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RECENT BREEDING BY DOUBLE-CRESTED CORMORANTS IN TENNESSEE

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The history of breeding by Double-crested Cormorants (*Phalacrocorax auritus*) in Tennessee, and their subsequent decline, has been described by Nicholson (1997). In short, prior to 1992, cormorants had been found nesting at just two sites — Reelfoot Lake and what is now the Duck River Unit of the Tennessee National Wildlife Refuge. The Reelfoot colony peaked at 400 nests in 1936 (Gersbacher 1939) and the Duck River colony reached about 100 pairs by 1949 (Nicholson 1997). Nesting ceased at both sites by the late 1950s or early 1960s. Cormorant populations declined rangewide during the mid-20th century due mainly to pesticide contamination, particularly DDT, and human persecution (Ludwig 1984). Also, some colonies were lost as habitat was destroyed (James and Neal 1986). The species was listed as "In Need of Management" in Tennessee in 1976 (TWRA 1976). Breeding could not be confirmed during the *Tennessee Breeding Bird Atlas* period, which was 1986-1991, although one "probable" record was noted at Duck River Unit (Nicholson 1997). This article summarizes known cormorant breeding activity since the *Atlas* survey period. At least five sites have been colonized by cormorants during the last decade. Of these, two are in middle Tennessee and three are in east Tennessee. They are listed chronologically.

Holston Army Ammunition Plant: On 22 June 1992, two cormorant nests, each with two nestlings, were observed within a Great Blue Heron (*Ardea herodias*) colony at the Holston Army Ammunition Plant in Hawkins County (Caldwell and Copeland 1995). The colony was in a stand of deciduous trees on Clay Island in the Holston River. On 8 April 1995 over 30 cormorants were seen at the colony, with at least five sitting on nests (J.W. Coffey & R. L. Knight, pers. obs.). Both species were still nesting there in 1999 (Brian Kegley, pers. comm.). Cormorants from this colony are routinely observed upstream at Riverfront Park in Kingsport throughout the year (R.L. Knight, pers.obs.).

Duck River Unit: On 13 May 1994, 11 cormorant nests, with adults in an incubating posture, were discovered in a large Great Blue Heron colony at the Duck River

Unit of the Tennessee National Wildlife Refuge in Humphreys County (Clayton Ferrell & Robert Wheat, pers. comm.). Over two months later, on 27 July, seven nests held two young each; the young appeared to be about three-quarters grown. Only one nest was seen the following year and three nests in 1998, with observations occurring in May. No cormorant nesting activity was seen in 1996-1997 or in 1999-2000. The nests were in Bald Cypress (*Taxodium distichum*) trees standing in water. Many of the trees are now dead or dying, which eventually will force the colony to relocate as the limbs fall.

Old Hickory Lake: On 13 June 1997, one adult cormorant was observed sitting on a nest within a large heron rookery on an island just east of Old Hickory Dam, on the Sumner/Davidson county line (Chris Sloan, pers. comm.). Nesting had been suspected here for at least two years prior to this discovery. A cormorant was seen carrying nest material into the rookery on 8 May 1999, and several active cormorant nests were sighted on 13 May 2000. The rookery consists of Black-crowned Night-Herons (*Nycticorax nycticorax*), Cattle Egrets (*Bubulcus ibis*), and Great Blue Herons, with a pair of Great Egrets (*Ardea alba*) confirmed breeding in 2000. The nests are in deciduous trees.

Watts Bar Lake: On 30 June 2000, three cormorant nests were observed in a mixed colony of Great Blue Herons and Black-crowned Night-Herons on a small island in upper Watts Bar Lake, just downstream from the I-75 bridge, in Loudon County by Hill Henry (pers. comm.) and Carrie Hedio. All three nests were in an Eastern Sycamore (*Platanus occidentalis*) tree along with many night-heron nests. On this date two cormorant nests contained three small young each, while the third nest held three young that appeared nearly ready to fledge.

Rankin Bottoms: Around the first of July 2000, six cormorant nests were found on upper Douglas Lake at Rankin Bottoms in Cocke County (Michael Sledjeski & Leslie Gibbens, pers. comm.). On 10 July these observers showed the colony to the author, as we approached closely by canoe. The nests were placed high in a small cluster of live Eastern Cottonwoods (*Populus deltoides*) in a broken line of trees along the bank of the French Broad River. When the lake is full, from May through July, this line of trees is standing in about 1-2 m of water and is over 100 m from the nearest exposed land. Of the six nests, three were in one tree, two were in another tree, and a single nest was in a third tree. On 10 July all six nests were occupied. Two nests contained at least two small young each, with adults present. One young was fed by regurgitation. The other four nests had adults sitting on them in an incubating or brooding posture. An active Osprey (*Pandion haliaetus*) nest with one young was in the same cluster of trees, only about 10-15 m from the nearest cormorant nest. Also, a mixed colony of Black-crowned Night-Herons and Cattle Egrets, concealed in Black Willows (*Salix nigra*), was about 100 m away. The breeding activity discovered in 2000 appears to be the first at Rankin Bottoms. Significant numbers of cormorants have been recorded at this location in spring and late summer dating back to at least 1994, with a maximum count of 130+ on 2 May 1997 (R.L. Knight, pers. obs.). Despite this, searches for nests had been fruitless prior to the year 2000.

Unconfirmed reports of cormorant breeding have come from two sites during 2000 (Bruce Anderson, pers. comm.). One was at a mixed heronry on Long Island at Kingston Refuge in Roane County. The other was on Goose Island at Hiwassee Refuge in Meigs County. Investigation of these two sites is warranted.

Some similarities exist between these current cormorant colonies. All are on islands or in trees standing in water, presumably as a safeguard from some predators. All are associated with other colonial nesting waterbirds (herons & egrets) or, in one case, an Osprey. All of the dates for nests with young presented here are considerably later than the range (13-29 May) given for historic sites in Tennessee (Nicholson 1997), although that sample was probably rather small.

This recent surge of breeding activity in Tennessee is undoubtedly a continuation of the widespread population recovery of this species since the 1970s, following the ban on DDT and increased legal protection (Ludwig 1984, Dolbeer 1991). Further evidence of this recovery is provided by the recent discovery of breeding in states near Tennessee, including inland Georgia in 1990 (Brisse 1990), inland Mississippi in 1998 (Reinhold et al. 1998) and southwestern Indiana in 1999 (Brock 1999). The Double-crested Cormorant was removed from the Tennessee list for species "In Need of Management" in August 2000 (TWRA 2000).

Acknowledgments: My thanks to Bruce Anderson, Clayton Ferrell & Robert Wheat, Hill Henry, Brian Kegley, Michael Sledjeski & Leslie Gibbens, and Chris Sloan for sharing information used in this article. Also, I thank Dev Joslin and anonymous reviewers for suggestions that improved the manuscript.

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CONFIRMED SUCCESSFUL NESTING
OF YELLOW-CROWNED NIGHT-HERON
IN RUTHERFORD COUNTY, CENTRAL TENNESSEE

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During the spring-summer of 2000, within the Murfreesboro city limits in Rutherford County, Tennessee, I observed a pair of Yellow-crowned Night-Herons (*Nyctanassa violacea*) successfully breed, nest, and rear four young that eventually fledged. Confirmed breeding of Yellow-crowned Night-Herons in Tennessee is uncommon to rare, and most of the breeding that has been confirmed has occurred in far west Tennessee in the Mississippi alluvial plain or in east Tennessee (Ford, 1990; Nicholson, 1997). Confirmed breeding records for central Tennessee are confined to Putnam County (Nicholson, 1997) and a previous 1982 record of a small colony in Rutherford County itself (Henderson, 1985).

This particular mating pair was observed during 2000 within the plantation grounds of Oaklands Mansion, Murfreesboro, in a small natural area with some mature trees that follow a free-flowing stream arising from a spring. The Oaklands Mansion site consists of around 10 acres, of which about half is open lawn and the rest mature woods. The mansion was built in the early 1800s, and the spring was a source of water for an extensive plantation. The mansion was restored in the 1970s and is now managed by a foundation. The property extends into a privately owned floodplain and some wooded yards that approximately double the appropriate habitat. Most of this floodplain consists of mature woodland, except for an open field of 10 acres adjoining the forest. Surrounding this area are heavily developed residential and commercial sites that are generally busy with autos and people on a daily basis. According to Watts (1989) and Nicholson (1997), this species is known to be quite tolerant of human disturbance.

The stream starts at the Oaklands Spring, which flows even during droughts, albeit not very rapidly. The total run of the stream is about 1/3 mile before it enters a residential area and a catchment pond. During this 1/3 mile, it averages about 12 feet in width and is quite shallow (1-2 feet), providing excellent feeding grounds for the herons. Other birds commonly found here in summer include Green Heron (*Butorides striatus*) and Wood Duck (*Aix sponsa*). The edges of most of the run are heavily vegetated, protecting birds from the surrounding human activity.

On 29 April, 2000, I flushed a single adult Yellow-crowned Night-Heron off the creek at Oaklands, and the following day, I saw what I assume was the same bird. A few days later, I observed two adult birds engaged in what appeared to be courting behavior — wing flapping and extending their head quills in a quasi-dance, near what would later turn out to be their nest site. On 3 May, the two adults started construction of a nest over the creek, approximately 40 feet high and in a rather exposed position. Although I was unable to check the nest for four weeks, upon

return on 2 June, I found a completed nest but no sign of either adult bird. When I visited the site on 7 June, I found one adult on the nest, presumably on eggs. It was difficult to be sure of the nest contents because of its location. Several days later, however, babies were seen in the nest. I continued to monitor progress, and on June 15, four young birds fledged and were not seen subsequently!

This is the second confirmed nesting in Rutherford County to my knowledge (Henderson, 1985). Yellow-crowned Night-Herons have been seen in this location about 10 times or so over the past 18 years, including several in juvenile plumage. The 1982 heronry reported by Henderson (1985) was located about 5 km SW of Murphreesboro in a woodlot containing limestone sinks. It contained four to six adult birds, three occupied nests, and six unoccupied nests. This species seems to have shown a general decline in population in the Middle Tennessee area since the report of the Rutherford County heronry in 1982. I usually have only one sighting per year despite spending a good bit of time in the field.

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BOOK REVIEW: "THE SIBLEY GUIDE TO BIRDS"

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Sibley, David Allen. 2000. *The Sibley Guide to Birds*. Alfred A. Knopf, Inc.

The recently released *The Sibley Guide to Birds* is a major addition to bird identification. Although the size and weight of the book will deter most birders from literally "carrying it" in the field, I expect that it will likely be as close as the birder's vehicle. It may even engender an increased sale in backpacks. In this field guide of 544 pages, Sibley single-handedly describes and illustrates 810 species and 350 regional populations, making it a truly monumental work.

His guide is generally arranged in traditional species order, but unlike many current bird guides, it does not have the descriptions and illustrations on opposite pages. Instead, the layout is vertical, with most species given at least a half page. I really liked the (usually) one- or two-page spreads, consisting of small individual species illustrations that begin the section on each family or related families. It helped me put the size, color, and shape of the birds into perspective. For individual species, the multiple (if sometimes smallish) illustrations typically include in-flight poses as well as water/ground or branch/trunk depictions with very little background. Several different plumages are shown for each species, and birds of the same family are usually drawn in nearly identical poses. In all, there are over 6600 illustrations.

Each bird's description is primarily given using short phrases amongst the illustrations, rather than in the paragraph form found in most field guides. There are also a number of identification inserts with other valuable information, such as those on the bills of swans and scoters, the head and bill shapes of geese, and the tails of gnatcatchers. The various attributes of accipiters are extensively discussed, as are the differences between Black-capped and Carolina Chickadee (particularly useful in Tennessee's Great Smoky Mountains). Important field marks are indicated in the illustrations with Peterson-like tick marks, a method I find extremely helpful. Sibley has pointed out additional field marks that should help birders differentiate between similar species. For example, although the third edition of the *National Geographic Field Guide to the Birds of North America* shows the black spot on the gape of the Mottled Duck, Sibley points it out as a useful field mark. Indeed, it is one that Jeff Wilson has been using and sharing with birders in our region for some years!

The guide is up-to-date, including the very recent Gunnison and Greater Sage-Grouse split, and returning the Strickland's Woodpecker of southeast Arizona to its earlier moniker of Arizona Woodpecker. While subspecies are extensively covered, Sibley has chosen to define regions of subspecies populations rather than using their scientific names. Although this may be disappointing to some birders, Sibley has explained his reasoning at his website (<http://www.sibleyart.com>). There is an extensive description of songs and call notes and generally adequately sized

range maps, unless you live along the northeast coast of the U.S. (I needed a magnifying glass to check out my original home state of New Jersey). In addition to winter, summer, and year-round ranges, the maps show main migration routes, and individual dots are used to indicate general areas of vagrancy rather than specific occurrences. I found both depictions very helpful in determining where a specific species is likely to occur.

The combination of these features places Sibley's guide a step above the third edition of the Geographic guide, and thus, quite appropriate for intermediate-level birders. Although potentially useful for beginners, many may be overwhelmed by the numerous plumage illustrations.

Like any first edition, there are some errors that will be corrected in future printings. For example, American Magpie will be changed back to Black-billed Magpie and Northern Caracara will revert to Crested Caracara. While I found the illustrations generally excellent, the colors on some of the birds seem to be a bit off. Sibley has acknowledged that the rufous colors will be toned down on a number of pages. My experience with Buff-breasted Flycatchers in Sawmill Canyon in southeast Arizona suggests that the head and back are also somewhat buff in color, similar to the Geographic depiction, rather than the gray shown by Sibley.

Sibley considers his guide to be a work in progress. We are very fortunate to have in book form the progress that he has made so far!

BOOK REVIEW: "FOCUS GUIDE TO THE BIRDS OF NORTH AMERICA"

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Kenn Kaufman. 2000. *Focus Guide to The Birds of North America*. Houghton Mifflin Company.

Focus Guide to The Birds of North America, the new field guide by Kenn Kaufman, is the most user-friendly field guide that I have ever used. Its use of photographs rather than drawings works surprisingly well. The book is excellent for beginners and is more than adequate for experts and professionals. I have tested the book in the field and found that it was an excellent addition to my field library.

For those of you who are new to birding, Kenn Kaufman is a legend in the birding community. For many years he held the record for seeing the most bird species in North America in a single year's time. He is a highly respected author having written at least four books on the subject of birds and bird identification, and he serves as a field editor for *Audubon*. Kaufman's book lives up to his reputation.

The first thing that I noticed about the book was that it used photographs rather than drawings. This immediately turned me off. Anyone who has done very much birding knows that the best guides do NOT use photos. It is simply too hard to get great photos of all those birds in all their different plumages, and artifacts, such as shadows and reflections, often show up and mislead us. But, as I leafed through the book, I found that the photos were remarkable, and to this day I have yet to find a poor or misleading photo in the book.

What did Kaufman do that made his photos so different? He used digital editing to touch them up. There are well over 2,000 photographs in the book that were scanned into a computer. Then Kaufman spent over 3,000 hours editing the photos so that they would look like the bird that you see in the field. You could say that he combined the best of photography with the best of the art world. The results were truly amazing. This is the first guide that uses photos that I recommend to my students in my birding classes.

Kaufman's book, as I said earlier, is definitely the most user-friendly book that I have ever used. The birds are broken into "families," as in all field guides, but it is much easier to find where in the book that family is located. You will find a list of all the families or groups on the first page of the book. Each is marked with a colored tab which corresponds to a marking on the side of the book so that you can quickly reference the group. Also, if you are new to birding and you are not sure if your bird would fit into the group called "Aerial Waterbirds," Kaufman has you covered. You simply need to flip the page and you will find several photo examples of each group. Again they are marked with the color tabs and in addition have the page numbers where the group is found.

Another user-friendly feature of the book is the index. Any of us who have done much birding have struggled with the complicated indexes in the backs of field

guides. Often, by the time we find the bird in the index, the one we were watching has long flown away. Well, Kaufman's index is equally confusing, but he has added a short index on the last page of the book. This is a very easy to use, simplified index that is designed to help you quickly find birds similar to the one you are observing. For example, if I see a nuthatch but I am not sure which nuthatch, I can quickly look in the short index and find that nuthatches are located on page 278. There is even the color tab so that I can more easily find the nuthatches by looking for the blue marking on the side of the book.

Another feature that I like is that Kaufman's book includes all the information on two facing pages. The written information and the range map are on the left-hand page and the photos are on the right. Some books that I have used have the range maps in the back, which is very inconvenient. It also covers all of North America so that you do not need another book when you travel or when a bird shows up outside of its normal range. The book also has pointers next to the photos indicating the important field marks. Thus, with a quick glance, you can know what to look for on a bird that you are observing.

While I would not throw out my tried-and-true *National Geographic* or *Peterson's*, I would certainly make room for this new and very useful book in my field library. It is equally helpful in bird identification and is more convenient to use. I cannot say that it offers the detailed information that the Sibley guide does, but it is an excellent guide and it is much easier to carry into the field. I would recommend it over Sibley for beginners and intermediate level birds that may be confused by all the information in Sibley's excellent guide. Whatever guide you choose, may all your days of birding be as extraordinary and wondrous as mine.

"BIRD STUDY IN SHADY VALLEY, TENNESSEE, 1934-1999"

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Coffey, J.W. and J.L. Shumate, Jr. 1999. *Bird Study in Shady Valley, Tennessee, 1934-1999*. Privately published (available from J.S. Shumate, Jr., 156 Meadowlark Lane, Shady Valley, TN 37688).

From 1959 through 1964, Kenneth Dubke intensively studied the bird life of Shady Valley, an isolated, high elevation, farmed valley surrounded by forested mountains in the extreme northeast corner of Tennessee. Dubke was often accompanied on these trips by Wallace Coffey. On one of these trips, Dubke met John Shumate, a schoolboy and Shady Valley resident. Shortly after leaving the area in 1964, Dubke wrote an annotated checklist of the summer birds of Shady Valley; this manuscript was never published.

Dubke's checklist is the nucleus of *Bird Study in Shady Valley, Tennessee*, and Coffey and Shumate have added observations from dozens of their own trips throughout the area, as well as all the published and unpublished observations they could gather. This annotated list of 188 species makes up about half the book and includes records through July 1999. It is presented in a fairly standard format of a brief overview of each species' status, with longer descriptions of the species' status during each season. These descriptions include, in many instances, listing of individual observations, a remarks section, and a listing of the maximum one day counts for the species. A "Breeding" section is also included for some species known to nest in the valley.

The annotated list is quite thorough and includes many important unpublished observations, such as a 1964 observation of nest-building by a Golden-winged Warbler (*Vermivora chrysoptera*). In fact, I wish many of these previously unpublished records had been more readily available when I was assembling the *Atlas of the Breeding Birds of Tennessee*. Although I did not count them, most of the individual records listed appear to be from the 1960s and 1990s.

I did, however, note problems in the species accounts. Neotropical migrants are identified by the code NM; this identifier is only used for species commonly categorized as landbirds, and not for the many waterbirds which migrate to and from the Neotropics. The year in which the American Ornithologists' Union formally recognized the split of the Traill's Flycatcher into the Alder and Willow Flycatchers (*Empidonax alnorum*, *E. traillii*) is incorrectly given as 1983, instead of 1973. The comparison of the abundance of the Black-throated Blue Warbler in Shady Valley and other areas is confusing. This section of the book, like the rest of the book, also unfortunately contains many typographic errors.

The book begins with short chapters on the physical environment and major plant communities of Shady Valley. Portions of these two chapters are an environmental history, chronicling the extensive draining of bogs and logging of red spruce,

eastern hemlock, and white pine forests. These chapters also include descriptions of some of the authors' favorite birding areas.

Most of the rest of the book is a very personalized history of bird study in Shady Valley, beginning with the visit of Tennesseans Albert Ganier and Bruce Tyler in 1934. Three years later, a U.S. National Museum expedition under the direction of Alexander Wetmore spent several days in the valley as it worked its way across Tennessee. The next intensive work was that of Dubke, mentioned above. Coffey and others carried out various studies in the 1960s, and Shady Valley was the site of the Tennessee Ornithological Society's 1976 breeding bird foray. During this period, The Nature Conservancy, spurred by Coffey and others, began its work preserving and restoring some of the area's unique natural communities. This work has continued, and its creation of some new bird habitats has further stimulated interest in the valley's bird life.

This book is attractively produced, with a panoramic cover photograph of Shady Valley at its peak of fall colors, maps, and several black-and-white photos of people, places, and bird nests. A few of these photos are historically important and previously unpublished. Despite the book's need for a thorough editing, I enjoyed reading it, and highly recommend it to anyone with an interest in the birds of the southern Appalachians. We would all benefit if more people took on the great challenge of producing similar local annotated lists.

1999 SPRING FIELD DAYS

CHRISTOPHER J.E. WELSH

Spring counts were reported for 10 locations across the state with dates ranging from 24 April to 8 May. Birders identified 208 species and a total of 59,648 individuals on count days, plus a Green-winged Teal found only during count week (Table 1). Thirty-two species were found on only one count, whereas 18 species were found on only two counts. Sixty-eight species were observed on all 10 counts. The Nashville count recorded the highest species total (158); Hamilton County was close behind with 157 species. The Hamilton Co., Nashville, Knox Co., and Elizabethton counts had the most participants with 30, 29, 27, and 26. Level of effort varied considerably among counts with Clarksville accounting for the most party hours and party miles (Table 1).

Species observed on only one count included Anhinga, Snow Goose, Green-winged Teal, Northern Shoveler, Canvasback, Bufflehead, Ruddy Duck, Mississippi Kite, Peregrine Falcon, Common Moorhen, Black-necked Stilt, Willet, White-rumped Sandpiper, Dunlin, Short-billed Dowitcher, Caspian Tern, Forster's Tern, Eurasian Collared-Dove, Black-billed Cuckoo, Northern Saw-whet Owl, Yellow-bellied Sapsucker, Willow Flycatcher, Scissor-tailed Flycatcher, Fish Crow, Brown-headed Nuthatch, Brown Creeper, Bewick's Wren, American Pipit, American Tree Sparrow, Rusty Blackbird, Red Crossbill, and Pine Siskin. Interestingly, Black-billed Cuckoos were detected on only one count while Yellow-billed Cuckoos were detected on all 10 counts.

The five spring counts that were conducted in conjunction with the North American Migration Count on 8 May are noted in Table 1 on page 125. Results from these counts are reported here as well as in Hoff and Joslin (1999).

CLARKSVILLE (Montgomery Co.) 8 May 1999. Temp. 51-78°F; clear with afternoon breeze. Thirteen observers in 6 parties put in 925 party miles and 98 party hours in the field. Feeders were monitored for 13.5 hrs. 132 species; 6268 individuals. Highlights included Common Loon, Great Egret, Bald Eagle, Semipalmated Sandpiper, Least Flycatcher, Horned Lark, Golden-crowned Kinglet, Gray-cheeked Thrush, Hermit Thrush, Loggerhead Shrike, Orange-crowned Warbler, Dickcissel, American Tree Sparrow, and Fox Sparrow. Participants: Joe Allen; Danielle and Paul Evans; Kevin and Mare Lynn Fitch; Andrew, Joe, and Matthew Hall; Debbie and Steven Hamilton; Annie Heilman; Ann Lowe; Gloria (compiler: 861 Vaughn Rd, Clarksville, TN 37043) and William Milliken; Sallie Noel; Barry Podell; Joseph Schiller; and Stanley York.

MAYFIELD-GRAY (formerly COLUMBIA). 7-8 May 1999. Temp: 55-80°F. Ten observers participated in the Columbia count, locating 143 species and 4648 individuals. Unlike other Tennessee spring counts, this is a two-day count. Highlights: Least Bittern, Little Blue Heron, Cattle Egret, Canvasback, Northern Harrier, Sora, Horned Lark, Swainson's Warbler, and Purple Finch. Participants: Jan and Bob Brown, Tom Edwards, William Fuqua, William Jernigan, Allyn Lay, Bedford Lochridge, Mary Lyles, Cleo and George R. Mayfield (compiler: 999 Sunnyside Dr., Columbia, TN 38401).

Table 1. Results of the 1999 TOS Spring Counts: number of individuals of each species observed plus effort for each count.

<i>Species</i>	<i>Shelby</i>	<i>May-Gray</i>	<i>Nashville</i>	<i>Murfrees</i>	<i>Clarksville</i>	<i>Putnam</i>	<i>Hamilton</i>	<i>Knox</i>	<i>Greene</i>	<i>Eliz</i>	<i>Totals</i>	<i># Counts</i>
Common Loon			2		1	1				3	7	4
Pied-billed Grebe	1	3	2				2	1			9	5
Double-crested Cormorant	48	21	205	2		1	2	28	1	1	309	9
Anhinga	1										1	1
American Bittern	2						2				4	2
Least Bittern		1					2				3	2
Great Blue Heron	41	28	70	6	14	10	241	141	8	2	561	10
Great Egret	96	1	5		2		1	1			106	6
Snowy Egret	7		3				1				11	3
Little Blue Heron	30	1	2				4			1	38	5
Cattle Egret	4	2	1				2				9	4
Green Heron	3	15	14		14	11	20	9	5	8	99	9
Black-crowned Night-Heron			92					23			115	2
Yellow-crowned Night-Heron								5		2	7	2
Snow Goose						1					1	1
Canada Goose	61	199	151	20	102	113	284	198	36	122	1286	10
Wood Duck	17	17	10	10	11	20	47	25	11	44	212	10
Green-winged Teal									cw(1)		cw	1
Mallard	39	4	51	7	42	9	109	47	20	144	472	10
Blue-winged Teal	16	7	11	1			18	2	20	1	76	8
Northern Shoveler	5										5	1
Canvasback		1									1	1
Lesser Scaup	5						1				6	2
Bufflehead										14	14	1
Ruddy Duck						1					1	1

<i>Species</i>	<i>Shelby</i>	<i>May-Gray</i>	<i>Nashville</i>	<i>Murfrees</i>	<i>Clarksville</i>	<i>Putnam</i>	<i>Hamilton</i>	<i>Knox</i>	<i>Greene</i>	<i>Eliz</i>	<i>Totals</i>	<i># Counts</i>
Black Vulture		53	117	14	51	12	161	27	17	36	488	9
Turkey Vulture		69	72	15	83	59	120	89	91	105	703	9
Osprey			1				1	6	1	10	19	5
Mississippi Kite	26										26	1
Bald Eagle	1		1		4		1				7	4
Northern Harrier		1		1				1	2	2	7	5
Sharp-shinned Hawk		3			2	3	2	1	1	4	16	7
Cooper's Hawk		2	4		2	2	3	6	5	3	27	8
<i>Accipiter sp.</i>						3					3	1
Red-shouldered Hawk	7	2	7		7	4	21	5	1	2	56	9
Broad-winged Hawk	2		3		2	12	7	6	1	10	43	8
Red-tailed Hawk	10	24	26	6	15	13	40	24	12	20	190	10
<i>Buteo sp.</i>								1			1	1
American Kestrel	4	20	3	5	9	13	3	1	8	7	73	10
Peregrine Falcon							2				2	1
Ruffed Grouse									2	2	4	2
Wild Turkey	1	6	4	2	8	5	4		8	1	39	9
Northern Bobwhite	16	21	24	2	32	21	26	14	8	4	168	10
Sora	6	4	2				2				14	4
Common Moorhen							1				1	1
American Coot	8	9	3	1			4	1	3		29	7
Semipalmated Plover			4				1	3			8	3
Killdeer	62	46	33	24	43	37	84	35	39	48	451	10
Black-necked Stilt	25										25	1
Greater Yellowlegs			3		1		4	1	7		16	5
Lesser Yellowlegs	3	4	8		1		22	2	6		46	7
Solitary Sandpiper	32	4	7	1	3	2	18	7	14	10	98	10
Willet	2										2	1

Species	Shelby	May-Gray	Nashville	Murfrees	Clarksville	Putnam	Hamilton	Knox	Greene	Eliz	Totals	# Counts
Spotted Sandpiper	10	9	12	5	4	3	4	9	3	17	76	10
Semipalmated Sandpiper		5	3		3		31		3		45	5
Least Sandpiper	384	4	40				8				436	4
White-rumped Sandpiper			4								4	1
Pectoral Sandpiper		1	3				1				5	3
Dunlin			1								1	1
Sandpiper sp.						17		1			18	2
Short-billed Dowitcher			1								1	1
Common Snipe		5	1					1	3		10	4
American Woodcock		6	2		1	3					12	4
Ring-billed Gull			9				9	26	cw(1)	8	52	4
Caspian Tern			1								1	1
Forster's Tern							1				1	1
Rock Dove	72	81	117	50	40	75	60	257	75	60	887	10
Eurasian Collared-Dove							5				5	1
Mourning Dove	71	77	94	54	140	203	305	217	154	147	1462	10
Black-billed Cuckoo							1				1	1
Yellow-billed Cuckoo	26	21	23	2	4	4	3	4	1	1	89	10
Barn Owl									8	1	9	2
Eastern Screech Owl		9				4	3			4	20	4
Great Horned Owl	1	7	2		3	1	1		1	3	19	8
Barred Owl	5	8	6		1	11	2	2		1	36	8
Northern Saw-whet Owl										1	1	1
Common Nighthawk	34	6	4		5	8	6	3	1	4	71	9
Chuck-will's Widow		17	2		4	6	6	5		3	43	7
Whip-poor-will		6	15	4	4	17	9	1			56	7
Chimney Swift	85	34	262		216	179	271	305	125	253	1730	9

<i>Species</i>	<i>Shelby</i>	<i>May-Gray</i>	<i>Nashville</i>	<i>Murfrees</i>	<i>Clarksville</i>	<i>Putnam</i>	<i>Hamilton</i>	<i>Knox</i>	<i>Greene</i>	<i>Eliz</i>	<i>Totals</i>	<i># Counts</i>
Ruby-throated Hummingbird	26	6	16	4	19	16	15	7	8	12	129	10
Belted Kingfisher	5	15	7	2	12	4	12	13	5	12	87	10
Red-headed Woodpecker	25	8	8		8	8	19		2	3	81	8
Red-bellied Woodpecker	71	52	47	14	51	54	58	59	27	24	457	10
Yellow-bellied Sapsucker				2							2	1
Downy Woodpecker	20	43	17	6	19	20	50	16	24	16	231	10
Hairy Woodpecker	9	9	5	2	2	7	7	1	5	3	50	10
Northern Flicker	7	5	7	7	19	16	16	18	15	21	131	10
Pileated Woodpecker	21	24	17	2	10	26	18	17	13	16	164	10
Olive-sided Flycatcher			3				1				4	2
Eastern Wood-pewee	89	24	32	6	37	52	20			1	261	8
Acadian Flycatcher	83	20	7		14	54	4			1	183	7
Willow Flycatcher			1								1	1
Least Flycatcher					2					2	4	2
Eastern Phoebe	7	33	24	11	24	45	28	22	27	26	247	10
Great Crested Flycatcher	39	30	20	6	34	55	40	9	7	2	242	10
Scissor-tailed Flycatcher	1										1	1
Eastern Kingbird	39	113	63	40	95	71	122	44	25	36	648	10
Horned Lark	29	3			2	2					36	4
Purple Martin	8	65	114	45	80	68	144	11	108	25	668	10
Tree Swallow	5	9	11			17	5	43	15	97	202	8
N. Rough-winged Swallow	20	42	53	5	159	52	105	63	17	129	645	10
Bank Swallow				4	1	2	6	4	22	4	43	7
Cliff Swallow		150	279		355	11	311	21		3	1130	7
Barn Swallow	50	67	67	24	197	153	254	96	153	132	1193	10
<i>Swallow sp.</i>								1			1	1
Blue Jay	52	90	120	59	113	175	246	218	184	90	1347	10
American Crow	53	114	141	36	180	182	347	218	247	312	1830	10

<i>Species</i>	<i>Shelby</i>	<i>May-Gray</i>	<i>Nashville</i>	<i>Murfrees</i>	<i>Clarksville</i>	<i>Putnam</i>	<i>Hamilton</i>	<i>Knox</i>	<i>Greene</i>	<i>Eliz</i>	<i>Totals</i>	<i># Counts</i>
Fish Crow	21										21	1
Common Raven									1	12	13	2
Carolina Chickadee	38	58	63	28	88	88	176	186	70	81	876	10
Tufted Titmouse	76	87	73	21	68	106	153	158	69	97	908	10
Red-breasted Nuthatch									1	3	4	2
White-breasted Nuthatch	17	22	16		16	36	15	3	9	15	149	9
Brown-headed Nuthatch							12				12	1
Brown Creeper										1	1	1
Carolina Wren	89	42	52	14	95	113	148	110	45	81	789	10
Bewick's Wren				1							1	1
House Wren		8	2	12	21	22	2	12	21	15	115	9
Winter Wren	2								5	2	9	3
Marsh Wren	1	1	3								5	3
Golden-crowned Kinglet					1		1			3	5	3
Ruby-crowned Kinglet	2		2	1		1		57	5	4	72	7
Blue-gray Gnatcatcher	79	60	79	13	39	130	141	86	20	47	694	10
Eastern Bluebird	26	130	95	43	155	201	181	88	129	84	1132	10
Veery	2	3	5		2	3	2	cv		7	24	7
Gray-cheeked Thrush	6	4	7	1	3		2				23	6
Swainson's Thrush	61	7	57	2	8	5	13	2		3	158	9
Hermit Thrush				2	3		1	1	1		8	5
Wood Thrush	52	26	20	4	24	78	44	48	2	51	349	10
American Robin	82	110	118	88	213	339	406	260	237	306	2159	10
Gray Catbird	13	15	11	17	10	33	15	25	2	23	164	10
Northern Mockingbird	34	80	65	47	129	79	155	103	79	77	848	10
Brown Thrasher	13	42	27	11	29	47	73	50	34	37	363	10
American Pipit							1				1	1

<i>Species</i>	<i>Shelby</i>	<i>May-Gray</i>	<i>Nashville</i>	<i>Murfrees</i>	<i>Clarksville</i>	<i>Putnam</i>	<i>Hamilton</i>	<i>Knox</i>	<i>Greene</i>	<i>Eliz</i>	<i>Totals</i>	<i># Counts</i>
Cedar Waxwing	168	52	60	20	58	72	131	197	42	412	1212	10
Loggerhead Shrike	3	11	2	2	4				2	1	25	7
European Starling	99	275	312	100	580	714	562	906	1068	563	5179	10
White-eyed Vireo	67	41	54	3	25	105	53	37	3	10	398	10
Blue-headed Vireo	1		3			9	3	8	8	33	65	7
Yellow-throated Vireo	14	6	4		7	48	5	8	1	7	100	9
Warbling Vireo	2	6	8		17	1			1		35	6
Philadelphia Vireo	1		6				1				8	3
Red-eyed Vireo	76	69	87	6	34	453	176	113	9	59	1082	10
Blue-winged Warbler	1	9	5			18	3	3			39	6
Golden-winged Warbler							1			3	4	2
Tennessee Warbler	175	16	45	8	48	18	10	2		1	323	9
Orange-crowned Warbler					2			3			5	2
Nashville Warbler	2		2			3		8		3	18	5
Northern Parula	39	4	13		15	34	4	3	1	26	139	9
Yellow Warbler	3	18	17	13	5	29	12	15	5	33	150	10
Chestnut-sided Warbler	16	1	16	1	7	8	4	12	1	24	90	10
Magnolia Warbler	13	3	54	7	4	16	10	3		2	112	9
Cape May Warbler		4	13			14	13	3		1	48	6
Black-throated Blue Warbler			2		12		2	1	5	42	64	6
Yellow-rumped Warbler	14	14	44	16	39	47	27	191	96	43	531	10
Black-throated Green Warbler	5		11		2	16	20	36	10	61	161	8
Blackburnian Warbler	2	1	4			7	8	10	cw(1)	6	38	7
Yellow-throated Warbler	6	7	8	2	17	27	2	2	1	11	83	10
Pine Warbler	3	3	3		5	34	35	14	5	13	115	9
Prairie Warbler		22	26	10	15	67	81	17	5		243	8
Palm Warbler	1	22	30	3	35	7	27	21	6	4	156	10
Bay-breasted Warbler	4	1	14		2	6	3	2		2	34	8

Species	Shelby	May-Gray	Nashville	Murfrees	Clarksville	Putnam	Hamilton	Knox	Greene	Eliz	Totals	# Counts
Blackpoll Warbler	8	5	33	10	4	15	29	11			115	8
Cerulean Warbler	16	4	5			29	1	8		1	64	7
Black-and-white Warbler	9	4	19	5	2	108	9	13	5	31	205	10
American Redstart	35	3	21	1	2	25	4	6	cw(1)	5	102	9
Prothonotary Warbler	18	9	14	2	28		7	1	3	2	84	9
Worm-eating Warbler		2	11		1	26	8	13	1	9	71	8
Swainson's Warbler	9	1					1			2	13	4
Ovenbird	14	4	5	2	8	129	8	28	8	62	268	10
Northern Waterthrush		1	2	5	2		1	cw		1	12	6
Louisiana Waterthrush	7	6	8	1	2	10	2	1	2	6	45	10
Kentucky Warbler	55	19	20	1	5	68	1	1		3	173	9
Common Yellowthroat	31	62	73	14	54	233	50	48	18	21	604	10
Hooded Warbler	9	8	15		1	74	1	19	7	63	197	9
Wilson's Warbler	3		3								6	2
Canada Warbler	1	1	6			3	3	1		5	20	7
Yellow-breasted Chat	5	51	44	9	16	91	97	23	2	14	352	10
Summer Tanager	50	50	54	3	20	55	16	4			252	8
Scarlet Tanager	12	24	35		4	50	29	41		25	220	8
<i>Tanager sp.</i>								1			1	1
Northern Cardinal	119	131	224	76	302	304	325	405	119	132	2137	10
Rose-breasted Grosbeak	9	10	17	13	24	10	16	37	1	15	152	10
Blue Grosbeak	3	8	13	1	7	10	14	9	8	3	76	10
Indigo Bunting	296	167	235	25	162	566	223	114	19	43	1850	10
Dickcissel	86	23	2	2	16						129	5
Eastern Towhee	6	58	57	26	100	86	129	129	40	48	679	10
American Tree Sparrow					2						2	1
Chipping Sparrow	6	21	7	22	47	190	47	39	45	58	482	10

<i>Species</i>	<i>Shelby</i>	<i>May-Gray</i>	<i>Nashville</i>	<i>Murfrees</i>	<i>Clarksville</i>	<i>Puham</i>	<i>Hamilton</i>	<i>Knox</i>	<i>Greene</i>	<i>Eliz</i>	<i>Totals</i>	<i># Counts</i>
Field Sparrow	3	51	108	30	70	86	58	67	35	26	534	10
Savannah Sparrow	13	3	26		8	1	10	35	2	2	100	9
Grasshopper Sparrow	2	1		5		2	3	9	10		32	7
Fox Sparrow					1				4		5	2
Song Sparrow		2	9	7	1	185	140	118	37	154	653	9
Lincoln's Sparrow	3		3								6	2
Swamp Sparrow		3	3	2	2	1		10	2		23	7
White-throated Sparrow	7	19	9	20	7	4	3	225	70	29	393	10
White-crowned Sparrow		3	5	6	6			10	22	21	73	7
Dark-eyed Junco									12	33	45	2
Bobolink	685	29	14			5	5	4			742	6
Red-winged Blackbird	185	142	157	42	329	239	178	164	195	186	1817	10
Eastern Meadowlark	26	114	40	61	157	194	120	79	185	72	1048	10
Rusty Blackbird										4	4	1
Common Grackle	74	209	187	56	192	166	241	266	387	286	2064	10
Brown-headed Cowbird	81	97	97	21	106	158	74	106	51	30	821	10
Orchard Oriole	14	36	30	8	9	55	18	8	7	11	196	10
Baltimore Oriole	20		5	8	1	3	3	7	3	10	60	9
Purple Finch		1							4		5	2
House Finch	9	28	21	12	129	32	88	20	37	25	401	10
Red Crossbill										6	6	1
Pine Siskin										5	5	1
American Goldfinch	20	122	101	50	151	103	176	112	115	279	1229	10
House Sparrow	8	50	47	100	146	115	40	66	70	49	691	10

	Shelby	May-Gray	Nashville	Murfrees	Clarksville	Putnam	Hamilton	Knox	Greene	Eliz	Totals
Total species 1999	140	143	158	101	132	128	157	134	121	143	208
Total individuals	5214	4648	5925	1649	6268	8439	8729	7484	5130	6162	59648
Number of participants	24	10	29	3	13	15	30	27	22	26	199
Number of parties				2	6	6		16	11	8	49
Party hours	44		77	10	99	74.5		92.5	54	87	538
Hours on foot	24.5		47			15		67.5	16.5		170.5
Hours in car	19.5		30			59.5		19.5	38		166.5
Hours in boat											
Party miles	100		320.5	160	925	511	847	429	489		3781.5
Miles on foot	18		39.5	3	31	10	38	58	12		209.5
Miles by car	82		281	157	894	501	809	371	477		3572
Miles by boat											
Hours owling						3	6.5	3.5			13
Miles owling						44		30.5			74.5
Feeder participants				5							5
Feeder parties				4							4
Feeder hours				12	13.5			2	15.5		43
NAMBD	Yes	No	Yes	No	Yes	Yes	Yes	No	No	No	

CW = Count week. Indicates species was seen during count week (3 days before or after the count but not on count day).

NOTE: The former Columbia chapter has changed its name to Mayfield-Gray.

ELIZABETHTON. 1 May 1999. Twenty-six birders in 8 parties from throughout Northeast Tennessee spent 87 party hours conducting the spring bird count in Carter County and the adjacent Unicoi, Johnson, and Washington counties. 143 species; 6162 individuals. The total species count of 143 was the highest in several years. Some of the better finds included Little Blue Heron, Yellow-crowned Night-Heron, Bufflehead, Northern Harrier, Northern Saw-whet Owl, Barn Owl, Red-headed Woodpecker, Rusty Blackbird, Red Crossbill, Pine Siskin, and 30 species of warblers, including Nashville, Swainson's, and Cerulean. Participants: Fred Alsop, Rob Biller, Janet Brown, Joy and Mark Crass, Brian Cross, Tess Cumbie, Gilbert Derouen, Hal and Martha Dillenbeck, Glen Eller, Pat and Ralph Keffer, Rick Knight (compiler: 804 N. Hills Dr., Johnson City, TN 37604), Howard Langridge, Jennifer Laughlin, Larry McDaniel, Perry and Stephanie McDorman, Charles Moore, Jason Osborne, Kevin Pierce, Hazel Rice, Bryan Stevens, Allen Trently, Gary Wallace, and Frank Ward.

GREENEVILLE. 24 April 1999. Temp. 55-72°F; cloudy morning with partly sunny afternoon, no precipitation; wind NW with gusts up to 10 mph. Twenty-two observers in 11 parties put in 54 party hours (16.5 on foot, 37.5 by car) and covered 489 party miles (12 on foot, 477 by car). In addition, feeders were monitored for 15.5 hours. 121 species; 5129 individuals, plus 4 additional species seen during count week. Highlights included Green-winged Teal, Ring-billed Gull, Barn Owl, and Fox Sparrow. Participants: Orland, Ben, and Phine Britton; Bill and Pat Foland; King and Margaret Gaut; Juanita and Lenard Heckart; Don Holt; Jim Holt (compiler: 311 Colonial Circle, Greeneville, TN 37745), Don Miller; Velda Moore; Richard and Willie Ruth Nevius; Linda and Roy Northrop; Helen Reed; JoAnne and Larry Routledge; and Bob and Karen Zimmerman.

HAMILTON CO. 8 May 1999. 0350-2200. Temp. 60-75°F; light wind. Thirty observers covered 809 miles by car and 38 miles by foot. Owling effort included 6.5 hrs. 157 species; 8729 individuals. Highlights included American and Least Bitterns, Little Blue Heron, Cattle Egret, Lesser Scaup, Bald Eagle, Peregrine Falcon, Sora, Common Moorhen, Semipalmated Plover, Semipalmated and Pectoral Sandpipers, Forster's Tern, Eurasian Collared-Dove, Black-billed Cuckoo, Olive-sided Flycatcher, Brown-headed Nuthatch (12), Golden-crowned Kinglet, American Pipit, Philadelphia Vireo, Golden-winged Warbler, and Swainson's and Canada Warblers. Participants: Nelson Bennett, Alice Benton, Mary Lynn Buttram, Kevin Calhoun (compiler: 1185 Mountain Creek Rd, Apt. 715, Chattanooga, TN 37405), Carl and Janice Chadwell, Tom Chittenden, Anita and Danny Gaddy, Bill Haley, John Henderson, Daniel Jacobson, Bonnie and Dawn Johnson, Tanya Jordan, Jonnie Sue Lyons, Barbara and Mike McMahan, Matt Morris, Johnnie Parks, Tom Patton, Roi and Debbie Shannon, David Vogt, Jimmy and Cynthia Wilkerson, Chris Williams, Hayden Wilson, and Libby and Ron Wolfe.

KNOX CO. 25 April 1999. Temp. 50-75°F; variable clouds, clear to mostly cloudy; wind light to moderate. Twenty-seven observers in 16 parties logged 429 party miles (371 by car, 58 on foot) plus 3.5 hours and 30.5 miles owling and 2 hours watching feeders. 134 species (plus 2 count week); 7484 individuals. Count week birds included Veery and Northern Waterthrush. Highlights included

Yellow-crowned Night-Heron, Northern Harrier, Whip-poor-will, Hermit Thrush, and Bobolink. Cardinals were second only to starlings in number of individuals counted. Participants: Jean Alexander; Jane Beintema; Jim and Betty Reid Campbell; Howard Chitwood; Marcia Davis; Dean Edwards (compiler: 521 E Old A.J. Hwy, Jefferson City, TN 37760); Amos Fields; Barbara Finney; Gary Hartman; Audrey Hoff; Ron Hoff; Susan Hoyle; David Johnson; Joel Keebler; Ben, Dan, and Laurie Mooney; Dollyann Myers; Charles Nicholson; Holly Overton; Truett Patterson; Martha Rudolph; Boyd Sharp; Liz Singley; David Trently; and Chris Welsh.

MURFREESBORO. 1-2 May 1999. Temp. 70°F; sunny and windy. Eight members of the Murfreesboro Chapter of TOS participated in the spring count, locating 1649 individuals of 101 species. Species number was down considerably from the 124 found in 1998, but participation and effort were also down considerably. Highlights included Northern Harrier, Northern Bobwhite, Solitary and Spotted Sandpipers, Yellow-billed Cuckoo, Bewick's Wren, Gray-cheeked Thrush, and Dickcissel. Participants: Bertha Chrietzberg, Wilma Hunter (compiler: 3659 Wilson Overall Rd., Murfreesboro, TN 37127) and Richard Hunter, David McCarroll, George Neal, Robert and Pat Sanders, and Terry Witt.

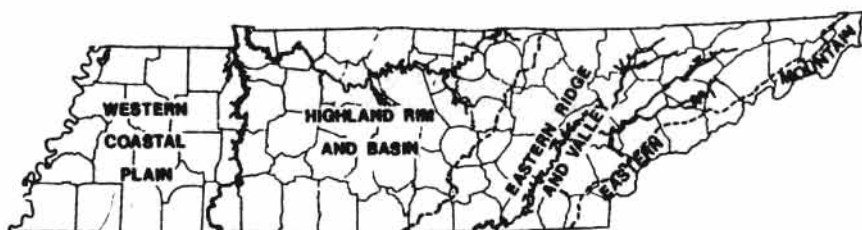
NASHVILLE. 8 May 1999. 0500-2100. Temp. 50-80°F. Twenty-nine observers banded 320 miles and 77 hours. 158 species: 5925 individuals. Count area includes Davidson and Cheatham Co., Old Hickory Lake and the Gallatin Steam Plant in Sumner Co., Percy Priest Lake in Rutherford Co., and Owl's Hill Nature Center in Williamson Co. Highlights included Great, Snowy, and Cattle Egrets; Little Blue Heron; Bald Eagle; Sora; Semipalmated Plover; Semipalmated, White-rumped, and Pectoral Sandpipers; Dunlin; Short-billed Dowitcher; Caspian Tern; Willow Flycatcher; Marsh Wren; Gray-cheeked Thrush; Philadelphia Vireo; Black-throated Blue, Cerulean, Wilson's, and Canada Warblers (among 32 warbler species); Dickcissel; and Lincoln's Sparrow. Participants: Jan Alexander, Hazel Cassel, Phillip Casteel, Richard Connors, Marty Dehart, Jay DesGrosellier, Carrie Dortch, Jerry Drewry, Joe Francis, Bill Franks, Mark Hackney, Barbara Harris, Cass Kennedy, Kathy Lee, Heather Leverett, Sue Marden, Dick Newton, Gwen Quillen, George Rentschler, Jan Shaw (compiler: 5019 Timberhill Dr., Nashville, TN 37211), Chris Sloan, Barbara Stokes, Sabin Thompson, Rita Venable, and Mary Zimmerman.

PUTNAM CO. 8 May 1999. Temp. 51-75°F; wind variable 0-20 mph; mostly sunny skies. Fifteen observers in 6 parties spent 74.5 party hours (59.5 by car, 15 on foot) covering 511 miles (501 by car, 10 on foot) tallying Putnam Co. birds. In addition, 3 hours and 44 miles were devoted to owling. 128 species; 8439 individuals. Highlights: Double-crested Cormorant, Snow Goose, and Ruddy Duck were firsts for the Putnam count, bringing the all-time species count for the Putnam Co. Spring Count to 188. Wild Turkey, Great Crested Flycatcher, Yellow-throated Vireo, House Wren, Yellow-throated Warbler, and Chipping Sparrow were found in all-time high numbers for the county. Participants: Terry Campbell, Laurie Cleary, Daniel Combs, Mike Edwards, Ginger Ensor, Graham Kash, Kenneth Morgan, Jan North, Tom Saya, Joanne Schaefer, Jeanne Schmitzer, Richard Simmers Jr., Stephen Stedman (compiler: 2675 Lakeland Dr., Cookeville, TN 38506) and Barbara Stedman, and Winston Walden.

SHELBY CO. 8 May 1999. 0700-1730. Temp. 56-72°F; partly cloudy with moderate wind. Twenty-four observers birded 25 hours and 18 miles by foot and 20 hours and 82 miles by car. 140 species: 5214 individuals. Highlights included Anhinga; American Bittern; Northern Shoveler; Lesser Scaup; Mississippi Kite; Bald Eagle; Sora; Black-necked Stilt; Willet; Scissor-tailed Flycatcher; Fish Crow; Winter and Marsh Wrens; Ruby-crowned Kinglet; Gray-cheeked Thrush; Philadelphia Vireo; Swainson's, Wilson's, and Canada Warblers; and Lincoln's Sparrow. Participants: Charles Askew, Betty and Dana Blaylock, Chad and Bob Brown, Carolyn Bullock, Karen Forbes, Martha Heinemann, Margaret Jefferson, Kathy and Prudence Katze, Jo Pascual, George and Jeanne Payne, William Peeples, Dick Preston, Barbara and Forrest Priddy, Virginia Reynolds, Ed Thomas, Martha Waldron (compiler: 1626 Yorkshire Dr., Memphis, TN 38119), Barbara Wilson, John and Linda Zempel.

THE SEASON

RICHARD L. KNIGHT, Editor



SUMMER: 1 JUNE - 31 JULY 1999

The summer of 1999 appeared to be a productive season, as numerous breeding accounts are included in this report. Peregrines nested successfully at two East Tennessee sites for the third consecutive year. A pair of Western Kingbirds was documented breeding in the state for the first time. Scissor-tailed Flycatchers were found in two regions, with a successful nest reported in the Highland Rim and Basin. Bobolinks returned to a site occupied last summer. Hermit Thrushes and Savannah Sparrows continue to be found in their limited range in northeast Tennessee. The expansion of Eurasian Collared-Doves continues. A singing Olive-sided Flycatcher in mid-June in the eastern mountains was most likely just a late migrant. The most notable rarity of the season was the Limpkin found at Hatchie NWR, representing the second state occurrence.

Standard Abbreviations

ad- adult	L- Lake
Co- County	lrs - latest reported sighting
ers- earliest reported sighting	m - male
et al. - and others	Mtn - Mountain
fide - reported by	R - River
Hwy - Highway	S.P. - State Park
im- immature	yg- young

WESTERN COASTAL PLAIN REGION — This summer season provided a pleasant mixture of the usual residents and transients, plus some firsts as the century drew to a close. The weather seemed average, but most of the seasonal rainfall came in early June, leaving July dry as a bone. Consequently, water holes dried up and deeper ponds and lakes began to shrink. The region was not as thoroughly covered this season as in past years, which may account for low numbers and scarcity of sightings in West Tennessee. However, an early arrival record was set for American Avocets. Observers at the Hatchie NWR reported a Limpkin, just the second ever in the state. A nest of Cedar Waxwings found along the Wolf River was a first in Fayette County. A Western Kingbird nest with young at the EARTH Complex substantiated the first nesting record in Tennessee.

Pelican - Dove: **American White Pelican:** 1 Jun (30) Phillipy Pits, Lake Co (WRP). **Egret rookery:** 6-7 Jul (200+ **Cattle Egrets** & 15+ **Little Blue Herons**) Mississippi R, mile 759 (Ken Jones, John Rumancik), only the birds observed from the periphery. **Tricolored Heron:** 5 Jun (1 ad) Hwy 79W & Great River Rd., Lake Co (MAG, Nancy Moore, JKS, MJW, JRW). **American Black Duck:** 5 Jun (1) Hwy 79W & Great River Rd., Lake Co (MAG, Nancy Moore, JKS, MJW, JRW). **Blue-winged Teal:** 1-2 Jun (2 pair) Black Bayou WMA, Lake Co (WRP). **Northern Shoveler:** 3 Aug (1) Eagle Lake WMA, Shelby Co (WRP). **Cooper's Hawk:** 10 Jun (1) Wolf R, Fayette Co (RPF, SNM, Larry Smith, Martha Waldron); 15 / 25 Jul (1) Shelby Farms, Shelby Co (WRP). **LIMPKIN:** 27 Jul (1) Hatchie NWR, Haywood Co (RPF, Alex Wyss), 2nd state report. **King Rail:** 5 Jun (2 ad, 10 yg) Hwy 79W & Great River Rd., Lake Co (MAG, JKS, MJW, JRW). **Semipalmated Plover:** 1 Jun (15) Phillipy Pits, Lake Co (WRP). **Black-necked Stilt:** 19 Jun (91 ad, 20 yg) NW Shelby Co (Martha Heineman, Ed Thomas). **American Avocet:** 6 Jul (2) Miss. R, mile 771 (Ken Jones), record early autumn arrival in state. **Willet:** 6 Jul (11) Miss. R, mile 771 (Ken Jones). **White-rumped Sandpiper:** 1 Jun (1 / 12) I-55 & Great River Rd., Dyer Co / Phillipy Pits, Lake Co (WRP). **Short-billed Dowitcher:** 26 Jul / 3 Aug (4 / 1) Eagle Lake, Shelby Co (WRP). **Eurasian Collared-Dove:** 17 / 19 Jun (2 / 1) E Shelby Co (WRP).

Kingbird - Tanager: **WESTERN KINGBIRD:** 3 Jul thru period (2 ad, 4 nestlings) EARTH Complex, Shelby Co (JRW, MAG), photos, first confirmed nesting for Tennessee. **Cliff Swallow:** 2 Jun (3) spillway at Reelfoot L, Obion Co (WRP), seen entering nest site under bridge. **Bewick's Wren:** 5 Jul (1) E Memphis (SNM). **Cedar Waxwing:** 2 Jun (4) stop 38 on Tiptonville BBS, Obion Co (WRP); 10 Jun (feeding yg) Wolf R. above Bateman bridge (RPF, SNM, Larry Smith, Martha Waldron), 1st nesting record for Fayette Co. **Scarlet Tanager:** 2 Jun (1) half-mile NE of Samburg, Obion Co (WRP), site of previous summer records.

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HIGHLAND RIM AND BASIN REGION — For the Nashville area, the months of June and July were near normal in both temperature and precipitation. An ongoing highlight of the summer was the discovery in June of a pair of Scissor-tailed Flycatchers nesting near a busy intersection in Franklin. As the summer progressed, young were seen in the nest, and by 20 July the adults were found feeding three fledglings. Sighted in Rutherford County was a Bewick's Wren, noted as a state Threatened Species. Eurasian Collared-Doves continued their expansion. Although previously seen in this region, the first Nashville sighting was made during this period.

Loon - Hawk: **Common Loon:** 29 Jul (2) Old Hickory L (PDC). **Pied-billed Grebe:** 30 Jun (1) Old Hickory L (PDC); all season (1) Cane Creek Park, Putnam Co (SJS). **Great Egret:** 30 Jun (1) Pennington Bend (MLM). **Snowy Egret:** 3 Jul (1) Pennington Bend (MLM). **Yellow-crowned Night-Heron:** 1 Jun (2) Nashville (Jan & David Alexander). **Wood Stork:** 12-19 Jul (1-2 im) Duck River Unit, Humphreys Co (Clayton Ferrell, Patrick Lemons, Robert Wheat). **Hooded Merganser:** 12 Jun (1) Monsanto Ponds (SJS, MP). **Osprey:** 31 Jul (1) Gallatin Steam Plant (TD). **Sharp-shinned Hawk:** 28 Jul (2 im) Standing Stone S.P., Overton Co (SJS, MP).

Plover - Dove: Semipalmated Plover: 31 Jul (1) Gallatin Steam Plant (TD). **Black-necked Stilt:** 28 Jun (1) Duck River Unit, Humphreys Co (Clayton Ferrell, Patrick Lemons, Robert Wheat). **Least Sandpiper:** 31 Jul (1) Gallatin Steam Plant (TD). **Ring-billed Gull:** 30 Jun (1) Old Hickory L (PDC). **Least Tern:** 31 Jul (1) Gallatin Steam Plant (TD). **Eurasian Collared-Dove:** 2 Jul (1) Nashville (Michael Bierly).

Flycatcher - Sparrow: Willow Flycatcher: 12 Jun (1) Monsanto Ponds (SJS, MP); 30 Jun - 2 Jul (1-2) Cane Creek Park, Putnam Co (SJS), first Co record. **Scissor-tailed Flycatcher:** 11 Jun thru period (nesting pair) Franklin (Joe Stone, m.ob.), 3 yg fledged, see intro. **Warbling Vireo:** 12 Jun (1) Shelby Park, Davidson Co (PDC); 12 Jun (2) Maury Co (SJS). **Bewick's Wren:** 5 Jun (1) Rutherford Co (DJT). **House Wren:** 11 Jun (2, 1 carrying food) Shelby Park, Davidson Co (PDC). **Dickcissel:** 12 Jun (1) Monsanto Ponds (SJS, MP). **Lark Sparrow:** 5 / 18 Jun (2 / 5-6) Rutherford Co (DJT / Hazel Cassel). **Grasshopper Sparrow:** 31 Jul (7) Warren Co (SNM). **Swamp Sparrow:** 1 Jul (1 banded) Radnor L, Davidson Co (Portia Macmillan), apparently first summer record in state.

Locations: Gallatin Steam Plant - in Sumner Co; Monsanto Ponds - in Maury Co; Old Hickory L - in Davidson & Sumner Cos; Pennington Bend - in Davidson Co.

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CUMBERLAND PLATEAU / RIDGE AND VALLEY REGION — Both temperature and rainfall were near average, although it was dry toward the end of July. Conditions seemed generally favorable for successful nesting. Noteworthy breeding reports include Pied-billed Grebe, Double-crested Cormorant, Bald Eagle, and Peregrine Falcon. Observations of several other scarce, local, or poorly-known regional breeding birds were reported, as well. Lingered waterfowl, wandering waders, and migrant shorebirds rounded out the season. Twenty-one counties are represented in this account. In particular, coverage of the northern Cumberlands was better than usual.

Loon - Duck: Common Loon: 4-11 Jun (1) Chickamauga L, Hmlt. Co (KAC et al.). **Pied-billed Grebe:** mid Jul (pair w/ yg) Kyker Bottoms, Blount Co (Boyd Sharp et al.). **Double-crested Cormorant:** 13 Jun (1) Phipps Bend & (1) Kingsport (RLK); still nesting in heronry at Holston Army Ammunition Plant, Hawkins Co (fide Brian Kegley, TWRA). **Great Egret:** 7 Jun (2) Cherokee Dam (KDE); 13 Jun (1) Phipps Bend (RLK); 5-25 Jul (1) Greene Co (DHM, ACL); 10-30 Jul (1) Austin Springs, Wash. Co (RLK); 11 Jul (1) Rhea Co (SJS); 13 / 30 Jul (1) Eagle Bend (Audrey Hoff / KDE). **Little Blue Heron:** 5 / 25 Jul (1 im) Greene Co (DHM, ACL). **Cattle Egret:** 3 / 11 Jul (5 / 13) Hwy 27 between Rockwood & Spring City, Rhea Co (SJS). **Yellow-crowned Night-Heron:** 16 / 26 Jun (7 ad, 3 yg) downtown Knoxville (KDE, Chris Welsh); 12 Jul (2 im) Chattanooga (KAC). **Black-crowned Night-Heron:** 7 Jun (200+) Cherokee Dam (KDE); 21 Jun / 3 Jul (1-3) Cove Lake S.P., Campbell Co (Jimi Moore); 23 Jul (20+) Douglas Dam, Sevier Co (RLK). **Gadwall:** 28 Jun / 25 Jul (3) Ktn. Stm. Pl. (KAC, CAS / KDE, DJT). **American Black Duck:** 28 Jun (1) Ktn. Stm. Pl. (KAC, CAS). **Blue-winged Teal:** 22-23 Jul (1 m) Brainerd Levee, Hmlt. Co (Janice Chadwell). **Lesser Scaup:** 13 Jun (1 m) Kingsport (RLK).

Osprey - Woodpecker: **Osprey:** 27 Jun (1) Greene Co (DHM, ACL); 16 Jul (1) Austin Springs, Wash. Co (RLK); 25 Jul (6) Ktn. Stm. Pl. (DJT, KDE). **Bald Eagle:** 1 nest at Cherokee L, Hawkins Co (Pete Wyatt); 20 Jun (1 ad, 1 yg at nest) Tennessee R, near Huffine Island, Roane Co (JDJ, Harriet Joslin). **Cooper's Hawk:** 6 sightings in Greene Co (DHM, ACL). **Peregrine Falcon:** 6 Jun (1 yg fledged, but not seen thereafter) Chickamauga Dam nest site, Hmlt. Co (Harold Sharp), 3rd consecutive year of occupancy. **American Coot:** 30 Jul (1) Eagle Bend (KDE). **Greater Yellowlegs:** 28 Jun (1) Ktn. Stm. Pl. (KAC, CAS), ers. **Solitary Sandpiper:** 12 Jul (1) Brainerd Levee, Hmlt. Co (KAC), ers. **Spotted Sandpiper:** 25 Jun (1) Goodfield WMA, Meigs Co (David Vogt), ers. **Semipalmated Sandpiper:** 4 Jun (1) Jefferson Co (KDE); 5 Jun (1) Ktn. Stm. Pl. (KDE, DJT), Irs; 22 Jul (3) Eagle Bend (NM), ers. **Least Sandpiper:** 10 Jul (2) Wash. Co (RLK), ers. **Pectoral Sandpiper:** 22 Jul (4) Eagle Bend (NM), ers. **Short-billed Dowitcher:** 9-10 Jul (1) Greene Co (DHM, ACL). **Barn Owl:** mid Jun - Aug (4 yg in silo) New Market, Jefferson Co (KDE). **Red-headed Woodpecker:** 23 Jun (1) Cherokee Dam, Jefferson Co side (KDE); 4 Jul (1) Greene Co (DHM, ACL).

Flycatcher - Waxwing: **Willow Flycatcher:** 4 / 6 Jun (1) near Wartburg, Morgan Co (SJS, MP); 5 Jun (2) Ktn. Stm. Pl. (DJT, KDE); 9 Jun (1) Bledsoe Co (Roi & Debbie Shannon); 9 Jun (1) Limestone, Wash. Co (RLK); 10 Jun (1) Tri-cities Airport, Sullivan Co (RLK), in upland patch of small black locusts; 13 Jun (3) Phipps Bend (RLK). **Least Flycatcher:** 13 Jun (1) Anderson Co (RDH, DM, FLB, SAB); 15 / 18 Jun (1) Cross Mtn (NM, MJW); 18 Jun (1) Old Hwy 63, 5.5 miles from Caryville, Campbell Co (NM); 19 Jun (1) Fork Mtn Rd, Anderson Co (Boyd Sharp, RDH, DM et al.); calling birds from upper Cumberlands where breeding still not confirmed. **Scissor-tailed Flycatcher:** 12 Jul (1) I-75 at Charleston exit, Bradley Co (Jack Colcolough), 3rd year at site. **Loggerhead Shrike:** 19 Jun (1 ad, 2 yg) Wash. Co (DHM, ACL); late Jun (2 ad, 3 yg) Jefferson Co (KDE). **Blue-headed Vireo:** 4 Jun (13 on 9 mile hike) Frozen Head (SJS). **Warbling Vireo:** present at 2 sites each in Greene / Wash. Cos (DHM, ACL / RLK). **Tree Swallow:** nesting at Sewanee, Franklin Co (David Haskell fide Jerry Ingles); continues to increase as breeders in northeast Tenn. (RLK). **Northern Rough-winged Swallow:** 2 Jun (pair apparently nesting in exhaust port of dry-docked cabin cruiser) Boone L, Sullivan Co (RLK). **Cliff Swallow:** 9 Jun (62+ at 5 bridges) Nolichucky R, Wash. Co (RLK); 13 Jun (150+ nests at 3 bridges) Kingsport (RLK); 23 Jul (220+ nests) Hwy 338 bridge below Douglas Dam, Sevier Co (RLK). **Veery:** 4 Jun (2) Frozen Head (SJS); 15 Jun (2) Cross Mtn (NM, MJW). **Cedar Waxwing:** 18 Jun (1 on nest) Cross Mtn (NM); 19 Jun (1 on nest) Fork Mtn Rd, Anderson Co (RDH, DM et al.).

Warbler - Oriole: **Golden-winged Warbler:** 13 Jun (5) Anderson Co (RDH, DM, FLB, SAB); 15 Jun (2) Cross Mtn (NM). **Chestnut-sided Warbler:** 15 Jun (ad feeding fledgling) Cross Mtn (NM, MJW); 19 Jun (1 singing m) House Mtn, Knox Co (KDE, Roger & Christine Tankersley); 30 Jun (1 m) Raven Cliff, Sequatchie Co (Roi & Debbie Shannon). **Black-throated Blue Warbler:** 4 Jun (8 on 9 mile hike) Frozen Head (SJS). **Blackburnian Warbler:** 5 Jun (1) Old South Mac trail, Frozen Head (SJS, MP, David Withers); 13 Jun (1) Anderson Co (RDH, DM, FLB, SAB). **Pine Warbler:** 7 / 10 Jun (3) Boone L, Sullivan Co (RLK). **Prairie Warbler:** 1-21 Jun (9 at 5 sites) Greene Co

(DHM, ACL). **Cerulean Warbler:** 4 Jun (74 on 9 mile hike) Frozen Head (SJS); 5 Jun / 18 Jul (1 / 1) Oak Ridge Reservation, Roane Co (Craig Walker, Chris Welsh / JDJ), separate sites, apparently first there since 1974; 13 Jun (10+) Anderson Co (RDH, DM, FLB, SAB); 15 Jun (39) Royal Blue WMA, Campbell & Anderson Cos (NM, MJW); 5 Jul (2 broods of 3 yg each) near Caryville, Campbell Co (NM). **American Redstart:** 4 Jun (73 on 9 mile hike) Frozen Head (SJS). **Prothonotary Warbler:** 13 Jun (2 m) Phipps Bend (RLK); 20 Jun (4) Tennessee R, Roane Co (JDJ, Harriet Joslin); 21 Jun (4 m, nest w/ yg) Cove Lake S.P., Campbell Co (NM); thru July (1) Austin Springs, Wash. Co (RLK). **Swainson's Warbler:** 4 Jun (1) near Leatherwood Ford, Big South Fork, Scott Co (SJS); 5 Jun (1) Angel Falls trail, Big South Fork, Scott Co (NM); 30 Jun, 3 / 11 Jul (1) White's Creek, Rhea Co (SJS). **Louisiana Waterthrush:** 11 Jun (nest w/ 3 yg) Holston R, near Laurel Run Park, Hawkins Co (Bruce Cole). **Savannah Sparrow:** thru Jun (7 singing at 3 sites) Wash. Co (RLK). **Grasshopper Sparrow:** 1 Jun (10) Greene Co (DHM, ACL); 9 Jun (11) Conklin & Limestone, Wash. Co (RLK); 13 Jun (6) Phipps Bend (RLK); 25 Jul (15+, including 3 juv.) Ktn. Stm. Pl. (DJT, KDE). **Rose-breasted Grosbeak:** 4 Jun (5 on 9 mile hike) Frozen Head (SJS). **Blue Grosbeak:** 1 Jun (6) Greene Co (DHM, ACL). **Dickcissel:** 1 Jun (3) Mohawk, Greene Co (DHM, ACL); thru 10 Jul (1-3 m) Limestone, Wash. Co (RLK), 4th consecutive year site occupied. **Bobolink:** 23 May & 9 Jun (1 m) Conklin, Wash. Co (RLK), at site where breeding occurred last year. **Brown-headed Cowbird:** 17 Jul (fledgling fed by female Scarlet Tanager) Oak Ridge Reservation, Roane Co (JDJ). **Orchard Oriole:** 14 Jun (SY m & female w/ 4-5 yg) Cherokee Dam, Jefferson Co side (KDE), breeding by a year-old male.

Locations: Cherokee Dam - at Grainger / Jefferson Co line; Cross Mtn - in Campbell Co; Eagle Bend - fish hatchery in Anderson Co; Frozen Head - Frozen Head State Park in Morgan Co; Hmlt. Co - Hamilton Co; Ktn. Stm. Pl. - Kingston Steam Plant, Roane Co; Phipps Bend - in Hawkins Co; Wash. Co - Washington Co.

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EASTERN MOUNTAIN REGION — Precipitation was below normal for the period. An Olive-sided Flycatcher was found singing persistently in suitable nesting habitat at 3200 feet elevation in mid-June in Carter County. However, it was not present on subsequent visits. Both Alder and Willow Flycatchers were present and singing in July at Orchard Bog in Shady Valley, Johnson County. It is very unusual to have these two closely related species as potential breeders at the same location.

Heron - Woodpecker: **Green Heron:** 7 Jul (6) Orchard Bog (JLS, LAS), high count for Shady Valley. **Yellow-crowned Night-Heron:** 19 Jun (1 ad) near Elizabethton, Carter Co (RLK). **Bald Eagle:** 3 Jun (1 ad) Watauga L (JHM); 16 Jun (1 ad) S. Hol. L. (Don Hill, fide JWC). **Sharp-shinned Hawk:** 19 Jun (1) Walnut Mtn (RLK); 26 Jun (1) Cherochala Skyway (DJT et al.). **Cooper's Hawk:** 1 Jun (1) Carter Co (RLK). **Peregrine Falcon:** nested again near Alum Cave Bluff, GSMNP, apparently fledging 3 yg, using a new nest site (an old raven's nest) on the same cliff (RLK, Kim DeLozier). **Northern Bobwhite:** 18 Jun (1) Carver's Gap, Roan Mtn (RLK). **WHIMBREL:** 30

Jul (1) S. Hol. L. (JWC, Andy Jones), 4th northeast Tenn. record. **American Woodcock:** 7 Jul (2) Shady Valley (JLS, LAS). **Mourning Dove:** 28 May (4 ad, 4 yg at feeder) Roan Mtn at 4450 ft (RLK), breeding at this regular high elevation site; 28 May (2) Carver's Gap, Roan Mtn (RLK), unusually high elevation (5500 ft). **Red-headed Woodpecker:** 19-30 Jun (pair) Holston Valley, Sullivan Co (Richard Lewis), apparently nesting in a residential area.

Flycatcher - Kinglet: **OLIVE-SIDED FLYCATCHER:** 19 Jun (1 singing) White Oak Ridge, Carter Co (JHM, RLK), see comments in intro. **Acadian Flycatcher:** 12 Jun (18) Walnut Mtn (RLK), max. **Alder Flycatcher:** 28 May - 3 Jul (1-6) Roan Mtn (RLK, DHM); 5 / 18 Jul (2) Orchard Bog (JLS, LAS). **Willow Flycatcher:** 8 Jun (2) Watauga L (RLK); 5 / 18 Jul (4 / 3) Orchard Bog (JLS, LAS). **Least Flycatcher:** 5 Jun (5) Roan Mtn (RLK), max. **Red-eyed Vireo:** 8 Jun (75) Watauga L (RLK), max. **Tree Swallow:** late May & again 18 Jun (pair feeding yg in nest box) Tenn side of Round Bald, Roan Mtn (Scotty Myers / RLK), at 5725 ft elevation on grassy bald, two separate broods; 2 pairs using nest boxes at town of Unicoi in Unicoi Co (JHM); 7 Jul (20+) Orchard Bog (JLS, LAS). **Cliff Swallow:** 19 Jun (16 nesting under bridge) Watauga R at town of Watauga, Carter Co (Joy & Mark Crass, RLK); 26 Jun (30) Chota, Monroe Co (DJT et al.); 7 Jul (30+) Orchard Bog (JLS, LAS). **Common Raven:** 26 Jun (5) Cherohala Skyway (DJT et al.). **Black-capped Chickadee:** 26 Jun (2) Cherohala Skyway (DJT et al.). **Red-breasted Nuthatch:** 6 Jun (1) Walnut Mtn (RLK), at 3500 ft in white pine / hemlock. **Brown Creeper:** 8 Jun (1) Little Milligan, Carter Co (RLK); 18 Jun (5) Roan Mtn (RLK), max there; 18 Jun / 15 Jul (1) Unaka Mtn (AJT / RLK); 19 Jun (1) Walnut Mtn (RLK). **Winter Wren:** 6 Jun (1) below Laurel Gap, Carter Co (RLK), 2nd year at this relatively low site (3000 ft). **Golden-crowned Kinglet:** 5 Jun (26) Roan Mtn (DHM), max; 15 Jul (3 broods) Unaka Mtn (RLK).

Thrush - Siskin: **Hermit Thrush:** 8 Jun - 3 Jul (1-3) Roan Mtn (RLK, Ed Schell, Charles R. Smith); 15 Jul (1) Unaka Mtn (RLK); 22 Jul (3) Mt. LeConte, GSMNP (RLK). **Northern Parula:** 8 Jun (25) Watauga L (RLK), max. **Chestnut-sided Warbler:** 25 May / 11 Jun (2) Horse Cove Gap, Washington Co (Fred J. Alsop / RLK), 1st or 2nd summer record in Co. **Magnolia Warbler:** 22 May - 23 Jun / 15 Jul (up to 10 m) Unaka Mtn (AJT / RLK). **Blackburnian Warbler:** 6-19 Jun (1) Walnut Mtn (RLK, JHM). **Yellow-throated Warbler:** 8 Jun (34) Watauga L (RLK), new high count in state. **Black-and-white Warbler:** 12 Jun (24) Walnut Mtn (RLK), max. **Swainson's Warbler:** 12 Jun (1) Shady Valley (JLS, LAS); 27 Jun (1) Monroe Co (DJT et al.). **Canada Warbler:** 6-12 Jun (1) Walnut Mtn at 2750 ft (RLK), rather low elevation. **Indigo Bunting:** 5 Jun - 3 Jul (3 m) Roan Mtn, above 5500 ft (RLK). **Savannah Sparrow:** 19 Jun (pair, agitated & carrying food) Doe Valley, Johnson Co (RLK); 29 Jun / 25 Jul (2) Orchard Bog (JLS, LAS). **Song Sparrow:** 28 May - 3 Jul (1) Carver's Gap, Roan Mtn (RLK). **Brown-headed Cowbird:** 28 May (1 m) Roan Mtn at 4450 ft (RLK); 6 / 12 Jun (3 m) Walnut Mtn, at 3 sites above 3500 ft (RLK). **Red Crossbill:** all summer (up to 100) Roan Mtn (RLK, Charles R. Smith); 7 Jun / 21 Jul (2 / 3+) Newfound Gap, GSMNP (Carolyn Bullock, Virginia Reynolds, Linda Zempel / RLK); 7 Jun (2) Unaka Mtn (AJT); 22 Jul (5+) Mt LeConte, GSMNP (RLK). **Pine Siskin:** 22 May - 23 Jun (2-10) Unaka Mtn (AJT); 28 May - 3 Jul (10-40) Roan Mtn (RLK).

Locations: Cherohala Skyway - in Monroe Co; GSMNP - Great Smoky Mountains National Park; Orchard Bog - in Shady Valley, Johnson Co; Roan Mtn - in Carter Co; S. Hol. L. - South Holston Lake, Sullivan Co; Unaka Mtn - in Unicoi Co; Walnut Mtn - in Carter Co; Watauga L. - in Carter & Johnson Cos.

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JHM - Joe H. McGuiness	JRW - Jeff R. Wilson

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INSTRUCTIONS TO AUTHORS

The Migrant records observations and studies of birds in Tennessee and adjacent areas.

SUBMISSIONS: The original and two copies of the manuscript should be sent to the Editor: J.D. Joslin, 112 Newcrest Lane, Oak Ridge, TN 37830. Manuscripts that have been published in other journals should not be submitted. Electronic copies on disk or sent by e-mail to <jdjoslin@esper.com> are greatly appreciated.

MATERIAL: The subject matter should relate to some phase of Tennessee ornithology. It should be original, factual, concise, and scientifically accurate.

STYLE: Both articles and short notes are solicited; 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 *CBE Style Manual*; this book is available at many public libraries and from the Council of Biology Editors, Inc., 111 East Wacker Drive, Suite 3200, Chicago, IL 60601-4298.

COPY: Manuscripts should be typed *double-spaced* on 8.5 x 11" paper with adequate margins for editorial notations. Tables and figures should be prepared on separate sheets with appropriate headings; see *CBE Style Manual* for examples of appropriate form for tables. Photographs intended for reproduction should be sharp with good contrast on glossy white paper; black-and-white photographs will usually reproduce better than color photographs. Weights, measurements, and distances should be in metric units. Dates should be in "continental" form (e.g., 16 March 1997). Use the 24-hour clock (e.g., 0500 or 1900).

NOMENCLATURE: The scientific name of a species should be given after the first use of the full common name in the text. The scientific name should be underlined and in parentheses. Names should follow the *A.O.U. Check-list of North American Birds* (seventh edition, 1998, or supplements).

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

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