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## THE MIGRANT

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## RED-BREASTED NUTHATCHES IN THE BIG SOUTH FORK NATIONAL RIVER AND RECREATION AREA: FIRST NESTING RECORD FOR TENNESSEE'S CUMBERLAND PLATEAU

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On 26 May 2002, while stopping at an area of mature white pines (*Pinus strobus*) along Rt. 297 in the Big South Fork National River and Recreation Area (BSFNRRA), Scott County, Tennessee, Frank Renfrow found a male Red-breasted Nuthatch (*Sitta canadensis*). Renfrow followed the bird back into the woods and observed it flying back and forth at about 10-minute intervals between a particularly large white pine with a broken branch dripping with sap and an area of dead pine snags at the edge of a ridge about 50 m distant. This bird was also observed gleaning insects from the lichen-encrusted twigs of an oak (*Quercus* sp.) and giving its plaintive "yna, yna, yna" call, typical of the species. Both Renfrow and Stephen J. Stedman returned to this location on several dates during June 2002 but were unable to relocate this nuthatch (Stedman and Stedman 2002).

On 31 May 2003, Renfrow stopped at this same location to check for this species in the late afternoon. A pair of Red-breasted Nuthatches soon made its presence known with occasional call notes repeated between them. While observing the birds foraging on the smaller branches of both pines and deciduous trees, Renfrow noted that the female appeared particularly dingy, as if she had been incubating in a nest cavity. He followed the calls of the pair to a spot on the north side of the road and found the birds flying back and forth in the area of a small dead oak. No positive evidence of nesting was obtained during this observation, and visits to this site by Stedman during the next week failed to disclose sightings of the nuthatches.

Renfrow relocated the nuthatches at this site 7 June after finding a male foraging in oaks and Virginia pines (*Pinus virginiana*) along the north side of the road. The male flew to an area with many standing dead pines on the south side of the road, followed a minute later by a female. Pursuing the birds up a steep embankment, Renfrow searched the many dead pine snags in that location for a possible nest cavity. In the meantime the birds continued to visit this area at 10-minute intervals, with the male giving a repeated "yna, yna, yna" call from the top of one of the taller dead pines. Renfrow noticed a small dead white pine that was broken off at approximately 7 m height. A hole approximately 3 cm in diameter was located at approximately 5 m height. A very small amount of pine sap could be seen in the sun's reflection at the lower edge of this hole, although the rough bark and lichens surrounding the hole made this somewhat difficult to observe clearly. Almost immediately after this discovery, the female Red-breasted Nuthatch landed on the hole edge, and the bill of a nestling appeared in view as it took food from the female. The peeping/begging notes of the nestling could be clearly heard as it was



Figure 1. Adult Red-breasted Nuthatch at nest cavity 9 June 2003 near Bandy Creek, Big South Fork National River and Recreation Area, Scott County, Tennessee. (photo: Stephen J. Stedman)

fed. About 20 minutes later the female flew straight into the hole, left about 20 minutes later, and again flew straight in 5 minutes later. About 10 minutes later the male began calling from nearby and then flew to the nest hole lip and fed the young or female.

Stedman visited the nest site on seven days during the period of 9-18 June, obtaining a photograph (Figure 1) on the first of these dates. During all visits the nuthatches were extremely quiet and seldom vocalized, behavior quite consistent with that described by Hicks (1935). No young were seen on any of these dates, but fecal sacs were observed being carried from the nest by adults on several dates, positively indicating the presence of young in the nest. On 17 June an adult carried fecal sacs out at 1016 and at 1025 EDT, indicating at least two young were in the nest. However, the rate at which the adults brought food to the nest, occasionally coming and going every 1-2 min for 10-20 min at a time, suggests that a full brood of 4-7 young may have been present in the nest.

On 21 June, Renfrow returned to the site in the mid-afternoon. After approximately 10 minutes, the female was seen entering the nest hole and then leaving several minutes later. The male soon came to the nest hole edge apparently feeding the young inside. About five minutes later the female reentered the hole and left after a minute or so. These observations were very similar to those of the initial nest observations on 7 June, despite the 14-day interval. However, no sound or sight of the nestlings was noted. The nest hole appeared to have considerably more sap clinging to the lower edge on the latter visit. The daubing of sap around the entrance to the nest hole is a characteristic habit of the Red-breasted Nuthatch, possibly involving a strategy to repel predators (Kilham 1972).

This nest was located among a number of dead and living white pines about 15 m from the south edge of Rt. 297 at a site approximately 1 km west of West Bandy Road (elevation 400 m). This entire area has been severely affected by a recent outbreak of southern pine beetles (Dendroctonus frontalis; Stedman and Stedman 2002), and a large number of standing and fallen dead pines were present at the site. Pitch pine (Pinus rigida) and Virginia pine were particularly hard hit by pine beetle infestations, but many white pines were also affected. A thick understory of rhododendrons (Rhododendron maximum) and mountain laurel (Kalmia latifolia), as well as greenbriar (Smilax sp.) and other vines, made this area particularly difficult to access. Previously existing trails in the area had also been rendered virtually impassable due to the fallen pines. These factors might explain our inability to relocate the nuthatches at this site in June 2002. However, even in the absence of such factors, nesting Red-breasted Nuthatches can be extremely difficult to locate because of their inconspicuousness and choice of secluded habitats (Hicks 1935). Considerable suitable breeding habitat for this nuthatch exists in the Tennessee portion of the BSFNRRA. Thick stands of mature white pine are present in the gorge of Bandy Creek where it flows into the Big South Fork above Leatherwood Ford, and in the vicinity of the Bandy Creek campground, as well as around park headquarters near the East Rim Overlook and at other sites within the park.

Prior to 2002, Stedman and Stedman (2002) recorded a late spring date of 5 May

[2001] for this species within the BSFNRRA. The sighting occurred at the Oscar Blevins Farm in Fentress County approximately 5 km from the nest site. Three consecutive years of May records possibly indicate a recent expansion of this species into this park as a breeder. However, the historic name of the White Pine United Baptist Church, located close to the nest site, might also indicate that suitable habitat has long been present and that this species may have been overlooked as a breeding bird. The presence of mature white pines appears to be a consistent factor at locations where this species has nested at lower elevation sites in the southern Appalachians.

For the past eight years, a breeding population of the Red-breasted Nuthatch has been located in the Rock Bridge area (elevation 300-340 m) of the Red River Gorge, Daniel Boone National Forest, Wolfe County, Kentucky, with nesting first discovered in 1996 (Renfrow 1996, 1999, 2001). This is about 160 km northeast of the BSFNRRA and is also located along the cliff section of the Cumberland Plateau (Braun 1950).

It may be no coincidence that these two Cumberland Plateau Red-breasted Nuthatch nest records occurred at sites where remnant portions of the natural range of white pine intersect with the cliff section of the plateau. As seen in Little (1970) and in Leopold et al. (1998), there is a disjunct area of the former range of white pine which encompassed a 19-county area of eastern Kentucky and another which branched westward out of the higher mountains of Tennessee and encompassed a 16-county area in the BSFNRRA region of both states (Figure 2). The present range of white pine is now much reduced, with little white pine remaining in the Kentucky portion of the BSFNRRA or outside of the Red River Gorge area of eastern Kentucky. However, areas with considerable stands of white pine remain in the Tennessee portion of the plateau where the cliff section broadens (Braun 1950), such as south of Wartburg near the Obed Wild and Scenic River, Morgan County,

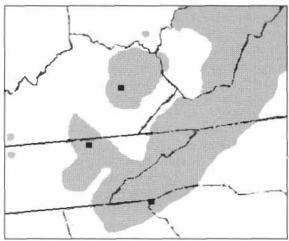


Figure 2. Three areas of Red-breasted Nuthatch nest records in low elevation areas of the Southeastern United States. Shaded area indicates the natural range of white pine.

Tennessee, Red-breasted Nuthatches might also be expected to occur as breeders at these sites (Renfrow unpubl. data).

Another lower elevation area where these birds are now known to nest is along the Chattooga River (elevation 450-690 m) in Georgia and South Carolina (Renfrow In press). Mature white pine-hemlock forest, "hard" or "southern" pines such as pitch, shortleaf (P. echinata), and Virginia pine, and a dense understory of rhododendron and mountain laurel are all characteristics that the Rock Bridge and the Chattooga River breeding sites share with the BSFNRRA breeding site. Another common feature of these sites is the presence of Swainson's Warbler (Limnothlypis swainsonii), also a species not known to breed in these areas until comparatively recent times (Brooks 1965).

In Tennessee the only previous breeding record of Red-breasted Nuthatches away from the eastern mountains consists of recently fledged young observed in the Ridge and Valley Region at Knoxville (elevation c. 300 m) during early June 1977 (Owen 1979, Nicholson 1997).

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We thank Kelly Roy for a number of valuable suggestions that improved the clarity of expression of this article.

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## A POPULATION OF BROWN-HEADED NUTHATCHES IN PUTNAM COUNTY, TENNESSEE

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Two Brown-headed Nuthatches (Sitta pusilla) were observed 15 December 2001 at the Cookeville Golf Course, Putnam County, Tennessee, by Winston A. Walden, Michael P. O'Rourke, and Graham S. Kash, providing the first record for the Cookeville Christmas Bird Count. Subsequent information gathered about the occurrence of these nuthatches at this site indicated they had been present since at least mid-February 1999 (T. R. Riddle, pers. com.), which consequently became the date of the first official county record.

A visit to the Cookeville Golf Course, which lies at an elevation of approximately 375 m, by Stedman, Walden, and Daniel L. Combs 16 December 2001 allowed an opportunity to confirm the identity of these unexpected nuthatches in Putnam County. Further visits 19 December 2001 by Stedman, Walden, and Ginger K. Ensor and 20 January 2002 by Stedman revealed at least five nuthatches present on each date. Additionally, photographic evidence was obtained by Stedman (Figure 1) on the latter date.

Visits to the Cookeville Golf Course throughout the spring of 2002 resulted in several sightings that indicated the nuthatches were breeding at this site. On 5 April 2002, an adult was noted entering a cavity in the dead limb of a still living loblolly pine (*Pinus taeda*); it may have been excavating the cavity at that time, but it was not possible to confirm this activity (Stedman unpubl. data). On 9 May 2002 an adult was noted repeatedly entering and leaving a different cavity, also in a loblolly pine, though the bird did not appear to have food in its bill, and no evidence of young was noted by Stedman and Walden. On 30 May 2002 Stedman observed a nuthatch with classic juvenile characteristics, including a yellowish lower mandible, a feature present in very young nuthatches recently out of the nest (Norris 1958, Renfrow unpubl. data). This recently fledged juvenile was seen among eight nuthatches counted at the golf course on that date, confirming the species as a breeder in the county (Stedman unpubl. data). Besides breeding evidence obtained in 2002, on 8 May 2003 an adult was observed feeding an immature bird out of the nest at the golf course by Stedman, Walden, and O'Rourke.

The habitat where the nuthatches have been observed at the Cookeville Golf Course includes about a dozen stands of mature loblolly pines, each comprised of 10-30 trees. These stands form the boundaries of many fairways at the golf course and contain some exceptionally large trees (approximately 1 meter diameter at breast height). During the winter of 2001-2002, many small- and medium-sized pines at the golf course died as a result of an outbreak of southern pine beetles (*Dendroctonus frontalis*). Many of the dead pines were removed from the edges of the fairways during the next few months, possibly degrading the habitat for the nuthatches as a result (W. K. Roy, pers. com.), but nearly all of the large pines survived, thus preserving habitat that appears suitable for maintenance of a small population of this southern nuthatch.

The Brown-headed Nuthatch has been expanding its range in Tennessee, mainly east of the Cumberland Plateau, since the late 1960s. The first nesting record for the state was reported from Hamilton County in 1977 (Haney 1981; Robinson 1990). In 1995 nesting was confirmed 126 km to the north at the Kingston Steam Plant, Roane County, Tennessee (Nicholson 1997). Non-breeding records on the Cumberland Plateau include a 29 July 1974 sighting in Van Buren County (Williams 1974; Haney 1981) and a 28 February 1990 sighting in Cumberland County (Knight 1990). A sighting in or near the Cumberland Mountains of Morgan County during July 1995 is of related interest (Roy *et al.* 2001). Records west of the Cumberland Plateau in



Figure 1. Adult Brown-headed Nuthatch in a loblolly pine at the Cookeville Golf Course, Putnam County, 20 January 2002. (photo: Stephen J. Stedman)

Tennessee are few. Besides reliable sightings on the Natchez Trace Parkway in Wayne County near the Alabama border (Bierly 1980), the only confirmed Tennessee sightings west of the plateau are from Hardin County near the Mississippi border (Cardiff 1997, Stedman 2000). An unconfirmed report of this species from Overton County (D. Chaffin, pers. com.) is the only indication that it has previously occurred in Tennessee north of I-40 and west of the plateau. However, a first record of this species for Kentucky was established in 1999 in an area of planted loblolly pines in Russell County about 80 km north of Putnam County (McNeeley 2001).

Previously considered sedentary, the Brown-headed Nuthatch is now known to be capable of movement well outside its historic range with an infrequent but established tendency for vagrancy. Range expansion in Tennessee, as well as in western Virginia and western North Carolina, has been linked to the planting of loblolly pine outside of the natural range of that pine in the southeastern United States (Renfrow, In press).

#### ACKNOWLEDGEMENTS

We thank Frank Renfrow and Kelly Roy for valuable comments on early drafts of this note.

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#### FIRST SULLIVAN COUNTY RECORD OF LEAST TERN

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While birding at Musick's Campground on South Holston Lake, Sullivan County, Tennessee on 18 August 2002 from approximately 1830-1945, Don Holt, David Smith, and I observed an aerial show as displayed by a Least Tern (Sterna antillarum). I first saw the bird aground on a small island, but once startled by jet skis in the area it flew within close range (less than 15 m) several times. The group observed the tern hovering and diving many times near shore.

We identified the bird as a first year Least Tern based on the following field marks: dark bill, black leading edge on shoulder, forked tail noticed when hovering, smaller in overall size than the nine Black Terns (*Chlidonias niger*) in the area, black lines through the eyes and lighter on top of head, white underside, and light gray back. The Least Tern remained independent of the Black Terns at all times.

This sighting represents the first record of Least Tern in Sullivan County. Only two previous accounts of this species have occurred in Northeast Tennessee, both at Austin Springs, Washington County (Knight 1994). Knight lists the species as an accidental visitor. No additional records exist for northeast Tennessee including: Sullivan, Carter, Johnson, Unicoi or Washington Counties (W. Coffey, Bristol Chapter of the Tennessee Ornithological Society, pers. comm.). Robinson notes more than 20 records each for both East and Middle Tennessee and lists the Least Tern as a rare migrant and summer visitor to east and middle Tennessee (Robinson 1990). The Least Tern is a regular migrant and breeding species in counties along the Mississippi River in West Tennessee where it often nests on sandbars in the river.

Watching this buoyant acrobat was certainly a field highlight, and working through the identification and researching the species' local history was an exciting exercise recommended to all who come across an unusual bird in their area.

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## MINUTES OF THE FALL 2002 TOS BOARD OF DIRECTORS MEETING

[Editor's note: Due to technical difficulties with the tape recording of the meeting, detailed minutes are unavailable. The meeting outline and brief minutes below have been compiled by Carolyn Bullock from President Nicholson's notes.]

The Board of Directors of the Tennessee Ornithological Society met on 2 November 2002 at Columbia. The reading of the minutes from the Spring 2002 meeting was dispensed with.

DIRECTORS AT LARGE: West Tennessee — Donna Ward gave a brief report on recent birding at Britton Ford. No reports from Middle or East Tennessee.

THE MIGRANT: Editor Chris Welsh reported that the December 2001 issue of The Migrant was at the printer. Because the pipeline of articles for The Migrant is downright low, if not dry, he issued a plea for TOS members to write up notable sightings and submit them for publication.

THE TENNESSEE WARBLER: Editor Theresa Graham reminded TOS members that the deadline for the next issue is 31 October.

FINANCE COMMITTEE: No report. Members are needed for this committee. Anyone with an interest, please contact the President.

**BIRD RECORDS COMMITTEE:** Chris Sloan reported that the committee will soon be recommending people for appointment to fill two vacancies.

CONSERVATION AND RESEARCH FUNDING COMMITTEE: Melinda Welton reported that four awards totaling \$2,090 were made between June 2001 and May 2002. These included \$905 to buy binoculars for a Dominican Republic bird monitoring project, \$685 for a Golden-winged Warbler survey, funds for observation facilities at west Tennessee wildlife refuges, and \$500 to Portia McMillan for banding supplies. New awards under consideration included \$400 in Goodpasture grant funds to TWRA for artwork for swan educational materials. Several proposals were submitted for standard Conservation and Research Funding funds. The proposal receiving the most committee votes was for \$2000 for Melinda Welton to conduct Cerulean Warbler surveys. There was considerable discussion about this award and the manner in which it was granted.

COLLATERAL MATERIALS: Carolyn Bullock reminded TOS members that patches and decals are, as always, available for purchase.

TOS WEBSITE: Chuck Nicholson reminded chapter representatives to send in updated information for the website. He also gave a brief report on making back issues of *The Migrant* available on the TOS website. He will present cost estimates at the spring meeting.

OTHER REPORTS: There were no reports submitted by Officers, the Nominating Committee, Treasurer, or Curator. No old business.

NEW BUSINESS: The Knoxville Chapter will host the 2003 Spring Meeting May 2-4 at the Episcopal School of Knoxville. The Winter Meeting will be held in January or February near the Duck River Unit, Tennessee National Wildlife Refuge.

## FALL 2002 MEETING: SCIENTIFIC PROGRAM

# POTENTIAL EFFECTS OF EASTERN HEMLOCK DECLINE ON BREEDING BIRDS IN THE SOUTHERN APPALACHIANS

D. AARON KELLER and DAVID A. BUEHLER Department of Forestry, Wildlife, and Fisheries University of Tennessee, Knoxville

The decline of eastern hemlock (Tsuga canadensis) due to hemlock woolly adelgid (HWA; Adelges tsugae), an exotic Homopteran introduced to the eastern United States from Japan in the early 1950s, may have impacts on avian populations and communities. Recent detections of HWA infestations in the Great Smoky Mountains National Park (GSMNP) and other areas of the southern Appalachians highlight the need to better understand the importance of hemlock to breeding birds. Our research has two objectives: 1) model avian associations with eastern hemlock using existing point count data from GSMNP and the U.S. Forest Service to identify avian species associated with eastern hemlock. 2) evaluate the importance of hemlock stands as reproductive sites for Black-throated Blue Warblers, Dark-eyed Juncos, Blue-headed Vireos, Wood Thrush, and Ovenbirds. The study areas for the reproductive aspect of this project are Cataloochee Valley in Great Smoky Mountains National Park and Coweeta Long Term Ecological Research Station in Nantahala National Forest, North Carolina. We have collected one field season of data on nest success, bird densities, food availability, rate of parental provisioning of nestlings, microclimate, and vegetation structure and composition on two 15-ha plots at Cataloochee. One plot is located in an old growth hemlock-dominated stand while the other is in a cove hardwood stand with minimal hemlock. The same data were collected at the Coweeta site on four 15-ha plots containing varying amounts of second growth hemlock. Data collected over this first field season is currently being compiled and analyzed.

## COMPARING BIRD COMMUNITIES IN NATIVE FORESTS, INDUSTRIAL PINE PLANTATIONS, AND RESIDENTIAL AREAS ON THE SOUTHERN CUMBERLAND PLATEAU, TENNESSEE

David G. Haskell, Jonathan P. Evans, and Neil W. Pelkey Department of Biology and Landscape Analysis Lab University of the South, Sewanee, TN

We examined the effects of conversion of oak-hickory forests to loblolly pine plantations and to residential areas on the abundance and diversity of birds on the southern Cumberland Plateau in Tennessee. We conducted distance counts of breeding birds in the spring and summer of 2000 and 2001 to establish the association between habitat type and bird populations. Bird diversity was lower at all spatial scales in pine plantations and was higher in residential areas. We combined these data with an eighteen-year GIS record of land-use changes in the region to assess the landscape-level significance of these findings.

## GOLDEN-WINGED WARBLER DISTRIBUTION AND HABITAT ASSOCIATIONS IN TENNESSEE

Melinda Welton 5241 Old Harding Road Franklin, TN 37064

Tennessee has just completed a Golden-winged Warbler Atlas Project to identify important breeding areas for the species, the range of acceptable habitats and the extent of hybridization between Golden-winged Warblers and Blue-winged Warblers. A total of 62 GWWA sites were found during the Atlas period. Eleven of these sites were in the Southern Blue Ridge and the remainder were on the Cumberland Plateau. Of the 51 sites on the Plateau, 45 were in the Cumberland Mountains of Scott, Campbell and Anderson Counties. Statewide, the most frequently used habitat type was abandoned strip mine sites in the Cumberland Mountains. Of the 203 individual Golden-wings located during the project, 141 were found in the Cumberland Mountains and 132 of these were on strip mine sites. No Blue-winged Warblers and only 3 Brewster's hybrids were found in the Southern Blue Ridge. Half of the lower Cumberland Plateau Golden-winged Warbler sites were shared with either Blue-wings or hybrids. Of the 45 Golden-winged sites in the Cumberland Mountains, 27% were shared with either Blue-wings or hybrids. Of the 17 hybrids encountered during this study, only one was a Lawrence's type hybrid.

## PRELIMINARY ASSESSMENT OF BIRD AND BAT IMPACTS AT BUFFALO MOUNTAIN WINDFARM, EASTERN TENNESSEE

JENNY FIEDLER, CHARLES NICHOLSON, ROGER TANKERSLEY, and NIKI NICHOLAS
Tennessee Valley Authority, Knoxville, TN,
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An increased interest in wind energy as an alternative energy source has prompted increased construction of windfarms across the United States. Early studies of bird mortality at windfarms, as well as the history of bird mortality at other types of man-made structures, indicate a need to fully understand the potential environ-

mental impacts of windfarms. The Tennessee Valley Authority's Buffalo Mountain Windfarm in the Cumberland Mountains of eastern Tennessee provides a unique opportunity to add to understanding this issue as it is currently the only commercial windfarm in the Southeast. A monitoring program has been in place since the windfarm became operational in October of 2000. Preliminary results estimate both bird and bat mortality rates. In order to put the mortalities into context, activity levels and patterns of birds and bats are being assessed with mist-netting, hawk watches, bat detectors, and radar.

#### **BLOOD PARASITES OF BIRDS**

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Tennessee and much of the east coast of the United States are dominated by lush deciduous forests and wetland ecosystems. Consequently these habitats harbour a large variety of biting insects (mosquitoes, black flies and no-see-ums) that have the ability to transfer minute parasitic organisms from one bird to another. As part of my research investigating seasonal reproduction and immunocompetence tradeoffs, I collected blood smears from birds in Memphis, Tennessee and Archbold Biological Station, Lake Placid, Florida over the last year. From these blood smears I have been able to identify four main groups of blood parasites: Plasmodium, Haemoproteus, Leucocytozoans and filarial worms. The negative effects on the host bird, if any, are poorly understood. My future work will investigate the question "Do birds with blood parasites have lower reproductive output than those that don't?

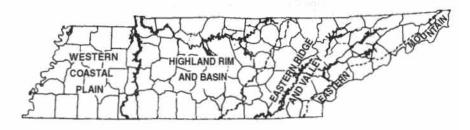
## OUR PRECIOUS HERITAGE-PRESERVING TENNESSEE'S DUCK RIVER

LESLIE COLLEY, Director
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The Duck River is globally significant due to its extraordinary biological diversity. With 50 species of freshwater mussels, 150 species of fish, and 22 species of pleurocid snails, it is the richest river in North America. The Nature Conservancy is involved in a number of projects on the Duck River, ranging from helping to make Columbia's Duck Riverwalk a reality to participating in a collaborative effort dealing with regional water supply issues to a comprehensive stream restoration project on Big Rock Creek in Marshall County.

#### THE FALL SEASON

RICHARD L. KNIGHT, Editor



#### 1 AUGUST-30 NOVEMBER 2002

Warmer and wetter than average best describe the weather across most of the state for much of the autumn season. Temperatures in November returned to near normal or slightly below. The lingering mild conditions apparently encouraged numerous migrants to remain later than usual in some areas. The meteorological events of the season occurred when the remnants of two hurricanes from the Gulf of Mexico passed through the state. *Isidore* moved through East Tennessee during 25-27 September with significant rainfall. *Lili* followed on 4 October, bringing heavy rains to West Tennessee and strong winds eastward reaching all the way to the mountains. Each system carried with it Sooty Terns, the first in Tennessee since 1934!

Although fall migration is always exciting for birders, this season seemed particularly good. With only four previous records, Roseate Spoonbills in opposite ends of the state were quite a surprise. Great White Herons graced two sites, also. The individual at South Holston Lake may have been the same bird that was there in 1990, 1991 and 1994. (Currently, Great White Heron is just a recognizable color-morph of the Great Blue Heron; but, it was formerly a separate species and may achieve that status again.) Other notable rarities this fall included Western Grebe, Sabine's Gull, Bell's Vireo, Clay-colored Sparrow and Great-tailed Grackle.

Waterfowl concentrations apparently were delayed by the mild weather and open waters to our north. However, Ross's Geese and scoters made good showings. Shore-birds staged in good numbers at regular sites in West and East Tennessee. The lone reporting hawkwatch experienced a stellar season. Warblers seemed to pass through in decent numbers. The four banding stations in the mountain region reported above average capture rates, with especially good tallies of Tennessee Warblers at the three ridge-top sites. Nelson's Sharp-tailed Sparrow, found in three regions, is proving to be a regular migrant for those who know when and where to search for it.

Much more can be sifted from the regional reports that follow.

#### Standard Abbreviations

ad-adult Irs-latest reported sighting

b.-banded m-male

Co-County max-maximum count m.ob.-many observers

ers-earliest reported sighting Mtn-Mountain

et al.-and others NWR-National Wildlife Refuge

f-female Pt-Point fide-reported by R-River im-immature SP-State Park

Is-Island WMA-Wildlife Management Area

L-Lake yg-young

WESTERN COASTAL PLAIN REGION — Precipitation was above normal from August to October and below normal for November. Temperatures, meanwhile, held slightly above normal for August and September and below normal for October and November. The most remarkable weather event of this season was the gulf coast's Hurricane Lili, whose remnants brought Henry County a jaeger species and West Tennessee's first Sooty Terns.

The season also brought a respectable 34 species of shorebirds, including Piping Plovers at Island 13 and Red Knots at three locations. The EARTH Complex delivered an American Avocet, Whimbrel, Marbled Godwit, and a Ruff, plus all three phalaropes.

Other notable sightings were a Sabine's Gull at Mud Island and a Bewick's Wren at Everett Lake. Also, a Blackpoll Warbler at Pace Point made an unusual autumn appearance. Bell's Vireos were noted at Millington and by many observers at Black Bayou. A Great-tailed Grackle at Island 13 would be a second state record if accepted by the Bird Records Committee.

Loon - Stork: Red-throated Loon: 2 Nov (1) Henry Co (JRW). Pacific Loon: 2-16 Nov (1-3) Henry Co (JRW, MCT, m.ob.). Common Loon: 17 Oct (1) Reelfoot L (JRW), ers; 16 Nov (719) Henry Co (JRW, HC), max. Eared Grebe: 10 Nov (1) Pace Pt. (DMa, MCT). American White Pelican: 14 Oct (730) Dyer & Lake Cos (JRW), max. Double-crested Cormorant: 26 Nov (3145) Mud Is (JRW), max. Snowy Egret: 28 Oct (1) Everett L, Dyer Co (MCT), Irs. Tricolored Heron: 7-11 Aug (1) Black Bayou (NaM, MAG, KL, MCT). Black-crowned Night-Heron: 25 Aug (1) Cocklebur L (JRW et al.); 21 Sep (1) Eagle Lake WMA (DDP). White Ibis: 27 Aug (1 im) Cocklebur L (MCT). Plegadis sp.: 8 Nov (1) Lauderdale WMA (JRW et al.); 10 Nov (1) Black Bayou (KL, NaM). Roseate Spoonbill: 24 -27 Aug (1-3) Cocklebur L (JRW, VBR, MCT et al.). Wood Stork: 24-27 Aug (50) Cocklebur L (JRW, MCT, m.ob.).

Goose - Rail: Ross's Goose: 7 Nov (1) Shelby Farms (JRW); 14 Nov (3) Lauderdale WMA (MCT). Mute Swan: 10/30 Sep (1) Dyersburg (KL, BL); 14 Sep (1) Memphis (WRP). American Black Duck: 21 Sep (1) Shelby Farms (VBR), ers. Greater Scaup: 14 Nov (1) Lauderdale WMA (MCT); 24 Nov (5) EARTH Complex (CHB, VBR). Surf Scoter: 19 Oct-11 Nov (1-4) Pace Pt (JRW, MCT, m.ob.). White-winged Scoter:

20 & 27 Oct/16 Nov (5/1/1) Henry Co (JRW, HC). Black Scoter: 14 Oct (1) Britton Ford (MCT); 2 Nov (1) Pace Pt (JRW); 6 Nov (1) Paris Landing SP (MCT). Hooded Merganser: 13-16 Sep (1) Shelby Farms (VBR, WRP). Mississippi Kite: 17 Aug (1) Fayette Co (WRP), few records there; 5 Sep (117) Tipton Co (JRW), max. Bald Eagle: 21 Sep/2 Oct (1) Shelby Forest (CHB, DDP, LVZ). Northern Harrier: 13/15 Aug (1) Shelby Farms (WRP, VBR), ers. Sharp-shinned Hawk: 23 Aug (1) Dyersburg (KL). "Harlan's" Red-tailed Hawk: 28 Oct (1) Obion Co (MCT); 24 Nov (1) EARTH Complex (CHB, VBR). Rough-legged Hawk: 23 Nov (1) Lake Co (JRW); 23 Nov (1) Dyer Co (KL, BL). Golden Eagle: 16 Nov (1 im) Henry Co (JRW, HC); 29 Nov (1 im) EARTH Complex (JRW). Merlin: 1 Nov (1) Benton Co (MCT); 10 Nov (1) Black Bayou (KL, NaM); 15 Nov (1) Lauderdale WMA (KL). Peregrine Falcon: reported from Shelby, Dyer, Henry, Lake & Madison Cos. (m.ob.). Yellow Rail: 18 Oct (1) Lake Co (JRW). Black Rail: 14 Oct (1) Lake Co (JRW). Virginia Rail: 18 Oct (2) Lake Co (JRW); 23 Oct (2) Shelby Farms (JRW). Sora: 18 Oct (43) Lake Co (JRW), max.

Shorebirds: Piping Plover: 17/19 Aug (6/4) Is. 13 (JRW/MCT). Killdeer: 26 Aug (600) Gibson Co (MAG), max. American Avocet: 25 Aug/15 & 29 Sep (1) EARTH Complex (JRW, m.ob.). Solitary Sandpiper: 17 Nov (1) EARTH Complex (CHB, VBR), Irs. Willet: 16-27 Aug (1) EARTH Complex (JRW, MCT); 7 Sep (1) Is. 13 (JRW et al.). Upland Sandpiper: 3/5 Aug (1) EARTH Complex (JRW, MCT); 10 Aug (1) Lake Co (MAG, KL, NaM, MCT). Whimbrel: 4 Aug (1) EARTH Complex (JRW). Marbled Godwit: 16 Aug (1) EARTH Complex (JRW). Red Knot: 10 Aug (2) Tiptonville Bar, Lake Co (MAG, KL, NaM, MCT); 10 Sep (4) Mud Is. & (1) EARTH Complex (JRW). Sanderling: 15 Aug (8) EARTH Complex (JRW), max. Least Sandpiper: 1 Sep (4000) EARTH Complex (CHB, WRP, VBR), max. White-rumped Sandpiper: 3 Sep (1) Is. 13 (MAG). Baird's Sandpiper: 8 Sep (19) EARTH Complex (JRW), max. Pectoral Sandpiper: 1 Sep (2000) EARTH Complex (CHB, WRP, VBR), max; 25 Nov (1) Lauderdale WMA (MCT), Irs. Dunlin: 17 Aug (1) Is. 13 (JRW), ers. Stilt Sandpiper: 15 Aug (110) EARTH Complex (JRW), max. Buff-breasted Sandpiper: 7 Sep (22) EARTH Complex (JRW et al.), max. Ruff: 31 Aug (1) EARTH Complex (JSD, CAS). Long-billed Dowitcher: 14 Nov (23) Lauderdale Co (MCT), Irs. Wilson's Snipe: 25 Aug (1) EARTH Complex (JRW), ers. Wilson's Phalarop2: 25 Aug (10) EARTH Complex (CHB, WRP, VBR, LVZ), max. Red-necked Phalarope: 8/19 Sep EARTH Complex (JRW). Red Phalarope: 21 Sep (1) EARTH Complex (JRW).

Jaeger-Nighthawk: Jaeger sp.: 4 -5 Oct (1) Henry Co (JRW, MAG, DMa, MCT). Laughing Gull: 17 Aug (2) Shelby Forest (WRP); 22 Aug (1) Pace Pt (MCT); 4 Oct (1) Pickwick SP, Hardin Co (JRW); 5 Oct (1) Paris Landing SP (MAG, DMa, MCT, JRW). Franklin's Gull: 25 Sep (1) Pace Pt (MCT), ers; 5 Oct/11 Nov (15/4) Paris Landing SP (MAG, DMa, MCT, JRW), max/lrs. Ring-billed Gull: 26 Nov (2000) Black Bayou (Glen Criswell, KL), max. Herring Gull: 24 Aug (1 ad) EARTH Complex (JRW), ers. Lesser Black-backed Gull: 4 Oct through period (up to 2 ad, 2 im) Henry Co (MCT, JRW, m.ob.). SABINE'S GULL: 17 Sep (1 im) Mud Is (JRW). Least Tern: 21 Sep (2) Shelby Forest (CHB, LVZ), Irs. SOOTY TERN: 4 Oct (2) Rocky Pt, Henry Co (JRW), first for West Tenn. Black Tern: 17 Aug (700) Lake & Dyer Cos (JRW), max. Eurasian Collared-Dove: 28 Oct (39) Millington, Shelby Co (DDP),

max. Black-billed Cuckoo: 18/21 Sep (1/2) Shelby Forest (DDP, MTOS). Short-eared Owl: 19 Nov (1) Lake Co (NaM). Common Nighthawk: 25 Aug (200) Gibson Co (MAG), max.

Flycatcher-Thrush: Acadian Flycatcher: 31 Aug (1, sitting on nest) EARTH Complex (MCT, JRW), very late breeding. White-eyed Vireo: 7 Aug (1 feeding yg in nest) Shelby Forest (DDP), late nesting. BELL'S VIREO: 27 Aug-10 Sep (1-2) Black Bayou (MCT, NaM, JRW, m.ob.); 15 Sep (1) Millington, Shelby Co (VH). Tree Swallow: 4 Oct (750) Is. 13 (KL, NaM); 6 Oct (750) White's L. Refuge, Dyer Co (KL, BL); max. Northern Rough-winged Swallow: 28 Sep (550) Reelfoot L (DDP), max; 19 Nov (2) White's L. Refuge, Dyer Co (KL), Irs. Bank Swallow: 1 Aug (120, with 200 used nests on Miss. R. sandbar) Shelby Forest (WRP). Bewick's Wren: 28 Oct (1) Everett L., Dyer Co (MCT). Veery: 2 Oct (1) Shelby Forest (Judy Dorsey, WRP, VBR). Swainson's Thrush: 4 Nov (1) Dyersburg (KL), Irs.

Warblers: Tennessee Warbler: 21 Aug (1) Shelby Forest (DDP), ers; 6 Nov (2) Pace Pt (MCT), Irs. Yellow Warbler: 21 Sep (1) Shelby Forest (MTOS); 22 Sep (1) Lichtermann Park, Shelby Co (DDP et al.). Magnolia Warbler: 7 Aug (1) Shelby Forest (DDP), ers. Cape May Warbler: 28 Sep (1) Reelfoot L (DDP). Prairie Warbler: 9 Aug (1) Shelby Farms (Martha Waldron); 31 Aug (1) Reelfoot L (JSD, CAS); 1 Sep (1) Shelby Co (WRP). Palm Warbler: 5 Oct (20) Henry Co (MAG, DMa, MCT, JRW), max. BLACKPOLL WARBLER: 25 Sep (1) Pace Pt (MCT), rare in fall. Prothonotary Warbler: 28 Sep (1) Reelfoot L (DDP) & (1) Shelby Forest (WRP), Irs. Mourning Warbler: 10 Sep (1) Eagle Lake WMA (JRW); 11 Sep (1) Pace Pt (MCT). Hooded Warbler: 26 Oct (1 m) Shelby Forest (WRP), late. Canada Warbler: 9 Sep (1) Shelby Farms (VBR). Yellow-breasted Chat: 22 Sep (1) Shelby Co (DDP et al.), Irs.

Sparrow-Grackle: Lark Sparrow: 21 Sep (1) Shelby Forest (Judy Dorsey, VH, MTOS), apparently 1st for park. LeConte's Sparrow: 16 Nov (4) Britton Ford (JRW, HC). Nelson's Sharp-tailed Sparrow: 5-14 Oct (1-2) Britton Ford (MAG, DMa, MCT, JRW, JSD, CAS); 14/17 Oct (2/1) Lake Co (JRW). White-throated Sparrow: 21 Sep (1) Eagle Lake WMA (DDP), ers. Dark-eyed Junco: 7 Oct (1) Shelby Forest (VH), ers. Lapland Longspur: 2 Nov (2) Gibson Co (MAG), ers. Smith's Longspur: 8-25 Nov (1-2) Lake Co (Charlie Muise, NaM, MCT, JRW). Blue Grosbeak: 26 Oct (3) Wolf River WMA, Fayett Co (Bob Ford), Irs. Painted Bunting: 18 Aug (2) EARTH Complex (CHB, WRP, VBR), Irs. Dickcissel: 3 Sep (1) Black Bayou (MAG), Irs. Bobolink: 5 Oct (3) Britton Ford (MAG, DMa, MCT, JRW); 14 Oct (8) Lake Co (JRW), Irs. Brewer's Blackbird: 25 Nov (4) Lauderdale Co (MCT). GREAT-TAILED GRACKLE: 18 Aug (1 ad. m.) Is. 13 (JRW, photo), 2nd state record pending acceptance.

Locations: Black Bayou-in Lake Co; Britton Ford-in Henry Co; Cocklebur L-in Shelby Co; Dyersburg-in Dyer Co; Eagle Lake WMA-in Shelby Co; EARTH Complex-in Shelby Co; Is. 13-in Lake Co; Lauderdale WMA-in Lauderdale Co; Mud Is.-in Shelby Co; Pace Pt-in Henry Co; Paris Landing SP-in Henry Co; Reelfoot L-in Lake & Obion Cos; Shelby Farms/Forest-in Shelby Co.

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HIGHLAND RIM AND BASIN REGION — In the Nashville area the first three months of the four month fall period were warmer and wetter than average. The most aberrant month, September, was nearly four degrees warmer and had almost twice the usual rainfall, 6.3 inches. November reversed course and was cooler and drier than usual. The highlight of this season was a "Great White Heron" discovered in Putnam County. This white morph of the Great Blue Heron, generally found in southern Florida, delighted birders by remaining in the same location for much of this period.

Grebe-Rail: Pied-billed Grebe: 4 Sep (1) Shelby Park/Radnor L (PDC, FCF, JKS), ers. Horned Grebe: 24 Nov (140) Center Hill L & (170) Dale Hollow L., Clay Co (SJS), max. American White Pelican: 5 Oct (31) Shelby Bottoms (PDC, GBC, MAZ). "Great White Heron": 21 Sep-11 Nov (1, photos) Caney Fork R., Putnam/Dekalb Cos (Carol Williams, SJS, m.ob.). Great Egret: 23 Aug (8) Warren Co (Doug Malone); 12-27 Nov (1) Cane Cr. Park (SJS), Irs. Turkey Vulture: 21 Nov (450) Center Hill L (SJS), max. Ross's Goose: 9 Nov (2) Duck R. Unit (CAS, JSD). Gadwall: 22 Sep (2) Duck R. Unit (JSD), ers. American Wigeon: 22 Sep (2) Duck R. Unit (JSD), ers. American Black Duck: 22 Sep (1) Duck R. Unit (JSD), ers. Northern Pintail: 22 Sep (3) Duck R. Unit (JSD), ers. Green-winged Teal: 22 Sep (50+) Duck R. Unit (JSD). Surf Scoter: 1 Nov (4) Cane Cr. Park (SJS); 3 Nov (1) Arrow L., Maury Co (TOS); 5-16 Nov (1) Celina sewage lagoons (TMC, m.ob.). White-winged Scoter: 1 Nov (1) Center Hill L (SJS). Black Scoter: 6 Nov (1 f) Center Hill L (SJS). Hooded Merganser: 5 Oct (2) Old Hickory L., Davidson Co (CAS, Barry Jernigan), ers. Red-breasted Merganser: 6 Nov (1) Cane Cr. Park (SJS), new early fall date for Co. Osprey: 2 Nov - (1) Monsanto Ponds (TOS); 9 Nov (1) Percy-Priest L., Davidson Co (NTOS); late. Peregrine Falcon: 27 Sep (1) Radnor L (JSD). King Rail: 16 Oct (1) Duck R. Unit (Marilyn Burgess, John Froeschauer).

Plover-Sapsucker: American Golden-Plover: 15 Sep (3) Cross Cr NWR (JSD); 9 Nov (3) Duck R. Unit (CAS, JSD). Semipalmated Plover: 17 Aug (3) Cross Cr NWR (JSD, NTOS). Spotted Sandpiper: 27 Nov (1) Celina (TMC), Irs. Baird's Sandpiper: 17 Aug (1) Cross Cr NWR (JSD, NTOS). Pectoral Sandpiper: 17 Aug (100+) Cross Cr NWR (JSD, NTOS). Dunlin: 1 Nov (16) Cordell Hull L., Putnam Co portion (SJS). Stilt Sandpiper: 17 Aug (1)/15 Sep (20) Cross Cr NWR (JSD, NTOS). Buffbreasted Sandpiper: 15 Sep (5) Cross Cr NWR (JSD). Caspian Tern: 18 Aug (3) Cane Cr. Park (SJS); 6 Oct (6) Dale Hollow L., Clay Co (SJS, WAW). Least Tern: 17 Aug (2) Cross Cr NWR (JSD, NTOS). Black Tern: 17 Aug (35+) Cheatham Dam, Cheatham Co (JSD, NTOS). Common Nighthawk: 12 Oct (2) Cookeville (SJS, WAW), new late fall date for Putnam Co. Chimney Swift: 21 Oct (hundreds) Nashville (CAS), late for so many; 25 Oct (1) Cane Cr Park (SJS), new late fall date for Co. Ruby-throated Hummingbird: 31 Oct (1) Putnam Co (BHS); 1 Nov (1) Nashville (CAS); both late. Rufous Hummingbird: 21 Sep (1 im. m.) Nashville (Bill & Joan Dougherty, b. CAS, Portia Macmillan), present since 15 Sep, ers. Yellow-bellied Sapsucker: 5 Oct (4) Davidson Co (NTOS), ers.

Flycatcher-Swallow: Olive-sided Flycatcher: 26 Aug (1) Shelby Park (PDC). Eastern Wood-Pewee: 30 Oct (1) Nashville (Michael Bierly); 4 Nov (1) Shelby Bottoms (PDC); 20 Nov (1) Nashville (LVK); all late. Yellow-bellied Flycatcher: 6 Sep (1) Shelby Park (PDC); 11-15 Sep (1-3) Radnor L (NTOS); 16 Sep (1) Shelby Bottoms (MS). Acadian Flycatcher: 21 Sep (1) Putnam Co (SJS), new late fall date for Co. "Traill's" Flycatcher; 5 Oct (2) Radnor L (CAS et al.). Alder Flycatcher; 13 Sep (1) Radnor L (PDC, FCF, Susan Hollyday). Least Flycatcher: 10 Sep (1) Shelby Park (PDC), ers; 5 Oct (1) Radnor L (CAS et al.); 8 Oct (1) Shelby Bottoms (PDC), new Nashville late date. Great Crested Flycatcher: 21 Sep (1) Putnam Co (SJS), new late fall date for Co. Scissor-tailed Flycatcher: 17 Aug (2) Warren Co (SNM). Loggerhead Shrike: 5 Oct (1) Harpeth Valley, Williamson Co (EG, LVK, Ed Byrne). Whiteeyed Vireo: 20 Oct (1) Cane Cr Park (SJS), new late fall date for Co. Blue-headed Vireo: 17 Nov (1) Radnor L (Richard Connors), Irs. Warbling Vireo: 5 Oct (1) Radnor L (CAS), lrs. Philadelphia Vireo: 9 Sep (1) Shelby Park (PDC), ers; 20 Oct (1) Cane Cr Park (SJS), new late fall date for Co; 30 Oct (1) Nashville (Michael Bierly), new late fall date for Nashville area. Tree Swallow: 2 Nov (3) Monsanto Ponds (TOS); 11 Nov (1) Celina (TMC), Irs. Northern Rough-winged Swallow: 19 Oct (1) Old Hickory L, Davidson Co (GBC, NTOS), new late fall date for Nashville area.

Nuthatch-Waxwing: Brown-headed Nuthatch: 21 Sep (5) & 9 Oct (2) Putnam Co (SJS et al.). Brown Creeper: 7 Oct (1) Shelby Park (PDC, JKS), ers. Winter Wren: 17 Oct (1) Shelby Park (PDC), ers. Sedge Wren: 11 Aug- 5 Oct (2-3) Shelby Bottoms (PDC, NTOS). Marsh Wren: 24 Sep (1) Shelby Bottoms (PDC); 27 Sep (1) Cane Cr Park (SJS); 5 Oct (2/1/2) Shelby Bottoms/Harpeth Valley, Davidson Co/Cheatham Co (NTOS). Golden-crowned Kinglet: 13 Oct (1) Nashville (JKS), ers. Ruby-crowned Kinglet: 13 Sep (1) Radnor L (PDC, FCF, Susan Hollyday), ers. Blue-gray Gnat-catcher: 5 Oct (1) Williamson Co (Jean Buchanan), Irs. Swainson's Thrush: 3 Sep/23 Oct (1) Putnam Co (BHS), new early & late fall dates for Co. Gray-cheeked Thrush: 4 Sep (1) Nashville (Jan Alexander), ers; 7 Oct (1) Shelby Park (PDC, JKS), Irs. Wood Thrush: 5 Oct (1) Shelby Park & Radnor L (PDC/CAS), Irs. American Pipit: 9 Oct (1) Cane Cr Park (SJS), new early fall date for Co. Cedar Waxwing: 17 Aug (1) Cross Cr NWR (PDC), ers.

Warblers: Blue-winged Warbler: 5 Oct (1) Warner Park (TE, NTOS), Irs. Goldenwinged Warbler: 7 Sep (1) Shelby Park (PDC, MS, MAZ), ers; 2 Oct (1) Cane Cr Park (SJS), Irs. "Brewster's" Warbler: 8 Sep (1) Radnor L (PDC, MAZ); 10 Sep (1) Shelby Park (PDC). Tennessee Warbler: 5 Sep (7) Radnor L (FCF), ers; 3 Nov (3) Davidson Co (FCF), Irs. Orange-crowned Warbler: 27 Sep (2) Radnor L (JSD), ers. Nashville Warbler: 7 Sep (1) Shelby Bottoms (PDC, MS, MAZ), ers; 22 Oct (1) Radnor L (FCF, JKS), Irs. Northern Parula: 10 Oct (1) Putnam Co (SJS), new late fall date for Co; 18 Oct (1) Radnor L (FCF), Irs. Yellow Warbler: 21 Sep (1) Putnam Co (SJS), new late fall date for Co. Chestnut-sided Warbler: 30 Aug (2) Shelby Bottoms (PDC), ers; 18 Oct (1) Radnor L (FCF), Irs. Magnolia Warbler: 4 Sep (3) Shelby Park (PDC), ers; 25 Oct (2) Radnor L (FCF), Irs. Cape May Warbler: 11 & 25 Sep, 5 Oct (1) Radnor L (PDC, CAS et al.). Black-throated Blue Warbler: 14 Sep (1) Radnor L (MCT). Yellow-rumped Warbler: 29 Sep (3) Cane Cr Park (SJS, WAW), ers. Black-throated Green Warbler: 1/9 Nov (1) Radnor L (FCF/Linn Ann Welch), Irs. Blackburnian

Warbler: 29 Aug/25 Oct (2) Radnor L (FCF), ers/lrs. Yellow-throated Warbler: 5 Oct (2) Cheatham Co (Joe Stone), lrs. Palm Warbler: 17 Sep (1) Shelby Bottoms (PDC), ers. Bay-breasted Warbler: 15 Sep (1)/25 Oct (3) Radnor L (PDC, MAZ/FCF), ers/lrs. Blackpoll Warbler: 14 Sep (1) Radnor L (MCT), rare in fall. American Redstart: 16 Oct (1) Radnor L (FCF), lrs. Ovenbird: 30 Oct (1) Putnam Co (Ginger Ensor), new late fall date for Co. Kentucky Warbler: 21 Sep (1) Putnam Co (BHS), new late fall date for Co. Connecticut Warbler: 5 Oct (1) Shelby Bottoms (PDC, GBC, MAZ, Mark Hackney, Barbara Harris). Mourning Warbler: 7/10 Sep (1) Shelby Park (PDC, MS, MAZ/PDC); 9/14 Sep (1) Radnor L (FCF/MCT). Hooded Warbler: 18 Oct (1) Cane Cr Park (SJS), new late fall date for Co. Wilson's Warbler: 9 Oct (1) Putnam Co (SJS), lrs. Canada Warbler: 28 Aug (1) Nashville (Jan Alexander), ers; 5 Oct (2) Warner Park (TE, NTOS), lrs. Yellow-breasted Chat: 5 Oct (1) Shelby Park (PDC), lrs.

Sparrow-Oriole: Vesper Sparrow: 23 Sep (1) Shelby Bottoms (PDC), ers. Lark Sparrow: 5 Oct (1) Harpeth Valley, Williamson Co (EG, LVK, Ed Byrne). Henslow's Sparrow: 19 Oct (1) Warren Co (SNM); 23 Nov (1) Shelby Bottoms (PDC, MAZ). Fox Sparrow: 3 Nov (1) Monsanto Ponds (GBC, JKS, Richard Connors), ers. Lincoln's Sparrow: 12 Sep (1) Shelby Park (PDC), ers. Swamp Sparrow: 5 Oct (1) Cheatham Co (Joe Stone), ers. White-throated Sparrow: 5 Oct (1) Warner Park (TE, NTOS), ers. White-crowned Sparrow: 28 Oct (2) Shelby Bottoms (PDC), ers. Rose-breasted Grosbeak: 4 Sep (1) Radnor L (FCF, JKS), ers; 1 Nov (1 at feeder) Nashville (EG), lrs. Indigo Bunting: 1 Nov (1) Radnor L/Shelby Bottoms (FCF/PDC), lrs. Bobolink: 28 Sep (45) Warren Co (SNM). Rusty Blackbird: 14 Nov (100+) Dyson's Ditch, Cheatham Co (GBC), ers. Baltimore Oriole: 5 Sep (16) Shelby Park (PDC), max.

Locations: Cane Cr Park-in Putnam Co; Celina-in Clay Co; Center Hill L-in DeKalb Co; Cross Cr NWR-in Stewart Co; Duck R. Unit-unit of Tennessee NWR in Humphreys Co; Monsanto Ponds-in Maury Co; Radnor L-in Davidson Co; Shelby Bottoms/Park-in Davidson Co; Warner Park-in Davidson Co.

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CUMBERLAND PLATEAU/RIDGE AND VALLEY REGION — This autumn was warmer than average through October and into early November before seasonable temperatures returned. As a result of the mildness, a few later than average departure dates were recorded. Sizable flocks of Chimney Swifts and Tree Swallows were seen later than typical, as well. The lingering mildness also caused leaf fall to be late. In the northern part of the region, August and September were rather dry, but the following two months were wetter than average. The Chattanooga area received near normal or greater amounts of rainfall during each month. Indeed, water levels at the Brainerd Levee were too high during most of the season for shorebirds and marsh birds. However, the Standifer Gap Marsh attracted several marsh birds.

The remnants of Hurricane Isidore passed through on 25-27 September with moderate to heavy rain. This storm also brought individual Sooty Terns to two sites, although one was found dead. These were the first to be seen in the state in nearly 70 years! A week later, on 4 October, the remnants of Hurricane Lili moved inland further west with mainly just strong winds in this region. But did this contribute to the occurrence of a Roseate Spoonbill found three days later?

Other exciting finds included Western Grebe, Swallow-tailed Kite, Black Rail, Ruff, Lesser Black-backed Gull, Clay-colored Sparrow, and Yellow-headed Black-bird. Above average numbers were reported for Peregrine Falcon, Dunlin, and Common Tern. Conversely, migrants in low numbers included Golden-winged and Wilson's warblers. The Soddy Mountain hawkwatch celebrated its tenth anniversary with a very productive season, including record one-day and season totals for Broad-winged Hawks (Table 1). At least 25 species of shorebirds were found in the region. Once again the Rankin Bottoms and adjacent Dutch Bottoms sections of upper Douglas Lake held the greatest concentrations of shorebirds and herons. Boreal irruptives were virtually non-existent this fall.

For the second year in a row, a group of captive-bred Whooping Cranes, led by ultra-light aircraft, passed through Tennessee. They rested at the Hiwassee Refuge from 18-23 November before continuing their "migration" to Florida. Additionally, at least three Whoopers from last year's "class" returned to the refuge on their own in mid November, and one lingered there into January! These birds represent an attempt to establish an eastern migratory flock to compliment the existing flock that winters in Texas.

Sightings from 22 counties are found in this regional report, rather above average.

Loon-Spoonbill: Common Loon: 5 Oct (1) Boone L (Martha Dillenbeck), ers; 18-25 Nov (1) Oneida (NeM), unusual location. Eared Grebe: 28 Sep (1) Oneida City Park (NeM), undoubtedly first Co. record. WESTERN GREBE: 22 Aug-15 Sep (1) Norris L, Grainger Co portion (Tim Pruitt, m.ob.), about 4th record in region. American White Pelican: 25 Oct (2) Blythe Ferry, Meigs Co (Wally Akins); 7/12 Nov (3) Tennessee R, Hamilton Co (Nelson Bennett/Dan Williams, Todd Milsap). Doublecrested Cormorant: 10 Oct (57) Cove Lake SP (NeM); 15 Oct (95) Dutch Bottoms (RLK); 16 Oct (85) Austin Springs (RLK). American Bittern: 30 Oct/10 Nov (1) Standifer Gap Marsh (DP); 15 Nov (1) Brainerd Levee (DP). Great Egret: 10 Aug/ 29 Sep (270+) Rankin Bottoms (KDE/MBS, LJG), max; 2 Sep-16 Oct (1-16 Greene Co (DHM); through 28 Oct (1) Austin Springs (RLK), late there; 1 Nov (3) Dutch Bottoms (RLK et al), Irs. Snowy Egret: 28 Jul/10 Aug/31 Aug (1-3) Rankin Bottoms (ARH/KDE/DHM). Little Blue Heron: 10/28 Aug (1 im) Rankin Bottoms (KDE/ JWC, RLK). Cattle Egret: 17 Aug (3) Hamilton Co (WGH); 31 Aug (1) Rankin Bottoms (DHM); 26 Oct (1) Monterey, Putnam Co (Betty & Harold Bright). Blackcrowned Night-Heron: 5 Oct (12) Kingston Steam Plant (RDH, DMy, FLB); 1 Nov (13) Douglas Dam, Sevier Co (RLK, LCM, Don Holt); 10 Nov (12) Kingsport (RLK). Yellow-crowned Night-Heron: 6 Aug (1) Knox Co (Chris Welsh). White Ibis: 10-20 Aug (2 im) Rankin Bottoms (KDE et al.). ROSEATE SPOONBILL: 7-16 Oct (1) Kinser Park, Greene Co (DHM, m.ob.), then moved downriver to Dutch Bottoms 20-22 Oct (James Brooks), first East Tenn. record, 6th in state.

Goose-Crane: Snow Goose: 26 Oct (38) Nickajack L (John Gatchet); 10 Nov (3) Kingston Steam Plant (KTOS); 21 Nov (3) Hiwassee Refuge, Meigs Co (David Aborn); 23 Nov (1) Oneida (NeM). Northern Pintail: 28 Sep (1) Greene Co (DHM); 29 Sep (1) Rankin Bottoms (MBS, LJG); both early. Osprey: 27 at Soddy Mtn was new season high there (WGH); 9 Nov (1) Scott Co (NeM, WAW, SJS); 12/22 Nov (1) Eagle Bend (NeM); 30 Nov (1) Ft. Loudoun L, Knox Co (KTOS), Irs. Swallow-tailed Kite: 11 Aug (1) Tenn. R. at Hwy 30, Rhea Co (Jeff Cowell fide JKS). Mississippi Kite: 19 Aug (1) Brainerd Levee (Kyle Wagner). Bald Eagle: 23 Sep (1) Greene Co (DHM); 29 Sep (1) Kingston Steam Plant (Charlie Muise); 13 Oct (1) Cove Lake SP (NeM); 15 Oct/1 Nov (1) Dutch Bottoms (RLK et al.); 23 Nov (1) Seven Is. Refuge (KTOS). Northern Harrier: 17 Aug (1) Hamilton Co (Nelson Bennett), ers. Redshouldered Hawk: 31 Aug (1) Greene Co (DHM); 10 Nov (2) Phipps Bend, Hawkins Co (RLK); scarce in northeast Tenn. Broad-winged Hawk: 13 Sep (1 dark morph) Soddy Mtn (Jimmy Wilkerson); 23 Sep (1733) Soddy Mtn (WGH), new one day high there. Peregrine Falcon: 17 Aug/29 Sep/5 Oct (1) Kingston Steam Plant (KTOS); 20 Aug-29 Sep (1-2) Rankin Bottoms (DHM, JWC, MBS et al.); 27 Aug (1) Cove Lake SP (NeM); through 15 Sep (2) Chickamauga Dam, Hamilton Co (fide KAC); 23 Sep. (1) Cross Mtn, Campbell Co (NeM); 24 Sep (1) Knoxville (Charles Nicholson); 28 Sep (2) Hinch Mtn, Cumberland Co (Roi & Debbie Shannon); 4 Oct/9 Nov (1) Greene Co (DHM). Black Rail: 21 Sep (1 heard) Standifer Gap Marsh (CDB, Betty Wampler), 2nd record there this year. Virginia Rail: through period (1-2) Standifer Gap Marsh (DP et al.); 10 Oct/18 Nov (1) separate Greene Co sites (BKS, HPL/DHM, RLK). Sora: through 3 Nov (1-3) Standifer Gap Marsh (DP et al.); 11 Sep (1) Knox Co (Leigh & Robert Loveday); 28/29 Sep (1) separate Greene Co sites (DHM). Sandhill Crane: 8-9 Nov (1) Boone L (Jerry Bevins fide GDE); 17 Nov (38) Cove Lake SP (NeM); 23 Nov (1) Seven Is. Refuge (KTOS); all east of usual migration corridor.

Shorebirds: Black-bellied Plover: 17-19 Aug (1-3) Rankin Bottoms (DHM et al.). American Golden-Plover: 31 Aug (2) Rankin Bottoms (DHM); 18 Nov (1) Warrior's Path SP, Sullivan Co (FRC). Piping Plover: 16-17 Aug (2-1) Kingston Steam Plant (RDH, DMy, FLB). American Avocet: 29 Sep (2) Rankin Bottoms (MBS, LJG). Greater Yellowlegs: 1 Nov (23) Dutch Bottoms (RLK JWC, LCM et al.), max; 12 Nov (1) Eagle Bend (NeM), Irs. Lesser Yellowlegs: 19 Aug (25) Rankin Bottoms (DHM), Irs. Solitary Sandpiper: 16 Oct (1) Washington Co (RLK), Irs. Ruddy Turnstone: 15-17 Aug (1) Rankin Bottoms (ARH, David Trently et al.). Sanderling: 17-18 Aug/15 Sep (3-5/8) Rankin Bottoms (KDE et al./JRW). Western Sandpiper: 13-31 Aug (3-8) Greene Co (DHM). Baird's Sandpiper: 18 Aug (1) Rankin Bottoms (KDE et al.); 8 Sep (1) Kingston Steam Plant (KTOS). Pectoral Sandpiper: 19 Aug (150) Rankin Bottoms (DHM), max; 1 Nov (2) Dutch Bottoms (RLK), Irs. Dunlin: 15-19 Oct (4) Washington Co (RLK); 1 Nov (800) Dutch Bottoms (RLK, JWC, LCM et al.), doubles the previous state high count; 4 Nov (13) Eagle Bend (JDJ); 4 Nov (2) Austin Springs (RLK); 5-11 Nov (4) Boone L (RLK); 18 Nov (1) Warrior's Path SP, Sullivan Co (FRC).

Table 1. Fall 2002 Hawkwatch Totals from Soddy Mtn (WGH et al.). 30 Aug-3 Dec; 51 days and 263 hours.

Species	Total	Species	Total	1
Black Vulture	74	Red-shouldered Hawk	24	
Turkey Vulture	718	Broad-winged Hawk	5073	
Osprey	27	Red-tailed Hawk	368	
Bald Eagle	35	American Kestrel	25	
Northern Harrier	31	Merlin	3	
Sharp-shinned Hawk	285	Peregrine Falcon	3	
Cooper's Hawk	77	unknown	5	

Total: 792 vultures & 5956 hawks = 6748

Stilt Sandpiper: 16-17 Aug (1) Kingston Steam Plant (RDH, DMy, FLB); 17-24 Aug / 6 Oct (1-4) Rankin Bottoms (DHM et al./RDH). Buff-breasted Sandpiper: 2-8 Sep (1) Kingston Steam Plant (FLB et al.). RUFF: 18 Aug (1 im) Rankin Bottoms (KDE et al.), 2nd record there. Short-billed Dowitcher: 14-31 Aug (1-15) Rankin Bottoms (JWC, Tom Horsch et al.); 17 Aug / 1-4 Sep (1-4) Greene Co (DHM); 8 Sep (1) Kingston Steam Plant (KTOS); 21 Sep (1) Standifer Gap Marsh (KAC). Wilson's Snipe: 10 Sep (1) Washington Co (RLK), ers. American Woodcock: 24 Nov (1) Cove Lake SP (NeM). Wilson's Phalarope: 19-21 Sep (1) Blount Co (Steve Adair, m.ob.).

Gull-Woodpecker: Laughing Gull: 15 Aug (1) Rankin Bottoms (ARH, David Trently); 27 Sep (1) Nickajack L (John Henderson). Bonaparte's Gull: 21 Oct (1) Austin Springs (RLK), ers. Ring-billed Gull: 4 Aug (5) Cherokee L., Jefferson Co portion (KDE), ers; 19 Aug (1) Rankin Bottoms (DHM). Herring Gull: 26 Sep (1) Kingston Steam Plant (RDH, DMy); 27 Sep (2) Nickajack L (John Henderson); ers. Lesser Black-backed Gull: 15 Oct (1 ad) Dutch Bottoms (RLK), 3rd East Tenn. record. Caspian Tern: 16-17 Aug (2) Kingston Steam Plant (RDH, DMy, FLB); 17 Aug (1) Douglas L, Jefferson Co (DHM); 27 Sep-5 Oct (2) Austin Springs (RLK); 15 Oct (1) Dutch Bottoms (RLK). Common Tern: 16-17 Aug (1) Kingston Steam Plant (RDH, DMy, FLB); 18 Aug (2) Rankin Bottoms (KDE et al.); 15 Sep (91) Boone L (RLK); 27 Sep (80) Nickajack L (Dan Jacobson, CDB); 12 Oct (1) Cove Lake SP (NeM). Forster's Tern: 22 Sep (4) Cove Lake SP (NeM). SOOTY TERN: 28 Sep (1) Nickajack L (Dan Jacobson, m.ob.); 29 Sep (1 found dead) Blount Co (Steve Adair); 3rd & 4th records for East Tenn. (previously in 1926 & 1934). Black Tern: 15 Aug (30) Rankin Bottoms (Boyd Sharp), max. Eurasian Collared-Dove: expansion of the Hamilton Co population (fide KAC). Barn Owl: 23 Oct (1) Greene Co (DHM); 31 Oct (1) Bridgestone-Firestone WMA, White Co (DFV); 23 Nov (1) Seven Is. Refuge (KTOS); through season (2) Johnson City (RLK et al.). Chimney Swift: 21 Oct (500) Austin Springs (RLK), late for such a large number. Rufous Hummingbird: 13 Aug (1 ad. m.) Maryville, Blount Co (June Welch, Jean Alexander, David Johnson); 11 Nov-17 Dec (1 ad. f) Johnson City, Carter Co portion (LCM, m.ob., b. CAS); 18 Nov through season (1 ad. f) Greeneville (DHM et al., b. CAS). Red-headed Woodpecker: 21 Sep (1) Austin Springs (RLK); 5 Oct (4) Greene Co (DHM); 1 Nov (7) Gray, Washington Co (Chris O'Bryan).

Flycatcher-Catbird: Yellow-bellied Flycatcher: 23/29 Sep (2/1) Craven's House, Hamilton Co (KAC). Least Flycatcher: 3/9 Sep (1) Royal Blue WMA (NeM); 14 Sep (1) Greene Co (DHM); 30 Sep (1) Hamilton Co (KAC). Blue-headed Vireo: 31 Oct (1) White Co (DFV), Irs. Warbling Vireo: 8 Sep (1) Knoxville (KDE). Philadelphia Vireo: 24 Sep-9 Oct (3 reports) Hamilton Co (KAC, LAW). Common Raven: 9 Oct (2) Tackett Cr., Claiborne Co (NeM), 2nd sighting there this year. Horned Lark: 18 Oct (4) Oneida (NeM). Tree Swallow: 5 Oct (775) Greene Co (DHM); 15 Oct /1 Nov (600/120) Dutch Bottoms (RLK); 4 Nov (12) Austin Springs (RLK), Irs. Bank Swallow: 5 Oct (1) Greene Co (DHM), Irs. Red-breasted Nuthatch: 9/13 Oct (1) Greeneville (DHM), only report. Brown-headed Nuthatch: through season (2-4) Kingston Steam Plant (KTOS et al.). Sedge Wren: 21 Sep-28 Oct (1) Standifer Gap Marsh (CDB, KAC, DP); 5 Oct (5) Brainerd Levee (KAC); 5 Oct (1) Austin Springs (RLK); 26 Oct (1) Greene Co (DHM). Marsh Wren: 21-23 Sep (1) Standifer Gap Marsh (CDB, KAC); 23 Sep-18 Nov (1-2) 3 sites in Greene Co (DHM); 29 Sep (1) Knox Co (KDE); 5 Oct (6) Brainerd Levee (KAC); 5 Oct / 3 Nov (5/1) Kingston Steam Plant (KTOS). Gray Catbird: 30 Oct (1) Greene Co (DHM), Irs.

Warblers: Tennessee Warbler: 15 Aug (1) Anderson Co (JDJ), ers; 7 Nov (1) Hamilton Co (David Aborn), Irs. Orange-crowned Warbler: 23 Sep/14 Oct (1) Greene Co (DHM). Yellow Warbler: 22 Sep (1) Cove Lake SP (NeM), Irs. Black-throated Blue Warbler: 30 Sep (1) Hamilton Co (Janice Chadwell, LAW), rare there. Yellow-rumped Warbler: 23 Sep (1) Greene Co (DHM), ers. Black-throated Green Warbler: 27 Oct (1) Cumberland Co (SJS), Irs. Blackpoll Warbler: 11 Sep (1) Royal Blue WMA (NeM, JDJ); 26 Sep (1) Greene Co (DHM); rare in fall. Connecticut Warbler: 29 Sep (1) Greene Co (DHM). Mourning Warbler: 22 Sep (1) Cove Lake SP (NeM). Wilson's Warbler: 11 Sep (1) Royal Blue WMA (NeM, JDJ); 30 Sep (1) Hamilton Co (KAC), only report there. Canada Warbler: 5 Oct (1) Campbell Co (NeM), Irs.

Sparrow-Siskin: CLAY-COLORED SPARROW: 1 Oct (2) Standifer Gap Marsh (LAW, Janice Chadwell, m.ob.), 2nd regional &about 5th state record, pending action of Tenn. Bird Records Committee. Grasshopper Sparrow: 12 Oct (1) Kyker Bottoms (KTOS). Henslow's Sparrow: 12 Oct (1) Kyker Bottoms (KTOS). Nelson's Sharp-tailed Sparrow: 5 Oct (1) Kingston Steam Plant (RDH, DMy, FLB). Lincoln's Sparrow: 14 Oct (1) Greene Co (DHM); 14 Oct-4 Nov (1-3) Standifer Gap Marsh (Bonnie Johnson, KAC, DP); 31 Oct (1) White Co (DFV); 7 Nov (1) Campbell Co (NeM). Lapland Longspur: 16-29 Nov (1-4) U.T. Plant Science Farm, Knox Co (KTOS). Indigo Bunting: 1 Nov (1) Knoxville (Dan Mooney), Irs. Bobolink: 29 Sep

(500) Greene Co (DHM), max. Yellow-headed Blackbird: 14 Aug (1 f) Rankin Bottoms (JWC, Tom Horsch-photo). Brewer's Blackbird: 18 Nov (1) Scott Co airport (NeM). Baltimore Oriole: 27 Oct (1) Kyker Bottoms (June Welch, Jean Alexander, David Johnson), Irs. Red Crossbill: 22 Nov (2) Cove Lake SP (NeM). Pine Siskin: 9 Sep (1) Hawkins Co (Ron Lapp), only report.

Locations: Austin Springs-in Washington Co; Boone L-in Sullivan & Washington Cos; Brainerd Levee-in Hamilton Co; Cove Lake SP-in Campbell Co; Dutch Bottoms-in Cocke Co; Eagle Bend-fish hatchery in Anderson Co; Kingston Steam Plantin Roane Co; Kyker Bottoms-in Blount Co; Nickajack L-in Marion Co; Oneida-in Scott Co; Rankin Bottoms-in Cocke Co; Royal Blue WMA-in Campbell Co; Seven Is. Refuge-in Knox Co; Soddy Mtn-in Hamilton Co; Standifer Gap Marsh-in Hamilton Co.

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EASTERN MOUNTAIN REGION — A dry summer was followed by a wet autumn. Precipitation was about 3 inches above normal for the period. The first three months of the period were much warmer than normal. However, November was cooler than normal. Some of the top records for the period included Red-necked Grebe, "Great White Heron", Ross's Goose, Northern Goshawk, Yellow Rail, Least Tern, Short-eared Owl, and LeConte's Sparrow. Good numbers were recorded at the four banding operations conducted in the region. There were a total of 4,468 birds banded, representing 65 species. Below are summaries for each; the first three sites are at high elevation.

- 1. Big Bald Mountain, Unicoi County: 30 August-23 September (2251 birds of 37 species banded), George R. Mayfield, Jr., G. Rad Mayfield III, & Mark Hopee, banders. Top species banded: Tennessee Warbler (1658), Black-throated Blue Warbler (144), Swainson's Thrush (80), Cape May Warbler (71), Magnolia Warbler (49).
- 2. Whigg Meadows, Monroe County: 7-19 September (1180 birds of 38 species banded), David F. Vogt, bander. Top species banded: Tennessee Warbler (670), Swainson's Thrush (90), Dark-eyed Junco (60), Black-throated Blue Warbler (46), Chestnut-sided Warbler (46), Black-and-white Warbler (44).
- 3. Roan Mountain, Carter County, TN and Mitchell County, NC: 31 August-8 October (719 birds of 47 species banded), Richard L. Knight, bander. Top species banded: Tennessee Warbler (185), Swainson's Thrush (130), Black-throated Blue Warbler (85), Dark-eyed Junco (69).
- 4. Quarry Bog in Shady Valley, Johnson County: 17 October-9 November (318 birds of 11 species banded), Richard L. Knight, bander. Top species banded: Swamp Sparrow (166), Song Sparrow (95), Savannah Sparrow (19), Palm Warbler (17).

Loon-Falcon: Common Loon: 18 Nov (123) S. Holston L (FRC, JWC), max. Horned Grebe: 14 Oct (1) Middlebrook L (JWC), ers; 28 Nov (54) S. Holston L (RLK), max. Red-necked Grebe: 16-17 Nov (1) S. Holston L (LCM, JWC, m.ob.). Eared Grebe: 29 Aug (3) S. Holston L (LCM, RLK), ers, up to 7 through period (m.ob.). Double-crested Cormorant: 5 Oct (2, flying over) Erwin (JHM); 25 Nov (28, flying over)

Carver's Gap (LCM); 27 Nov (67) Middlebrook L (JWC). "Great White Heron": 7-29 Aug (1) S. Holston L (JWC, m.ob.), previous sightings here in 1990, 1991 & 1994. Great Egret: 18 Nov (1) Middlebrook L (JWC), Irs. Snow Goose: 27 Sep (1) S. Holston L (RLK), early. ROSS'S GOOSE: 29 Oct through period (1) Middlebrook L & environs (RLK, m.ob.), first record in Mtn. Region & 2nd in northeast Tenn. American Black Duck: 29 Aug (1) S. Holston L (RLK, LCM), ers. Blue-winged Teal: 25 Oct (5) Ouarry Bog (RLK), Irs. Ring-necked Duck: 17 Nov (260) S. Holston L (JWC), max. Greater Scaup: 5 Nov through season (1-4) S. Holston R. weir, Sullivan Co (RLK et al.). Lesser Scaup: 18 Nov (140) S. Holston L (JWC, FRC), max. Surf Scoter: 4/7/18 Nov (1-2) S. Holston L (JWC/RLK/FRC); 27 Nov (4) Middlebrook L (JWC et al.). Bufflehead: 5 Oct (1) Ripshin L, Carter Co (FJA, AJT), ers. Osprey: 23 Sep (2) Carver's Gap (RLK); 25 Oct (1) Erwin (JHM). Bald Eagle: 29 Aug/13 Oct through period (1 ad) S. Holston L (RLK et al.); 31 Aug (1 ad) Carver's Gap (Nathan Klaus, AJT, RLK); 31 Aug (1 ad) Weaver's Bend, Cocke Co (DHM); 5 Oct (1 ad) Watauga L (GDE, HPL); 31 Oct (1 ad) upper Stoney Cr., Carter Co (FJA). Northern Goshawk: 7 Sep (1 ad) Roan Mtn SP (FJA, GOW et al.); 25 Nov (1 im) Carver's Gap (LCM). Red-shouldered Hawk: 20 Nov (1) Shady Valley (RLK). Merlin: 18 Sep-8 Oct (5 sightings of 1-2 birds) Carver's Gap (RLK). Peregrine Falcon: 17 Aug (1) Erwin (BKS); 5 Oct (1) Watauga L (GDE); 16 Oct (1) Shady Valley (BKS, HPL et al.).

Rail-Flicker: YELLOW RAIL: 4 Oct (1) Round Bald, Roan Mtn (Randy Hoffman fide JHM), first record in NE Tenn. Virginia Rail: 19 Oct (1) Quarry Bog (BKS). Sora: 19-22 Oct (1) Quarry Bog (RLK). Sandhill Crane: 8-11 Nov (1) S. Holston L (Sammy Cross, JWC, m.ob.). Greater Yellowlegs: 29 Sep (1, flying over) Carver's Gap (RLK); 11 Nov (3) S. Holston L (RLK), Irs. Whimbrel: 16 Oct (1) S. Holston L (HPL, BKS et al.). Dunlin: 29 Oct-28 Nov (1-13) S. Holston L (RLK et al.). American Woodcock: 3 Sep-6 Oct (1) Carver's Gap (RLK). Bonaparte's Gull: 18 Nov (50) S. Holston L (JWC, FRC), max. Ring-billed Gull: 5 Aug (1) S. Holston L (JWC, Chris O'Bryan), ers; 18 Nov (700) S. Holston L (JWC, FRC), max. Herring Gull: 18 Nov (20) S. Holston L (JWC, FRC), max. Caspian Tern: 29 Aug (1) S. Holston L (LCM, RLK). Common Tern: 14 Sep (49) S. Holston L (JWC, Ken Hale, Bert Hale, FRC), with 1-7 lingering through 27 Sep (RLK). Forster's Tern: 7-25 Aug (1-3)/13 Oct (1) S. Holston L (JWC/RLK). LEAST TERN: 18 Aug (1) S. Holston L (FRC, Don Holt), 3rd record in NE Tenn. Black Tern: 13-24 Aug (2-9)/14 Sep (1) S. Holston L (GDE, FRC, m.ob./JWC). Mourning Dove: 31 Aug-3 Oct (1-3) Carver's Gap (RLK). Yellow-billed Cuckoo: 29 Sep/3 Oct (2 b.) Carver's Gap (RLK). Short-eared Owl: 27 Oct (1, found dead, specimen to East Tenn. State Univ.) grassy balds on Roan Mtn (fide FJA). Northern Saw-whet Owl: 31 Aug/3 Oct (1/2) Carver's Gap (RLK); 5 Oct (3) Big Bald Mtn (JHM). Common Nighthawk: 5-10 Sep (single birds on 4 days at dawn) Carver's Gap (RLK). Rufous Hummingbird: 20 Oct-19 Nov (1 ad. m) Roan Mtn at 4400 ft. (GOW, m.ob.); 5-24 Nov (1 ad. f) Elizabethton, Carter Co (GOW, b. by CAS on 23 Nov). Red-headed Woodpecker: 29-30 Sep (2, flying over) Carver's Gap (RLK); 29 Oct (1 im) Shady Valley (Chris O'Bryan). Red-bellied Woodpecker: 29 Sep (6, flying over) Carver's Gap (RLK), plus 3 individual sightings on other days; generally considered sedentary, where were these birds going to / from? Northern Flicker: 8 Oct (50+, flying over) Carver's Gap (RLK).

Flycatcher-Pipit: Olive-sided Flycatcher: 5 Sep (1) Carver's Gap (RLK). Yellow-bellied Flycatcher: 27 Aug (1) Wilbur L (HPL, BKS); 6 Sep (1 b.) Carver's Gap (RLK); 12 Sep (1 b.) Whigg Meadows (DFV). Eastern Kingbird: 31 Aug (1) Carver's Gap (Nathan Klaus, AJT, RLK). Yellow-throated Vireo: 8 Oct (1 b.) Carver's Gap (RLK), Irs. Philadelphia Vireo: 13 & 19 Sep (2 b.) Whigg Meadows (DFV); 23 Sep (1) Foothills Parkway, Blount Co (Charlie Muise). Tree Swallow: 19/22/28 Nov (1 each date) S. Holston L (JWC/RLK/JWC), late. Northern Rough-winged Swallow: 21 Oct (2) Holston Valley, Sullivan Co (RLK), Irs. Black-capped Chickadee: 11 Sep (1 b.) Whigg Meadows (DFV). Carolina Wren: 6 Sep (1 b.) Carver's Gap (RLK). Sedge Wren: 9/19 Oct (1) Quarry Bog (RLK/HPL, BKS, RLK). Marsh Wren: 5 Oct (1) Unicoi Co (JHM); 9/17 Oct (3/1) Quarry Bog (RLK). Hermit Thrush: 7-17 Sep (4 juv. b.) Carver's Gap (RLK), believed to be from the local breeding population. Gray Catbird: 24 Oct (1) Erwin (BKS), Irs. Brown Thrasher: 2 Sep-8 Oct (9 b.) Carver's Gap (RLK), unusually high number there. American Pipit: 19 Oct-9 Nov (1-12) Quarry Bog (RLK).

Warbler-Siskin: Golden-winged Warbler: 10 Sep (1 b.) Big Bald Mtn (GRM et al.). Tennessee Warbler: 12 Sep (244 b.) Big Bald Mtn (GRM et al.), max. Orange-crowned Warbler: 21 Oct (1) Roan Mtn SP (RLK); 21/29 Oct (1) S. Holston L (RLK). Nashville Warbler: 27 Aug (1) Wilbur L (HPL, BKS), ers. Yellow-rumped Warbler: 4 Sep (1 b.) Big Bald Mtn (GRM et al.), ers; 29 Sep (1) Carver's Gap (RLK). "Yellow" Palm Warbler: 24 Oct (1) Erwin (BKS); 25/27 Oct (2 b.) Quarry Bog (RLK). Cerulean Warbler: 23 Sep (1) Foothills Parkway, Blount Co (Charlie Muise). Kentucky Warbler: 11 Sep (1 b.) Big Bald Mtn (GRM et al.), Irs. Common Yellowthroat: 9 Nov (1) Quarry Bog (RLK), Irs. Wilson's Warbler: 13 Sep (1) Carver's Gap (AJT, RLK). Summer Tanager: 2 Oct (1) Carver's Gap (RLK). Field Sparrow: 14 Sep-3 Oct (1-3 irregularly) Carver's Gap (RLK). Vesper Sparrow: 22 Oct (1 b.) Quarry Bog (RLK); 24 Oct (1) Erwin (BKS); 4 Nov (1) S. Holston L (JWC). Grasshopper Sparrow: 17 Oct (1) Quarry Bog (RLK), Irs. LeConte's Sparrow: 19 Oct (1) Quarry Bog (HPL, BKS, RLK), 3d NE Tenn record, 2nd at this site. Nelson's Sharp-tailed Sparrow: 9 Oct (1) Quarry Bog (RLK). Lincoln's Sparrow: 18-31 Oct (8 b.) Quarry Bog (RLK). Snow Bunting: 18/28 Nov (1) S. Holston L (FRC, JWC), first confirmed lowland record in NE Tenn. Northern Cardinal: 3 Oct (1) Carver's Gap (RLK), unusual at high elevation. Rose-breasted Grosbeak: 31 Aug-8 Oct (400+ for season) Carver's Gap (RLK), only a fair flight. Indigo Bunting: 30 Oct (1) Erwin (FJA), Irs. Bobolink: 5 Oct (3) Hampton Cr. Cove, near Roan Mtn (FJA, AJT); 5-19 Oct (10-1) Quarry Bog (JWC, HPL, BKS, RLK). Rusty Blackbird: 30 Oct (1) Quarry Bog (RLK), ers; 4 Nov (200) Holston Valley, Sullivan Co (JWC), max. Red Crossbill: 5 Sep/25 Nov (1/2) Carver's Gap (RLK/LCM), only reports. Pine Siskin: 31 Aug through season (1-3) Carver's Gap (RLK et al.), only reports.

Locations: Big Bald Mtn-in Unicoi Co; Carver's Gap-on Roan Mtn, Carter Co (& Mitchell Co, NC); Erwin-in Unicoi Co; Middlebrook L-in Bristol, Sullivan Co; Quarry

Bog-in Shady Valley, Johnson Co; Roan Mtn-in Carter Co; Shady Valley-in Johnson Co; S. Holston L-in Sullivan Co; Watauga L-in Carter Co; Whigg Meadows-in Monroe Co.

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CHB - Carolyn H. Bullock	DHM - Don H. Miller
KAC - Kevin A. Calhoon	NaM - Nancy Moore
TMC - Terry M. Campbell	NeM - Nell Moore
GBC - Gary B. Casey	DMy - Dollyann Myers
PDC - Phillip D. Casteel	DP - David Patterson
HC - Hap Chambers	WRP - W. Robert Peeples
JWC - J. Wallace Coffey	DDP - Dick D. Preston
FRC - F. Rack Cross	VBR - Virginia B. Reynolds
JSD - Jay S. Desgrosellier	JKS - Jan K. Shaw
GDE - Glen D. Eller	MBS - Michael B. Sledjeski
KDE - K. Dean Edwards	CAS - Chris A. Sloan
TE - Troy Ettle	MS - Michael Smith
FCF - Francis C. Fekel	BHS - Barbara H. Stedman
LJG - Leslie J. Gibbens	SJS - Stephen J. Stedman
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RDH - Ron D. Hoff	GOW - Gary O. Wallace
JDJ - J. Dev Joslin	JRW - Jeff R. Wilson
LVK - Linda V. Kelly	LAW - Libby A. Wolfe
RLK - Richard L. Knight	LVZ - Linda V. Zempel
HPL - Howard P. Langridge	MAZ - Mary A. Zimmerman
BL - Betty Leggett	
KL - Ken Leggett	
DMa - Don Manning	NTOS - Nashville Chapter, TOS
GRM - George R. Mayfield, Jr.	TOS - Tennessee Ornithological Society

#### 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: Christopher J. Welsh, 5337 Hickory Hollow Road, Knoxville, TN 37919. Manuscripts that have been published in other journals should not be submitted. Electronic copies on disk or sent by e-mail to <cwelsh@utk.edu> 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.

ABSTRACT: Manuscripts of five or more typed pages should include an abstract. The abstract should be less then 5% of the length of the manuscript. It should include a brief explanation of why the research was done, the major results, and why the results are important.

LITERATURE CITED: List all literature citations in a "Literature Cited" section at the end of the text. Text citations should include the author and year.

IDENTIFICATION: Manuscripts including reports of rare or unusual species or of species at atypical times should include: date and 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 the identification, and reference works consulted.

REPRINTS: Reprints are available to authors on request. Billing to authors will be through the TOS Treasurer. Request for reprints must be made well in advance of printing.

SEASON REPORTS: Observations that are to be considered for publication in "The Season" section should be mailed to the appropriate Regional Compiler. Consult a recent issue of *The Migrant* for the name and address of the compiler.

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