

THE MIGRANT

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THE MIGRANT

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VOL. 51

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NO. 4

NOTES ON THE BREEDING BIOLOGY AND BEHAVIOR OF THE RAVENS OF PEREGRINE RIDGE, GREAT SMOKY MOUNTAINS NATIONAL PARK, TENNESSEE

MORRIS D. WILLIAMS

Peregrine Ridge is a rugged rock outcropping named after the Peregrine Falcon, *Falco peregrinus*, which formerly nested there. Currently, it is the only known nesting site of the Common Raven, *Corvus corax*, in Tennessee. The ridge is in Sevier Co. at coordinates 35°38'10"N; 83°26'45"W (Mt. Le Conte Quadrangle, USGS 1964). The elevation along the crest is 1463 m. A distinctive feature of this ridge is a natural hole, about 1.5 m in diameter, that passes completely through the ridge near the crest.

Ganier (1931) was the first to discover the falcon eyrie in 1925. Stupka (1963) believed that falcons continued to nest on this ridge through 1942. It is not known when ravens began to nest there, but Koch (Stupka 1963) heard young ravens crying for food in the vicinity of the nearby Alum Cave Bluffs on 21 May 1944. Again, it was Ganier (1962) who reported the first nest of ravens on this ridge. He saw at least three well-feathered young in a nest on 4 May 1960. I have found no reference to the nesting of ravens at this site during the decade following Ganier's discovery.

I saw four ravens flying around the ridge on 9 June 1971; two of them perched together on the crest for a while. I did not notice any nests. I did not visit this site again until 26 April 1973, when, from the Alum Cave Bluffs, I saw a nest on a ledge about 8 m below the crest of the ridge (Fig. 1A, #1). Later, as I made my way along the crest of the ridge to a point above the nest, a raven flushed from the cliff. Since the ridge leaned sharply to the east (Fig. 1B), the nest was not visible to me. Several times, while I was on the ridge, a raven flew over and croaked. When I left, a bird returned to the cliff face. I returned eight days later and secured my climbing rope through the natural hole and descended over the edge to the nest. The bulky, empty nest was composed of large branches of laurel (*Kalmia* and/or *Rhododendron*). It was covered with excrement, and had been flattened such that there was no distinct nest cup. The rocks below the nest were also splashed with white excrement. I was not able to determine whether the nest had recently held young. A raven was in the vicinity while I was at the nest. The next day, I saw a raven carrying what I assumed was food near the Alum Cave Bluffs.

On 9 March 1974, I found the ravens occupying a nest (Fig. 1A, #2) about 6 m below Nest 1. I lowered myself to this nest and found seven eggs (Fig. 1C). I saw that Nest 1 had been rebuilt and relined, but it was empty. Twice on this visit, I watched a bird return to the nest using a maneuver that is apparently an adaptation

for distracting the attention of potential predators from the nest. Each time, one bird flew along the crest of the ridge and called while the other bird silently flew below the crest, and near the face of the cliff, to the nest. Once, a bird left the cliff face and called when a Red-tailed Hawk, *Buteo jamaicensis*, flew overhead. Later, both ravens chased and attacked the hawk by diving upon it while it circled in the valley between Peregrine Ridge and the Alum Cave Bluffs. One raven struck the hawk and knocked one secondary feather out and loosened another. I did not see whether the raven hit the hawk with its foot or its beak. A raven was sitting on the nest when I last viewed it from the trail below the Alum Cave Bluffs.

The next year on 25 March, I returned to the cliff with Fae P. Andrews and Charles P. Nicholson. From the Alum Cave Bluffs, we saw a raven sitting on a nest that I assumed was the same structure that had been active in 1974. Since we were looking through a spotting scope, we could not see the whole cliff face at once. I descended to the old Nest 2 and found it empty. It was freshly lined and appeared ready for use. Nest 1 had been flattened again; it did not appear to contain any new nesting material. A pair of agitated ravens remained nearby during our presence. After we had left the ridge and returned to the Alum Cave Bluffs, we discovered that the nest to which I had descended was not the active nest. There was a new nest about 20 m below the crest (Fig. 1A, #3). This experience led me to wonder if I had not also failed to see the active nest on my first descent in 1973.

Eleven days later, the three of us returned. Although spring had come to the lowlands, icicles still hung from the ledges on Peregrine Ridge. We watched from the Alum Cave Bluffs as a raven flew to the cliff and relieved the bird that was on the nest. A short time later, this raven was relieved by what was presumably the original bird. One of these birds carried something to the nest in its beak. We then went to the ridge where I anchored my rope to rocks on the west side of the ridge and descended to the west (Fig. 1D). One young, weighing an estimated 450-500 g was in the nest (Fig. 1E). Its eyes were closed and, except for small movements, it remained in the same position while I was there.

While we were on the ridge, two ravens soared overhead and uttered bell-like notes. Twice we saw them sail in precision flight, one directly over the other. At times, it appeared that they may have touched each other. When soaring alone, these birds sometimes turned a somersault in mid-air.

In 1976, Andrews, Alan B. Smith, and I hiked to the Alum Cave Bluffs on 11 April. We found that Nest 3 was active again. During our 35-minute observation period, we watched through a spotting scope as the adults visited the nest five times and fed the young. On the third visit, one of the birds brooded for a short while. I believe there were at least two young. We could see their heads raised above the rim of the nest when they begged for food. When I returned to the Alum Cave Bluffs on 16 May, this nest appeared empty. I saw one raven perched in a conifer; later it soared over the bluff. Once it uttered the series of notes that always sounds, to me, like a hiker jostling an empty canteen along a rough trail.

Ganier's photograph (1931: Fig. 1) shows that the Peregrine Falcon nest was in about the same position on the cliff as Nest 1 in my Figure 1A, however, his description of the ledge does not fit any of the ledges to which I descended or saw. This shale cliff could have eroded considerably in the nearly 50 years since Ganier made his descent. None of the raven nests was on ledges large enough to support anything other than the nest; therefore, I had to remain suspended entirely by a rope

each time I visited a nest. Ganier's (1962) description of the 1960 raven nest site, "About half-way up the 150' sheer cliff . . ." fits my Nest 3 site quite well.

This nest site, on the southern edge of the specie's range in eastern North America, should prove important for future investigations since it is protected and

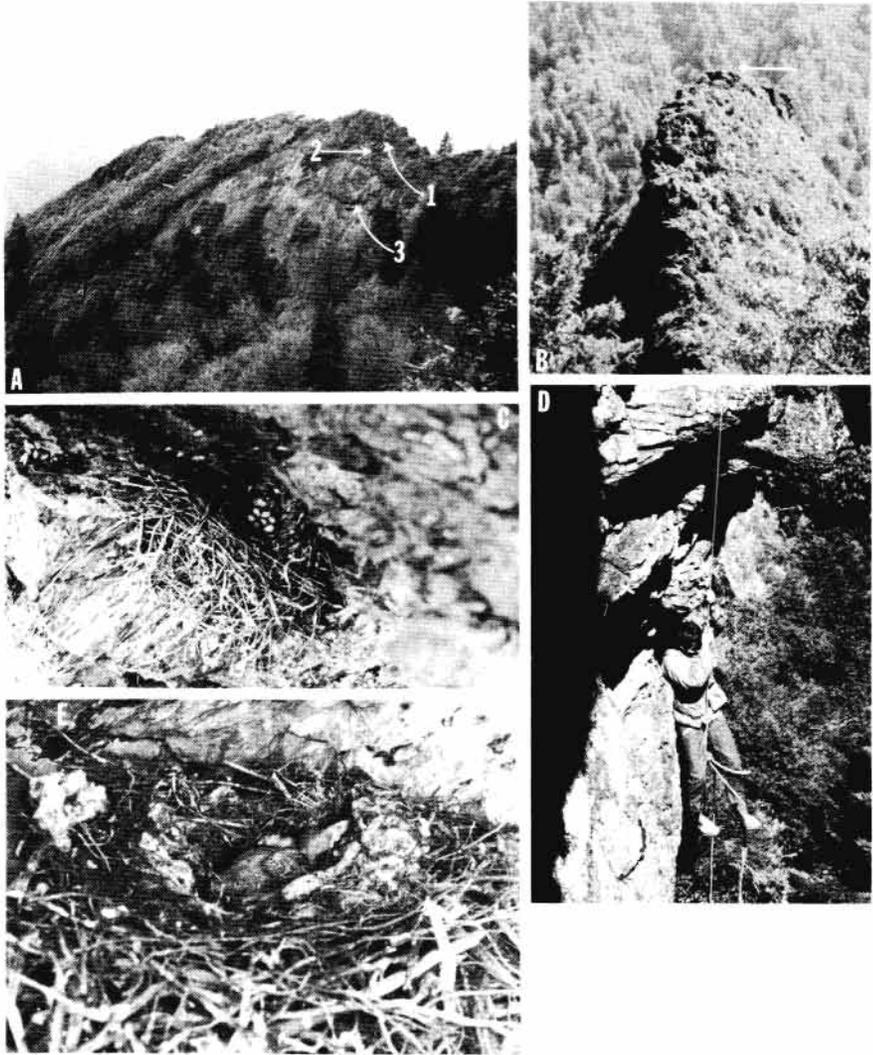


Figure 1. Nest site, nest, eggs, and young of the Common Raven, *Corvus corax* on Peregrine Ridge, Great Smoky Mountains National Park. A) Looking west from the Alum Cave Bluffs Trail; the three nest sites are labelled. B) Looking south from the Mt. Le Conte Trail; for scale, note the person (arrow) standing on the ridge. C), D), and E) see text for explanation.

(Photo "D" by C. P. Nicholson; remainder by M. D. Williams.)

easily observed. The nesting ledges are completely visible from points several hundred meters away along the trail before it reaches the Alum Cave Bluffs, which are about an hour's hike from U.S. Highway 441. The ravens apparently are not disturbed by hikers along this trail. Since overhanging rocks cast dark shadows upon the nesting ledges later in the day, early morning is the best time to observe the nests. No one should attempt to reach the nest ledges except for legitimate research approved by the Park Superintendent. Only experienced and well-equipped climbers should consider such a project.

I am grateful to the individuals mentioned in this paper for their assistance in the field. C. P. Nicholson, H. D. Pratt, J. P. O'Neill, and J. V. Remsen, Jr. provided helpful comments on early drafts on this paper.

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- Museum of Zoology, Louisiana State University, Baton Rouge, Louisiana 70893. Accepted 18 March 1980.

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BOOK REVIEW

A FIELD GUIDE TO WESTERN BIRDS' NESTS. Hal H. Harrison. 1979. Houghton Mifflin Co., 2 Park St., Boston, Mass. 02107. 256 color photographs, 161 black-and-white photographs. Indexed, hardbound. \$11.95. This unit of the Peterson Field Guide Series includes 520 species found breeding west of the Mississippi River. The text covers breeding range, habitat, nest construction and eggs. The author does emphasize distinctive features that may help in identification. This book involves a tremendous effort on the part of the author and will be useful to anyone attempting to identify nest of Western birds.

GARY O. WALLACE

ANNUAL AUTUMN HAWK COUNT, 1979

THOMAS W. FINUCANE

In 1979 the fall hawk flights through Tennessee were recorded at eleven stations, extending 150 miles WSW from the Mendota Fire Tower in southwest Virginia to Signal Point, just north of the border with Georgia. Nearly all species were recorded in numbers higher than their average counts over the preceding ten years, although hours of observation were at a ten-year low.

The Broad-winged Hawk count was 16,205, about the same as in 1975 but significantly higher than in 1976. In 1978 the count fell below 12,000, lowest since 1969, and in 1977 our flights of Broad-winged Hawks were far greater than in any other year. In that year record numbers were established also at nearly all major observation stations in eastern North America. The 109 Sharp-shinned Hawk total was evidently part of a downward trend in the population of that species. In the T.O.S. reports the yearly numbers of Sharp-shinned Hawks, have been 62-158-168-427-208-109. Similar rises and falls in the Sharp-shinned Hawk counts over the same period of years have been observed in other parts of the migration routes of this species.

The 129 total for Red-tailed Hawks in our 1979 data is four more than the old fall-migration record for observation of Red-tailed Hawks in east and middle Tennessee. In west Tennessee, however, Oliver Irwin saw 142 Red-tailed Hawks flying over Memphis, in 1961, to make the total for that year 163. "Observation from a roof-top in the center of Memphis daily during noon hours, 9/25 to 11/19" (*The Migrant* 1961 v. 32, No. 4). The flights reported by Randy Stringer in the fall of 1979 were on 13-14 November. We have always had Red-tailed Hawk migrations in September, but never in large numbers. Nearly all Broad-winged Hawks winter south of the United States, but Red-tailed Hawks are seen in the north in winter, in western New York State, for example.

Only 13 Northern Harriers were listed in our reports for the fall of 1979. In 1978 the count was 26. Totals for Ospreys and Kestrels were 30 and 20, about what we have had in other years. A Golden Eagle was recorded, 9 Sept., with the following comment: "Well seen with a 25x scope at 1/4 mi. to 1/2 mi. for about 10 minutes; white base on undertail and white under primaries suggested a 2-3 yr.-old bird. Observer (BHS) has seen many Golden Eagles in the American West, including immatures like this one." Only one other eagle was reported, unidentified, 15 Sept., Signal Mountain.

We had three Peregrine Falcons in the 1979 T.O.S. hawk count: a distant bird seen from Look Rock, 29 Sept., a male passing close to watchers there on 10 Oct., and one near Chickamauga Dam 13 Nov. Only one was recorded in the T.O.S. program in 1978, one in 1977, and none in 1976. Peregrines formerly nested throughout Tennessee, but egg-collecting and saturation of the land with insecticides distributed by aircraft destroyed the nesting populations in eastern North America, and Peregrines seen in fall migration in the east, mainly down the Atlantic coast, were considered to be western birds. But in recent years Peregrines have been hatched, raised, and released by the Cornell Laboratory of Ornithology and better methods for insect control have been developed.

In 1979 the T.O.S. fall hawk-migration program was in its 40th year. After two years of unfruitful efforts to find migrating hawks success came first in 1950 when

TOS HAWK MIGRATION DATA, 1979

No	Date	Hrs	Obs	Location	Alt	Wind	Sky	°C	SS	CH	Rt	Rs	Bw	NH	OS	AK	a	b	f	u
1	8/31	0.1	Paul	Fort Loudon Lake	-	SS	2	27	-	-	-	-	30	-	-	-	-	-	-	-
2	9/9	2.8	S&B	Look Rock	-	1NW	1	19	2	-	-	-	7	-	-	-	-	-	-	2
3	4	2.5	TomH	Mendota FT	3018	3NE	0	19	1	4	-	-	234	-	-	3	-	-	-	7
4	-	4.7	AS	Mendota FT	3018	2E-NNE	0	19-30	-	-	-	-	74	-	-	-	-	-	-	-
5	14	2.0	K&L	White Oak Mt.	1425	3NW	3	22	3	-	5	-	3	-	-	-	-	-	-	2
6	15	9.0	Ken	Signal Point	1972	3E	1	21-24	3	1	1	-	203	-	3	1	-	-	-	-
7	15	3.0	Lil	White Oak Mt.	1425	3SW	1	21	-	-	-	-	9	-	-	-	-	-	-	-
8	15	3.9	Gene	Fairfield Glade	-	2E	1	18	-	-	-	-	76	-	-	-	2	4	-	-
9	15	0.1	Adel	Rock Island	-	-	-	-	-	-	-	-	45	-	-	-	-	-	-	-
10	15	3.0	Hart	Rockwood FT	2040	-	-	-	1	-	-	-	121	-	2	1	1	4	-	-
11	16	9.0	Ken	Signal Point	1972	2ENE	3	22	2	1	-	-	247	-	-	-	-	-	-	-
12	16	4.0	Gene	Fairfield Glade	-	1S	1	17	-	-	-	-	11	-	-	-	-	2	1	-
13	16	1.0	Adel	Rock Island	-	2N	3	23	-	-	-	-	175	-	-	-	-	-	-	-
14	16	0.1	Dvis	Chilhowee Dam	-	-	-	-	-	-	-	-	265	-	-	-	-	-	-	-
15	16	8.0	EES	Mendota FT	3018	2SE	2	22	5	1	-	-	410	1	2	-	-	-	-	-
16	17	4.2	Gene	Fairfield Glade	-	2SE	0	17	-	-	-	-	10	-	-	-	-	1	-	-
17	17	8.5	EES	Mendota FT	3018	3SE	1	22	10	2	-	1	3407	-	1	-	-	-	-	-
18	18	6.3	Gene	Fairfield Glade	-	1NNE	1	22	-	-	-	-	562	-	-	-	-	2	-	-
19	18	8.7	EES	Mendota FT	3018	2S	v.	18	12	11	-	-	3399	-	-	-	-	-	-	-
20	19	3.3	Lil	White Oak Mt.	1425	3NNE	3	25	2	3	1	-	279	-	1	-	-	-	-	-
21	19	8.0	C&T	Mendota FT	3018	2N-2v.	3	22	6	1	1	-	255	-	1	-	1	1	-	-
22	20	9.0	EES	Mendota FT	3018	5ESE	3	18	1	1	-	-	41	-	1	-	-	-	-	-
23	21	4.0	TomF	Mendota FT	3018	3SE	3	20	-	-	-	-	-	-	1	-	-	-	-	-
24	22	10.0	Ken	Signal Point	1972	2NE	3	20	3	2	1	-	98	-	1	2	-	-	-	-
25	22	6.5	Lil	White Oak Mt.	1425	3NNE	3	20	1	1	2	-	88	2	1	-	-	-	-	-
26	22	7.0	Sue	Bon Air	1800	5NW	3	16	-	1	4	-	31	1	-	2	-	-	1	-
27	22	2.5	S&B	Look Rock	-	3SW	6	20	-	-	-	-	3	-	-	-	-	-	-	3
28	22	1.3	Rndy	Mountain Creek	-	3NE	3	21	1	-	-	-	76	-	-	-	-	-	-	-
29	23	9.0	Ken	Signal Point	1972	3NE	1	22	1	-	3	-	24	-	-	-	-	-	-	-
30	23	9.0	Lil	White Oak Mt.	1425	1ENE	1	22	1	-	3	-	708	2	-	-	-	-	-	-
31	23	8.0	Sue	Bon Air	1800	5N	0	20	-	1	2	1	381	2	-	-	-	1	-	-
32	23	4.3	Gene	Fairfield Glade	-	2SW	2	16	-	-	-	-	13	-	-	-	1	6	1	2
33	23	5.0	Kath	Birchwood	-	2E	1	23	-	-	-	-	159	-	-	-	-	-	-	-
34	23	5.5	S&B	Look Rock	-	3NE	2	-	5	-	1	-	888	-	1	3	1	2	4	8
35	23	2.8	Rndy	Mountain Creek	-	3E	1	23	-	2	-	-	138	-	1	-	-	-	-	-
36	23	3.4	Cofe	Mendota FT	3018	2NE	5	13	-	-	-	-	-	-	-	-	-	-	-	-
37	24	3.8	Gene	Fairfield Glade	-	3SE	3	17	-	-	-	-	-	-	-	-	1	-	-	-
38	24	6.0	EES	Mendota FT	3018	2 1/2 SE	2	16	3	-	1	-	75	1	2	4	-	-	-	-
39	25	2.0	Gene	Fairfield Glade	-	2 1/2 ENE	2	17	-	-	-	-	-	-	-	-	-	-	2	-
40	29	9.0	Ken	Signal Point	1972	3v.	v.	25	3	1	2	1	87	1	-	2	-	-	-	-
41	29	2.0	Lil	White Oak Mt.	1425	3NNE	1	27	2	1	3	-	10	2	-	-	-	-	-	-
42	29	-	Hart	Rockwood FT	2040	-	-	-	8	1	-	1	49	-	1	-	-	-	-	-
43	29	2.3	S&B	Look Rock	-	2WNW	5	21	1	1	1	-	86	-	1	-	3	3	6	1
44	29	3.1	Dvis	Chilhowee Dam	-	3NW	1	23	-	-	2	-	3726	1	1	-	7	-	2	5
45	30	9.0	Ken	Signal Point	1972	2v.	0	21-27	3	-	1	-	19	-	1	-	-	-	-	-
46	30	2.0	Lil	White Oak Mt.	1425	2NE	0	20	1	-	1	-	49	-	-	-	-	-	-	-
47	30	0.5	S&B	Look Rock	-	2NW	1	23	1	-	1	-	1	-	-	-	2	2	-	-
48	30	3.0	Dvis	Chilhowee Dam	-	1N	0	20	-	-	-	-	60	-	2	-	3	-	-	1
49	30	1.7	AS	Mendota FT	3018	2E	0	30	-	-	-	-	-	-	-	-	-	-	-	-
50	10/1	7.0	S&B	Look Rock	-	2SW	1	21	4	-	1	-	22	-	1	3	-	-	-	-
51	3	2.0	Paul	Rockwood FT	2040	1NW	1	23	-	-	1	-	1	-	2	-	-	-	-	-
52	6	2.0	S&B	Look Rock	-	3SW	2	15	9	-	1	-	6	1	1	-	2	5	-	-
53	6	0.7	Dvis	Chilhowee Dam	-	4SW	1	8	1	-	1	-	2	-	1	-	-	-	1	1
54	7	9.0	Wlky	Signal Point	1972	3NNW	0	19	13	-	-	-	-	-	-	-	-	-	-	-
55	7	1.3	S&B	Look Rock	-	4NW	-	11	1	-	-	-	10	-	-	-	2	1	-	1
56	13	9.0	Ken	Signal Point	1972	2v.	2	13-22	2	-	-	-	-	-	-	-	-	-	-	-
57	14	9.0	Ken	Signal Point	1972	3NE	0	10-17	2	-	-	-	-	-	2	1	-	-	-	-
58	14	2.3	S&B	Look Rock	-	1E	0	12	1	1	3	-	1	-	-	-	3	1	1	2
59	11/13	1.3	Rndy	Chickamauga Dam	-	2N	3	5	-	-	40	-	-	-	-	-	-	-	-	PG
60	14	1.3	Rndy	Chickamauga Dam	-	2NE	0	10	-	-	45	-	-	-	-	-	-	-	-	-
61	21	5.0	TomF	Mendota FT	3018	2SE	2	20	-	-	1	-	-	-	-	1	-	2	-	-

115 37 130 8 16674 15 32 20 35 123 11 15

Joe Howell, Fred Behrend, Steve Russell, Richard Nevius, Gene and Adele West, Jim Tanner, and William Johnson reported seeing migrating hawks in a dozen different places. Of the people in this list only the Wests are still watching. Mrs. W. F. Bell started hawk-watching in 1953 at Bon Air and still goes there for the fall hawk count.

KEY TO REPORTERS

Adele: Adele West, Fairfield Glade; AS: Arthur Smith, Kingsport; C & T, Charlotte and Tom Finucane, Kingsport; Cofe: John Wallace Coffey, Bristol; Dvis: Marcia Davis; EES: Eugene Scott, Nickelsville, Va.; Gene: Gene West, Fairfield Glade; Hart: Paul Hartigan, Knoxville; Kath: Kathleen Selvidger,

Birchwood; Ken: Ken Dubke, Ooltewah; Lil: Lil Dubke, Ooltewah; Paul: Paul Pardue, Knoxville; Rndy: Randy Stringer, Ooltewah; S&B: Mr. & Mrs. Steve Stedman, Knoxville; Sue: Sue Bell, Nashville; TomF: Tom Finucane, Kingsport; TomH: Tom Haggerty, Boone, N.C.; Wlky: Bruce Wilkey, Ooltewah.

WIND AND SKY CODES

Wind data are presented in the Beauford Scale, stronger winds with higher numbers. Sky conditions range from clear (0) to heavy clouds or rain (5).

1434 Watauga St., Kingsport 37664.

BOOK REVIEWS

A FIELD GUIDE TO THE NESTS, EGGS AND NESTLINGS OF NORTH AMERICAN BIRDS. Colin Harrison. Wm. Collins Publishers, Inc., 208 W. 117th St., Cleveland, Ohio 44111. 416 pp. 64 color plates, many line drawings. \$11.95. This is a good comprehensive guide describing and illustrating the nests, eggs and identifiable nestings of North American birds. A short discussion is given on egg types, hatching, nest habitats, nest sites, breeding season, incubation, nestlings and nestling period and manner of feeding nestlings. The author provides three keys: to nests, to eggs, and to young nestlings and chicks. These keys are cross-referenced.

No range maps or descriptions of adult birds are given so this book is not a substitute for the normal field guide. It should be useful to banders who band nestlings and to anyone that attempts to identify young birds and eggs. The hard cover is impregnated with plastic so the book should be able to take the normal field abuse. It is bound in field guide size. The book includes warnings against egg collecting and hopefully readers will use caution around nests and nestlings.

GARY O. WALLACE

BIRD WATCHER'S DIGEST. P. O. Box 110, Marietta, Ohio 45750. \$7.50 per year. A new bimonthly journal which was started in the fall of 1978. It contains articles written more for the general reader and also reprints articles from newspapers and general natural history magazines.

GARY O. WALLACE

MINUTES OF THE 1980 SYMPOSIUM AND FALL MEETING

The Board of Directors' meeting of the Tennessee Ornithological Society was held 18 October 1980 at Montgomery Bell State Park with a quorum present. President Nelle Moore called the meeting to order at 12:30 P.M.

The minutes of the Board of Directors' meeting held 3 May 1980 were approved as printed in the June 1980 issue of *The Migrant*.

REPORTS OF OFFICERS

There were no reports from the Vice-presidents Rick Knight of East Tennessee, Dot Crawford, Middle Tennessee or Richard L. Whittington, West Tennessee.

The SECRETARY, Helen Dinkelspiel, reported that the membership list of the organization had been sent to the Editor in mid-July and hopefully would be available with the September 1980 issue of *The Migrant*.

The TREASURER, Martha Waldron, reported that the newsletter, *The Tennessee Warbler*, should cost less for the year 1980 than for 1979. The report of the Society's finances, covering 1 January 1980-9 October 1980 listed:

Income	\$5481.87
Expenses	2505.86
Savings (10/6/80)	4016.85
Checking	203.19

Copy of complete report is attached to the minutes.

The CURATOR, Dr. James Tanner, reported sales of back copies of *The Migrant* were \$218.29 covering the period May to October 1980. Expenses totalled \$179.75. Dr. Tanner made a motion to accept the following rates for sale of back copies, including mailing costs (as stated in his attached report):

Volume 1	\$2.00
Photocopies issues	2.00 (per issue)
Issues still in print	1.00 (per issue)
Species Index to <i>The Migrant</i>	2.00

Dr. Tanner's motion was seconded and passed.

DIRECTORS-AT-LARGE

Jon A. Koella, representing East Tennessee, stated that he hoped to get a chapter started at Madisonville.

Michael Dinsmore, Middle Tennessee, said that there was deterioration in plans for a Montgomery County chapter as he cannot pursue the idea because of uncertainty concerning his personal plans.

Mrs. C. K. G. Sumara, West Tennessee, had no report.

REPORTS OF COMMITTEES

FINANCE: In the absence of the Finance Committee Chairman, William T. Whitley, the report was read by Martha Waldron. The committee recommended that all the accumulated interest in the Briley Fund be transferred to the Endow-

ment Fund. The recommendation was accepted and approved by the Board of Directors. Complete report attached to minutes.

CONSERVATION: The committee report was given by Ken Dubke, who stated that the Resolution passed at the spring meeting had brought good results. This Resolution dealt with a plea for preservation of Amnicola Marsh in Chattanooga. As a result \$400,000 was voted for an impact study.

NOMINATING COMMITTEE: President Nelle Moore thanked outgoing Chairman Lula Coffey and her committee of Michael Bierly and Daniel Jacobson for serving in that capacity.

Miss Moore selected the members of the Nominating Committee to serve through the Spring meeting of 1982. They are Chairman Tom Guschke of Middle Tennessee, Sally Goodin, East Tennessee, Joe Guinn, West Tennessee.

SPECIAL ASSIGNMENT REPORTS

Charles Nicholson, Editor of the newsletter, *The Tennessee Warbler*, explained that the last issue was late due to a printer's mixup.

Charles Nicholson, Foray Director, stated that the 1981 Foray would be held in McNairy County. Mr. Nicholson agreed to continue as Foray Director for one year.

PATCHES, DECALS: Lil Dubke announced sales of patches and decals in the amount of \$65.60.

OLD BUSINESS

There was no old business.

NEW BUSINESS

Michael Bierly proposed submitting a Resolution to TWRA supporting their proposed proclamation to prohibit importation and holding of the Black-hooded Parakeet and the Monk Parakeet. A similar Resolution was to be sent to the U.S. Fish and Wildlife Service, but the resolution to them was also to request that these two birds be put on the Injurious Animal List.

Ben Coffey made a motion to accept the resolutions. Motion was seconded and carried.

A committee consisting of George Mayfield, Chairman, Michael Bierly and Ken Dubke was appointed to (1) make plans for the 1981 Fall meeting and (2) to make recommendations for the mechanics of planning future fall meetings.

Michael Bierly made a motion that T.O.S. provide an Honorary Life Membership to Harry Monk in appreciation for his dedication and contributions to ornithology.

Motion seconded and passed unanimously.

The President expressed thanks to the Columbia Chapter for handling of arrangements and for hosting of this fall meeting, with particular thanks to Allen Pressnell and Ann Lochridge.

The Knoxville Chapter extended an invitation to T.O.S. to hold its 1981 spring meeting at Norris Dam State Park 1-3 May with Knoxville serving as host chapter.

The meeting adjourned at 1:50 P.M.

HELEN DINKELSPIEL, *Secretary*

ROUND TABLE NOTES

ANHINGA NESTING AT BIG HILL POND, McNAIRY CO.—Jim Harrison and Jesse Taylor, Park Rangers at Big Hill Pond State Park, observed twelve Anhinga (*Anhinga anhinga*) in the Park area during the third week in March and a nesting pair in early June. Big Hill Pond State Park is located in southwest McNairy Co. on Highway 57, just north of the Mississippi State line near the confluence of Cypress Creek and the Tusculumbia Rivers which drain into the Hatchie State Scenic River.

A pair of Anhinga were observed building a nest 8 June in a stand of dead trees in the lake. There was no observation of young although the adults were seen carrying food. No one approached the nest by boat therefore all observations were made from shore. Observations were stopped for three weeks because the presence of people on the shore seemed to disturb them. The nest was approximately 4.5 m (15 ft.) above the water and about 45 m (150 ft.) from the shore.

The Anhingas were last seen on 9 July 1980 by Dan Eagar, Staff Zoologist, with the Tennessee Heritage Program.

Prior nestings in West Tennessee were 40 nests at Reelfoot in 1939 (*Migrant*, 10:27, 1979) and five nests at the Duck River Heronry on Grassy Lake at Kentucky Lake in 1953 (*Migrant*, 26:9, 1955).

MARTHA WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119. Accepted 1 Dec. 1980.

RAPTOR BANDING PROGRAM IN THE GREATER MEMPHIS AREA—The Tennessee Wildlife Resources Agency initiated a research and recovery program in 1977 whereby injured and orphaned raptors are cared for and released. This bander secured the required permit to help in the rehabilitation process. As a consequence of becoming involved in the TWRA recovery program, an interest in the program's success and the raptor population within the Mississippi Flyway was generated. This interest led to an initial effort of banding birds of prey which began in August, 1978, both in the wild and of birds being rehabilitated prior to release. The following objectives for banding birds of prey have been submitted to the Department of Interior, Bird Banding Laboratory and the TWRA:

1. To determine if raptors follow the Mississippi Flyway or cross flyways.
2. To more accurately determine the wintering area of birds of prey in the greater Memphis area.
3. To more accurately determine the breeding area of wintering birds of prey in the greater Memphis area, and
4. To secure a more accurate count of birds of prey in the greater Memphis area.

Both agencies accepted the objectives and endorsed the work. Banding permits have been secured from Mississippi and Arkansas. It was felt that since Memphis was geographically close to these states it would be necessary to band the birds and either transport and/or release birds in the adjacent areas as well as to band young on the nest.

The Memphis Zoological Gardens has acquired a large number of raptors through private donations. Many of these raptors are orphaned young or injured

adults. Once the birds have received necessary medical attention and rehabilitated, or in the case of orphaned young properly hacked out, release times and locations are selected by zoo personnel. Prior to release, the birds are banded. In addition to banding rehabilitated birds, active nests were observed this past nesting season and the young were banded on the nest. The birds listed in Table 1 have been banded and either released, hacked out, or replaced in the nest.

TABLE 1
BIRDS OF PREY BANDED 1978-1980

SPECIES	DATE	DISPOSITION/RELEASE LOCATION
Red-tailed (<i>Buteo jamaicensis</i>)	03-10-79	(R) Lookout Mtn., TN (Note 1)
	10-02-79	(R) Chimney Tops, Smoky Mtn. National Park, TN
	01-27-80	(T) Memphis, TN (Note 2)
	02-16-80	(R) Penal Farm, Memphis, TN
	03-22-80	(R) Penal Farm, Memphis, TN
	05-18-80	(N) Olive Branch, MS (Note 3)
	05-18-80	(N) Olive Branch, MS
	05-27-80 05-27-80	(N) Memphis, TN (N) Memphis, TN
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	03-30-79	(R) Reelfoot Lake State Park, Reelfoot, TN
American Kestrel (<i>Falco sparverius</i>)	05-25-79	(R) Southwest, Memphis, TN
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
Barn Owl (<i>Tyto alba</i>)	02-16-80	(R) SFSP, Memphis, TN (Note 4)
	02-16-80	(R) SFSP, Memphis, TN
Screech Owl (<i>Otus asio</i>)	08-17-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	05-31-80	(H) Overton Park, Memphis, TN (Note 5)
	05-31-80	(H) Overton Park, Memphis, TN
	05-31-80 05-31-80	(H) Overton Park, Memphis, TN (H) SFSP, Memphis, TN
Great Horned Owl (<i>Bubo virginianus</i>)	07-25-79	(R) SFSP, Memphis, TN

Note 1 (R) Rehabilitated.

Note 2 (T) Trapped in the wild.

Note 3 (N) Banded on the nest.

Note 4 SFSP, Shelby Forest State Park, northwest Shelby Co.

Note 5 (H) Hacked, birds set free but fed daily from a roosting box or platform.

The banding program has had a good beginning. Further projects have been planned for this fall and winter. Appreciation is given to John Stokes, Assistant

Curator of Birds, Memphis Zoological Gardens, for his assistance in banding rehabilitated birds and banding birds on the nest, and to Dave Vance, Memphis falconer, who located active nests of birds of prey and who has given much encouragement and time to the project.

MARTHA WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119. Accepted 30 July 1980.

PEREGRINE AT ASHWOOD—On 1 June 1980, when leaving Hamilton Place near Ashwood, my sister, Mrs. J. L. Whiteside, pointed out a hawk flying about 100 feet above us on the highway. It was about twice the size of a Kestrel, had long pointed wings, a streaked breast, a dark brown back, and black mustaches. It was obviously an immature Peregrine Falcon (*Falco peregrinus*). It swiftly flew over a hill that we call the knob. I was reminded of Dan R. Gray's report of a Duck Hawk flying over Ashwood on 21 October 1935 (*The Migrant* 6:92).

HARRY C. YEATMAN, Biology Department, University of the South, Sewanee 37375. Accepted 2 July 1980.

RECENT RECORDS AND STATUS OF THE WHIMBREL IN TENNESSEE—During the late afternoon of 27 May 1979 I was censusing shorebirds at the Kingston Steam Plant, Roane County, with Robert E. Beck, doctoral student in ornithology at the University of Tennessee (Knoxville), when we noted a flock of 18 large shorebirds perched about 100 meters away on the mudflats of the settling ponds associated with the facility. Inspection with a 25x 'scope revealed that all the birds possessed a prominently decurved bill as well as distinctive striping on the head, leading us to believe that they were Whimbrels (*Numenius phaeopus*). As we observed the flock we used the *Birds of North America* by Robbins et al (1966, New York, Golden Press) for confirmation; later the birds circled over the pond and we were able to note that they did not possess the rufous underwings characteristic of Long-billed Curlews (*Numenius americanus*). I have considerable experience with each of these species from field work done in Florida and Texas from 1971-1977, though I have never noted a Whimbrel flock of this size in either state. Ben Coffey (pers. comm.) also noted that he had no previous experience with a Whimbrel flock of these proportions.

This observation constitutes the seventh record for Tennessee; it is also only the second spring sighting on record, and it appears to be the second sighting in the Eastern Ridge and Valley Region of the state. More importantly, this observation is the only one where more than one or two birds is concerned. At the same location on 24 May 1980 J. B. Owen, Pat Stalling, and Albert Jenkins also observed a Whimbrel, the eighth sighting in the state.

The previously published observations of Whimbrels in Tennessee (*The Migrant*, 5:40. 43:82-93. 47:18. 48:104, 105) and the two records herein noted show the extreme dates of Spring occurrence to be 24 May - 4 June, while the autumn migration dates fall into two clusters: 8-24 July and 20-26 September. Both A. C. Bent's *Life Histories of North American Shore Birds, Part II*. (1929, New York, Dover Publications, Inc.) and R. S. Palmer's *The Shorebirds of North America* (1967, G. D. Stout, Ed., New York, Viking Press) note a characteristic late May northward flight of this species as well as two clearly articulated southward migration waves, the first comprised of adults in July and the second made up of

young birds in August and September. The above noted extreme dates correlate well with each of these authorities.

STEPHEN J. STEDMAN, 2223 Tomassee Drive, Knoxville, TN 37920. Accepted 3 Sept. 1980.

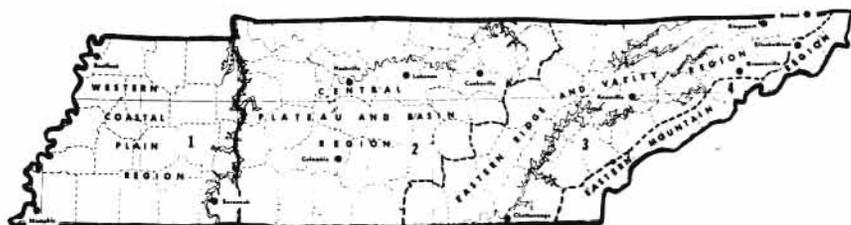
RED-COCKADED WOODPECKER COLONY IN CAMPBELL COUNTY, TENNESSEE—On 12 December 1978, J. C. Howell, Gary Muffly, and I located two Red-cockaded Woodpecker (*Picooides borealis*) cavity trees on Pine Mountain, Campbell County, Tennessee. During subsequent visits, three additional cavity trees were found. This is the first known colony site in Campbell County. The colony was on a west slope above a ravine, approximately 3.4 km NE of the junction of I-75 and Stinking Creek Road. The area is mixed pine and oak-hickory forest, with a dense understory of mountain laurel (*Kalmia latifolia*) and other ericaceous shrubs. Red-cockaded Woodpeckers have been sighted within 2 to 3 km of the colony site several times since 1971 (Nicholson, *Migrant* 48:53-62, 1977). Howell and Muffly observed a single bird 0.8 km SSE of the colony site on 18 October 1978 (Dubke and Dubke, *Migrant* 50:23, 1979), and this observation prompted our search which eventually resulted in the discovery of the colony site.

All of the five cavities were in shortleaf pine (*Pinus echinata*), and the trees were within about 350 m of each other. Two of the cavities were in trees killed by southern pine beetles (*Dendroctonus frontalis*), and the other three in live trees. One of the cavities in a live pine was inactive, and another showed a small amount of fresh resin flow in April and October 1979. The remaining cavity had a copious flow of resin on 12 December 1978, and the plate surrounding the cavity entrance was enlarged during the spring and summer of 1979. This tree, approximately 58 cm d.b.h., was located on the edge of a 30-m bluff, and was the largest nest tree I have observed in the State. The cavity was somewhat unusual for a Red-cockaded Woodpecker, as several large, live branches originated below the nest opening. However, this may have been one of the only suitable trees in the area, as many other large pines were beetle-killed or logged a few years before.

Single Red-cockaded Woodpeckers were observed in the colony area on 15 April 1979, by Tom Phillips and Rich Laughlin (pers. comm.), and on 30 October 1979, by Craig Watson and the author. Further visits to the colony site during the April to June breeding season are needed to determine if this is a viable, reproducing colony. The nearest known active sites are 63 km SW in Morgan County, Tennessee (Nicholson, op. cit.), and 62 km N in Laurel County, Kentucky (Jackson et al., *Kentucky Warbler* 52:75-80, 1976).

CHARLES P. NICHOLSON, TVA Regional Natural Heritage Project, Office of Natural Resources, Tennessee Valley Authority, Norris, Tennessee 37828. Accepted 8 March 1980.

THE SEASON

DR. FRED J. ALSOP, III, *Editor*

NESTING SEASON: 16 MAY - 31 JULY, 1980

The Tennessee Wildlife Resources Agency lists 14 species of birds as either *endangered* or *threatened* species in Tennessee. To highlight records of these species for researchers using *The Migrant*, as well as for the general birder, those species so designated will be *italicized* in this and in future "Season" reports. Unfortunately the following report is once again incomplete as the data for the Central Plateau and Basin Region was unavailable after an extended deadline at the time this material was called for by the editor of *The Migrant*.

Probably the most unexpected record for this reporting period is that of two *Anhingas* observed for more than a month in McNairy County. This species was once a breeding bird along the Mississippi River, at Reelfoot Lake, and in Humphreys County, but has been unrecorded in the State for 18 years. Many other birds associated with aquatic habitats were recorded including numerous species of herons, especially in the Eastern Ridge and Valley Region, where a new *Black-crowned Night Heron* nesting colony was discovered. Snowy Egrets were found in both the Eastern Ridge and Valley and the Eastern Mountain regions. All three reporting regions had White Ibis; most seen were immature, and they were most common in the Western Coastal Plain where a roost at Dyersburg built to a peak of over 100 individuals in early August.

Mike Bierly found almost 200 Least Terns at the colony in the Mississippi River and banded more than 40 young birds. Birders visiting the Kingston Steam Plant west of Knoxville on a regular basis are finding lots of shorebirds and some lingering ducks of several species not normally seen here in summer. Their report (see E. Ridge and Valley) includes a Whimbrel, 8 Northern Phalaropes at one time which may be the largest single sighting in the State, and a breeding plumaged Laughing Gull; the last a species for which there are few, if any, records at this season here. *Bald Eagles*, in both adult and subadult plumages, were seen in the Eastern Ridge and Valley at several locations. *Ospreys* were reported from a new location in the Western Coastal Plain where two birds spent almost 3 months at Big Hill Pond State Park in McNairy County. Don Hammer reports there were 3 nesting pairs on Watts Barr and 6 young were fledged from 2 nests there.

In this nesting season there are records in the pages that follow of the attempted and successful breeding of many avian species. Some of the nests discovered merit special notice because of the rarity of the species in Tennessee. The nests of the *Sharp-shinned Hawk* were located in south Knoxville and in Hoss Cove south of Johnson City. *Cooper's Hawks* nests were found in two locations on Bays Moun-

tain in Kingsport. A pair of *Red-cockaded Woodpeckers* with one young bird were located on Skunk Ridge in Great Smoky Mountains National Park by Chuck Nicholson in the area where Rick Phillips, Tom Laughlin, and Bill Kappa discovered an adult in 1979. Nicholson also found a single bird at the Sinking Creek site in Campbell County. Bank Swallows were located in a large active colony on the Mississippi River banks and a small colony in a gravel pit at Austin Springs near Johnson City was destroyed by the operation of pit. One young bird was produced in the *Common Raven* nest in Great Smoky Mountains National Park that was reported in the previous issue's "Season." The successful nesting of Golden-crowned Kinglets on Roan Mountain may be the first reported observation of an active nest of the species in Tennessee even though it must have been doing so in the Spruce-fir forests here for thousands of years.

A *Scissor-tailed Flycatcher* was observed in the Eastern Ridge and Valley. Alder Flycatchers were found in several areas on and near Roan Mountain and at least 6 males appeared to be territorial in the alder thickets above 5,000 feet. Olive-sided Flycatchers were located in both the eastern regions. A Brown Creeper was discovered in the Western Coastal Plain on 21 June. *Grasshopper Sparrows* were reported in all three reporting regions but the compiler for the Eastern Mountain found fewer in the Elizabethton area this year than last. In the Eastern Ridge and Valley Region a *Bachman's Sparrow* was seen at Newport and in the same region House Finches were observed in Knox County throughout the reporting period. In June and July they were seen feeding fledged young who still had downy feathers on their heads. The compiler for the region believes that at least two broods of House Finches were produced in Knox County this summer and it looks as if the species continues to expand its range in the eastern states.

Details of these observations and many, many more in the pages that follow. Send your field notes to your regional compiler today.

WESTERN COASTAL PLAIN REGION—The western part of the state experienced the record hot days rivalled only by days without any precipitation.

Anhinga-Sandpiper: ANHINGA: 1 Jun - 9 Jul (2) BHP (DE, JH, JT). Yellow-crowned Night Heron: 11 nests were observed at the McCorkle site as compared to 8 nests last year. There was an average of 4 young per nest. Two young were found on the ground at two different locations, they were banded and released (JS). WHITE IBIS: 16 Jul (1) R (DM, GM); 27 Jul (1 imm) NE Shelby Co. (AP, DP); 28 Jul (1) NE Shelby Co. (LCC, HD, CB), last seen at this location 4 Aug (1) (AP). The following is a compilation of birds observed by W. G. Criswell at the Dyersburg's roost:

	Little Blue Heron	Cattle Egret	Yellow-crowned Night Heron	White Ibis
24 Jul	1229	462	9	25
25 Jul	nc*	nc*	nc*	26
28 Jul	1204	687	2	11
30 Jul	nc*	nc*	nc*	75
7 Aug	1206	1065	2	103
14 Aug	616	1426	0	44

*nc = not counted

The heronry was not used in 1979.

Least Bittern: 18 May, completed nest, no eggs; 27 May (4 eggs in nest), WM (WGC). Mississippi Kite: 15 May (2) OP (JS, NS, MW), 25 May (4) FPSP (MCTOS), 31 May thru 1 Aug (1 to 3) D (WGC). Broad-winged Hawk: 15 May (1) OP (NS, MW). Osprey: 5 Apr thru 25 Jun (2) BHP (JH, JT). Semipalmated Plover: 28 Jul (1) CP (WGC). American Woodcock: 19 Jul (1) M (DAD). Spotted Sandpiper: 8 Jul thru 12 Jul (2) Island 21 (WGC). Least Sandpiper: 8 Jul thru 12 Jul (4-6) Island 21 (WGC). *Least Tern*: 21 Jun (194) 790 mile to 824 mile on MS River, count made by air survey (MLB), 19 Jul (140 adults, 42 young banded) 790 mile marker MS River (DAD, JG, MW).

Whip-poor-will-Swallow: Whip-poor-will: 24 Apr (21 WPW at 9 stops) Mt. Comfort to I 240 4.6 mi. Carrol Co.; (37 WPW at 15 stops; 3 CWC, two at beginning of run and one near Wildersville) I-40 to Wildersville 10.5 mi. Henderson Co.; 22 Jun (36 WPW at 20 of 21 stops; 13 CWC at 11 of 21 stops) Lick Creek Rd. 9.4 mi. to Granny's Creek Resort, Benton Co. (BBC, LCC). Chimney Swift: 28 May (nest with 3 eggs); 1 Jun (same nest with 5 eggs) D (WGC). Eastern Phoebe: 19 Jun (nest with 4 eggs) FPSP; (nest with one young about 6 days old) OL (BBC, LCC). Tree Swallow: 3 Jun (1) R (BP, RP). Bank Swallow: 9 Jul (174 holes, some completed, some incomplete) MS River bank at Island 21. Barn Swallow: 19 Jun (63 nests) I 55 and Delaware St. Bridge, M (BBC); 6 Jun (60 nests) I 40 and overpass at Exit 133 (BCC); Other nests on Interstate bridges at Tennessee, Buffalo and Duck Rivers (BBC). Rough-winged Swallow, Tree Swallow, and Bank Swallow (approximately 1500) were observed on the east end of an island at the 790 mile marker in the MS river on 19 Jul. The swallows were observed from a boat so an accurate number of each species was very difficult. The birds were resting, preening and bathing (JG, DAD, MW).

Creepers-Sparrow: *BROWN CREEPER* 21 Jun (1) HNWR (LCC, MW). House Wren: 19 Jun (1) FPSP (BBC, LCC). Bewick's Wren: 21 Jul (nest, 4 well fledged young); 23 Jul (1 young photographed) D (WGC); the nest was in a corrugated cardboard box in a cluttered shed. Warbling Vireo: 25 May (2) FPSP (MCTOS); (2) one each at two different locations in Memphis; 31 May (2) one each at two different locations in SFSP; (6) MI & (2) EB (BBC, LCC). Parula Warbler: 13 Jun (2 to 4) MI (BBC, LCC). *MAGNOLIA WARBLER*: 4 Jun (1) OP (BBC), latest by four days of an other previous records. Blue Grosbeak: 9 Jun (nest with 3 eggs) D (WGC). Grasshopper Sparrow: 4 May (3) Tiger Tail (CN); 9 Jun (evidence of feeding young) D (WGC); 21 Jun (1) D (WGC); 19 Jun (2) FPSP (BBC, LCC). Chipping Sparrow: 17 May (1 observed building a nest) AP (JS); 31 May (nest with 3 eggs) AP (JS, MW).

Locations: AP—Audubon Park, city park in southeast Memphis; BHP—Big Hill Pond, State park in southwest McNairy Co.; CP—Cottonwood Point, near Heloise, TN; D—Dyserburg, TN; EB—Ensley Bottoms, south west Shelby Co.; FPSP—Fort Pillow State Park, Lauderdale Co.; HNWR—Hatchie National Wildlife Refuge; HM—Hooper Marsh, Dyer Co.; Island 21—Mississippi River, Dyer Co.; McCorkle—city street in Memphis; M—Memphis; MI—Mud Island, northwest Memphis; OL—Opem Lake, Dyer Co.; OP—Overton Park, city park in Memphis; R—Reelfoot Lake TN; Tiger Tail, Dyer Co.

Observers: CB—Carolyn Bullock; MLB—Michael L. Bierly; BCC—Ben B. Coffey, Jr.; LCC—Lula C. Coffey; WGC—William G. Criswell; DAD—Dolly Ann Daily; HD—Helen Dinkelspiel; JG—Joe Guinn; DE—Dan Eagar; JH—Jim Harrison; MCTOS—Memphis Chapter, TOS; DM—Don Manning; GM—Gina

Manning; CN—Chuck Nicholson; AP—Allen Phillips; BP—Bill Peeples; DP—David Phillips; RP—Rob Peeples; NS—Noreen Smith; JS—John Stokes; JT—Jim Taylor; MW—Martha Waldron.

MARTHA WALDRON, 1962 Yorkshire Drive, Memphis, TN 38119.

EASTERN RIDGE AND VALLEY REGION—Observations continued on a consistent basis at the Kingston Steam Plant. The regular species were identified and the now-to-be-expected rarities were searched for and duly recorded in the basic data being compiled.

The reports of the number of accipiter hawks being received is most gratifying. With the first reported nesting of a Sharp-shinned Hawk in Knox County and the probable nesting of a pair in Hoss Cove the breeding situation is looking better than in many years. Two active nests of Cooper's Hawks were located in Kingsport.

From the virtual lack of any comments being made on the many Breeding Bird Surveys run it must appear that passerine species being monitored are stable. House Wrens have again been reported in the Chattanooga area, but still there is no documentation of their nesting. House Finch have been reported with young for the first time in Knoxville and observations on Grasshopper Sparrows continue to be reported.

Loon-Duck: Common Loon: 19 May (1) NL (Terry Chilcoat, Ralph Jordn *vide* CPN). Pied-billed Grebe: 17 May (1) AM (DRJ, JTP). Green Heron: 14 Jul (50) EB (PP). Little Blue Heron: 21 Jun (1) CH (RCM); 1 Jul (2) Bean Station (PP); 5 Jul (1) K (PP); 11 Jul (2) SB (LD); 14-31 Jul (max 8) EB (PP, DH, CPN, LT); 20 and 26 Jul (25-26) RB (TK); 28 Jul (5) HRS (WKJ, GR); all the reports were of immature birds except two. Cattle Egret: 28 Jul (15) HRS (WKJ, GR). Great Egret: 14-31 Jul (1) EB (DH, CPN, LT); 20 and 26 Jul (6) RB (TK); 29 Jul (1) KSP (SBS). Snowy Egret: 16 Jul (1) SB (LD). Black-crowned Night Heron: *new heronry* at Vonore, approx 25 nests (Bob Nichols). *WHITE IBIS*: 16-31 Jul (1) KSP (PP, SJS *et al*); 22-31 Jul (1) EB (DH, CPN, LT); 20 Jul (1) RB (TK); 28 Jul (5) HRS SKJ, GR). Gadwall: 26 May (1) KSP (DRJ, KLD); Blue-winged Teal: 26 May (2) KSP (MaD, LT). Ring-necked Duck: 1-3 all period KSP (SBS, CPN *et al*). Lesser Scaup: 26 Jun (1) JC (RK); 1-2 thru period KSP (CPN *et al*). Ruddy Duck: 17 May (1) KSP (LD, DRJ *et al*); 4 Jun (1) NL (DRJ, LD).

Hawk-Phalarope: Sharp-shinned Hawk: 27 May (1) (JC, MD, SG); "On 26 July at my study area in Hoss Cove, I observed 2 adult sharp-shins attending to two recently fledged immatures. The adults were present all summer." (Richard Lewis); 1 Jun (1) JBBS (DRJ); 5 Jul (1) Tiftonia (DRJ); 22 Jul (1) SB (KD); *nest* south K, 1 young fledged in early Jul (James T. Tanner); 10 Jun (1 carrying food) north KCo (JCH). Cooper's Hawk: 18 Jun (1) JB (RK); 9 Jun (1) McFarland Breeding Bird Survey, PCo (KD); 1 present during Jul, K (A. Boyd Sharp). 21 Jun (nest w/1 two-week old Y) Pretty Ridge, Bays Mt, Kingsport (RAP, TL); 10 Jul (nest w/5 young w/fight feathers) Holly Trail, Bays Mt, Kingsport (RAP, TL). Accipiter *spp*: 23 Jun (1) NE KCo (CPN); 28 Jun (1) W KCo (MaD); 12 Jul (1) Clinton (CPN); 23 Jul (1) Union Co (JCH). Accipiters: many reports came from the Knoxville area, those identified to species were Sharp-shinned, except for 1 Cooper's report. Historically, the Cooper's was more common in the Knoxville area. Are Sharp-shins occupying this vacant Accipiter niche? (CPN). *BALD EAGLE*: one adult thru season Norris L. (JCH); 17 Jul (1) Sevierville (PP); 28 Jul

(1 ad and 1 imm) Cherokee L. (WKJ, GR). Osprey: 3 nesting pairs Watts Bar L. that fledged 6 young from 2 nests (Don Hammer).

Coot-Owl: American Coot: 25 May (1) AS (SG); 28 May (1) SB (KLD); 20 Jul (1) RB (TK). Semipalmated Plover: 17 May (35) KSP (SBS *et al*); 17 May (4) Har (DRJ); 26 May (13) KSP (DRJ, KLD); 20 Jul (1) RB (TK). Black-bellied Plover: 17 May (19) KSP (LD, JWS, DRJ *et al*); 23 May (3) KSP (PP); 26 May (13) KSP (KLD, DRJ); 31 May (1) EB (SBS, Ron and Audrey Hoff). Ruddy Turnstone: 24 May (1) KSP (JBO). Am. Woodcock: 19 Jul (1) JCo (TK). *WHIMBREL*: 24 May (1) KSP (JBO). Spotted Sandpiper: 26 May (5) KSP (KLD, DRJ); 20 and 26 Jul (10 and 4) RB (TK). Solitary Sandpiper: 26 May (1) AS (RK). Willet: 17 May (3) KSP (LD, DRJ, JWS *et al*); 26 Jul (1) RB (TK). Greater Yellowlegs: 16 Jul (1) KSP (SBS). Lesser Yellowlegs: 16 Jul (1) KSP (SBS); 20 and 26 Jul (20 and 8) RB (TK). Pectoral Sandpiper: 17 May (1) KSP (LD, JWS, DRJ); 17 Jul (7) KSP (DRJ, CH, JWS); 20 and 26 Jul (100 and 80) RB (TK). White-rumped Sandpiper: 17 May (25) KSP (LD, JWS, DRJ); 23, 25 May (1-2) KSP (PP); 26 May (12) KSP (KLD, DRJ); 17 Jul (3) KSP (CH, JWS, DRJ). Least Sandpiper: 17 May (150) KSP (LD, JWS, DRJ); 26 May (2) KSP (KLD, DRJ); 17 Jul (30) KSP (CH, JWS, DRJ); 21 Jul (1) HRA (KLD); 20 and 26 Jul (30 and 10) RB (TK). Dunlin: 17 May (50) KSP (SBS, LD, JWS, DRJ); 25 May (4) KSP (PP); 26 May (15) KSP (KLD, DRJ). Dowitcher *spp*: 22 Jul (1); 23 Jul (4) EB (DH, CPN, LT); 20 and 26 Jul (1-4) RB (TK). Semipalmated Sandpiper: 17 May (100) Har (DRJ, JTP); max 17 May (600) KSP (LD, JWS, DRJ *et al*); 26 May (40) KSP (KLD, DRJ); 20 and 26 Jul (40-60) RB (TK). Western Sandpiper: 17 May (10) KSP (LD, JWS, DRJ). Sanderling: 22 Jul (1) EB (DH, CPN); 27 Jul (1) KSP (LT). *NORTHERN PHALAROPE*: 17 May (8) KSP (LD, JWS, DRJ); 21 May (2) KSP (PP). Ring-billed Gull: 17 May (2) KSP (LD, JWS, DRJ). *LAUGHING GULL*: 24 Jun (1, breeding plumage) KSP (BHS, REB); 27 Jun (1) KSP (CH). Common Tern: 18 Jul (2) ChL (RCM). Caspian Tern: 18 May (5) KSP (SJS, Paul Hartigan, Bill and Allison McNutt); 27 May (1) K (PP). Black Tern: 17 May (14) SB (LD); 4 Jun (20) ChL (E. O. Grundset); 15 Jul (1) SB (LD); 22-23 Jul (1) EB (DH, CPN, LT). Barn Owl: 12 Jun (1) JC (RK); nest with 3 young, Speedwell (Hugh and Pearl Bowman *vide* JBO); 6 at one time near nest tree that has been occupied for at least 20 years at White Pine, JCo (TK).

Woodpecker-Wren: Red-headed Woodpecker: only report from Carter-Washington Counties was of one pair in Jonesboro (RK). *RED-COCKADED WOODPECKER*: 3 Jun (1) at Stinking Creek colony site, Campbell Co. (CPN). *SCISSOR-TAILED FLYCATCHER*: 18 May (1, details to be submitted) JCo (TK). Willow Flycatcher: 2 singing males AS, down from usual 4-6 (GBE *et al*); 27 May - 7 Jun (1) SB (KLD); 4 Jun (2) AM (DRJ). Eastern Wood Pewee: approx. 30% decrease on BBS routes (CPN). Olive-sided Flycatcher: 16-25 May (1) Hoss Cove (RK, MD, SG). Horned Lark: max 40, permanent resident at farm JCo (TK). Bank Swallow: 17 May (2) SB (DRJ, JTP); 25 May 5 *nest holes discovered AS, then destroyed*: last 2 birds 26 Jun (RK); 26 Jul (50) JCo (TK). Cliff Swallow: 15 Jun (2) JB (RK). House Wren: in the Chattanooga area at least 3 different individuals were reporting singing on territory and carrying nesting material—still no confirmed nesting for the area (Ann Gibson, KLD); they seem to be fairly common in suburbs of towns such as Maryville, Newport and White Pine (TK).

Waxwing-Sparrow: Cedar Waxwing: 31 May (4) RR (KD); "plentiful during the entire period" Eliz-JC (GDE *et al*). Solitary Vireo: 1 Jun (1) Collegedale (CH). Golden-winged Warbler: 1 Jun (2) JBBS (DRJ). Bobolink: 14 Jun (1 male) JCo

(TK). Northern Oriole: 15 Jun (1) Grainger Co. (TK). Rose-breasted Grosbeak: 7 Jun (1) RR (DRJ, KD). Blue Grosbeak: 3 singing males Eliz-JC (RK *et al.*). Dickcissel: 1-3 during May and June JCo (TK). *HOUSE FINCH*: young noted in Knoxville for apparently the second year; up to 8 birds all season with a male seen feeding a young bird in July and a bird with downy feathers on head seen in early June, so probably at least one pair brought off two broods this summer (Jim and Betty Mason, SJS). Grasshopper Sparrow: only 5 singing males found this year Eliz-JC compared to 8-10 normally (GDE *et al.*); at least 3 additional localities found in KCo (KTOS); 10 Jun (1) Wetmore, PCo (CPN); Tony Koella checked 18 suitable sites and reported 26 singing individuals in Grainger, Greene, Hamblen, Jefferson and Knox counties. *BACHMAN'S SPARROW*: 9 Jun (1) Newport, JCo (TK). Song Sparrow: 1 Jun (41) JBBS (DRJ).

Locations: AM—Amnicola Marsh; AS—Austin Springs; CH—Chattanooga; ChL—Chickamauga Lake; EB—Eagle Bend Fish Hatchery; Eliz-JC—Elizabethton-Johnson City Area; Har—Harrison; HRA—Hiwassee River Area; HRS—Holston River at Surgoinville; JB—Jonesboro; JBBS—Jasper Breeding Bird Survey; JC—Johnson City; JCo—Jefferson County; K—Knoxville; KCo—Knox County; NL—Nickajack Lake; PCo—Polk County; RB—Rankin Bottoms (Cocke County section of Douglas Lake); RR—Reflection Riding; SB—Savannah Bay.

Observers: BHS—Barbara H. Stedman; CPN—Charles P. Nicholson; DRJ—Daniel R. Jacobson; DH—Dave Hankins; GDE—Glen D. Eller; GR—Greg Reed; JBO—J. B. Owen; JCH—Joseph C. Howell; JTP—Johnny T. Parks; KD—Ken Dubke; KLD—Ken and Lil Dubke; KTOS—Knoxville Chapter, TOS; LD—Lil Dubke; LT—Linda Turner; DL—Dick Lura; MaD—Marsha Davis; MD—Martha Dillenbeck; PP—Paul Pardue; RCM—Robert C. Mitchell; REB—Robert E. Beck; RK—Rick Knight; RAP—Rick Phillips; SBS—Stephen and Barbara Stedman; SG—Sally Goodin; SJS—Stephen J. "Steve" Stedman; TK—Jon A. "Tony" Koella; TL—Tom Laughlin; WKJ—Wesley K. James.

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EASTERN MOUNTAIN REGION—Hotter than normal temperatures and drier than usual conditions existed from the end of May thru the end of July. However, nesting did not seem to be adversely affected as all species seemed to enjoy a very successful breeding season. Yellow-crowned Night Herons nested successfully for the second consecutive year near Elizabethton. Alder Flycatchers were successful again this season on Roan Mountain. In a most notable find, a pair of Red-cockaded Woodpeckers fledged one young in Great Smoky Mts. Nat'l Park, the first time since 1965 that a young bird has been recorded there (per Chuck Nicholson).

Several unusual water bird sightings were made on Watauga Lake during July including White Ibis, Snowy Egret and as many as seven immature Little Blue Herons, making for some interesting birding during this normally "slow" time of the birding season.

Loon-Turkey: Common Loon: 1 Jun (1 bird in breeding plumage) WatL (GE). Little Blue Heron: 6 Jul (4) and 4 to 7 irregularly thru end of period on WatL (GE, ETOS). *SNOWY EGRET*: 18-22 Jul (1) WatL (GE, SG, MD). Yellow-crowned Night Heron: 5 to 7 young fledged and seen thru end of period near E (GE, GW, *et al.*). *WHITE IBIS*: 20 Jul (1), 23, 27 Jul (1) and 29 Jul (3) all imm. WatL (GE, RK,

SG, MD). Blue-winged Teal: 26 May (3) E (HF) last spring sighting. Bufflehead: 15-22 Jun (1 imm male) WibL (GE). Sharp-shinned Hawk: 24 May (1) SHL (RL); 28 May (1) Erw (GS); 1 Jun (1) SHL (RL); 23 Jun (1) Hpt (RK); 13 Jul (2) WatL (GE). Cooper's Hawk: 12 Jun (1) IrMtn (GS); 2 Jul (1) RC (GE). Wild Turkey: 24 Jun (1 hen, 5 young) HolMtn (RK); 22 Jul (5) ShV (RK).

Woodcock-Flycatcher: American Woodcock: 16 Jun (1) Tabcat Creek, GSMNP (CN). Spotted Sandpiper: 1st late summer sighting 23 Jul (1) WatL (RK). Solitary Sandpiper: 25 May (1) E (HF) last spring sighting. Ring-billed Gull: 7 Jun (2) WatL (GE) last spring sighting. Barn Owl: 15-31 Jul (1) SV (GW, *et al*). Great Horned Owl: 1-2 birds regular thru-out period SHL (RL). Whip-poor-will: annual Eliz count on HolMtn on 20 Jun found 48 birds (ETOS). *RED-COCKADED WOODPECKER*: 27 May thru 23 Jul (1 pair + young) Skunk Ridge, GSMNP (CN). Cliff Swallow: 19 Jun (10) Tabcat Creek, GSMNP (CN). Willow Flycatcher: only 1 pair in Eliz area during period. *ALDER FLYCATCHER*: 15 Jun first seen and at least 6 singing males seen thru end of period above 5000' on RM (ETOS). Olive-sided Flycatcher: 16 May (3) GSMNP (DJ, PDC, KD).

Raven-Sparrow: Common Raven: 16 May (1 young in nest) GSMNP (DJ, PDC, KD). Black-capped Chickadee: 16 May (12) GSMNP (DJ, PDC, KD). Red-breasted Nuthatch: 11 Jul (1) RM (RL) only sighting reported all season in high elevation. Golden-crowned Kinglet: 21 Jun (3 males) RCP (GW) possible low elevation nesting? 17 Jun (2 adults carrying food to nest) Carver's Gap, RM (FJA); 20 Jun (7 young fledged) above nest, Carver's Gap, RM (FJA). Cedar Waxwing: very numerous thru-out period. Warbling Vireo: 21 Jul (1) RC (MD, SG). Swainson's Warbler: 2nd consecutive year located singing male at WibL (GW). Cerulean Warbler: 19 Jun (2) Deals Creek, GSMNP (CN). Prairie Warbler: 26 Jun (2) RC (RK). Wilson's Warbler: 25 May (1) RM (SG) last spring sighting. Blue Grosbeak: 1 Jun (1 singing male) Cades Cove, GSMNP (Fred Alsop) very few records from the Park. Red Crossbill: 7 Jun (4) GSMNP (Debbie and Tommy Harston). Grasshopper Sparrow: 2 pairs nested near Eliz during period (GW). Vesper Sparrow: 1 Jul (1) RM above 5000' (MD, SG).

Locations: E—Eliz. area; Erw—Erwin; GSMNP—Great Smoky Mtn. National Park; HolMtn—Holston Mtn.; Hpt—Hampton; IrMtn—Iron Mtn.; RC—Roans Creek; RCP—Rock Creek Park near Erwin; RM—Roan Mtn.; SHL—South Holston Lake; ShV—Shady Valley; SV—Siam Valley; WatL—Watauga Lake; WibL—Wilbur Lake.

Observers: FJA—Fred J. Alsop, III; PDC—Paul and Dot Crawford; KD—Kathy Davidson; MD—Martha Dillenbeck; ETOS—Eliz. Chapter of T.O.S.; GE—Glen Eller; HF—Harry Farthing; SG—Sally Goodin; DJ—Daniel Jacobson; RK—Rick Knight; RL—Richard Lewis; CN—Chuck Nicholson; GS—Glenn Swofford; GW—Gary Wallace.

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