), 25 Apr. (2) FV (JOE). Common Snipe: 28 Feb. (8) WB (FB), 8 Mar. (1) HP (JHR), 9 Mar. (1), 3 Apr. (1) both, 21 Mar. (19) DRU (MLB, ROH), 15 Apr. (2), 18 Apr. (1) LD (RTH). Spotted Sandpiper: scarce, 19 Apr. (1) BL (JNR), 23, 25 Apr. (2) LD (RTH). Solitary Sandpiper: 1 Apr. (4) at 3 locations WB (FB), 19 Apr. (2) LD (RTH), 23 Apr. (1) SHV (KAG). Lesser Yellowlegs: 30 Mar. (2) DRU (JHR), 4, 19, 25 Apr. (1) BL (JNR)*. Pectoral Sandpiper: 25 March (20) WB (FB), 30 Mar. (26) DRU (JHR)*. Avocet: 30 Apr. (3) GSP (PC), gone daylight next day. No other reports to writer of shorebirds! Ring-billed Gull: continued below normal NA, 18 Feb. (100) OHL (LOT), last 25 Apr. (2) OHL (CK). Laughing Gull: 24 Apr. (1) 26 mi. So. Nashville (MLB). Bonaparte's Gull: 8 Apr. (1) RL (MLB), 11 Apr. (24) WR (HCM, MLB).

Cuckoos-Swallows: Yellow-billed Cuckoo: late, first report 25 Apr. (6) NA (NC). Great Horned Owl: 1 Mar. (1), 22 Apr. (1) H BT (RH)*. Barred Owl: 1 Mar. (1), Apr. (1) BT (DH). Whip-poor-will: 13 Apr. (1) H (MLB), 15 Apr. (2) BT (RH) and (1) LD (RTH). Common Nighthawk: 20 Apr. (1) BV (MLB) first report, none BT (RH). Chimney Swift: 31 Mar. (1) (MLB) to 6 Apr. (100) (LOT) both RL. Ruby-throated Hummingbird: early, 9 Apr. (1) WB (Kathleen Bratten *vide* MCW), 11 Apr. (1) CV (Caprice Haile), 19 Apr. (1) LD (RTH), 21 Apr. (2) OCR (AT). Red-headed Woodpecker: 1 Feb. (10) BT (RH), 21 Apr. (2) LH (JNR), 25 Apr. (10) A (NC). Yellow-bellied Sapsucker: last, 15 Apr. (1) LD (RTH), 24 Apr. (1) H (HCM). Eastern Kingbird: very early, 3 Apr. (1) RL (AT), then 20 Apr. (3) LD (RTH). Great Crested Flycatcher: 19 Apr. (1) LD (RTH), and (1) CP (HCM). Eastern Phoebe: returned to SHV 6 Mar. with (5) (KAG), late RL (2) 21 Mar. (AT). Acadian Flycatcher: 23 Apr. (1) banded TJ (KAG). Eastern Wood Pewee: 25 Apr. (1) WSM-TV (JHR). Horned Lark: 4 Apr. (6) BL (JHR)*. Tree Swallow: first, 29 Mar. (9) RL (JHR). Rough-winged Swallow: 26 Mar. (5) RL (LOT), few CL (MCW). Barn Swallow: well below normal NA (HEP), first, 23 Mar. (1) DRU (JNR, MLB), 27 Mar. (1) LD (RTH), 22 Mar. (1) RR, NA (MLB, ROH), 3 Apr. (1) WB (FB). Cliff Swallow: 29 Mar. (1) RL (JHR) was the first. Purple Martin: still fewer each year; 10 Mar. (1) WB (MCW), 22 Mar. (10) RL (JHR), 6 Apr. migrating flock (125) RL (MLB).

Nuthatches-Vireos: Red-Breasted Nuthatch: continued plentiful NA; last, 25 Apr. (1) BLV (HEP). Brown Creeper: last, 7 Apr. (1) H (AT). House Wren: 19 Apr. (1) H (Mrs. Clyde Anderson). Winter Wren: continued

scarce; last, 9 Apr. (1) BS (MLB). Bewick's Wren: during Feb. (1-2) LD (RTH), 25 Apr. (5) NA (TOS count). Long-billed Marsh Wren: 26 Apr. (1) WSM-TV (JHR)*. Catbird: first, 17 Apr. (1) WB (FB), 18 Apr. (2) NA (JHR, AN), 20 Apr. (1) LD (RTH). Wood Thrush: first, 14 Apr. (1) H (AN), 17 Apr. (1) LD (RTH). Swainson's Thrush: first, 21 Apr. (1) OCR (AT) Gray-cheeked Thrush: 25 Apr. (1) RL (MCW)*. Blue-gray Gnatcatcher: very early 22 Mar. (1) H (SB), more normal 10 Apr. (1) WB (FB). Ruby-crowned Kinglet: last, 26 Apr. (1) WSM-TV (JHR). White-eyed Vireo: first, 9 Apr. (2) BS (MLB), 11 Apr. (1) LD (RTH). Yellow-throated Vireo: very early, 5 Apr. (1) dam CHL (MLB, ROH), 9 Apr. (1) BS (KAG). Solitary Vireo: 22 Apr. (2) WSM-TV, (1) LH, both (JHR). Red-eyed Vireo: 18 Apr. (4) RL (MLB, ROH). Warbling Vireo: 21 Apr. (1) WSM-TV (JHR).

Warblers: Black-and-white: late, first 9 Apr. (1) BS (KAG). Prothonotary: 7 Apr. (1) ACM (CK), 8 Apr. (3) RL (MLB). Worm-eating: 18 Apr. (1) RL (MLB, ROH). Blue-winged: 12 Apr. (2) H (AT). Tennessee: 20 Apr. (1) H (SB). Nashville: late, 27 Apr. (1) H (MLB). Parula: 9 Apr. (1) BS (KAG). Yellow: very early, 6 Apr. (1) RL (MCW), 13 Apr. (1) H WB (FB). Black-throated Green: 11 Apr. (1) Short Mt. (KAG), then none until 24 Apr. (2) LH (JHR). Cerulean: 18 Apr. (1) WB (FB) and (1) FR (AN). Blackburnian: 18 Apr. (1) CHL (SB). Yellow-throated: 10 Apr. (2) WB (FB), 11 Apr. (2) RL (JHR). Bay-breasted: first, 24 Apr. (1) WSM-TV (JNR). Blackpoll: 24 Apr. (1) LH (JNR). Pine: 19 Apr. (1) RL (MLB), 28 Apr. (3) CH (KAG). Prairie: 9 Apr. (1) BS (KAG), 15 Apr. (1) WB (FB). Palm: 19 Apr. (1) RL (MLB). Ovenbird: early, (1) 12 Apr. H (AT). Northern Waterthrush: 23 Apr. (1) banded TJ (KAG). Louisiana Waterthrush: 14 Mar. (1) RL (MLB). Kentucky: 12 Apr. (1) H (SB). Yellowthroat: 18 Apr. (1) LD (RTH). Yellow-breasted Chat: 19 Apr. (1) H WB (FB), 21 Apr. (1) OCR (AT). Hooded: 18 Apr. (1) FR (JHR *et al.*). Redstart: very early, 9 Apr. (2) BS (KAG).

Orioles-Siskins: Orchard Oriole: 13 Apr. (3) WB (FB), 18 Apr. (1) WSM-TV (MLB), 22 Apr. (2) LD (RTH). Baltimore Oriole: 20 Apr. (1) H FR (AN), then 24 Apr. (1) WSM-TV (JNR), 27 Apr. (4) LD (RTH). Rusty Blackbird: very late were (4) ACM 25 Apr. (AGF *et al.*). Brown-headed Cowbird: first, 22 Feb. (100) OHL (JHR), then 22 Mar. (150) ONT (JHR) and (500) SHV (HCM, HEP). Scarlet Tanager: 18 Apr. (1) CHL (SB), 24 Apr. (1) H (JHR) and (2) LD (RTH). Summer Tanager: 17 Apr. (1) CW (MLB), 18 Apr. (1) H WB (FB), then 20 Apr. (4) LD (RTH). Rose-breasted Grosbeak: 18 Apr. (3) CHL (SB), 21 Apr. (2) OCR (AT), 23 Apr. (1) LD (RTH). Blue Grosbeak: 22 Apr. (1) H (ABH), 25 Apr. (8) NA (NC), 27 Apr. (1) LD (RTH). Indigo Bunting: very early was (1) 13 Apr. and (2) next day, LD (RTH), then 19 Apr. (1) H (ABH) and (2) WB (FB), 20 Apr. (1) WSM-TV (JNR). Dickcissel: 25 Apr. (2) near RL (MCW)*. Evening Grosbeak: 9 Feb. (12) SHV (LF), 28 Mar. (8) CH (NC), thru period (15) BT (RH) and to (15) during period SHV (KAG, MG, MLB, JHR). Purple Finch: numerous NA, last 29 Apr. (2) H (Dorothy Cushman *vide* AT). Pine Siskin: fairly numerous NA.

Sparrows: Savannah: 6 Mar. (1) HP (MLB) to 26 Apr. (3) SHV (KAG)* except NA. Vesper: 30 Mar. (40) DRU (JHR), 25 Mar. (7) WB

(FB), last, 25 Apr. (2) H (HH). Lark: 11 Apr. (1) Mt. Juliet (Joey Vaudrey)* Oregon Junco: (1) continued H (GRM) until 9 Mar., then 1 Mar. (1) H (ARL), and 11 Mar. (1) H (KAG). Tree: (1) H (RE) to 15 Mar., 3 Feb. (1) LB (WmS), few NA during Feb. Chipping: first, 7 Mar. (1) H (AT), 8 Mar. (1) WB (MCW), 13 Mar. (1) MBP (LOT). Fox: last, 30 Mar. (1) H (AT). Lincoln's: 25 Apr. (1) banded TJ (KAG). Swamp: last, 25 Apr. (3) BV (JHR). Song: late, 20 Apr. (1) RL (MLB). Snow Bunting: (1) last seen 18 Feb. dam OHL (Erline Elmore).

Locations: ACM—Ashland City Marsh, BL—Bush Lake, BLV—Bellevue, BS—Basin Springs, BT—Byrdstown, BV—Buena Vista Marsh, CH—Craggie Hope, CHL—Center Hill Lake, Sligo area, CL—Coleman's Lake, CP—Centennial Park, CV—Cookeville, CW—Cheekwood, DRU—Duck River Unit, Tenn. Nat'l Wildlife Refuge, FR—Franklin Road, GSP—Gallatin Steam Plant, HP—Hunters Point, upper OHL, H—home of observer, LB—Lebanon, LD—Lilydale, LH—Love Hill, MBP—Montgomery Bell Park, NA—Nashville Area, OHL—Old Hickory Lake, OCR—Otter Creek Road, ONT—Old Natchez Trace, RL—Radnor Lake, RR—River Road, NA, SHV—South Harpeth Valley, TJ—Two Jays Sanctuary, WB—Woodbury, WR—Woods Reservoir, WSM-TV—tower area (all reports from there are of uninjured birds).

Observers: SB—Sue Bell, MLB—Mike L. Bierly, FB—Frances Bryson, GNB—Gary N. Burke, NC—Nashville Chapter, T.O.S., PC—Paul Crawford, KHD—Kenneth H. Dubke, RE—Roy Elliott, CEF—Charles E. Farrell, LF—Louis Farrell Jr., MG—Mel Garland, AFG—Albert F. Ganier, KAG—Katherine A. Goodpasture, ROH—Roger O. Harshaw, RH—Robby Hassler, DH—Dave Hassler, HBH—Mrs. A. B. Herron, RTH—Roy T. Hinds, HH—Helen Hodgson, CK—Carol Knauth, ARL—Amelia R. Laskey, GRM—the George R. Millers, CM—Harry C. Monk, AN—Anne Nichols, HEP—Henry E. Parmer, JNR—JHR—John N. or John and Heather Riggins, WmS—William Senter, AT—Anne Tarbell, LOT—Lawrence O. Trabue, MCW—Mary C. Wood.

Note—the asterisk (*) is used to denote records printed which are the only ones for a species received by the writer.

HENRY E. PARMER, 3800 Richland Ave., Nashville 37205.

EASTERN RIDGE AND VALLEY REGION—*Loons-Mergansers:* Common Loon: first, 10 Mar. (1) BWP (KD), max., 4 Apr. (25) NoL (JCH), last, 27 Apr. (2) WBL (KD, LS). Double-crested Cormorant: 27 Apr. (1) WBL (KD, LS). Common Egret: 7, 14 Feb. (1) PHL (GD, HD), 27 Apr. (2) SeV (LS). Yellow-crowned Night Heron: 26 Apr. (1) AM (KD), 27 Apr. (1) SeV (LS). Least Bittern: 26 Apr. (2) AM (KD). American Bittern: 5, 26 Apr. (1, 2) AM (KD). Mute Swan. 21 Feb. (1) BL (LRH, *et al.*). White-fronted Goose: 7 Feb. (2) BL (LRH). Blue Goose: 17 Feb., 2 Mar. (1) HRA (KD). Greater Scaup: 10, 17 Feb., (214, 230) CL (KD), 13 Feb. (6) BL (LRH). White-winged Scoter: 7 Mar. (3) BL (GD, HD, RK, PR). Common Merganser: 11, 41, 18 Mar., 4 Apr. (3, 7, 7, 20) NoL (JCH). Red-breasted Merganser: 24 Mar., 7 Apr. (4, 17) NL, CL (KD), 18 Apr. (1) NoL (JCH).

Hawks-Gulls: Cooper's Hawk: 6 Feb. (1) DL (LS). Harlan's Hawk: 19 Mar. (1) AM (JD) (See *The Migrant* 40: 85-86). Red-shouldered Hawk: 5

Apr. (1) K (FA, JCH). Bald Eagle: 13, 15, 20 Feb. (1 adult) HRA (KD), 7, 11, 13 Mar. (2 [adult and imm.], 1, 1) NoL (JCH). Marsh Hawk: regular through period to 8 Apr. (1-2) HRA (KD, LS). Osprey: first, 31 Mar. (2) HRA (KD), last week in April (2 nests, one egg and two eggs) WBL (KD). Sandhill Crane: 2 Mar. (50) HRA (AA). Virginia Rail: 26 Apr. (1) MB (KD, FW). American Woodcock: 28 Feb. (1) JC (GD, HD), 17 Apr. (1) K (FA). Greater Yellowlegs: first, 31 Mar. (1) K (BL), 31 Mar. (2) HRA (KD). Lesser Yellowlegs: first, 31 Mar. (1) K (BL). Pectoral Sandpiper: first, 30 Mar. (1) K (BL). Least Sandpiper: 28 Apr. (1) K (FA, JMC, GW). Dunlin: max., 31 Mar. (61) SB (KD), last, 7 Apr. (13) SB (KD). Bonaparte's Gull: 26 Mar. (1) NoL (JCH), 13 Apr. (37) NL (KD).

Owls-Crossbills: Barn Owl: regular through period (1) HRA (KD), 1 Feb., 3, 8 Mar. (1) JC (PR), 19 Mar. (1) K (FA, JMC) caught in kite string on tree, 18 Apr. (1) NoL (JCH). Barred Owl: 18 Apr. (1) NoL (JCH). Rough-winged swallow: first, 19 Mar. (2) HRA (KD), unusually early. Barn Swallow: first, 24 Mar. (2) NL (KD), unusually early. Bewick's Wren: 5 Apr. (1) K (FA, JMC). Solitary Vireo: 28 Mar. (2) K (JMC), unusually early. Orange-crowned Warbler: 16 Apr. (4) K (FA, GW), 18, 19 Apr. (2, 1) K (JMC). Yellow-throated Warbler: 29 Mar. (1) K (JMC), unusually early. Black-throated Blue Warbler: 21, 23 Apr. (1, 1) K (FA, JMC). Bay-breasted Warbler: 23 Apr. (1) K (FA, JMC), unusually early. Dickcissel: 27 Apr. (1) SeV (LS). Evening Grosbeak: regular to 10 Apr. (1 to 20) SeV (LS), 21 Mar. (10) K (JC). Red Crossbill: 23 Feb., 7, 16 Mar., 21 Apr. (7, 1, 6, 1) JC (HD, PR), 5 Apr. (2) K (FA, JMC), 17 Apr. (2) K (FA, GW).

Locations: AM—Amnicola Marsh, BL—Boone Lake, BWP—Booker T. Washington State Park, CL—Chickamauga Lake, DL—Dunlap, JC—Johnson City, K—Knoxville, MB—Moccasin Bend, NL—Nickajack Lake, NoL, PHL—Patrick Henry Lake SB—Savannah Bay, SeV—Sequatchie Valley, WBL—Watts Bar Lake.

Observers: AA—Arnold Aslinger, FA—Fred Alsop, JMC—James M. Campbell, JC—James Cooley, GD—Mrs. Geo. Dove, HD—Mrs. Harold Dillenbeck, JD—Jon DeVore, KD—Kenneth H. Dubke, JCH—Joseph C. Howell, LPH—Lee R. Herndon, RK—Ralph Keffer, BL—Beth Lacy, PR—Peter R. Reber, SeV—Sequatchie Valley, FW—Frank Ward, GW—Gary Wallace.

JAMES M. CAMPBELL, 15 Hedgewood Drive, Knoxville 37918.

EASTERN MOUNTAIN REGION—Heron-Eagle: Great Blue Heron: 15 Feb. (2) RC (PR). Canada Goose: 15 Feb. (12) RC (PR). Black Duck: 15 Feb. (15) RC (PR). Gadwall: 15 Feb. (1) RC (PR), 14 Mar. (8) WiL (FWB). Pintail: 15 Feb. (1) WaL (PR). American Widgeon: 14 Mar. (1) WiL (FWB). Shoveler: 15 Feb. (1) RC (PR). Wood Duck: throughout period in small numbers (2-5). Redhead: 1 Feb. (1) WiL (FWB). Ring-necked Duck: 1 Feb. (30) WiL (FWB). Canvasback: 15 Feb. (7) RC (PR). Lesser Scaup: throughout period (2) WiL. Common Goldeneye: 1 Feb. (2) WiL (LRH). Bufflehead: 1 Feb. (80) WiL (FWB). Hooded Merganser: 20 Mar. (1) WiL (FWB), 7 Apr. (2) WaR (FWB). Sharp-shinned Hawk: 5 Apr. (1) MC (CRS). Red-tailed Hawk: throughout period (1-7) HC (MS).

Red-shouldered Hawk: 1 Feb. (1) CC (FA, JCH), 5 Apr. (1) LR (FA, JCH). Golden Eagle: 1 Feb. (1) CC (FA, JA, DH).

Coot-Thrasher: American Coot: 14 Mar. (1) WiL (FWB). American Woodcock: 24 Feb. (1, singing) WaR (FWB). Common Snipe: 1 Mar. (1) MC (CRS). Herring Gull: 15 Feb. (1) RC (PR). Ring-billed Gull: 15 Feb. (3) RC (PR). Barred Owl: 4, 18 Apr. (1) RM (FWB), 24 Apr. (1) UM (CRS). Chuck-will's-widow: first, 20 Apr. (1) MC (CRS). Whip-poor-will: first, 24 April (6) UM (CRS). Purple Martin: first, 3 Mar. (1) EGC (LRH). Red-breasted Nuthatch: "abundant" throughout period RM (FWB). Catbird: (1) wintering E (LRH, *et al*). Brown Thrasher: (1) wintering E (LRH, *et al*).

Vireo-Sparrow: Solitary Vireo: 27 Mar. (1) RM (FWB), very early. Cape May Warbler: 23 Apr. (3) WiL (CRS), early. Cerulean Warbler: 25 Apr. (1) UM (CRS), early. Yellow-throated Warbler: 23 Apr. (1) WiL (CRS). Louisiana Waterthrush: 25 Mar. (1) RM (FWB), early. Evening Grosbeak: until end of Apr. E. Pine Siskin: throughout period (75-100) RM (FWB). Red Crossbill: 1 Feb. (50) RM (FWB), 15 Feb. (20) WaL (PR), 20 Feb. (12) RM (FWB). White-winged Crossbill: 1 Feb. (100) RM (FWB), 20 Feb. (12) RM (FWB), 6 Mar.-21 Apr. (6-7) RM (FWB). Vesper Sparrow: 15 Mar. (1) UT (FA, JC), 4 Apr. (3) CC (FA, JC), 24 Apr. (1) GRS (FA, JC).

Locations: CC—Cades Cove, E—Elizabethton, EGC—Elizabethton Golf Course, GRS—Greenbrier Ranger Station GSMNP, HC—Heaton Creek, near RM, LR—Lovell Rd., 140, Knox Co., MC—Milligan College, RC—Roan Creek area of WaL, RM—Roan Mtn., UM—Unaka Mtn., UT—UT Plant Science Farm, WaL—Watauga Lake, WaR—Watauga River, WiL—Wilbur Lake.

Observers: FA—Fred Alsop III, JA—Jean Alsop, FWB—Fred W. Behrend, JC—Jim Campbell, LRH—Lee R. Herndon, JCH—J. C. Howell, DH—Dennis Huffman, PR—Pete Range, CRS—Charles R. Smith.

BRENT ROWELL, 2227 Edgemont Ave., Bristol 37620.

ANNOUNCEMENT OF A FALL MEETING
TENNESSEE ORNITHOLOGICAL SOCIETY

OF THE

9-11 OCTOBER 1970

HOLIDAY HILLS RESORT, CROSSVILLE, TENNESSEE

Schedule of Events, Saturday, 10 October 1970

11:00-12:00 Meeting of the Committee for Self-study and Future Plans

12:00-13:00 Lunch, on your own

13:00-14:00 Meeting of the Board of Directors

14:00 Informal Paper Session Begins

Evening "The Role of the TOS in the Tennessee Environmental Council," by George R. Mayfield, Jr.

There will be informal field trips both Saturday and Sunday mornings for those who may be interested in participating. Those planning to attend this meeting should make their own reservations directly with the Holiday Hills Resort, Drawer 608, Crossville, Tennessee 38555, as soon as possible before 15 September 1970, and state that they are with the TOS meeting. This is especially important since we have until 15 September to fill up the resort, after which they will begin accepting other reservations. A \$10.00 deposit should accompany your request for a reservation. For those who decide to attend at the last minute, there are numerous other motels and resorts in the area as well as camping at nearby Cumberland Mountain State Park. For further information, contact Kenneth H. Dubke, 3302 Navajo Drive, Chattanooga, Tennessee 37411.

PREPARATION OF COPY FOR PUBLICATION

The purpose of THE MIGRANT is the recording of observations and original information derived from the study of birds, primarily in the state of Tennessee or the area immediately adjacent to its borders. Articles for publication originate almost exclusively from T.O.S. members.

Contributors should prepare manuscripts and submit them in a form acceptable to the printer, after editorial approval. Both articles and short notes are solicited but their format should be somewhat different.

Some suggestions to authors for the preparation of papers for publication are given herewith.

MATERIAL: The subject matter should relate to some phase of Tennessee Ornithology. It should be original, factual, concise, scientifically accurate, and not submitted for publication elsewhere.

TITLE: The title should be concise, specific, and descriptive.

STYLE: Recent issues of THE MIGRANT should be used as a guide in the preparation of manuscripts. Where more detail is needed reference should be made to the *Style Manual for Biological Journals* available from the American Institute of Biological Sciences, 3900 Wisconsin Avenue N. W., Washington, D. C. 20016.

COPY: Manuscripts should be typed double spaced on 8½ x 11" paper with adequate margins, for editorial notations, and should contain only entries intended for setting in type, except the serial page number. Tabular data should be entered on separate sheets with appropriate title and column headings. Photographs intended for reproduction should be sharp with good contrast on glossy white paper in black and white (not in color). Instructions to the editors should be given on a separate sheet. Weights and measurements should be in metric units. Dating should be in "continental" form (e.g., 7 March 1968).

NOMENCLATURE: Common names should be capitalized followed by binomial scientific name in italics only after the first occurrence in the text for both regular articles and ROUND TABLE NOTES, and should conform to the A.O.U. Check-list 5th edition, 1957. Trinomial should be used only after the specimen has been measured or compared with typical specimens.

BIBLIOGRAPHY: When there are more than five references in an article, they should be placed at the end of the article, otherwise they should be appropriately included in the text.

SUMMARY: Articles of five or more pages in length should be summarized briefly, drawing attention to the main conclusions resulting from the work performed.

IDENTIFICATION: Rare or unusual species identification to be acceptable must be accompanied by verifying evidence. This should include: date, time, light and weather conditions, exact location, habitat, optical equipment, distance, behavior of bird, comparison with other similar species, characteristic markings, experience of observer, other observers verifying observation and reference works consulted.

REPRINTS: Reprints are available on request. Reprint requests should accompany article at the time of submission. Billing to authors will be through the state T.O.S. Treasurer.

Books for review and articles for publication should be submitted to the editor. Seasonal reports and items should be forwarded to the appropriate departmental editor whose name and address will be found on the inside front cover.

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