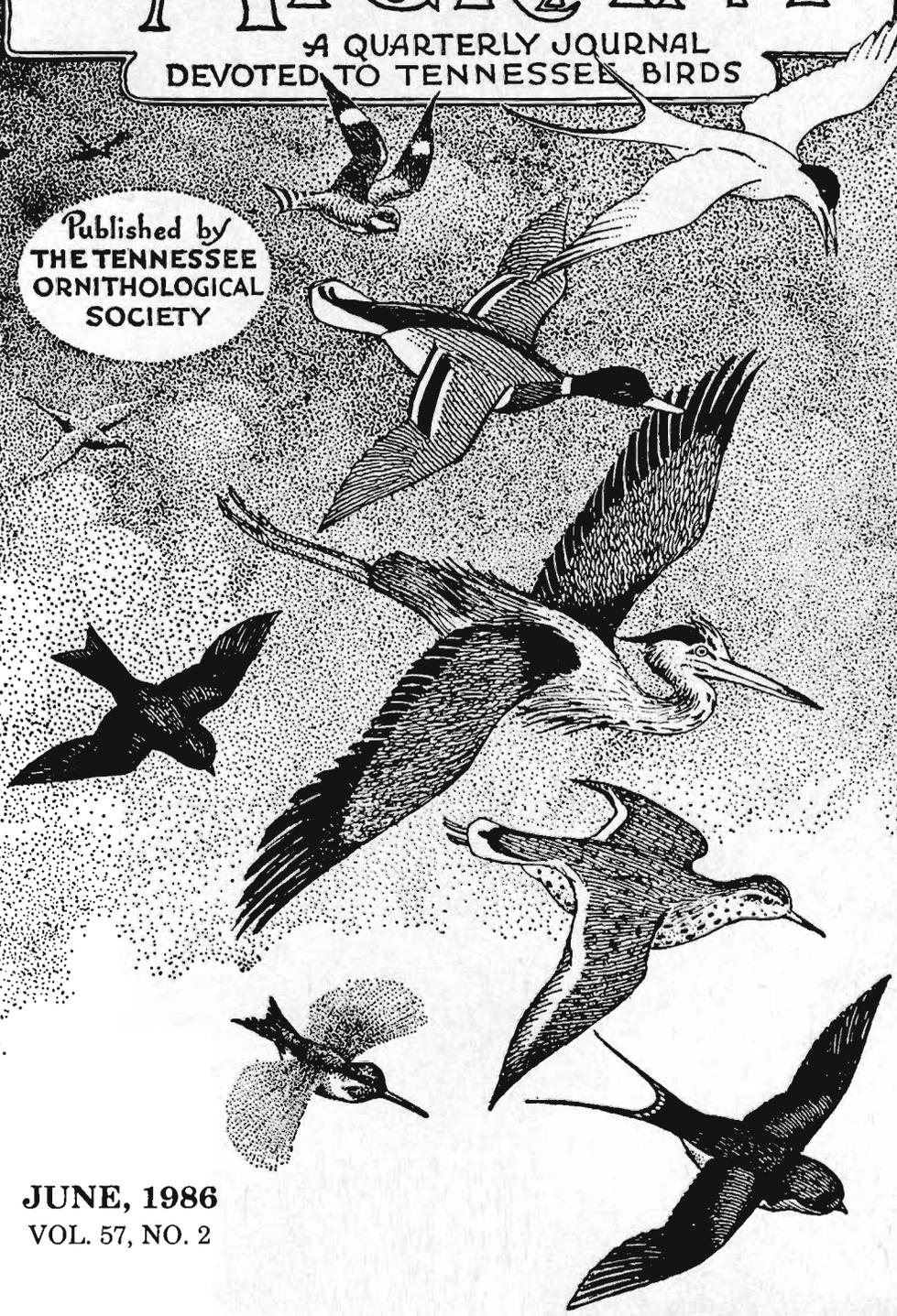


THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

Published by
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AUTUMN HAWK FLIGHTS - 1985

Linda J. Fowler

During the 1985 fall hawk migration season, observers logged 182.3 hours at 6 Tennessee lookouts and reported 11 different species of hawks (Table 1). Most of the hawk watching was concentrated in September with few stations active by the end of the month. The peak of the Broad-winged Hawk migration passed through Tennessee 14-15 September, several days earlier than in previous years. The highlight of the season was the 3,380 Broad-winged Hawks seen at Ooltewah Firetower on 14 September (Table 2), which set a new high daily total for Broad-wings in Tennessee.

A high pressure system centered over the Great Lakes region pushed through east Tennessee on 12 September and by 13 September early morning temperatures had plunged into the 5°C (40°F) range. On 13 September, the only active station, Signal Point, reported 513 Broad-wings. On 14 September, the all-time daily Broad-wing high for Tennessee was reported from Ooltewah FT on White Oak Mountain. Lil Dubke reported that 2,383 of the 3,380 Broad-wings came through between 1100 and 1130 hours. On nearby Signal Pt., Ken Dubke reported 761 Broad-wings (9 hours), while Look Rock reported 713 Broad-wings (7 hours). Other active east Tennessee stations reported fewer Broad-wings (Table 1) on 14 September.

On 15 September, Audrey Hoff reported 686 Broad-wings (7 hours) at Look Rock. Paul Hartigan spent 4.5 hours on Thorn Hill and tallied 393 Broad-wings. The last daily Broad-wing count exceeding 100 was reported on 16 September by Linda Fowler and Boyd Sharp at Thorn Hill. No Broad-wings were reported from active stations after 29 September.

Resident Red-tailed Hawks were reported from all east Tennessee stations during September. However, few stations were active later in the season (October-November) during the peak of the Red-tail migration. The highest daily total of migrant Red-tails was 11 birds seen on 6 October at Signal Pt. by Ken Dubke. Only 5 Red-shouldered Hawks (0.03 birds/hr) were seen during the 1985 season among 4 different lookouts. This number is lower than the 1955-1984 average of 0.04 birds/hr for this species.

Sharp-shinned Hawks were reported from 13 September to 17 October in numbers (0.44 birds/hr) that exceeded the 12-year (1972-84) average of 0.33 birds/hr. Highest daily totals were reported on 24 September at Signal Pt. (10 birds) and Ooltewah FT (9 birds). Observers reported fewer uniden-

Table 1. Autumn Hawk Flights - 1985.

Date	Location	Reporter (# Observers)	Hours	TV	BV	SS	CH	Unsd. Accip.	RT	RS	BW	Unld. Buteo	NH	OS	AK	Others	Total
08/18	Signal Pt.	D. Patton (1)	1.0								22						22
09/13		Patton/Kafka (1)	2.5			1					513		2		1		517
09/14		K. Dubke (4)	9.0			2					761		2	1	1		766
	Ooltawah FT	L. Dubke (2)	7.0		3		2		2	2	3380						3389
	Look Rock	A. Hoff (4)	7.0							1	713					6u	721
	Mt. Roosev. FT	J. B. Owen (1)	6.5	3			1				55						59
	Thorn Hill	L. Fowler (2)	8.5				6		1	1	355	2					365
09/15		P. Hartigan (2)	4.5						1		393			1		3u	400
	Laurel Grove FT	L. Fowler (1)	2.0				2				15						18
	Look Rock	A. Hoff (2)	7.0				2	2	5		685		9	1	2	6u	712
	Signal Pt.	K. Dubke (4)	9.0				5	2		2	170				2		181
09/16	Ooltawah FT	L. Dubke (2)	4.0				1		1		10						12
	Thorn Hill	L. Fowler (2)	3.5				1				129	1				1u	132
09/17	Mt. Roosev. FT	J. B. Owen (1)	2.0	3							5						8
09/18		Sheffield (2)	5.5	1	4			1		1	18			1	1		29
09/19	Look Rock	A. Hoff (1)	2.0				2	1			5						8
09/20		(2)	5.8				2	1			32					1PG, 4u	39
09/21		(4)	6.2				2	1		1	32				4	1u	44
	Signal Pt.	K. Dubke (3)	8.0				3		1	4	65						53
09/22			8.5				4		2	2	2						8
	Ooltawah FT	L. Dubke (1)	2.0	1	2				2	2	6					1PG	12
09/24		K. Dubke (1)	8.5				9		2	1	10		1	1			24
	Signal Pt.	D. Patton (4)	6.5	4	10	10	1		5		29		1				60
09/25	Ooltawah FT	L. Dubke (2)	5.0	8	3	5					65		1				62
	Look Rock	T. Howe (1)	1.0		4					1	0				1		6
	Thorn Hill	P. Hartigan (2)	7.5				1	1	1		71	2		1		1u	78
09/27		J. B. Owen (1)	3.0	2	3						10						15
09/28	Look Rock	T. Howe (1)	1.5		2	2					5						9
	Signal Pt.	K. Dubke (1)	8.0				3			1	4						8
09/29			8.0														0
	Look Rock	A. Hoff (5)	3.5				2	1			13			3		1u	20
10/05	Signal Pt.	K. Dubke (1)	8.0		1	7	1		1	1				1	2		15
10/06			8.0				4	1		11					1		17
10/17	Thorn Hill	P. Hartigan (2)	1.5				7	2		1							11
Total			102.3	24	32	80	18	11	36	5	7533	23	9	11	13	23u, 2PG	7820

Table 2. Summary of 1985 Autumn Hawk.

Location	Hours	BW High	TV	BV	SS	CH	Unid. Acci.				Unid. Buteo	NH	OS	AK	Others	Total	Total Hawks Per Hour
							RT	RS	BW	NI							
Signal Pt.	76.5 (11 days)	761 (9/14)	4	11	38	5	1	26	1	1546	1	5	2	7	1647	21.5	
Look Rock	34.0 (8 days)	713 (9/14)	0	6	10	6	5	2	1	1485	13	1	2	9	18u, 1PG	1559	45.9
Thorn Hill	28.5 (6 days)	393 (9/15)	2	3	15	3	3	1	1	958	8	0	2	0	5u	1001	35.2
Ooltewah FT	27.3 (5 days)	3380 (9/14)	9	8	14	3	2	6	2	3451	0	2	1	0	1PG	3499	128.2

tified Accipiters this season and more Cooper's Hawks (18 total). Cooper's Hawks (0.10 birds/hr) this season exceeded the 12-year average of 0.07 birds/hr.

Nine Northern Harriers (0.05 birds/hr) were seen, which was slightly lower than the 12-year average of 0.06 birds/hr. Harriers were observed between 13-25 September with a maximum daily high of 2 birds. This year's total of 11 Ospreys (0.06 birds/hr) was consistent with the 12-year average of 0.06 birds/hr for this species. No Bald or Golden Eagles were seen from Tennessee lookouts this year.

American Kestrels were reported in numbers (0.07 birds/hr) which slightly exceeded the 12-year average of 0.06 birds/hr. Highest daily total of 4 birds was reported from Look Rock on 21 September. A Peregrine Falcon was reported from Look Rock on 20 September and Ooltewah FT on 22 September. Both birds were immature.

Most Tennessee lookouts reported resident Turkey and Black Vultures during the season although most stations were inactive in October during the migration peak. However, groups of migrating Turkey Vultures were reported from east Tennessee including: 17 October (157) House Mountain (Paul Hartigan); 17 October (140) Douglas Lake (Paul Hartigan); 25 October (155) Speedwell (George McKinney); 28 October (125) Norris (Linda Fowler); and 26 November (90) near Norris (Chuck Nicholson).

KEY TO SPECIES ABBREVIATIONS IN TABLES

TV - Turkey Vulture; BV - Black Vulture; SS - Sharp-shinned Hawk; CH - Cooper's Hawk; RT - Red-tailed Hawk; RS - Red-shouldered Hawk; BW - Broad-winged Hawk; NH - Northern Harrier; OS - Osprey; AK - American Kestrel; PG - Peregrine Falcon; u - Unidentified raptor.

LOOKOUTS

For a detailed description of lookout stations not described in this report, see *Migrant* 52:89-90, 1981; 53:62, 1982; 54:36-37, 80, 1983; 55:80, 1984.

Rt. 4, Box 541, Valley Lane, Clinton, Tennessee 37716.

ANNOUNCEMENTS

NEW AUTUMN HAWK COUNT COMPILER

Linda Fowler has resigned as compiler of the fall hawk migration report for *The Migrant*, a position she held for 6 years. She will be replaced by Audrey Hoff, who will begin with the compilation of this fall's results. Hawkwatching results must be sent to her by 30 November in order to meet reporting deadlines imposed by *The Migrant* and *American Birds*. Remember that season-long observations from a few lookout points are more valuable in determining changes in hawk populations and migratory trends than are scattered reports from numerous areas. Hawkwatchers are encouraged to use the HMANA reporting form, and may obtain copies of it from Audrey. Use the TWRA Unusual Species card or TOS Certification Committee verification form to provide details on rare species, such as Peregrines, Merlins, Goshawks, and Rough-legged Hawks. Send results to Audrey R. Hoff, 4523 McCloud Road, Knoxville, TN 37918.

HENRY PARMER'S NOTEBOOK

The bird records of Henry E. Parmer (1914-1985) by his own wish have been given to the Tennessee Ornithological Society and placed in permanent storage in the Special Collections of the Library of the University of Tennessee, Knoxville. There they will be available to anyone. The notes are contained in a single large notebook. They are a mixture of his own records, reports from other observers, and compilations of records that appeared in *The Migrant*. Many of the observations have been published in his thorough study, "Birds of the Nashville Area" (first edition, 1966; fourth edition, 1985; Nashville Chapter, T.O.S.). The data, however, are not limited to the Nashville area but come from over the state.—JAMES T. TANNER, Curator.

MINUTES OF THE 1986 ANNUAL BOARD OF DIRECTORS AND BUSINESS MEETING

The 71st Annual Meeting of the Tennessee Ornithological Society was held jointly with the 67th Annual Meeting of the Wilson Ornithological Society on 17-20 April, 1986, at the Holiday Inn, Gatlinburg, Tennessee. The TOS Board of Directors meeting was called to order by President James Ferguson at 1700 on 19 April. The President officially welcomed the new Red River Chapter of Springfield. The minutes of the 1985 fall meeting were approved.

REPORTS OF OFFICERS

Tom Guschke, VICE PRESIDENT for Middle Tennessee, reported on activities of the Nashville, Murfreesboro, Columbia and John Sellars Chapters.

Lil Dubke, VICE PRESIDENT for East Tennessee, had the Chapter Presidents from Chattanooga, Greeneville, Knoxville and Lee Herndon report on their chapter's activities.

Dollyann Daily, VICE PRESIDENT for West Tennessee, reported on her district.

TREASURER George Payne reported for the period 1 November 1985 to 10 April 1986, listing income of \$7,810.73; expenses of \$4975.48; and a capitol reserve of \$33,178.51.

The report of the CURATOR, James Tanner, was read by President Ferguson, and showed net income from sales of back copies of *The Migrant* since November 1985 was \$279.78; the book sale from the W.W. Walker library netted \$599.75; and the bird records of the late Henry E. Parmer have been placed in the library of the University of Tennessee, Knoxville.

The EDITOR of *The Migrant*, Charles Nicholson, reported that 3 issues have been mailed since the last meeting and that he expected to have the December 1985 and March 1986 issues mailed by the middle of May, which will get *The Migrant* on schedule. He asked that Season information and reports be turned in promptly.

There were no reports from the Directors-at-Large or from the Secretary.

REPORTS OF COMMITTEES

NOMINATING—Chairperson Martha Waldron thanked committee members Anne Hettish and Wallace Coffey and recommended Robbie Hassler as nominee for President-Elect. Steve Stedman moved her acceptance, which was seconded and passed.

FINANCE—Chairperson Richard Taylor reviewed the condition of the Society's funds invested in the Massachusetts Investment Trust account, which have a history of approximately 18% annual growth. Following discussion, no changes were decided upon. He announced that the Finance Committee had audited the Treasurer's books and approved them.

CONSERVATION/EDUCATION—Chairperson Ken Dubke announced that David Pitts and Wallace Coffey are the other committee members. He reported that most chapters have appointed Conservation/Education chairpersons as requested. He reported on Homecoming '86 Bluebird project activities, which included presentations to Governor Alexander, monitoring of boxes in roadside rest areas by local chapters, and preparation by David Pitts of a bluebird slide program, available for \$15. Lil Dubke emphasized the excellent quality of the slide program, which is suitable for garden clubs, schools, libraries, etc.

Ken Dubke reported that he had recently distributed to each chapter a letter written by the Nashville Chapter about action to protect the Bald Eagle. Following discussion, he moved that the Nashville Chapter continue investigation as to what action TOS should take on this matter and present it at the fall meeting; the motion was seconded and passed.

George Mayfield distributed copies of a resolution passed unanimously by the Columbia Chapter, urging Monsanto to preserve their lakes and ponds. He moved for passage of the resolution, and the motion was seconded. During discussion, Charles Nicholson presented an amended resolution, which was passed.

Dubke pointed out that TOS does not have a permanent mailing address and with the agreement of Bob Hatcher, moved that the TWRA address be used to channel mail to TOS. Following discussion, the motion failed. Dubke also announced a conservation victory, a public ceremony to mark the donation to TWRA of 62 Acres of the Amnicola Marsh by the Norfolk Southern Railroad Corporation.

CERTIFICATION—Chairperson Charles Nicholson reported that the committee will be meeting soon and appealed for documentation for unusual sightings.

BREEDING BIRD ATLAS—Chairperson Paul Hamel recognized all committee members and regional coordinators, and announced that Rick Knight has agreed to serve as Co-coordinator with Fred Alsop in Region 9. Programs have been given to 10 chapters or other groups, TWRA has donated \$750 to print forms, and 200 people have signed up to cover one or more blocks. He has a tax lawyer's opinion that travel expenses may be deducted as a charitable contribution on the 1040 tax form. He will present a budget at the fall meeting.

OTHER ASSIGNMENTS—Patches and Decals: Lil Dubke gave her supply of patches to Robbie Hassler, and announced that new decals will be ordered. When the remaining 256 patches are sold, TOS will have realized about \$400 profit. President Ferguson thanked Dubke for her 13 years of service with this project. There was no report from the Editor of *The Tennessee Warbler*, Buzz Bean, who was absent. Steve Stedman, Fall Meeting Program Coordinator, announced the 1986 Fall Meeting will be held in Lebanon 17-19 October, hosted by the John Sellars Chapter. Papers are solicited, and Charles Smith from the Cornell Laboratory of Ornithology will give the Saturday night program.

OLD BUSINESS

Treasurer George Payne requested that chapters send their dues and

rosters to him so that all members will receive *The Migrant* and *Tennessee Warbler*.

NEW BUSINESS

President Ferguson proposed the appointment of Richard Taylor, David Pitts, Audrey Hoff, Bill Whitley and George Payne as Finance Committee members to serve through the 1987 Spring meeting. The motion was made, seconded, and passed. President Ferguson appointed to the Certification Committee James Tanner as member from East Tennessee, with Rick Knight as alternate.

Charles Nicholson proposed that TOS give a one year membership to Representative Jim Cooper of Shelbyville and his wife Martha Hayes Cooper, who are attending the meeting. Mrs. Cooper was a graduate student of Dr. Jerome Jackson at Mississippi State University and now works for the World Wildlife Fund. The motion was made, seconded, and passed.

Paul Hamel announced that the 1986 Foray will be at Standing Stone State Park in Overton County, 23-26 May. President Ferguson announced that the Memphis Chapter will host the 1987 Annual Meeting at Memphis, tentatively the first weekend in May. Ken Dubke moved to accept this invitation, which was seconded and passed.

Following the announcement of a TOS get-together after the banquet, the meeting was adjourned at 1820.

BUSINESS MEETING

The members of the TOS and the WOS met together for the buffet style dinner served by the Holiday Inn. President James Ferguson called the TOS Annual Business Meeting to order at 2045. He welcomed all present and expressed appreciation for the joint meeting with the WOS. President Ferguson noted that all TOS officers were in attendance and recognized each. He then called the roll of TOS chapters and members-at-large, who stood and where recognized. He introduced U.S. Representative and Mrs. Jim Cooper, thanked them for attending, and announced the gift membership voted them by the Board.

President Ferguson announced the Foray Dates, 1986 Meeting and 1987 Annual Meeting details, and reported that the Finance Committee had found the Treasurer's books in order. He read the resolution on Monsanto ponds passed at the Board meeting. He announced that the Board recommended the Nominating Committee's choice for President-Elect Robbie Hassler. George Payne moved that nominations be closed. The motion was seconded, and passed by acclamation.

President Ferguson thanked the Knoxville Chapter and the Local Committee for the meeting arrangements. Charles Nicholson, Chairperson of the Local Committee, introduced the speaker for the evening, Dr. James T. Tanner, who related the history of the Great Smoky Mountains National Park. Following this address, the meeting was adjourned.

CAROLYN H. BULLOCK, Secretary.

ROUND TABLE NOTES

FIRST RECORD OF PARASITIC JAEGER IN TENNESSEE—On 5 October 1985, in response to the passage of a cold front accompanied by strong northwesterly winds, Robinson visited the Pace Point and Britton Ford areas of the Tennessee National Wildlife Refuge in Benton and Henry Counties, Tennessee. During the day winds averaged 20-40 kph, and it was noted that various gulls and raptors were using the air currents, which provided good migration and soaring conditions. In all, 3 Franklin's Gulls (*Larus pipixcan*), 1 Bonaparte's Gull (*Larus philadelphia*), 7 Ring-billed Gulls (*Larus delawarensis*), 1 immature Bald Eagle (*Haliaeetus leucocephalus*), and 3 Ospreys (*Pandion haliaetus*) were observed. Late in the day, while crossing the bridge spanning Kentucky Lake at Paris Landing State Park, Robinson noted a dark larid flying near one of the small islands in the Lake; however, not enough sunlight was available to examine the bird closely.

Stedman was notified of the Franklin's Gulls and arrived at Pace Point on the morning of 6 October 1985. Upon discovering 3 Franklin's Gulls resting on the water near Paris Landing State Park, he visited that location. At 1012, a dark larid was discovered about 1 km offshore southeast of the park. It sat on the water and preened for several minutes and then periodically took to the air, circling randomly as if for food. The presence of a white flash at the base of the primaries on both wings, and two central rectrices slightly longer than the rest of the tail, confirmed that the bird was a jaeger, while its overall dark coloration indicated it was a dark phase bird. It was observed until 1037, after which Robinson was notified. Both observers returned to the site and relocated the bird at 1300. Although the bird was observed for 15 minutes, the glare from the sun on the water prevented the gathering of additional information about the bird's identity.

To place the sun at our backs, we proceeded to Pace Point and observed the bird from 1415 to 1615 at distances ranging from 300 m to 2 km. Its overall dark coloration, mottling on the underwings and upper tail coverts, and pale flanks indicated that we were observing an immature, dark morph jaeger. The white at the base of the primaries was extensive and flashy, forming a crescent of white on the upper and lower surfaces of the wing. Although more than 2 of the primary shafts on the upper surface were white, the exact number having this characteristic was not determined.

The bird continued to search periodically for food. Every time it landed it held its wings above its body for a few seconds, much in the manner of an Upland Sandpiper (*Bartramia longicauda*). During this behavioral activity, we failed to discern a second, smaller area of white on the underwing surface at the base of the primary coverts. The absence of this field mark was the first indication that this bird was not a Pomarine Jaeger (*Stercorarius pomarinus*).

When the bird was in flight, its upper tail surface was uniformly dark, but its upper tail coverts were a lighter, mottled brownish-white color. The underwing surface, excluding the white flash at the base of the primaries, exhibited a pattern of mottling or barring consisting of dull white and dark gray colors. The mandible was shiny, especially when viewed in

direct sunlight, at the base and dark at the tip; occasionally, the basal two-thirds of the mandible appeared bluish.

The flight of this bird was gull-like and similar to the flight of a Ring-billed Gull (or similar-sized gull) in overall rhythm and depth of wingbeat. The flight lacked the deep, ponderous wingbeats of a species such as an eagle; however the flight was not buoyant or tern-like. The wings were long, crooked at the wrist like those of an Osprey, and relatively pointed at the tips. The two central rectrices were only slightly longer than the rest of the tail feathers, but the shape of these two feathers could not be determined due to the great distance at which the bird was observed. The head, neck and mantle were dark gray-brown. When the bird swam, its sides appeared somewhat lighter than the mantle, consisting of a pattern of brownish mottling or barring. The cap was darker than the rest of the head and neck.

Immature jaegers are often difficult and sometimes impossible to identify. Usually several key field marks must be weighed together for identification to be made; these include the amount and pattern of white in the wings and the barring on the tail coverts and wing linings, the shape of the tail streamers, and the behavior, overall flight pattern, and size of the bird (Harrison 1983). All but the last of these factors had been satisfactorily analyzed when the bird was seen flying in a falcon-like manner directly toward a group of birds sitting on the water. It landed among these birds, which included 6 American Wigeons (*Anas americana*) and 1 Herring Gull (*Larus argentatus*). All three species were simultaneously within the viewing fields of our spotting scopes (Bushnell Spacemaster IIs with 20x and 25x eyepieces) for 4 to 5 minutes, and all eight birds were within approximately 8m of one another. When the jaeger briefly harassed the ducks, it was noted that its size very closely approximated that of each of the wigeons. Eventually it swam close to the Herring Gull, which was at least 25% larger than the jaeger. Later, the jaeger was harassed in flight by a Ring-billed Gull for about 30 seconds, during which time it could be determined that the gull was slightly larger than the jaeger. Relative sizes of all these species are given in Table 1.

Table 1. Body lengths (in cm) of Parasitic, Pomarine and Long-tailed Jaegers, Herring and Ring-billed Gulls and American Wigeon.*

Species	Body Length	Body Length Without Tail Streamers	Body Length With Tail Streamers
Long-tailed Jaeger		24-33	50-58
Pomarine Jaeger		44-58	65-79
Herring Gull	56-66		
Parasitic Jaeger		32-53	46-67
American Wigeon	46-58		
Ring-billed Gull	46-53		

*All body lengths adapted from Harrison (1983), except American Wigeon (Peterson, 1980).

The various field marks observed indicate that this bird was a Parasitic Jaeger (*S. parasiticus*). Its plumage helped eliminate Long-tailed Jaeger (*S. longicaudus*), the dark phase of which is virtually unknown (Cramp 1983), as did its size, flight characteristics and pattern of white in the upperwing surface. The pattern of its underwing, its size and flight charac-



Figure 1. Immature dark phase Parasitic Jaeger near Pace Point, Henry/Stewart Counties, October 1985. Photo by Wallace Todd.

was seen and photographed (Stedman 1985). This sighting of Parasitic Jaeger is unusual not only because it is the first documented in the state but also because of the length of time involved in its stay; it was last sighted 22 October 1985 in the same area where first located (*vide* M.L. Bierly). In mid-October the bird was photographed (Figure 1) by Wallace Todd.

We acknowledge with thanks the contribution of a photograph by Wallace Todd.

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STEPHEN J. STEDMAN, Rt. 6, Pinewood Rd., Franklin, TN 37064, and JOHN C. ROBINSON, P.O. Box 215, Dover, TN 37058. Accepted 20 May 1986.

teristics were also instrumental in eliminating Pomarine Jaeger. If accepted, this record constitutes the first for Tennessee, although one sighting of a possible Parasitic occurred 16-17 September 1978 at Woods Reservoir, Franklin County (Purrington 1979; Bierly 1980). The only other sighting in Tennessee of a member of the genus *Stercorarius* occurred 2-4 September 1984 at Island No. 13 in Lake County, where a Long-tailed Jaeger

A SIGHT RECORD OF "BULLOCK'S" ORIOLE IN TENNESSEE—On 17 December, 1983, Don and Linda Magee and I spent the day participating in the Murfreesboro Christmas Bird Count. During mid-afternoon, we observed a large mixed flock of Common Grackles (*Quiscalus quiscula*), Red-winged Blackbirds (*Agelaius phoeniceus*), and Brown-headed Cowbirds (*Molothrus ater*) near I-24 in north central Rutherford County. Near the flock we noticed a pale gray bird feeding on honeysuckle (*Lonicera* sp.) berries in a fence row. The head was orange-yellow with a dark eye and dark icterid beak. The back was dark gray and the belly was light gray. We noted yellow-orange undertail coverts and the wings were black with 2 white wing-bars. The bird was observed with a 22x spotting scope at a distance of about 30m, and continued actively feeding as we left the area. All field marks were noted by each of the 3 observers. A camera was not available and no confirmatory photographs were obtained. We feel that this bird was a female Northern Oriole (*Icterus galbula*) of the "Bullock's" race. Although there have been reports of Northern Orioles on prior Christmas Bird Counts, this is the first well documented "Bullock's" Oriole report for the counts and for the state of Tennessee.

TERRY J. WITT, 507 Highland Terrace, Murfreesboro, TN 37130. Accepted 17 February, 1986.

A LONG-BILLED CURLEW IN LAKE COUNTY, TENNESSEE—At 0800 on 1 September 1985, while birding Island 13 on the Mississippi River in Lake County, Tennessee, I found a single Long-billed Curlew (*Numenius americanus*) standing along the bank of the river. The curlew was with 3 Little Blue Herons (*Egretta caerulea*) and 1 Great Blue Heron (*Ardea herodias*). At first the distance (300m) and light conditions kept me from determining whether it was a curlew or Whimbrel (*N. phaeopus*). At 0810 the herons and curlew flushed and flew towards me. The curlew passed by me at a distance of about 50m, and I saw its long down-curved bill and cinnamon underwings, and noted the lack of white on its head. I also heard it call, and had no doubt that it was a Long-billed Curlew. The curlew flew out of sight, and I was unable to find it after an hour of searching. Later that day, Jeff R. Wilson and Dollyann Daily of Memphis observed the bird in the same area.

This is the first record of a Long-billed Curlew for the state of Tennessee.

DONALD W. BLUNK, Rt. 2, Box 788, Dover, TN 37085. Accepted 17 February 1986.

BOOK REVIEW

THE ATLAS OF BREEDING BIRDS OF VERMONT—edited by Sarah B. Laughlin and Douglas P. Kibbe, 1985. University Press of New England, Hanover and London, xx + 456 pp., 204 maps, 8 plastic overlay maps, hardcover, \$45.00.—The first in what is expected to be a long line of works devoted to breeding bird atlas projects in the states and provinces of North America, THE ATLAS OF BREEDING BIRDS OF VERMONT offers information on the breeding biology and distribution of 194 Vermont bird species, 137 of which have been known to breed in Tennessee. By far the bulk of this work is devoted to accounts of the species recorded as breeding during the period of the Vermont atlas project, 1976-81. However, the introduction offers preliminary information about several atlas-related subjects, including collecting data, recording field data, data analysis by physiographic region, results and interpretation, and biases and limitations, each of which helps clarify important aspects of the project. Several appendices follow the species accounts; these deal with the following matters: Vermont geography and ecology, plants cited, animals cited, Northeastern Breeding Bird Atlas Conference recommendations, and orders and families of birds confirmed as breeders in Vermont.

Easily the most intriguing portion of the work is the account of the species themselves. The 194 accounts were written by 15 different authors, but they vary surprisingly little in quality of content. Each account of the 178 birds confirmed as breeding in the state during the 5-year atlas project covers 2 pages, including about one and one-half pages of text, a black-and-white drawing of the species, a well-presented map showing areas of the state in which the species was noted as a possible, probable, or confirmed breeder, and two tables, one showing the number and percentage of priority blocks in which the species occurred and the other offering information on the distribution of the species by physiographic region. Fourteen other species accounts, of birds recorded as possible or probable breeders, are included after the main accounts and are similar in format but shorter in length than the main accounts. Finally, accounts for the reintroduced Peregrine Falcon and post-atlas-discovered Great Black-backed Gull complete this section of the work.

The texts of the species accounts will probably be the part of the work that readers will enjoy the most, as they are well-written, concise, and packed with pertinent information about the breeding biology of the species involved. Typically, the text begins with comments about the behavior and general distribution of the species; it then proceeds to a discussion of the distribution of the species in Vermont, whereafter follow comments about habitat preference, nest site selection, nest construction, egg dates, clutch size, incubation, and fledging. The accounts generally conclude with a brief summary of the changes in the species' population level over the last 100 years and/or any conservation issues which affect its status in the state.

Very few flaws occur in this work, attesting to the skills of its editors. On p. 13 the symbol used to indicate confirmed breeding is missing, for instance, but generally the work is free of such items. Its price will no doubt deter many, and to be honest I must admit that I hesitated before committing so many dollars to the purchase of a work without color illus-

tration; however, I'm delighted with the book despite this drawback, primarily because so many of the species which breed in Vermont are also found as breeders in Tennessee. This overlap in breeding species will make the book highly useful to Tennessee field workers involved in our state's atlas project.

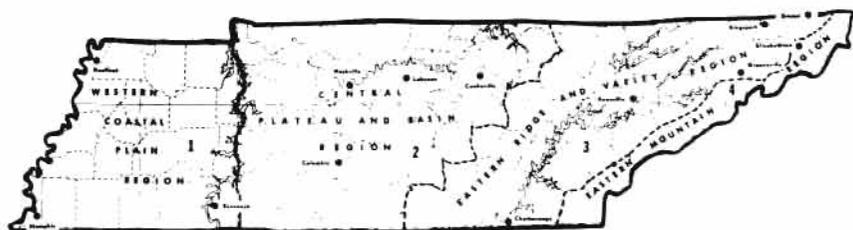
THE ATLAS OF BREEDING BIRDS OF VERMONT will convince any amateur or professional ornithologist who peruses its pages that it is a highly worthwhile addition to his or her library, particularly those involved in atlas work.—STEPHEN J. STEDMAN.

ANNOUNCEMENT

THE 1986-87 WINTER ROADSIDE RAPTOR SURVEY

During the winter of 1986-87 a Winter Roadside Raptor Survey will be conducted in order to determine the distribution and abundance of the state's diurnal raptors and the Loggerhead Shrike. These surveys involve observers in about 3-5 hours of fieldwork at least once during the winter in a single county; however, multiple counts may be taken in a county, or single counts may be taken in several counties. For details and forms contact Stephen J. Stedman (Rt. 6, Pinewood Rd., Franklin, TN 37064; 615-791-1277). Results of the WRRSs will be published in *The Migrant*.

THE SEASON



WINTER: 1 NOVEMBER 1985 - 28 FEBRUARY 1986

The weather this season was characterized by wide swings in temperature, but with no periods of extreme cold as in recent winters. Precipitation was well below normal in December, there was record drought in January, and near normal rainfall in February. Snowfall was below normal and the heaviest snows occurred in mid-February. One might expect cold temperatures statewide in early December and snow in East Tennessee in mid-December to affect numbers on Christmas Bird Counts. Many counts (see *Migrant* 57:8-15, 20, 1986 for complete results) had high species numbers and a variety of half-hardy lingerers and northern invaders. Selected observations from the Christmas Bird Counts are included here, and regional compilers are reminded to identify count data as such when including it in any report.

As anticipated, numbers of waterfowl were low at some locations, although a Black-bellied Whistling-Duck which lingered from last season added to the variety of species reported. The number of Bald Eagles counted on the Mid-winter Eagle Census (Table 1), conducted in early January by state and federal agency personnel and TOS members, is about average for recent mild winters. Northern Goshawks were reported in the 2 central regions and there were several Rough-legged Hawk reports. The fall Sandhill Crane migration, which began earlier than normal, continued well into December, and there were wintering birds reported in Middle and East Tennessee. The only unusual gulls reported were a Franklin's Gull and a Black-legged Kittiwake near Knoxville. Red-breasted Nuthatches were fairly common in West and Middle Tennessee and somewhat less common in the eastern part of the state. Purple Finches were present in good numbers, and the explosive growth in House Finch numbers continued unabated. Pine Siskin and Evening Grosbeak abundance varied throughout the state, and each was numerous in some localities. Other unusual species reported this season were a Common Ground-Dove at Memphis, a Common Redpoll at Sewanee, and a White-winged Crossbill at Oak Ridge.—CHARLES P. NICHOLSON.

Abbreviations used in the following reports include: CBC - Christmas Bird Count; EOP - end of period; max - maximum number during period; m.ob. - many observers.

WESTERN COASTAL PLAIN REGION—The season was characterized by mild, above seasonal temperatures and availability of food and

habitat. While the number of species sighted was low, several unusual birds were reported. These included a White-winged Scoter and a Common Ground-Dove, both third reports of these species from West Tennessee. Erratic visitors, such as Pine Siskins and Evening Grosbeaks, were seen at several feeders. Purple Finches and House Finches were seen in unusually large numbers.

Loon—Gull: Common Loon: 11 Jan (9) BSU (JCR); 17 Feb (5) PAP (JCR). Horned Grebe: 7 Dec (47), 13 Dec (37), 25 Jan - 22 Feb (12) PLS (JCR). Double-crested Cormorant: 11 Jan (1) PAP (JCR). **BLACK-BELLIED WHISTLING-DUCK:** bird reported last period present 24 Nov - 18 Dec (1) PEF (JRW, MGW *et al.*) Canvasback: 27 Dec (661), 26 Jan (1110), 22 Feb (42) BRF (JCR). **GREATER SCAUP:** 21 Dec (1) Tiptonville Sewage Lagoons, Lake Co. (BBC, LCC); 23 Dec (1) ESL (RWP).

OLDSQUAW: 22 Dec (3), 23-24 Dec (2) ESL (RW, LCC, BBC, DPB, DAD, JLL, WRP, MGW, JRW). **WHITE-WINGED SCOTER:** 16 Feb (1) Mississippi R. at MEM (JRW). Common Goldeneye: 11 Jan (543) BSU (JCR). Common Merganser: 17 Feb (40) BSU (JCR). Bald Eagle: during Jan (3 imm, 1 ad) Glengary Lake, SW of Somerville, Fayette Co. (JLS). Sharp-shinned Hawk: 22 Dec (2) Raleigh, MEM CBC (HBD *et al.*); 5 Feb (2) Shelby Forest State Park, Shelby Co. (CHB *et al.*). Cooper's Hawk: 22 Dec (2) MEM CBC (HBD, LCC *et al.*); 6 Jan (1) MEM (JLS); 26 Jan (1) BRF (JCR); 23 Feb (1) PEF (MGW, JRW); 25 Feb (1) MEM (MGW). Golden Eagle: 27 Dec (1) BSU (JCR); 26 Jan (1) BRF (JCR). Merlin: 20 Dec (1) Great River Rd., Dyer Co. (BBC, LCC, William B. Fowler); 22 Dec (1) MEM CBC (Harold Elphinston). Spotted Sandpiper: 1 Dec (1) PEF (DJS, JRW). Bonaparte's Gull: 25 Dec (5) PLS (JCR).

Ground-Dove—Grosbeak: COMMON GROUND-DOVE: 13 Jan (1) ESL (BBC, LCC, PBH); first Shelby Co. record. Cedar Waxwing: 21 Feb-EOP (over 50 sightings from 20 to 2500) MEM (*vide* MGW). Red-breasted Nuthatch: common locally and at feeders in MEM area (BBC). Common Yellowthroat: 15 Jan (3) Tigrett WMA, DYC (JCR). Indigo Bunting: 27 Feb - 5 Mar (1, banded) MEM (BBC). **CLAY-COLORED SPARROW:** 14 Jan (1) NW Hardin Co. (PBH), first West Tennessee record. Lincoln's Sparrow:

Table 1. 1986 Mid-Winter Eagle Survey

	Bald Eagle			Golden Eagle
	Adult	Imm.	Total	
<u>West Tennessee</u>				
Reelfoot Lake area	80	23	103	-
Dyer County	2	-	2	-
Moss Island WMA	1	-	1	-
Open Lake	6	2	8	-
Chickasaw NWR	1	-	1	-
Hatchie NWR	-	-	-	1 imm.
Tennessee NWR	25	25	50	3 ad.
Totals	115	50	165	4
<u>Middle Tennessee</u>				
Land-Between-the-Lakes	6	5	11	1 unk.
Cross Creeks NWR	1	-	1	-
Cheatham Reservoir	1	1	2	-
Center Hill Resv.	1	-	1	-
Cordell Hull Resv.	2	-	2	-
Dale Hollow Resv.	36	9	45	-
Cumberland County	1	-	1	-
Cannon County	1	-	1	1 ad., 2 imm.
Woods Reservoir	1	2	3	-
Normandy Reservoir	1	-	1	-
Hardin County	2	8	10	-
Totals	53	25	78	4
<u>East Tennessee</u>				
Norris Reservoir	2	2	4	-
Clinch River	1	-	1	-
Cherokee Reservoir	1	-	1	-
Tellico Reservoir	1	-	1	-
Watts Bar Resv.	8	4	12	-
Chickamauga Resv.	5	2	7	-
Nickajack Resv.	4	2	6	-
Guntersville Resv.	1	-	1	-
Totals	23	10	33	-
GRAND TOTALS	191	85	276	8

12-28 Feb (1) MEM (JRW). Harris' Sparrow: 11 Jan - EOP (1) BRF (JCR). Lapland Longspur: 24-28 Nov (1), 1 Dec (4), 20 Jan (20) PEF (JRW, RWP). Northern Oriole: 21 Jan (1) MEM (JRW). Purple Finch: common in MEM area (BBC). House Finch: 9 Dec - 28 Feb (142 banded) MEM (BBC). Pine Siskin: common in MEM area (BBC). Evening Grosbeak: fairly common in MEM area (BBC).

Locations: BRF - Britton Ford, Henry Co.; BSU - Big Sandy Unit, Tennessee Nat. Wildl. Refuge, Benton Co.; DYC - Dyer Co.; ESL - Ensley Sewage Lagoons, Shelby Co.; MEM - Memphis; PAP - Pace Point, Henry Co.; PEF - Shelby Co. Penal Farm; PLS - Paris Landing State Park, Henry Co.; REL - Reelfoot Lake.

MARTHA G. WALDRON, 1626 Yorkshire Dr., Memphis, TN 38119.

CENTRAL PLATEAU AND BASIN REGION—Erratic shifts in temperature and dry conditions characterized this winter. The alternating periods of warm and cold weather kept most bodies of water ice-free except in mid to late December, and apparently encouraged unusual rails, wrens, and a heron to overwinter. For the fourth consecutive season rainfall was below average; in fact, precipitation for 1985 was 20 inches below the annual norm in Nashville, and 1986 began more ominously still when only 0.19 inches fell in January, the lowest accumulation for that month since records have been kept in the area. However, rainfall in February was near normal, with very little of it coming as snow.

Although a fewer than normal number of reports of Black-crowned Night-Herons was submitted, two locales hosted Great Egrets, a highly unusual winter species in the region. A single bird stayed in Wilson County from mid-December to mid-January, while 2 were present in Stewart County in December, with at least one of them remaining the entire winter. Among other rarely reported wintering birds were 2 species of rails in Stewart County and 3 species of irregularly occurring wrens at several regional locations.

Numbers of ducks were expected to be low this winter, following poor nesting success in the prairie pothole region last summer, and this expectation was fulfilled. At Cross Creeks NWR, for instance, John Robinson noted that waterfowl "fluctuated tremendously" and "remained well below normal peak populations" throughout the season. Although Gadwall and Northern Shoveler were mentioned by Ann Tarbell as being in high numbers at Radnor Lake during the CBC season, most other species were down there and elsewhere in the region. An exception was the Oldsquaw, which appeared in 3 locales.

Following the CBC season, an analysis of CBCs in middle Tennessee for 1966-1985 was undertaken by Ruth V. McMillan. Results of her work are reflected in Tables 2-4, which present numbers of birds per 100 party hours of observation for selected declining, increasing, and semihardy/irruptive species in the region. Among the species in the first group is the American Coot, which has undergone significant decline since 1980. Apparently, that segment of the coot population which formerly wintered in middle Tennessee has withdrawn to the southeast of the Cumberland Plateau, where coot numbers remain high (as at Nickajack Lake). Reasons for this withdrawal are obscure and may stem from changes in conditions

outside of middle Tennessee rather than in it. Pileated and Hairy Woodpeckers have also decreased on the CBCs over the past 20 years, each having been reduced about 50% in that period; suburbanization of the areas where CBCs are conducted undoubtedly accounts for most of these declines. Three species associated with farmland have also been reduced in the past 2 decades—Northern Bobwhite, Loggerhead Shrike, and Eastern Meadowlark; the downward trend in their populations on the CBCs corroborates similar trends noted on the Breeding Bird Surveys (BBSs) conducted in the region (*Migrant* 55:90, 1984). Although the bobwhite population normally undergoes cyclic change, each of the low points in its cycle in the past 20 years has been lower than the one preceding it, a discouraging trend. Reasons for the decline of the shrike and meadowlark are uncertain, but probably involve changing agricultural practices as well as the subdividing of farmland.

Table 2. Birds Per 100 Party Hours for Species Declining on Middle Tennessee CBCs (1966-1985)

Species	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Northern Bobwhite	43	97	182	111	84	77	74	76	96	77	62	64	40	69	66	40	71	71	22	31
American Coot	448	853	382	711	611	290	442	166	186	94	186	94	313	167	241	27	68	16	40	21
Hairy Woodpecker	19	22	30	15	22	24	16	13	14	16	13	15	14	18	15	12	17	10	12	10
Pileated Woodpecker	33	51	31	36	34	31	29	19	27	31	19	29	21	45	21	19	23	17	16	17
Loggerhead Shrike	36	55	32	16	39	36	35	20	26	17	12	23	23	25	17	17	26	15	16	17
Eastern Meadowlark	251	378	624	189	513	622	377	311	301	268	199	252	227	252	116	162	234	143	160	213

Table 3. Birds Per 100 Party Hours for Species Increasing on Middle Tennessee CBCs (1966-1985)

Species	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Canada Goose	11	0	3.0	9	96	162	160	40	192	75	540	535	430	283	312	391	455	797	314	2300
Sharp-shinned Hawk	0	2.3	0	0	0.5	1.0	0.4	0.9	0	0.9	0.9	1.7	1.1	1.3	0.7	1.1	1.9	2.0	3.3	
Red-tailed Hawk	17	24	26	20	25	33	20	17	20	17	23	25	25	25	30	26	30	32	29	41
Barred Owl	0.7	0	0	0.7	1.9	1.3	0.6	2.5	4.0	4.0	3.6	8.1	3.4	4.5	4.1	7.2	3.8	5.0	2.5	6.3
White-br. Nuthatch	18	4.6	26	9.5	16	9.4	6.1	5.9	6.7	12	5.1	16	17	33	22	21	29	20	34	30
House Finch	0	0	0	0	0	0	0	0	0	0	0.2	1.3	0	0.5	4.0	2.4	2.2	29	25	177

Table 4. Birds Per 100 Party Hours for Semihardy/Irruptive Species on Middle Tennessee CBCs (1966-1985)

Species	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Carolina Wren	70	83	71	55	65	115	90	60	77	108	70	40	39	52	48	51	84	57	72	44
Bewick's Wren	4.7	6.8	9.5	3.7	0.7	7.0	5.4	2.1	4.3	3.6	2.0	2.8	1.9	1.1	1.5	1.2	1.8	2.2	1.9	0.2
Eastern Bluebird	43	101	68	48	105	172	100	51	84	127	116	88	23	29	65	55	76	81	128	138
Red-breasted Nuthatch	0	0	1.3	2.9	0.7	0.5	1.6	1.0	2.5	3.6	2.6	17	2.5	0.7	3.7	11	2.4	2.0	0.8	12
Purple Finch	23	28	242	100	14	208	164	58	218	178	144	309	74	77	171	66	155	100	33	218
Pine Siskin	0	0	0	38	0	0.9	7	25	2.5	12	0	94	0.4	0.2	23	0.4	0.7	27	0.2	32
Evening Grosbeak	0	0	0	0	0	0	46	0.6	0	50	0.4	65	0	0.5	5.5	0.2	0	14	0	42

CBC results indicate that at least 6 species increased in numbers over the past 20 years (Table 3). Two of these—Canada Goose and White-breasted Nuthatch—have also increased on the BBSs, a doubly encouraging circumstance. Of the region's raptors, 3 are trending up on the CBCs, also encouraging, though the increase in Barred Owls may reflect a greater owling effort by CBC participants in recent years rather than a larger number of birds. About the impact of the very nearly exponential increase in House Finches (Table 3) over the past decade no safe comment

can be offered (except perhaps that the increase must be real rather than an artifact of sampling), given the very divided opinions which attend the expansion of this cardueline in the region.

Most readers will no doubt be in undivided agreement about the fine recovery which the cold-sensitive Eastern Bluebird continues to make (Table 4) since the severe winter of 1976-77 and 1977-78, which saw the species reduced to its lowest level in the past 20 years. Another semihardy species, the Carolina Wren, fared less well on the 1985 CBCs than did the bluebird, but it is still in much better shape than Bewick's Wren, which may well have been given the *coup de grace* by the record cold winter of 1984-85. If the CBCs are a reliable index of this species' abundance, it is now at the lowest level in 20 years and perhaps in historical times. Every sighting of this bird should be carefully noted and submitted for publication.

Irruption species enjoyed a good season. For the first time since the winter of 1981-82, the Red-breasted Nuthatch occurred in good numbers (Table 4). It now appears to be on a 4-year cycle of invasion in the region. Purple Finches were recorded in higher numbers on the CBCs than in any year since 1977, though no evidence of a cycle in their incursions is discernible. Judging from the CBC data, it appears that Pine Siskins invaded in modest numbers, but most of them were found in Maury County; elsewhere their numbers were low. Evening Grosbeaks occurred in sizable flocks until the end of December; thereafter, their numbers thinned out.

Eighteen Winter Roadside Raptor Surveys (WRRSs) were conducted in the region during the season (Table 5). Modeled on a census described by Craighead and Craighead (Hawks, Owls, and Wildlife, 1956, pp. 7-9), these surveys occurred in 12 middle Tennessee counties and provided information on populations of 10 raptors and the shrike. They are an independent corroboration of the validity of the CBCs as indicators of the relative abundance of the region's raptors, because the rank order of the 10 species on the WRRSs (Table 6) closely parallels the order of the same species on the CBCs; also, the WRRSs suggest that the CBCs are a reliable index of population changes over the years. Unlike the CBCs, however, these raptor surveys can be used to detect population changes over the course of a single season, as the ones conducted in Williamson and Lawrence Counties in December and again in February suggest. Furthermore, information about the age and sex composition of winter raptors can be obtained from these surveys (e.g., of 196 kestrels sexed on the WRRSs, 111 were male, 85 female; of 108 Red-tailed Hawks aged, 94 were adult, 14 immature).

Let me close by offering thanks to Paul B. Hamel for commenting on a draft of part of this report, to Ruth McMillan for the many hours which she spent recording and analyzing the CBC data, to the 22 other observers who submitted WRRSs and helped get that pilot project under way, and to all the field workers noted below for observing, recording, and submitting records about our everchanging avifauna.

Loon—Night-Heron: Common Loon: after Dec the only reports were of 1-3 on OHL and PPL. Horned Grebe: 11 Jan (87) OHL, SUC/DVC (CKC), max. Double-crested Cormorant: no reports 27 Dec - 26 Feb. Great Blue Heron: 29 Jan (127) CCNWR (JCR), max. GREAT EGRET: 13 Dec - 17 Jan (1) Schute's Branch Recreation Area and Harbor Island Yacht Club, WLC

Table 5. 1985-86 Winter Roadside Raptor Data for Middle Tennessee

County	Observers	Date	km	BV	TV	BE	NH	SS	CH	RS	RT	RL	AK	LS	Total
Stewart	DWB	15 Feb 86	120	6	33	4	4	1	1	5	3	--	6	4	80
Hickman	DFV, FBH	17 Feb 86	172	10	27	--	1	--	--	3	11	--	9	3	64
Lawrence	SJS, DJS	14 Dec 85	105	26	24	--	--	--	--	--	8	--	13	6	77
Lawrence	DJS, MAB	23 Feb 86	118	5	43	--	--	--	--	--	11	--	11	3	73
Williamson	SJS, BHS	15 Dec 85	161	13	1	--	5	--	--	--	18	--	42	17	101
Williamson	SJS, DFV	16 Feb 86	129	7	12	--	2	--	--	1	?	--	27	7	59
Coffee	MDH, FH	21 Jan 86	161	--	27	--	--	--	--	--	2	--	5	4	38
Coffee	ELF, MDH	8 Feb 86	116	--	2	--	--	--	--	--	3	--	21	3	29
	FNW, FLW														
Rutherford	TJW	12 Jan 86	105	11	--	--	--	1	--	2	--	12	32	5	62
Rutherford	RVM	29 Jan 86	105	--	--	--	1	--	1	--	7	--	14	--	23
Cannon	RVM, MSM	21 Feb 86	137	--	8	--	1	--	--	--	2	--	5	3	19
Wilson	RVM, MHW	24 Jan 86	112	--	8	--	--	--	--	--	7	--	13	6	34
Wilson	RVM, MAT	1 Feb 86	105	18	2	--	1	--	--	--	6	--	14	1	42
Sumner	RPF	5 Feb 86	100	--	4	--	--	--	3	--	8	--	8	5	28
Sumner	DFC, JFC	19 Feb 86	164	200	10	--	--	--	--	--	13	1	14	2	240
Futman	RWS, ML	16 Jan 86	111	--	--	--	--	1	--	--	2	--	5	2	10
Overton	JDH, RCH	20 Feb 86	150	--	13	--	1	--	--	2	6	--	9	4	35
Pickett	JDH, RCH	4 Feb 86	117	--	6	7	--	--	--	2	6	--	9	2	32
Totals	23 obs.		2288	292	220	11	16	2	7	13	145	1	262	77	1046
Birds/100 km				12.8	0.48		0.09		0.37	0.57		0.04		3.4	
				9.6	0.69		0.31		6.3		11.4		45.6		

Table 6. A Comparison of 1985-86 Raptor Data from Middle Tennessee CBCs with 1985-86 Raptor Data from the Middle Tennessee Winter Roadside Raptor Surveys (WRRSs).^a

Species ^b	Birds/100 Party Hours on CBCs	CBC Trend Over Last 20 Years	Rank Order on CBCs ^c	Rank Order on WRRSs	Birds/100 km on WRRSs
Black Vulture	94.7	None	1	1	12.8
Turkey Vulture	28.9	None	4	3	9.6
Bald Eagle	1.8	Up slightly	9	7	0.5
Northern Harrier ^d	9.1	None	5	5	0.7
Sharp-shinned Hawk ^a	3.4	Up moderately	7	9	0.1
Cooper's Hawk	2.4	Up slightly	8	8	0.3
Red/shouldered Hawk	4.9	None	6	6	0.6
Red-tailed Hawk	40.7	Up moderately	3	4	6.3
Rough-legged Hawk	0.8	Up slightly	10	10	0.1
American Kestrel	51.8	None	2	2	11.4

^a Twenty-three observers conducted 18 surveys and covered 2288 km of roads in middle Tennessee counties to provide these data.

^b Not included in these data is an Osprey recorded on 1 middle Tennessee CBC.

^c Note that the rank orders for 6 species are identical and that the rank orders for the other 4 species are close.

^d Although no trend over the past 20 years is detectible for this species the number of birds per 100 party hours and the number of total birds (46) sighted on the 1985-86 CBCs were the highest ever during that period.

^e As part of a 20-year trend of relatively constant increase, the 1985-86 data for this species are the highest ever in terms of total birds and birds/100 party hours.

(James D. Parrish, ATT, *et al.*), first NA winter record; 21 Dec - 25 Feb (2, later only 1) vicinity of DOV (JCR, DWB, Vicki Grafe), other than the preceding record, there are very few, if any, records of this species' overwintering in the region. Black-crowned Night-Heron: besides the usual wintering birds at OHL, only other report came on 18 Jan (1) PAP (ATT).

Swan—Duck: Tundra Swan: 21-26 Dec (6) CCNWR and Barkley WMA, SWC (JCR, DWB), only report. Snow Goose: 7 Feb (20, including only 1 "blue") Wiley's Spring Bay, SWC (DWB), max. Canada Goose: 28 Jan (36,000+) CCNWR (JCR), max. Wood Duck: no wintering concentrations occurred except perhaps at Duck River Unit, Tennessee NWR, where 3000 were reported, though this estimate is undoubtedly exaggerated by at least one and perhaps two orders of magnitude. American Black Duck: 14 Feb (8400) CCNWR (JCR), max. Mallard: 28 Jan (25,000+) CCNWR (JCR), max. Northern Shoveler: overwintering bird noted in LWC (DJS); a mid-Jan record also occurred at CCNWR (JCR); high number on Nashville CBC (ATT). Gadwall: 11 Dec (1065) CCNWR (JCR), max. American Wigeon: 11 Dec (1600) CCNWR (JCR), max. EURASIAN WIGEON: 22-25 Jan (1 male) CCNWR (JCR, m.ob.), about 8th state record and 4th consecutive winter at this site. Canvasback: 14 Feb (275) CCNWR (JCR), max. Redhead: 15 Feb (134) PPL (MHI, CKC); 25 Feb (142) CCNWR (JCR), max, but these two records may represent migrants, though a few birds did overwinter at each site. Ring-necked Duck: 13 Jan (2400+) CCNWR (JCR), max. Greater Scaup: 31 Dec (25) WDR (SJS, BHS), only report (females with auricular patches noted). Lesser Scaup: 1 Jan (110) RDL (CKC), max. Oldsquaw: 6 Dec - 1 Jan (1) RDL (RVM, ATT, CKC, m.ob.), continues a fall record; 9 Jan, 20 Feb (1) PPL, DVC (MHI, SJS); 10 Jan (1) LHL (DJS); more than the usual number of reports. Surf Scoter: 8 Dec (2) RDL (DMM), only report. Bufflehead: 22 Dec (86) RDL (CKC), max (a normal wintering number for this site). Hooded Merganser: Dec-Jan (40) Couchville Lake, LHSP (Reggie Reeves, *vide* RVM), max. Common Merganser: 21-29 Dec (up to 10) CCNWR (SJS, BHS, JCR, DWB); 31 Dec (4) WDR (SJS, BHS); only reports. Red-breasted Merganser: 5 Jan (22) Quarry Lake, RUC (TJW, DMM, Anne L. Hettish), max. Ruddy Duck: 20 Jan (2) Barkley WMA, SWC (DWB), only report after Dec.

Vulture—Merlin: Black Vulture: roosts of 150+ and 200 were noted at MOP and Gallatin Steam Plant, SUC, respectively; also see Tables 5 & 6. Turkey Vulture: 23 Jan (200+) Hillsboro, CFC (Chloe W. Peebles), max. Osprey: 27, 30 Dec (1/2) WDR and Highland Rim CBC (PLM, FNM), only report. Bald Eagle: besides the usual wintering birds on the larger lakes and reservoirs (Table 1), the following data were submitted: 28 Dec (1a, 2 imm) LHL (MDW), very few LWC records; 18 Jan (1a) PAP (ATT); additionally, nesting was noted in progress near CCNWR (*vide* JCR) and Normandy Lake, CFC (PLM, MDH). Northern Harrier: had best year ever on CBCs (Table 6). Sharp-shinned Hawk: also had best year ever on CBCs (Tables 3 & 6); well reported from many areas during Jan and Feb, also. Cooper's Hawk: second-highest number of birds per 100 party hours of observation recorded on CBCs for this species (Table 3). NORTHERN GOSHAWK: 17 Jan (1) Bodenham, Giles Co. (MDW), only report. Red-tailed Hawk: the scarce dark phase was reported in RUC (TJW) and CCNWR (JCR); see introduction. Rough-legged Hawk: 11 reports from Bedford Co., CHC, HPC, LWC, SUC, and SWC; a better than average year. Golden Eagle: 5 reports, 1 each from Cannon Co., CHC, HPC, and 2 from

SWC. Merlin: 17 Dec (1) LHSP (RVM, Hazel Cassel); 28 Dec (1) RUC (TJW); only reports.

Pheasant—Gull: Ring-necked Pheasant: 3 Jan (1 male) Stewart Creek Boat Ramp, PPL, RUC (RVM, MAT), only report. Ruffed Grouse: 24 Dec (1) BAH (RWS); all season (35 released in restoration project) near Cuba Landing, HPC (Peter Kalla); readers are urged to report all sightings of this species from the latter locale, especially if breeding evidence is noted. Virginia Rail: 1, 4, 25 Jan (2/2/1) CCSP (JCR, DWB), only reports; species has seldom wintered anywhere in region except MOP. Sora: 21 Dec (1 flushed from solidly frozen marsh) CCNWR CBC (SJS, BHS); 28 Dec - 25 Jan (1) CCSP (JCR, DWB); only reports of species which is rarely reported anywhere in region except at MOP during winter. American Coot: see introduction. Sandhill Crane: 5 Jan-EOP (1) Hwy 50 at Little Lot Rd., MUC (Kenneth G. Anderson, O. Bedford Lochridge), rare wintering species; 13 Jan (1) CCNWR (JCR); only reports. Least Sandpiper: 14 Dec - 1 Jan (1) CCSP (JCR); 4 Jan (4) PPL (CGD, *et al.*); only reports. Dunlin: 7 Dec (2) Old Hickory Beach, DVC (Donna J. Smith, Jan C. Alexander, JPC, CKC, SJS); 4 Jan (2) PPL (CGD *et al.*); only reports. American Woodcock: 14 reports, most of calling/singing birds; more than the normal number of reports. Bonaparte's Gull: 20 Dec (26) Gray's Landing, SWC (DWB), max. Ring-billed Gull: 2 Jan (1000+) Bryant Grove, PPL (*fide* MPS), max.

Owl—Blackbird: Short-eared Owl: 19 Dec (1) West Harpeth Rd., WMC (SJS, BHS), only report; first NA report since 1979. American Crow: all season (roost of 10,000+) 47th St., NASH (DFV). Red-breasted Nuthatch: widely reported; see introduction. Bewick's Wren: reported only from WLC (Earline C. Berry); now at all-time low level on CBCs (Table 4). House Wren: 16 Dec (1) CLA (Annie H. Heilman); 25 Dec (1) FCMR (JCR); 4 Jan (1) Hickory-Priest CBC (MPS); only reports. Sedge Wren: 21 Dec (1) CCNWR CBC (BHS, SJS), only report. Marsh Wren: 21 Dec - 4 Jan (1) CCSP (JCR *et al.*), only report. Water Pipit: 21 Dec (67) CCNWR CBC (*fide* JCR), max. Cedar Waxwing: 20 Feb-EOP (up to 500) LWC (DJS), max. Loggerhead Shrike: WRRS data show this species to be widely and fairly evenly distributed throughout middle Tennessee, with the only higher than normal concentration occurring in Williamson Co. (Table 5); CBC data show a steadily decreasing population over the past 20 years (Table 2). PROTHONOTARY WARBLER: 2 Dec (1) Bear Creek WMA, SWC (DWB), an unprecedentedly late record of this early-departing parulid; temperature was below 30°F at the time of this sighting. Common Yellowthroat: 28 Dec - 25 Jan (1) CCSP (JCR, DWB), only report. American Tree Sparrow: a very modest echo of the 1984-85 invasion occurred: 21 Dec (2) FCMR on CCNWR CBC (DWB); 25 Dec - 17 Feb (up to 6) CCNWR (JCR, DWB, Ellen J. Walker); 28 Dec (1) CLA (*fide* William Hudson); 4 Jan (1) Hickory-Priest CBC, NASH (PBH). Chipping Sparrow: 17, 19 Dec (1) DOV (JCR), only report. Vesper Sparrow: 15 Dec - 14 Jan (up to 20) Liberty Grove, LWC (DJS, MAB); 28 Dec (5) LWC CBC (DJS, MAB, Mark A. Reeves); 24 Jan - 16 Feb (up to 8) Tullahoma, CFC (MDH); only reports. Lincoln's Sparrow: 28 Jan (1) LBL (DWB), only report. Lapland Longspur: 1 Dec (3) Robertson Pond, LWC (DJS); 29 Dec, 22 Jan (1/4) CCNWR (DWB/JCR); only reports. BREWER'S BLACKBIRD: 13-15 Dec (up to 30) Bishop Chapel Rd., LWC (DJS, MAB, SJS); 28 Dec (6) Center, LWC (DJS); 23 Feb (1) LOR (DJS); only reports; second consecutive winter in LWC.

Finch—Grosbeak: Purple Finch: well-reported on the CBCs, but consi-

dered to be below normal by some observers in NASH and CLA; 463 birds banded, well below the levels of banding in some years in the 1960s and 1970s, when thousands were banded. House Finch: the comment of DFV seems as apt as any: "at least as common as during either of the past 2 years," when numbers were high; CBC data show this species to be increasing dramatically (Table 3). Pine Siskin: except in MUC, where Katherine A. Goodpasture banded 215 in February and where high numbers occurred on CBC, low numbers were the regional rule for this northern finch. American Goldfinch: no better than an average winter region-wide, though commoner in some areas than others, e.g., in CLA (David H. Snyder) and BAH (RWS). Evening Grosbeak: fairly widely distributed in region with fair numbers in some areas (e.g., up to 46 in LOR, 40 at CCNWR, 62 in DOV, and 50 in WMC); became scarcer after the CBC season.

Corrigenda: Migrant 56:51, 1985: in entry for Common Merganser delete the record for 15 Jan; *Migrant* 56:53, 1985: in entry for Yellow-headed Blackbird change "27 Jan-(Feb)" to "27 Jan - 9 Feb."

Locations: BAH - Barnes Hollow, Putnam Co.; CCNWR - Cross Creeks National Wildlife Refuge, Stewart Co.; CCSP - Cumberland City Steam Plant, Stewart Co.; CFC - Coffee Co.; CHC - Cheatham Co.; CLA - Clarksville; DOV - Dover, Stewart Co.; DVC - Davidson Co.; FCMR - Fort Campbell Military Reservation, Montgomery and Stewart Cos.; HPC - Humphreys Co.; LBL - Land Between the Lakes, Stewart Co.; LHL - Laurel Hill Lake, Lawrence Co.; LHSP - Long Hunter State Park, Davidson Co.; LOR - Loretto, Lawrence Co.; LWC - Lawrence Co.; MOP - Monsanto Ponds, Maury Co.; MUC - Maury Co.; NA - Nashville Area (includes all of Cheatham, Davidson, Robertson, Rutherford, Sumner, Williamson, and Wilson Cos., and parts of Dickson and Trousdale Cos.); NASH - Nashville; OHL - Old Hickory Lake (in Davidson, Sumner and Wilson Cos.); PAP - Pardue's Pond, Dickson Co.; PPL - Percy Priest Lake; RDL - Radnor Lake State Natural Area, Davidson Co.; RUC - Rutherford Co.; SUC - Sumner Co.; SWC - Stewart Co.; WDR - Woods Reservoir, Franklin Co.; WLC - Wilson Co.; WMC - Williamson Co.

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EASTERN RIDGE AND VALLEY REGION—The widespread long-term rainfall deficit continued throughout the region. Average temperatures from the reporting areas of Johnson City, Knoxville and Chattanooga were mixed.

In Johnson City, December temperatures were above normal until mid-month, then normal winter weather was prevalent until the end of January. February was warm until the 12th, when the heaviest snowfall of the winter occurred. After the 16th, temperatures were warmer than usual.

In Knoxville, temperatures in December were slightly below normal, and near normal in January and February. Unlike the last two winters, there were no sub-0°F temperatures, and there was no pronounced warming at the end of February as in the past few years. In the Chattanooga area, the average December temperature was the coldest recorded since 1969. January was slightly below average and February was warmer.

In July, the U.S. Fish and Wildlife Service issued a report stating the

number of breeding age ducks was down. On the local or regional scene, this was hard to confirm. One thing obviously apparent was the results of TVA's summer drawdown of Chickamauga Lake to kill water weeds. In the past these areas of weeds have always provided an abundant source of food, especially for Pied-billed Grebes, American Coots and Gadwalls. This season, because of a lack of food and feeding sites, few of these birds were present.

Peregrine Falcon sightings continued from the lower part of the region. On the Chattanooga CBC, 21 December, an adult was leisurely watched as it ate a duck and the Nickajack Dam immature remained until at least 8 December. Other sightings of an immature were later recorded, which may have represented the Nickajack bird moving around.

There is good news regarding Sandhill Cranes. The *Unison Call* (Vol. 7, No. 1), a newsletter to crane investigators, reported a total of 16,170 counted in the eastern population during the fall. Normally several hundred cranes remain in northern Indiana until the end of November, and this year 6000 were counted there on 11 December. They departed the area on 13-14 December when temperatures dropped to -2°F. This could account for the unprecedented number of cranes during January and early February in the Hiwassee River Area.

The early anticipation of a large number of winter feeder birds never really materialized. The number of Red-breasted Nuthatches in the northern part of the region either disappeared, dispersed, or went unrecorded. Overall, the other species seemed to have been widespread in small to moderate numbers, except for the House Finch, which continues to increase in numbers.

Loon—Night-Heron: Red-throated Loon: 1 Dec (1) CHL (KHD, LHD, CDB, RAR *et al.*). Common Loon: 16 Dec (8), 19 Jan (17) CRL (RLK); 2-5 BOL (LHTOS); 1-21 all period CHL (m.ob.). Pied-billed Grebe: 19 Jan (38) CRL (RLK); 6-124 all season CHL (m.ob.). Horned Grebe: 6 Dec (1) BOL (RLK); 16 Dec (10), 19 Jan (3) CRL (RLK); 10-30 regular CHL (KHD, LHD *et al.*). American White Pelican: 5 Dec (1) NIL (Richard H. Simms *vide* KHD). Double-crested Cormorant: 2 Dec (3) BOL (RLK); 1-29 Dec (1-3 occasional) CHL (KHD, LHD) - not observed as regular this season as in recent past; 16 Dec (2), 19 Jan (4) CRL (RLK); 4 Jan (1) NIL (AMJ); 26 Feb (1) SAB (RAR). Great Blue Heron: reduced numbers on DOL, especially after cold weather on 12 Dec, only 2 present on 14 Dec (JAK). Great Egret: 2-3 Dec (1) SAB (KHD, LHD); 2 Dec (2), 17 Dec (1) HRA (KHD); up to 2 in FLL area until at least 21 Dec, when 1 seen on Knoxville CBC, a first for the count (Joseph C. Howell, JBO, Paul S. Pardue). Yellow-crowned Night-Heron: 21 Dec (1 ad) CHA CBC (MAM, BGM).

Waterfowl: Tundra Swan: 21 Dec (1) Knoxville CBC (KTOS); 28 Dec (2) NIL (KHD, LHD); 8 Jan (3) HRA (TWRA). White-fronted Goose: 4 Dec (2) HRA (TWRA). Snow Goose: 1-6 white phase, CHL & HRA (TWRA); 1-4 blue phase, CHL & HRA (TWRA); 4 Dec (2) WBL (TWRA). Canada Goose: max 4 Dec (1135) WBL (TWRA). Green-winged Teal: 14 Dec (36), 18 Jan (10) DOL (JAK); 15-112 HRA (TWRA, KHD, LHD), not as regular in their usual haunts this year. American Black Duck: max 28 Jan (518) WBL (TWRA). Mallard: 11 Jan (5000) DOL (JAK). Northern Pintail: 17-29 Dec (35-85) HRA (KHD, LHD); 16 Feb (6) FLL (JAK). Northern Shoveler: 17 Dec (4) CHL (KHD, LHD); 11 Jan (1) DOL (JAK); 24 Jan (2) GNC (DJN,

BKB). Gadwall: max 16 Dec (1914) CHL & HRA (TWRA); max 28 Jan (535) WBL (TWRA). American Wigeon: max 28 Jan (208) WBL (TWRA); max 28 Jan (57) CHL & HRA (TWRA). Canvasback: 1, 17 Dec (1) CHL (KHD, LHD). Redhead: 5-110 sporadic CHL (KHD, LHD); 8 Jan (17) WBL (TWRA); noticeable increase in Knoxville area at end of season - 18 Feb (65) FLL, BLC (JAK). Ring-necked Duck: max 4 Dec (70) WBL (TWRA); max 16 Dec (483) CHL & HRA (TWRA). Greater Scaup: regular, max 3 Feb (400) CHL (KHD, LHD); 27 Feb (2) FLL, BLC (JAK). Lesser Scaup: 4-175 regular CHL (KHD, LHD); 19 Jan (100) CRL (RLK); 24 Jan (1) BLC (JAK). White-winged Scoter: 21 Dec (3) Knoxville CBC (KTOS); 9 Feb (2) CHL (KHD, LHD). Common Goldeneye: max 8 Jan (104) WBL (TWRA); 19 Jan (116) CRL (RLK). Bufflehead: max 28 Jan (79) WBL (TWRA); max 28 Jan (260) CHL & HRA (TWRA). Hooded Merganser: 2-14 Dec (3-6) BOL (RLK); 45-58 occasional HRA (KHD, LHD). Common Merganser: 8-16 Dec (1-5) NIL (AMJ, CDB, KHD, LHD, SJS). Red-breasted Merganser: 14 Dec (12) BOL (RLK); 21 Dec, 9 Feb (1) CHL (KHD, LHD). Ruddy Duck: regular, max 29 Jan (82) CHL (LHD, AMJ, TJW).

Vulture—Gulls: Vultures: late Feb (120+, 70% Turkey, 30% Black Vultures) Holston Army Ammunition Plant, Hawkins Co. (RLK), traditional site. Osprey: 21 Dec (1) CHA CBC (THP, DCP, JSL). Bald Eagle: 21-22 Dec (1 ad) BOL (RLK); 9 Feb (1 3-4 year old bird carrying stick) HRA (JCW, SLW). Northern Harrier: 21, 23 Dec, 6 Jan (1) JNB (RLK); 3, 7 Jan (1) Speedwell (George W. McKinney); 4, 12 Feb (2, 1) GNC (DJN, BKB). NORTHERN GOSHAWK: 21 Dec (1 imm) Knoxville CBC (David A. Hankins, CPN) - first Knox Co. record. Red-shouldered Hawk: 5-10 Jan (1) BOL (LHTOS). Rough-legged Hawk: 12 Jan (1 light phase) Sequatchie Valley, Bledsoe Co. (KHD, LHD, Angela C. Davis). Merlin: 26-27 Dec (1) Dunlap, Sequatchie Co. (Virginia G. Goins). Peregrine Falcon: 21 Dec (1 ad) CHA CBC (JCW, SLW, KHD, RLK); the immature reported last period from Nickajack Dam remained until at least 8 Dec (Johnny T. Parks, Randall L. Doyle); 22 Dec (1 imm) SAB (KHD, LHD); 1 Jan (1 imm) HRA CBC (JCW, SLW, SJS, BHS). American Coot: max 4 Dec (6138) CHL & HRA (TWRA); max 8 Jan (2229) NIL (TWRA); max 8 Jan (571) WBL (TWRA). Sandhill Crane: fall: 1-15 Dec (1194) HRA, HLC, CLE (KHD, LHD, CWC, T. Whitten Davis, C. Richard Hughes); winter: 1 Jan - 2 Feb (4-40) observed feeding, flying and "dancing", Armstrong Bend, Meigs Co. (JCW, SLW, SJS, BHS, CWC, RAR, RLK, Tom Pride, Sr.); spring: first northward movement reported 18 Feb; more reported lingering in HRA than usual, with from 10-96 cranes consistently reported to EOP (CWC, CDB, KHD, LHD); 26 Feb (62) west Knox Co. (Walter Shipe, *vide* JBO); 21 Feb (1) west Knox Co. (ABS). Spotted Sandpiper: 30 Dec (1) Greeneville CBC (WRN). Least Sandpiper: 16 Dec (2) SAB (KHD, LHD); 17, 29 Dec (3-4) HRA (KHD, LHD). Dunlin: 7 Dec (10) DOL (JAK) - only report from area; 30-45 sporadic SAB (KHD, LHD). Dowitcher sp.: 21 Dec (3) Knoxville CBC (Holly Overton, Roland Wauer) - first area winter record. Common Snipe: max 16 Dec (178) SAB (KHD, LHD). American Woodcock: 16 Feb (1) Roaring Fork, GNC, (RN, WRN); 24 Feb (1) Austin Springs (RLK). FRANKLIN'S GULL: 12 Dec (1) FLL, BLC (MLD). Bonaparte's Gull: 16 Dec (30) CRL (RLK); 21 Dec (8) BOL (RLK); 20 Dec (8) NIL (AMJ); 10 Jan (2) CHL (AMJ). Ring-billed Gull: 16 Dec (250+), 19 Jan (1400+) CRL (RLK); BOL wintering population of 100 considered low (LHTOS); max 2000 at roost site, CHL (KHD, LHD). Herring Gull: 16 Dec (4), 19 Jan (1) CRL (RLK), low. BLACK-LEGGED

KITTIWAKE: 15-17 Dec (1 imm) Fort Loudoun Dam (MLD *et al.*).

Barn-Owl—Ovenbird: Common Barn-Owl: 27 Dec (1) CHA (David C. Chaffin); 10 Feb (1) Roaring Fork, GNC (Virginia Williams). Great Horned Owl: active nest CHA (RAR). Red-headed Woodpecker: one regular JNB (RLK); 9 Feb (1 imm) Andersonville, ANC (CPN); 5-8 regular wintering population CHA (RAR); no other reports received. Horned Lark: 10 Dec (4), 6 Jan (25+) JNB (RLK *et al.*); 10+ regular WHP (JAK); 27 Dec (7) HRA (RAR) - not regularly found in this section; 6 Jan (125) Graysburg Hills Golf Course, Greeneville, GNC (PHB); 11 Jan (150) Nolichucky Valley, GNC (JAK). Purple Martin: first report 27 Feb (1) Madisonville (Sue Snyder *vide* JBO). Red-breasted Nuthatch: no reports from Johnson City; present in small numbers in KNX area; 2 reports from GNC; widespread in moderate numbers with 1-3 reported from 14 feeders in BYC, SEW, HLD and Ocoee, Polk Co. (m.ob.). Brown-headed Nuthatch: reported from new locations HLC (RAR, AMJ). House Wren: 21 Dec (1) CHA (Peter D. Robinson, Paul C. Harris, Daniel R. Jacobson). Sedge Wren: 1 Jan (1) HRA CBC (SLW, JCW, ABS). Blue-gray Gnatcatcher: 11-12 Jan (1) KNX (Susan E. Hoyle *et al.*). Hermit Thrush: "very common" in JNC area during Dec and thru 18 Jan (LHTOS). Gray Catbird: 21 Dec (1) CHA CBC (THP, DCP, JSL). Water Pipit: 24 Dec, 7 Jan (100+) JNC (RLK); 29 Jan - 16 Feb (9-50) GNC (BKB, WRN, RN); at KNX, more numerous in late Dec and Jan than usual, with 492 on KNX CBC on 21 Dec; 4 Feb (150) ANC (CPN). Cedar Waxwing: at KNX, much lower than average numbers throughout the winter, probably due to reduced berry supply resulting from previous winter's extreme cold (CPN). Loggerhead Shrike: 10 Dec, 31 Jan, 7 Feb (1) JNB (RLK *et al.*); 12 reports GNC (DJN, BKB); about average numbers on KNX and Norris CBCs, other birds reported from Jefferson, Blount and Claiborne Cos. (KTOS). Solitary Vireo: 7 Dec (1) Kingsport (RLK). Orange-crowned Warbler: 15 Feb into Mar (1 at feeder) KNX (Louise F. Fuller). Yellow Warbler: bird reported last period at KNX present 17 Nov - 11 Dec (Bettie Mason, MLD). Pine Warbler, 1-3 regular at feeders in HLC, BYC (AMJ, CDB, Paul H. Dietrich, Gertrude L. Fleming, Janet A. Phillips); also regular on Signal Mt., HLC, but not at feeders (JSL, DCP). Palm Warbler: 21 Dec (1) CHA CBC (RAR, BGM, MAM, Ella Howard, J.N. Howard); 22 Dec (1) Kingsport (RLK); 23 Dec (6) JNB (RLK); 28 Dec (1) Norris CBC (ABS); 1 Jan (3) HRA CBC (RAR, Rick Waldrop); 24 Jan (1) GNC (DJN, BKB). Ovenbird: 21 Dec (1) CHA CBC (THP, DCP, JSL).

Sparrow—Grosbeak: Chipping Sparrow: 20-30 regular at feeder, Ocoee, Polk Co. (JCW, SLW); 1 Jan (37, high) Hiwassee CBC (CPN, David A. Hankins, ABS, Mark Reeves); 10 Jan (15) HLC (AMJ). Vesper Sparrow: 10 Dec (5) JNB (RLK); higher numbers than usual with 7 sightings CHA, max 10 Feb (11) (RAR). Fox Sparrow: 6 Jan (5), 15 Jan (8), 1 Feb (1) Washington Co. (RLK); 27 Feb (4) GNC (BKB, DJN); present in high numbers at end of period KNX area (*vide* CPN); more common near home CHA, in past usually 4 found per trip, this season up to 14 (RAR). White-crowned Sparrow: 10+ regular WHP (JAK); 11 Jan (40 at 2 sites) Nolichucky Valley, GNC (JAK). Rusty Blackbird: 24 Dec (100) JNB (RLK). Purple Finch: at JNC, smaller populations than in previous years (LHTOS); in GNC, "a few more than last year," in KNX area, widespread in moderate numbers, more than last winter, but not as abundant as in some recent years (KTOS *et al.*); in southern section of region, similar status reported by 12 feeder watchers in BYC, SEW and HLC, with flocks

of up to 30 reported (m.ob.). House Finch: noticeable increase reported throughout region; one report of 300+ from GNC; many flocks of 50+ in Knox, Blount and Anderson Counties (KTOS *et al.*); reports of up to 75 at feeders in BYC, SEW and HLC (m.ob.). WHITE-WINGED CROSSBILL: 20, 30 Dec, 18 Jan (1, photographed) Oak Ridge (L.F. Parsly, C.G. Sonneon, *vide* JBO). COMMON REDPOLL: 20 Dec - 14 Mar (1, photographed) SEW (James R. Peters, *et al.*), details to be published. Pine Siskin: 1-3 present after 2 Jan at feeders in JNC area (LHTOS); no reports from GNC; scattered small flocks up to 30, in Knox, Blount and Anderson Counties (James M. & Betty Reid Campbell, CPN, JAK *et al.*); widespread with numbers up to 100 being exceptional in BYC, SEW and HLC (m.ob.). Evening Grosbeak: flocks of 6-12 birds at JNC (LHTOS); one report of 10-12 birds in GNC (PHB); several small flocks of up to 20 in Knox and surrounding counties (*vide* JBO, m.ob.); widespread and sporadic in numbers up to 10 at feeders in BYC and HLC; 25-50 regular at SEW, and 100+ regular on Signal Mt., HLC (m.ob.).

Corrigenda: *Migrant* 55:93-94, 1984: on page 93, should read ' . . . 44 Ring-billed Gulls at Cherokee Dam on 3 June . . . ' and on page 94, line 24, change 3 Jul to 3 Jun.

Locations: ANC - Anderson Co.; BLC - Blount Co.; BOL - Boone Lake; BYC - Bradley Co.; CHA - Chattanooga; CHL - Chickamauga Lake; DOL - Douglas Lake; FLL - Fort Loudoun Lake; GNC - Greene Co.; HLC - Hamilton Co.; HRA - Hiwassee River Area; JNC - Johnson City; JNB - Jonesborough, Washington Co.; KNX - Knoxville; NIL - Nickajack Lake; SAB - Savannah Bay, Hamilton Co.; SEW - Sewanee, Franklin Co.; WBL - Watts Bar Lake; WHP - White Pine, Jefferson Co.

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EASTERN MOUNTAIN REGION—The region was warmer than normal though mid-December, then cold through January. February started warm, but was cold from the 12th through 16th, when the heaviest snowfalls of the season occurred. Late February temperatures were near normal. Precipitation for December and January was less than half of the normal amount, continuing the year-long trend of low rainfall. February precipitation was near average.

Waterfowl populations were lower than average, and no major movements were noted. Both nuthatch species were sighted in above average numbers, while both kinglet species were considered below average. Numbers of Eastern Bluebirds, Carolina Wrens and Loggerhead Shrikes were slightly above normal, and Eastern Phoebe numbers were well below average.

Loon—Kestrel: Common Loon: 2-5 regular during Dec & Jan on WTL, SHL (*vide* GDE); no February reports. RED-NECKED GREBE: 28 Dec, 15 Jan (1) RNC (RLK, RC). Canada Goose: 3-7 irregular 2 Jan-EOP on WTR (*vide* GDE). Oldsquaw: 15 Feb (1) WTL (RC). SURF SCOTER: 16 Feb (1) WTR (GDE, GOW). Hooded Merganser: 6 Dec (3) RNC (C. Frank Ward). Ruddy Duck: 15 Jan (1) RNC (RC); 7 Feb (1) WTL (GWS). Northern Harrier: 4 Dec (1) RNM (RLK); 28 Dec (1) ELI CBC (GDE, HHF). Sharpshinned Hawk: 8 reports in ELI area, about average (*vide* GDE). Cooper's

Hawk: 3 reports in ELI area, below average (*vide* GDE). American Kestrel: very numerous all period in ELI area (*vide* GDE).

Killdeer—Pipit: Killdeer: 28 Dec (1) RNM, Jane Bald, 6000 ft. elev. (RLK, Edward H. Schell). Great Horned Owl: 30 Dec (1) RNM (RLK); through period at SHL (Richard P. Lewis *et al.*). Eastern Phoebe: 10, 28 Dec (1) ELI (GDE), only reports. Golden-crowned Kinglet: 4 Jan (200) Great Smoky Mtns. CBC (m.ob.), record high count. Hermit Thrush: numerous in ELI area Dec through mid Jan, then in very low numbers (*vide* GDE). Brown Thrasher: 15 Feb (1) SMV (GOW), first spring report. Water Pipit: 10 Dec (100+), 15 Jan (5), 14 Feb (8) Powder Branch, Carter Co. (RC *et al.*).

Sparrow—Grosbeak: Chipping Sparrow: last report 28 Dec (25+) ELI CBC (Sally Goodin, GWS), later than usual. Fox Sparrow: 28 Dec (3) ELI CBC (LHTOS); 30 Dec (1) RNM CBC (GDE); 28 Jan, 1, 18 Feb (1) Erwin, Unicoi Co. (GWS *et al.*). Purple Finch: low numbers throughout period in ELI area (*vide* GDE). House Finch: numbers almost double those of last year in ELI area (*vide* GDE). Red Crossbill: 24 Jan (2) Cove Ridge, Carter Co. (RC). Pine Siskin: first report 2 Jan (1) ELI (HHF), then 1-3 at various feeders to EOP. Evening Grosbeak: good numbers in ELI area all period, with 150+ at feeder near ELI (*vide* GDE).

Locations: ELI - Elizabethton, Carter Co.; RNC - Roans Creek, Johnson Co.; RNM - Roan Mountain, Carter Co.; SHL - South Holston Lake, Sullivan Co.; SMV - Siam Valley, Carter Co.; WTL - Watauga Lake; WTR - Watauga River in Carter Co.

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