




THE MIGRANT



A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

*75th
Anniversary*

PUBLISHED BY
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY

THE MIGRANT
A QUARTERLY JOURNAL OF ORNITHOLOGY
FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY
THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

THE MIGRANT

December 1990
Volume 61, Number 4

Commemorating the
75th Anniversary
of the
Tennessee Ornithological Society
1915 — 1990

THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 61

December 1990

NO. 4

The Migrant, 61(4):82-83, 1990.

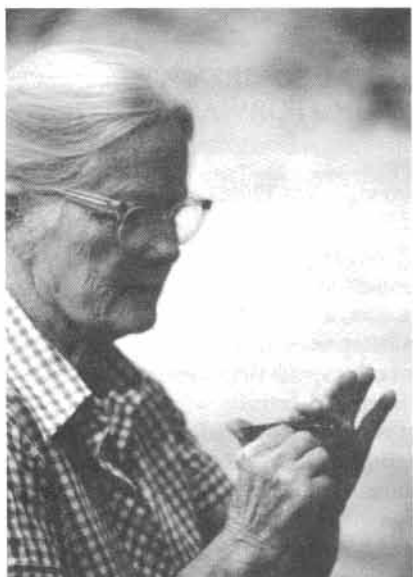
INTRODUCTION

T. DAVID PITTS

The Tennessee Ornithological Society (= TOS) celebrated its 50th anniversary with a special issue of *The Migrant* in June 1965. To commemorate the 75th anniversary another special issue has been prepared. In this issue some of the changes in birdlife in Tennessee since 1965 are summarized and representative activities of TOS members and chapters are described. Readers who are familiar with the traditional appearance and format of *The Migrant* will notice several changes in this issue. Most of these changes are temporary. The cover design was prepared by Ms. Teresa Bullock and donated to Mrs. Ben B. Coffey, Jr., who graciously allowed its use.

One of my responsibilities as editor is to insure that each manuscript adheres to certain standards of content and format. In this issue some of the normal guidelines have been modified, or even ignored, in an attempt to allow authors more personal contact with the readers. I believe that the lead article, an address made by Dr. James T. Tanner at the 75th anniversary meeting banquet, alone justifies the value of such a policy. One of my regrets upon completion of this special issue is that the coverage is not uniform. Certain groups, of both birds and TOS members, have not received the attention they deserve. This is due to a combination of factors such as limited space and lack of information. In spite of these limitations, I trust that future readers who did not experience the events of 1965-1990 which are described here or who did not know the individuals described here will be better able to appreciate the role of TOS and its contributions to ornithology in Tennessee.

I would like to express my appreciation to all who have assisted in the preparation of this issue. Also, I wish to gratefully acknowledge the special contributions made by Mr. and Mrs. Ben B. Coffey, Jr, Dr. Katherine Goodpasture, and Dr. James T. Tanner to TOS and to my personal career.



Upper left: Dr. Katherine A. Goodpasture

Upper right: Dr. James T. Tanner

Lower: Mr. and Mrs. Ben B. Coffey, Jr.

THE TENNESSEE ORNITHOLOGICAL SOCIETY AT 75, LOOKING BACK AND LOOKING FORWARD

JAMES T. TANNER

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The Tennessee Ornithological Society (T.O.S.) began in a very informal way. Albert Ganier of Nashville, who described himself as a life-long student of birds, called on the editor of *The Morning Tennessean*, a man named Dixon Merritt. Ganier was attracted to Merritt because the latter occasionally wrote a kind of nature column for his newspaper. Each knew of others who were interested in birds, so the two called a meeting to see if there was interest in forming a "club for mutual pleasure and benefit." Five persons were present at a Nashville restaurant on 7 October 1915. They were: Albert Ganier, a civil engineer; Dixon Merritt, a newspaper editor; George Mayfield, Sr., a professor at Vanderbilt University; Alonzo Webb, an artist and teacher; and H. Y. Hughes, a judge in the civil courts. They agreed to organize, so two weeks later they met again, with a new member, George M. Curtis of the Vanderbilt College of Medicine. This second meeting was the formal beginning of the T.O.S., with six members.

I have personal recollections of three of the founders, and I think that you will be interested in the kind of persons they were. I begin with Albert Ganier, because in many ways he was the backbone of the T.O.S. Mr. Ganier was a quiet, dignified, but warm, gentleman. Professionally he was a civil engineer with the L. & N. Railroad, rising to a very responsible position in that company. His primary interest was in the birds of Tennessee, the birds living in the fields, woods, lakes and streams of this state. He made field trips to all corners of the state, and he described his observations in about 200 articles and notes. In his later years his field work was handicapped by deafness, but this did not diminish his enthusiasm. In the T.O.S. he held every important office at one time or another. "Held" is not the proper verb; he "worked in" every office. One of his most valuable contributions to the Society was being editor during the years of World War II. Then, because of travel restrictions and the absence of many members in the armed forces, field work was reduced, manuscripts for *The Migrant* were few and far between, annual meetings of the Society could not be held, and publishing was hindered by lack of paper. Despite all the difficulties, Mr. Ganier kept *The Migrant* going for a number of years. In 1966 He was honored as Tennessee's "Conservationist of the Year." Speaking personally, I had great respect for the man and was delighted to be a friend.

Let me turn next to the second man mentioned in this history, Dixon Merritt. He spent most of his life in the newspaper business, and at one time was editor of *The Nashville Tennessean*. This was a strenuous business, and after the organization of the Society he did not have much time for it until he retired to his farm near Lebanon. He occasionally wrote articles for *The Migrant*, and if you want to get a taste of his style I recommend you read an article in the June 1957 issue entitled "One Weewe He Phoebe", which is a sympathetic and entertaining account of a pair of Phoebes that nested under the eaves of his home. A regular custom at our annual meetings, while Dixon was alive, was to call upon him to recite a limerick

which he composed years ago, and which has become more famous than its author. It goes:

A wonderful bird is the pelican,
His bill can hold more than his bellican,
He can hold in his beak,
Enough food for a week,
Though I'm damned if I know how the hellican.

Dixon not only had wit, humor, and perception, he was also a man of action. At one of the first business meetings of the T.O.S. I ever attended, held under the trees at a park near Nashville, the question came up of a debt of about \$50 that the Society had owed for some time. Dixon rose and said something about how this was ridiculous, and all we had to do was pass the hat and ten \$5 bills would pay off the debt; in a few minutes it was accomplished. After his retirement, he led in organizing the Lebanon Chapter of the T.O.S. All in all, he was a delightful man to know.

The third of the founders that I came to know was George R. Mayfield, Sr. He was a professor of German at Vanderbilt University, usually rather formally dressed, which was probably why he was always referred to as "Professor" or "Doctor" Mayfield. But this remark is misleading, because he easily made friends with his bright personality and quick wit. The wit was illustrated when on a field trip he called out, "There is a Solitary Sandpiper." Someone spoke up, saying, "I say, it is a Spotted Sandpiper." Dr. Mayfield replied, "Of course, a solitary Spotted Sandpiper." He had a marvelously acute sense of hearing, and a great memory for the sounds of birds. This made him stand out on our group field trips. One of his hobbies was to listen to Mockingbirds and identify the kinds of birds that were mocked. He wrote an article on this for *The Migrant* (June 1934) listing about 50 species that Mockingbirds had imitated. He did the same for the Starling, identifying about 30 species imitated in the songs of that species (*The Migrant*, December 1942). Like the other founders, Dr. Mayfield was active in several fields. He wrote many articles for newspapers, usually on aspects of conservation. And he once served as chairman of the Tennessee Conservation Commission.

Of the six founders, I know that four of them had long lives, living to the ages of 80, 87, 90, and 93. This suggests that bird-study is a recipe for long life, a welcome thought to readers of *The Migrant*. But I really think that these persons were vigorous individuals, and because of their vigor they accomplished much in their lives and lived a long time.

To return to the history of the T.O.S.: The Society remained centered in Nashville for some time, but other chapters were gradually formed. The Knoxville Chapter started in 1923 under the leadership of H. P. Ijams, and the Memphis Chapter in 1929 under Ben Coffey. A good history of the growth of the Society was written by Mary Davant of Memphis and published in *The Migrant* of June 1965.

At the organization meeting of the T.O.S., in 1915, some individuals volunteered to find books on Tennessee birds or at least lists of birds of the state. Practically nothing was found, and that was accepted as a challenge to begin accumulating information. The first publication was "Bulletin No. 1, Tennessee Ornithological Society, February 6, 1916." This was a full page of print in both *The Nashville Tennessean* and *The Nashville American*. It was rediscovered as a newspaper

clipping in the archives of the T.O.S. when Katherine Goodpasture inventoried the file. The first real effort to survey the kinds of birds found in the state resulted in the publication in 1917 of "A Preliminary List of Birds of Tennessee," and this was revised in 1933 as "A Distributional List of the Birds of Tennessee." Both of these were written by Albert Ganier.

In 1930 the Society started its most lasting and valuable project, publication of *The Migrant*. Its first editor was George Woodring of Nashville. In its 61 years *The Migrant* has had only eight editors, an indication of both the devotion of these persons and of the rewarding nature of the work. In judging the contributions of *The Migrant*, it is easy to measure that a complete set occupies almost two feet of a bookshelf. I did not attempt to estimate how many articles and notes have been published, not even how many pages have been printed. It is also easy to perceive the importance of our journal. It is a focus for many of our activities and a magnet that brings participants together from across the state. Of course it is invaluable as a record of what we have learned about birds, and this record has earned *The Migrant* a reputation as one of the very best state ornithological journals.

A minor way to measure our progress in accumulating information is by the number of bird species known to have been present in Tennessee. In 1917 the list included 251 species; now it includes, by my count, 364 species.

Now to turn to some of the special projects which have been accomplished. The most long-lasting has been the series of "forays", as Albert Ganier named them. His first foray was to Reelfoot Lake in 1915 to find the kinds of birds there in the nesting season. Reelfoot was then an almost unknown area. The first forays were often accomplished just by Albert Ganier and some friend, often Alfred Clebsch of Clarksville. The most recent forays have included many participants following the same pattern: a trip around early June to some section of the state where the birds are little known, and intensive field work to find what is there. By now about 20 forays have been conducted in different regions of the states, but there still are gaps which we must fill in.

Other long continuing activities have been the Christmas Bird Counts, Spring Field Days, Fall Field Days, and the compilation of the observations to be published in *The Migrant*. The first of these counts reported in *The Migrant* was in 1930. Taken all together, these published reports contain an enormous amount of information about birds.

A project which lasted a relatively short time but had some very interesting results was the banding of Chimney Swifts. This was carried on at six locations in Tennessee. The interesting results were that five bands put on Swifts in Memphis by Ben Coffey and three in Nashville by J.B. Calhoun were recovered in 1944 in northern Peru; this was the first solid evidence of where Chimney Swifts spent the winter. Details on the banding and recovery are in the September 1944 issue of *The Migrant*.

A series of studies taught us much about the night-time migration of birds. The first of these was a cooperative project headed by an ornithologist at Louisiana State University in which several chapters of the T.O.S. cooperated. Volunteers at many locations watched the face of the full moon with a telescope, and counted the birds as they flew silhouetted against the moon. From the results we learned that night migrations were heaviest around midnight, and discovered something about the direction of flight and the effects of weather. Later on two kinds of accidents

to migrating birds provided new knowledge about the species of night migrants and their migratory seasons. The first accidents were at airport ceilometers in Knoxville and Nashville where, under certain weather conditions, nocturnal migrants were blinded by the intense light and flew into the ground by the hundreds. Fortunately this no longer happens because the nature of ceilometers has changed. The modern accidents result from birds striking very tall radio or television towers. Amelia Laskey and Katherine Goodpasture obtained much data by identifying birds killed by striking towers in the Nashville area.

In East Tennessee many hours have been spent watching the fall migration of hawks along the mountain ridges. These observations began about 1948, but were not coordinated until about 1954. Since then *The Migrant* has almost annually carried a summary of the fall hawk migration.

Now our most important project is the "Breeding Bird Atlas." It has been underway for over four years, organized and spurred on by Charles Nicholson. As the sports announcers say, it "has momentum", and we are looking forward to its completion. Like many projects, however, it may be harder to complete than it was to get started. So we must work for its completion, and if individuals have no time to do the field work, they can donate money in support.

This leads naturally to a related subject. In 1935 the four then surviving founders of the T.O.S. wrote:

"A project which the Society is looking forward to is the preparation of a comprehensive book on the birds of the State. It expects to sponsor nothing less than a thoroughly accurate, fully illustrated volume.... The Society is confident that such a work can be brought out in the not far distant future."

Fifty-five years have passed since that statement, so: Why do we not have a state bird book? The answer lies, perhaps surprisingly, in the success of the T.O.S. We have accumulated so much information about the birds of Tennessee that to organize and condense all that information has been too much of a challenge. For years we had assumed that "The Birds of Tennessee" would be written by Albert Ganier. He fully intended to do so, until about 1960 when he told me that he was then not up to the task.

So we are faced with a mass of information, perhaps more than has been recorded for the birds of any other state in this country. What we need now is a series of steps, each a pulling together of knowledge on one aspect of Tennessee bird life. Only in this way will the mass of information become organized and manageable. One major step in this direction was accomplished by John Robinson who compiled and digested most of the published records of each species in the state. This report has recently been published by the University of Tennessee Press. To complete some other steps was the motive for my writing three articles for *The Migrant*: an analysis of the Christmas Bird Counts (December 1985), an analysis of the Spring Bird Counts (December 1986), and an account of historical changes in the ranges of birds in Tennessee (September 1988).

I wish to suggest some other projects which should be done. Any comprehensive review of the birds of a state must depend heavily on accounts of the birds of local areas, written by persons who are thoroughly familiar with the area and its birds. At present we have only three good local accounts, one each for the Nashville area, for Shelby County, and for the Great Smoky Mountains. Three reports done several years ago now need revision; these pertain to Knox County, Greene County, and

Carter County. You can see that there are still many parts of the state for which we need local lists prepared by local authorities. Another subject which occurs to me is a modern summary of the data on hawk migration. There must be a wealth of information on waterfowl buried in the files of the Tennessee Valley Authority and the state and federal wildlife agencies. Another set of possibilities is the histories of species becoming rare, such as the Bachman's Sparrow and Barn Owl, because it is always harder to find data on declining populations than on any that are increasing.

The "Breeding Bird Atlas" will, of course, provide a solid base of information about the status of birds which nest in Tennessee. When it is done, we will know more about the summer residents than we do about the migrants and winter residents.

I think, furthermore, that now we need to start thinking about what kind of a state bird book we want. Of course it must be an accurate, scientifically thorough, and complete account. It also must appeal to many persons outside of the T.O.S., people who are not as interested in birds as are we. This is necessary for financial reasons. The kind of book we want cannot be published unless it has promise of a reasonably large sale. Even though scientific, it must not be dull. What about illustrations? Many state bird books, that for Massachusetts being the first, contain illustrations of all species from the state, usually depicting both the birds and their habitats. One reason for these pictures was that they were intended to aid in identification. But now we have several field guides which serve that purpose much better. On the other hand I think that a book without pictures would have a limited sale. This is one example of the decisions that need to be made. What I am emphasizing now is that we need to do some thinking about what kind of a book should be "The Birds of Tennessee."

I must conclude with a very different subject in which the T.O.S. has been involved since its beginning, and which may grow in importance in the future, the subject called "conservation." The first members of the Society, especially Albert Ganier and George Mayfield, felt that they needed to work for the legal protection of birds, to keep them from being shot. In Article I of the T.O.S. constitution is the statement that one purpose of the Society shall be "to stand for the passage and enforcement of wise and judicious laws for bird protection." Today the emphasis has shifted. We, as birdwatchers, know that birds are found only in certain habitats: thrushes and most warblers in the woods, rails and gallinules in the marshes, and so on. We know that some habitats are disappearing, and others are changing because of human actions. We know that, ultimately, if we are to conserve a species we must protect its habitat. Members of the T.O.S. have been active in preserving some good habitats; examples are Radnor Lake in Nashville, the Tennessee River Gorge near Chattanooga, House Mountain near Knoxville, Overton Park in Memphis, and the Monsanto ponds near Columbia. As in the early days, these accomplishments result, not by coordinated action of the whole Society, but largely by individual efforts of some members of the Society. To me this means that the T.O.S., by encouraging the study of birds, has fostered belief in the necessity of conservation. I think that, in the long run, this has been a more lasting benefit than if we had become a society oriented actively towards conservation. So let us keep on doing what we have been doing.

I will end by quoting again from an article written in 1935 by four of the founders:

"Since the study of birds holds an inexhaustible supply of new facts to be learned, this Society and its members have much to look forward to in the years to come."

In short, we are not yet finished; there is still plenty to do.

The Migrant, 61(4):89-91, 1990.

NESTING BALD EAGLES IN TENNESSEE: 1965-1990

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During the last 25 years, the number of nesting Bald Eagles (*Haliaeetus leucocephalus*) in Tennessee has increased. This population growth has been primarily a result of three activities: (1) the banning of DDT from use in the United States in 1972; (2) the release (by hacking) of young eagles; and, (3) the enhancement of the fish food base by development of 34 man-made reservoirs totaling over 214,000 hectares (530,000 acres) during 1930-1980.

Bald Eagles once nested along the major river systems in Tennessee (Alsop 1979). Reelfoot National Wildlife Refuge records indicate that 14 "active nests" were at Reelfoot Lake as late as 1954 and 1955 (Crews 1980). Since some pairs of eagles may actively maintain more than one nest site, the actual number of nesting pairs at Reelfoot Lake in 1954 and 1955 is not known. However, in 1961 the last documented successful nesting for 22 years occurred in the state.

After DDT was banned from use in the United States, Tennessee's January Bald Eagle population increased from an annual average of 251 during 1979-1984 to 287 during 1985-1990. However, all of these eagles returned to nesting areas in southern Canada and the Great Lakes states where they had fledged. A hacking program was initiated in Tennessee in 1980 at Land-Between-the-Lakes (LBL) to accelerate the establishment of a nesting population.

The hacking technique assumed that raptors tend to return to nest in the general area of their maiden flights. Hacking was initiated at Cornell University (Sherrod and Cade 1978) in 1972 to reintroduce Peregrine Falcons (*Falco peregrinus*) in areas where pesticides and other factors had previously extirpated the populations. Hacking of Bald Eagles was initiated in 1976 in New York state, with one eagle returning to nest in 1980 about 135 km (85 miles) from the hack site (Nye 1980).

From 1980 through 1990, 146 young Bald Eagles were released at five hack sites in Tennessee (Table 1). Current proposals are for a total of 74 additional eagles to be released at three of these sites and at a new site during 1991-1993 (Table 1).

EVIDENCE OF THE RETURN OF HACKED EAGLES

In Tennessee: In 1990, 13 of Tennessee's 14 occupied Bald Eagle nests were within about 75 km (47 miles) of the two oldest hack sites, LBL and Reelfoot Lake. Included in these 13 were five of the six successful nests in the state. Five occupied nests were an average of 19 km (12 miles) from the Reelfoot hack site and eight occupied nests were an average of 43 km (27 miles) from the LBL hack site.

Two males which are known to have been hacked at LBL successfully nested 13 km (8 miles) and 24 km (15 miles) from their hack sites. Three other banded eagles nested 13, 27, and 78 km (8, 17, and 49 miles) from the LBL and Reelfoot Lake hack sites; these eagles may have been hacked in Tennessee but this could not be confirmed.

Outside Tennessee: In 1990, there were six occupied Bald Eagle nests in Kentucky within 96 km (60 miles) of the Tennessee hack sites. Three of these nests fledged a total of six young. One mated pair, both with leg bands, fledged two young 29 km (18 miles) north of the LBL hack site. There were two occupied, but eventually abandoned, nests in Ballard County, Kentucky, approximately 80 km (50 miles) and 96 km (60 miles) north of the Reelfoot Lake hack site. A male eagle that was hacked at LBL in 1982 occupied a nest in 1989 and 1990 in south-central Indiana, 288 km (180 miles) north of the hack site.

THE NEXT 25 YEARS

Projections (Hatcher 1991) indicate the next 25 years should have an even greater Bald Eagle population increase than the last 25 years. Of the 220 eagles to be released by 1993 (Table 1), approximately 166 (75 percent) had not reached reproductive age in 1990.

A computer population model indicates there would *theoretically* be 62 successful nests in Tennessee's area of influence by the year 2000 (Hatcher 1991). If two-thirds of the successful nests should continue to be in Tennessee this would mean a potential of 42 successful nests for the state. However, Tennessee's percentage would likely decline as eagles move into unoccupied nesting habitat in nearby states.

Bald Eagle nesting success during the next 25 years will likely be governed primarily by available habitat, human disturbance, and our collective abilities to properly manage them.

LITERATURE CITED

- ALSOP, F.J., III. 1979. Population status and management considerations of Tennessee's 13 threatened and endangered bird species. Tennessee Wildlife Resources Agency. 200 pp.
- CREWS, W. E. 1980. U.S. Fish and Wildlife Service, Reelfoot and Lake Isom National Refuges. File Mimeogr. 2 pp.
- FLOYD, J.K. 1990. Breeding ecology of bald eagles at Cross Creek National Wildlife Refuge. M.S. Thesis, Murray State University, Murray, KY. 89 pp.
- HATCHER, R.M. 1991. Computer model projections of bald eagle nesting in Tennessee. J. Tn. Acad. Sci. 66:225-228.
- NYE, P.E. 1980. Successful establishment of nesting Bald Eagles by hacking. Abstract from Raptor Research Foundation Annual Meeting, October, 1980. Duluth, MN.
- SHERROD, B.K., and T.J. Cade. 1978. Release of peregrines by hacking. pp. 121-136 in Greer, T.G. (ed.) *Birds of Prey Management Techniques*, British Falconers' Club, Oxford.

Most of the data and parts of the text of this manuscript were originally published by R. M. Hatcher in the *Journal of the Tennessee Academy of Science*, Vol. 66, 1991. Permission of the editor of the *Journal of the Tennessee Academy of Science*, Ms. Libby Workman, to include the material in this issue of *The Migrant* is gratefully acknowledged.

Table 1. Tennessee's Bald Eagle hacking projects and plans, 1980-1993.

<u>Hack Site</u>	Years of <u>Hacking</u>	<u>Releases</u>		Nest <u>Goals*</u>	Target <u>Year</u>
		<u>1980-90</u>	<u>1991-93</u>		
Land-Between-Lakes	1980-88	44	0	15	1977
Reelfoot Lake	1981-88	43	0	12	1999
Dale Hollow Lake	1987-91	32	10	8	1998
Chickamauga Lake	1990-92	20	22	10	2005
Scottsboro	1990-92	7	12	6	2006
South Holston Lake	1991-93	<u>0</u>	<u>30</u>	<u>10</u>	2007
	Totals	146	74	61	

*Estimated carrying capacity.

Table 2. Bald Eagle nesting in Tennessee, 1983-1990.

	<u>'83</u>	<u>'84</u>	<u>'85</u>	<u>'86</u>	<u>'87</u>	<u>'88</u>	<u>'89</u>	<u>'90</u>	<u>Total</u>
Number fledged	1	2	3	7	9	15	10*	14*	61
Successful nests	1	2	2	4	5	8	6*	6*	34
Occupied nests	1	3	6	8	8	10	12	14	62
Number of fledglings/ successful nest	1.0	1.0	1.5	1.8	1.8	1.9	1.7	1.7	1.8
Number of fledglings/ occupied nest	1.0	0.7	0.9	0.9	1.1	1.5	0.8	1.0	1.0

*During 1989 and 1990, a total of 4 nests had 7 additional young; 4 young were killed and 3 had unknown fates.

RECOVERY OF THE EAST TENNESSEE OSPREY POPULATION

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Although there is little early information available, the Osprey (*Pandion haliaetus*) was apparently never a common breeding bird in east Tennessee. Early in this century, Osprey habitat was limited to the larger rivers, a few small natural lakes, and a few small reservoirs in east Tennessee. Nest records from this early period include Ganier's report of a nest at Mullins Cove on Hales Bar Reservoir (presently part of Nickajack Reservoir) in Marion County (Ganier 1933), a 1937 attempt at Andrew Jackson Lake in Knox County (Walker 1937), and a pair building a nest at Davy Crockett Lake in Greene County in 1940 (White 1956). The Knox County attempt was unsuccessful because local residents tore down two consecutive nests under construction, accusing the birds of eating too many fish (Walker 1937).

Following the construction of the Tennessee Valley Authority reservoirs in the 1930's and 1940's, the amount of suitable Osprey habitat in east Tennessee greatly increased. The first published report of Ospreys nesting on the TVA reservoirs was from Watts Bar Reservoir in 1961 (Comstock 1961; Owen 1963). In that year the U.S. Coast Guard presented a nest with a portion of a hatched egg to the Elise Chapin Audubon Sanctuary in Chattanooga. The nest had been removed during repair work on the Euchee light navigation marker, about 10 km above Watts Bar Dam. Ospreys apparently began building on the Euchee light in 1958, and the Coast Guard removed these earlier nests. The success of these nesting attempts is unknown.

The Euchee light continued to be used by Ospreys until the deteriorating structure was dismantled in 1987; the nest was placed on a pole erected at the site. Ospreys continue to nest on the pole, and this site probably has the longest record of continuous use of any Osprey nest site in the state. From 1961 through 1976, nest attempts were monitored by TOS members. Although eggs were laid during several years, no young were fledged. Other Osprey nests were reported on Chickamauga Reservoir near Hiwassee Island in 1967 and 1968, but no fledglings were produced (Dubke 1967; K. Dubke, pers. comm.). A nest was also reported on upper Chickamauga Reservoir on Yellow Creek in 1969. Two nestlings were present in this nest in 1973 and 1975, but they did not successfully fledge. In 1969, a second nest was present on Watts Bar Reservoir in the White's Creek area; this nest contained two eggs, but it did not fledge young.

Active management of the Osprey population began in 1976. Following the 1976 nesting season, the nest on the Euchee light navigation marker was removed by TVA personnel, and, with the permission of the Coast Guard, replaced in early 1977 on a 1.2 m square elevated wooden platform above the light on the marker. A pair of Ospreys accepted the nest and successfully fledged three young. A partially built nest was also discovered in 1977 on the White's Creek navigation marker about 8 km upstream of the Euchee nest.

Following the success of the Euchee nest in 1977, management activities increased in 1978. To provide a more secure nest site, an artificial nest was built in the top of a tree on a nearby island. The nest on the White's Creek light was removed, and the light was modified to discourage the pair from returning. The pair accepted the new nest site and two fledglings were successfully produced. The Euchee light nest was monitored, and two apparently infertile eggs were found and removed. In mid-June, two nestlings were obtained from nests on the Chesapeake Bay, flown to Tennessee, and placed in the Euchee nest. Both foster nestlings successfully fledged.

Based on the success of the fostered young and results of raptor hacking programs elsewhere, hacking of Ospreys began in 1979 (Hammer 1981). Hacking is the process of taking young from a healthy population and rearing them to independence in the recovery area with minimal exposure to humans to avoid imprinting. Once the birds mature, they return to the hacking area to nest. TVA biologists and cooperators placed young Ospreys, taken from nests on the Chesapeake Bay, in artificial nests on Chickamauga and Norris Reservoirs. The four young successfully fledged. In the following years, Ospreys were hacked at additional sites on Chickamauga, Nickajack, Watts Bar, Fort Loudoun, Douglas and Cherokee Reservoirs, and at the lake on Bays Mountain in Sullivan County. A pair of Ospreys attempted nesting on Holston Army Ammunition Plant in Hawkins County in 1987 and successfully nested in 1988. These birds were probably from the hacking project at nearby Bays Mountain. There is no other evidence that east Tennessee hacking efforts resulted in established nesting populations.

Meanwhile, efforts to increase the naturally nesting east Tennessee Osprey population continued. The growth of this population is shown in Figure 1. Two efforts to relocate nests from Watts Bar navigation structures to treetop, artificial nests on large islands were unsuccessful. These treetop nests were below the surrounding tree canopy and had limited visibility. We therefore concentrated on providing elevated nesting platforms with good visibility. Prior to the 1983 nesting season, six navigation structures were modified to provide a secure nest platform mounted on a tripod above the light. This allowed Ospreys to nest on the structures without interfering with their navigation function. Five of the six had active nests during the 1983 season. That same year, the Tennessee Wildlife Resources Agency also placed two pole-mounted platforms on islands within wildlife management areas on Watts Bar; both were used during the 1983 nesting season. Erection of pole-mounted platforms has continued, and all manmade nesting structures have been occupied at one time or another. In recent years, several nests have been discovered in trees along the shoreline. These shoreline habitats were previously considered low quality nesting sites. Their use may indicate a lack of optimum nest sites, which appears to be the only factor limiting the continued growth of the population. Watts Bar has apparently not reached its carrying capacity and we plan to provide more nesting structures.

Ospreys from the Watts Bar population have also expanded to nearby reservoirs. In 1986, a pair built a nest at Hiwassee Island, Chickamauga Reservoir. This area was also used in 1987, but was apparently unsuccessful each year. In 1988, a pair successfully nested on a wood power pole at the upstream end of Melton Hill Reservoir near Clinton in Anderson County. The pair returned in 1989, but nesting was not successful. A dead Osprey, killed by a gunshot, was found late that spring

a few kilometers from the nest. Nesting structures were built on Melton Hill below Solway, and young fledged from one nest in 1990 and two in 1991. A pair built a nest on a dead tree near the upper end of Tellico Reservoir in 1989, but apparently did not fledge young. This nest was used by Bald Eagles in 1991. Two nests were present in 1991 on Fort Loudoun Reservoir, and one of them fledged young.

I believe the east Tennessee Osprey population will continue its rapid growth (Figure 1) for several years. This growth has shown some fluctuation, and the low numbers in 1989 may have been due to unusually heavy spring and summer rains. The 29 active nests in 1991 fledged an average of 2.3 young, a high rate compared to other populations (Henny 1988). On Watts Bar Reservoir, suitable nest sites appear to be limiting, and TWRA, in cooperation with TVA, intends to continue building more nest structures. We also plan to continue building structures on other reservoirs as their need arises.

LITERATURE CITED

- COMSTOCK, R. 1961. The season: Chattanooga. *Migrant* 32:43-44.
 DUBKE, K.H. 1967. Osprey nesting attempt near Hiwassee Island. *Migrant* 38:61.
 GANIER, A.F. 1933. Two March days at Mullins Cove. *Migrant* 4:3-4.
 HAMMER, D.A. 1981. Osprey reintroduction in the Tennessee Valley. pp. 104-106 in Odum, R.R., and J.W. Guthrie. Proc. Nongame and Endangered Wildlife Symposium. Georgia Dept. Nat. Res., Game and Fish Div., Tech. Bull. WL 5.
 HENNY, C.J. 1988. Osprey. pp 73-102 in Palmer, R.S., Ed. Handbook of North American birds, Vol. 4. Yale Univ. Press, New Haven.
 OWEN, J.B. 1963. Osprey nest on Watts Bar Lake. *Migrant* 34:60-62.
 WALKER, W.M. 1937. The Ospreys build a nest. *Migrant* 8:53.
 WHITE, J.B. 1956. Birds of Green County, Tennessee. *Migrant* 27:1-8.

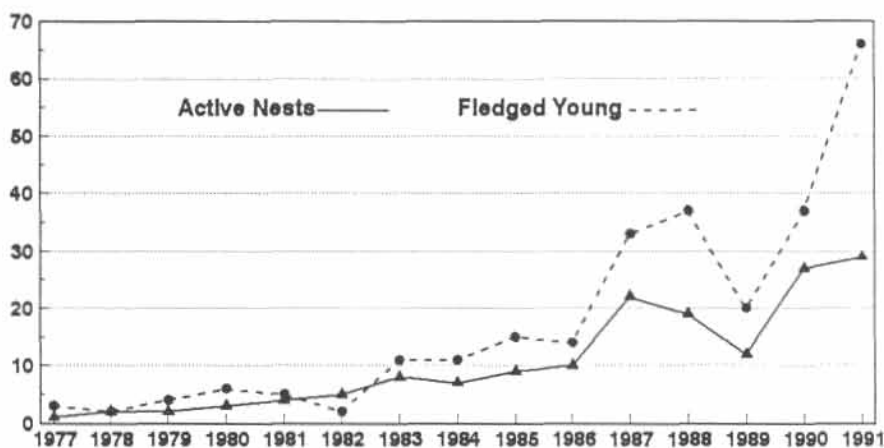


Figure 1. Growth of the Osprey population in east Tennessee, 1977-1991. The count of fledglings was incomplete in 1982 and 1988. Until 1986, all nests were on Watts Bar Reservoir.

SIZE AND TRENDS OF WADING BIRD POPULATIONS IN TENNESSEE DURING 1977-1988

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INTRODUCTION

Most heron and egret species nest in conspicuous colonies which traditionally use sites for many consecutive nesting seasons. This behavior facilitates census efforts and affords ornithologists unique opportunities to study regional population trends. Historic data on Tennessee wading birds indicate that the number of species, number of nesting colonies, and total breeding pairs increased in the 1930's, but declines occurred during the next two decades. Populations rebounded again in the 1960's, but by 1972 significant declines were reported (Pitts 1973).

In 1977 the Tennessee Valley Authority initiated a Valley-wide survey of colonial nesting wading birds to identify viable populations and to manage and protect colonies occupying public lands. The annual survey was conducted until 1989 when budget restraints curtailed census activities. I present data on Tennessee heronries for the 1977-1988 survey period in this report. Cattle Egret (*Bubulcus ibis*) records are sparse and have been reported elsewhere (Tanner 1989). Green-backed Herons (*Butorides striatus*) are typically solitary nesters and are ubiquitous in Tennessee, so they were not included in the survey.

METHODS

Great Blue Heron (*Ardea herodias*) populations were censused by systematic counts of active nests on aerial photographs. A Koni-Omega professional format camera equipped with a 180-millimeter f/4.5 ultratelephoto lens and EPD 120 color reversal film was used to photograph nests from a Hughs 500-C helicopter. Counts were made from color positive photographs (5.5 cm x 7.0 cm) with a dissecting microscope (16x). Surveys were conducted during the late incubation period in mid-March when newly emerging, sparse foliage provided little cover to incubating herons. Great Blue Herons generally responded to the circling helicopter by standing over their nests; this allowed clutches to be seen and active nest status confirmed.

Since Black-crowned Night-Herons (*Nycticorax nycticorax*) initiate nesting activities later than Great Blue Herons and prefer to nest below the canopy in conifers, active Night-Heron nests were determined by ground-based inspection. Nests were considered active if eggshells, nestlings, or significant concentrations of guano were present in or below nests. Visual estimates of Great Egret (*Casmerodius albus*), Little Blue Heron (*Egretta caerulea*), and Yellow-crowned Night-Heron (*Nyctanassa violaceus*) populations were provided by other observers.

RESULTS

Great Blue Heron Colonies

The size and distribution of wading bird colonies in Tennessee from 1977 to 1988 are summarized in Table 1. In 1977, four colonies of Great Blue Herons were

known with a total population of 180 breeding pairs. By 1987 the documented population had increased to 2,124 pairs in 24 colonies (Table 2). Populations in the eastern and western regions increased steadily throughout the survey period. The largest single year increase in the formation of new colonies occurred in 1985 when a total of 10 new colonies was discovered in the eastern and western regions. Great Blue Heron populations in central Tennessee increased during 1982-1988 following two successive annual declines in nesting pairs (Figure 1).

I also examined the population growth rate of nine Great Blue Heron colonies (Table 3). The compound annual growth rate, r , indicates how fast a population is growing (Ricklefs 1975). Generally, small colonies grew more rapidly than the large colonies.

Black-crowned Night-Heron Colonies

Black-crowned Night-Heron populations increased dramatically in the eastern and central regions in 1981 (Table 2). During 1977-1980 the number of nesting pairs fluctuated slightly in the east and remained stable in the central region (Figure 2). No active nests were acknowledged in western Tennessee until the discovery of a mixed-species colony at Hales Point in 1983. However, the population size was undetermined until 1985 when 12 active nests were counted. Despite a tripling of the statewide population of Night-Herons from 1977 to 1984, the number of colony sites increased only from four to six with the two new sites (Hales Point Colony and Long Island Colony) accounting for less than 1 percent of the total population.

Great Egret, Little Blue Heron, and Yellow-crowned Night-Heron Populations

Great Egrets were reported nesting in only two sites in Tennessee during the survey period. The population at Reelfoot has grown since 1977 but my data are incomplete and do not reflect true increases. My data denote visible active nests during the March survey and typically only capture early arrivals at the Reelfoot Colony. Visual estimates on total egrets sighted in the colony during late June by other observers indicate a more rapid increase in the population than is reported here. The only other known active Great Egret nest was sighted at Waller Pond in 1986.

Little Blue Herons nested at three sites in Tennessee from 1982 through 1985 (Table 1). The Hales Point population was the largest reported with 20 active nests in 1985. The earliest sighting was eight nests near New Johnsonville in 1982. The site was abandoned after one season. One nest with three young was discovered in Houston County in 1984. The adults apparently abandoned the site after the young nestlings fell from the nest.

Reported sightings of active Yellow-crowned Night-Heron nests were received each year from 1977-1987. West Tennessee sites contained the largest known nesting populations (Table 1) with the number of nesting pairs ranging from two to 68. Nest site fidelity was relatively short for all regions with colonies occupied from a single year to a maximum four successive years. Most sites were active for only two nesting seasons.

DISCUSSION

The most conspicuous wader trend in Tennessee during recent years is the extensive range expansion by nesting Great Blue Herons. Prior to TVA dam construction along the Tennessee River, most significant nesting colonies of Great Blue Herons and Great Egrets occurred in tupelo swamps in Henry and Humphries Counties and in cypress breaks at Reelfoot Lake (Ganier 1951). Creation of Kentucky, Chickamauga, and Watts Bar Reservoirs in the 1940's provided additional lacustrine habitats with fertile, shallow water overbank feeding areas, but not without consequences to west Tennessee waders. Clearing of bottomland hardwoods prior to Kentucky Lake impoundment forced colony relocations. Thereafter, populations fluctuated until the late 1970's when Great Blue Heron numbers began to grow and small satellite colonies formed in previously unavailable habitats, especially in east Tennessee. Despite losses of significantly-sized colonies in the 1960's, remnant populations in each region (e.g., Reelfoot, Duck River, Sinking Pond, Armstrong Bend) were sufficient to rekindle growth. Most declines apparently resulted from habitat destruction including logging and drainage activities, but other sites were impacted by direct disturbance (e.g., Cranetown Colony, Gersbacher 1964).

I expect that the statewide Great Blue Heron population will continue to expand and extend its range until competition for food resources begins to limit or stabilize net productivity and adult and juvenile survival rates. Great Egret numbers are increasing in west Tennessee from the small remnant population at Reelfoot Lake. East Tennessee may benefit from a reintroduced breeding population in northeast Alabama. Future expansion into favorable habitats on Chickamauga and Watts Bar Reservoirs is very plausible.

Little Blue Herons and Snowy Egrets were severely impacted by drainage of wetlands for agriculture conversion (e.g., Ridgely and Dyersburg Colonies, Ganier 1960). Only 20 Little Blue Heron nests were acknowledged in Tennessee as late as 1985. Snowy Egrets have not nested in the state since the mid-1950's. Reestablishment of sustaining populations will have to rely on immigration by Arkansas or Missouri birds.

There is evidence that Black-crowned Night-Herons are more sensitive to organochloride pesticides than are Great Blue Herons. In 1980 significant concentrations of DDE were found in 6.5 percent of the eggs sampled in east Tennessee (Fleming et al. 1984). However, I believe productivity has been most significantly impacted by direct human disturbance and land use conflicts. East Tennessee colonies have been subjected to repeated forced relocations by requests of private landowners. The beleaguered Fort Loudoun Colony moved seven times between 1977 and 1986. In 1987 the population split into two groups, one of which nested on public land adjacent to Fort Loudoun Reservoir while the second occupied private property near Tellico Lake. Every forced relocation was followed by a decline in the number of active nests from the previous nesting season. The Cherokee Lake population fared somewhat better but still occupied five different nest sites between 1977 and 1985. During 1982-1984, the herons nested successfully on public property where the population grew from 306 to 764 breeding pairs. The herons abandoned the site in early 1985. During late March, when Black-crowned Night-Herons initiate nesting activities in east Tennessee, I found evidence of human disturbance to the site including tracks from all-terrain vehicles

and horses, charred camp sites, and spent shotgun shells. Colony location and population size during 1986-1988 is unknown. The Sevierville population occupied a privately owned loblolly pine stand from 1977 through 1981 where it grew from 132 to 423 breeding pairs. This growth accelerated the deterioration of pine trees and the birds moved in 1982. The population decreased to 303 nesting pairs in 1983 but recovered to 493 pairs by 1985. The site was abandoned in 1987 with nearby construction activities. For each of the aforementioned Black-crowned Night-Heron colonies, the number of breeding pairs increased when populations occupied undisturbed sites for two or more consecutive seasons.

In central Tennessee a similar scenario has been noted. The Bordeaux site came under state ownership and protection in 1978. The population responded by increasing from 70 pairs in 1977 to 370 nesting pairs in 1984. However, the population began to fall as nest trees deteriorated from nesting pressures and urban development continued around the perimeter of the colony (Paul Hamel, pers. comm.).

Overall, while the total Black-crowned Night-Heron population increased statewide, the number of significantly sized colonies remained unchanged from 1977 through 1984; this underscores the vulnerability of the four largest colonies. Fluctuations in Black-crowned Night-Heron numbers will likely continue until stable, protected nest sites are identified and utilized by the herons. Opportunities for expansion by displaced Bordeaux birds exist on nearby Percy Priest and Old Hickory Reservoirs. Underutilized, suitable nesting habitats on public lands occur on Cherokee and Douglas Reservoirs in east Tennessee, but very few opportunities exist on Fort Loudoun.

ACKNOWLEDGMENTS

I thank Ken Garner, Ken Dubke, Scott Atkins, Robert Hatcher, and J.B. Owen for information on Yellow-crowned Night-Heron and Little Blue Heron populations.

LITERATURE CITED

- FLEMING, W.J., B.P. Pullin, and D.M. Swineford. 1984. Population trends and environmental contaminants in herons in the Tennessee Valley, 1980-81. *Colonial Waterbirds* 7:63-73.
- GANIER, A.F. 1951. The breeding herons of Tennessee. *Migrant* 22:1-8.
- GANIER, A.F. 1960. A new heronry in northwest Tennessee. *Migrant* 31:48-49.
- GERSBACHER, E.O. 1964. Heronries of Reelfoot Lake — 25 years later. *J. Tn. Acad. Sci.* 39:15-16.
- PITTS, T.D. 1973. Tennessee heron and egret colonies: 1972. *Migrant* 44:89-93.
- RICKLEFS, R.E. 1975. *Ecology*. Chiron Press. Portland, Oregon.
- TANNER, J.T. 1988. Changing ranges of birds in Tennessee. *Migrant* 59:73-87.

Figure 1. Nesting population growth of great blue herons in Tennessee from 1977 to 1987.

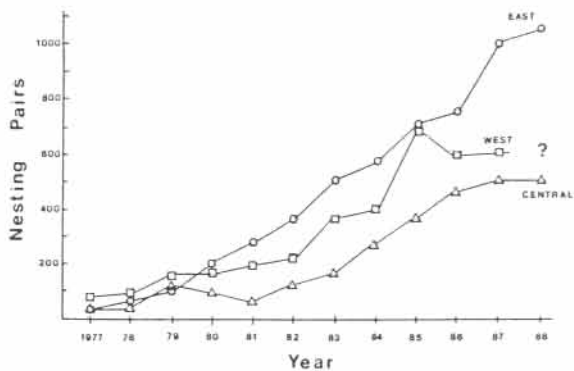


Figure 2. Black-crowned night-heron population growth in Tennessee from 1977 to 1984.

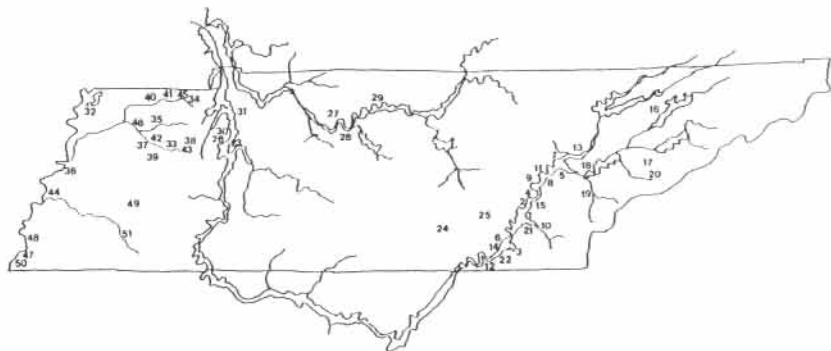
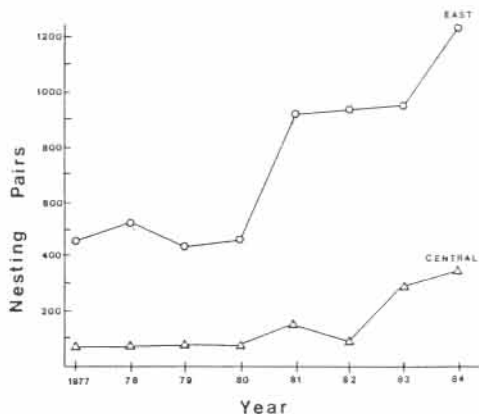


Figure 3. Locations of wading bird colonies in Tennessee during 1977-1988.

Table 1. Size and distribution of nesting wading bird populations in Tennessee during 1977-1988. (cont.)

Colony	Species	Nesting Season											
		77	78	79	80	81	82	83	84	85	86	87	88
<u>Central Region</u>													
23. Duck River	GBH	27	32	69	70	41	80	90	156	190	237	233	203
24. Sinking Pond	GBH	18	25	30	31	37	55	88	132	197	187	190	227
25. Sequatchie	GBH			* 14	0	0							
26. Camden	GBH										* 50	83	76
27. Bordeaux	BCNH	70	70	70	50	167	100	298	370	?	324	?	?
28. Mill Creek	BCNH			25	40	0	8	0	0				
29. Gallatin	BCNH									* 20	168	200	?
Mill Creek	YCNH							1	1				
30. New Johnsonville	LBH						8	0	0				
31. White Oak Creek	LBH								* 1				
<u>Western Region</u>													
32. Reelfoot	GBH	90	95	135	174	183	210	202	250	281	316	350	NS
33. McKenzie	GBH					* 15	15	116	82	151	?	30	NS
34. Jones Mill	GBH							30	25	0	NS	0	
35. Dresden	GBH							* 12	22	3	0	16	NS
36. Hales Point	GBH							*actv	actv	15	?	?	?
37. Greenfield	GBH								* 24	12	3	0	NS
38. Bruceton	GBH								* 1	2	9	0	NS
39. Wingo	GBH									*100	102	154	NS
40. Latham	GBH									* 83	56	32	NS
41. Palmersville	GBH									* 23	0	0	NS

Table 1. Size and distribution of nesting wading bird populations in Tennessee during 1977-1988. (cont.)

Colony	Species	Nesting Season											
		77	78	79	80	81	82	83	84	85	86	87	88
<u>Western Region (cont.)</u>													
42. L & N	GBH									* 23	20	0	NS
43. Jarrell	GBH									* 16	27	0	NS
44. Waller Pond	GBH										* 75	0	NS
45. Midway	GBH											* 30	NS
46. Sharon	GBH											* 4	NS
Reelfoot	GE	2	2	5	10	10	12	5	15	3	16	17	NS
Waller Pond	GE										1		
47. Riverside Park	YCNH	25	25	3	3								
48. Shelby	YCNH			40	68	?	?	0	0				
49. Forked Deer	YCNH			20	14	4	?	0	2				
50. Memphis	YCNH			8	10			26	2	0			
51. Hatchie	YCNH							2	12				
Hales Point	BCNH							actv	actv	12			
Hales Point	LBH							actv	actv	20			

* - Denotes year colony was initiated or discovered during survey.

NS - Colony site not surveyed.

? - Indicates location or size of population unknown.

Numerical designation of colony refers to map location.

Actv - colony active

Movd - colony moved

Table 2. Regional and statewide summary of great blue heron and black-crowned night-heron nesting populations during 1977-1988.

Region	Species	Nesting Season											
		77	78	79	80	81	82	83	84	85	86	87	88
Eastern		45	74	107	222	273	364	512	581	712+	760	1002	1056
Central	GBH	45	57	113	101	78	135	178	288	387	474	506	506
Western		90	95	135	174	198	225	360+	404+	709	608	616	NS
Tennessee		180	226	355	497	549	724	1050+	1213+	1808+	1842	2124	
No. Active Colonies		4	4	6	5	6	7	12	15	24	24	24	
Eastern		450	527	438	449	914	925	947	1249	604+	?	?	?
Central	BCNH	70	70	95	90	167	108	298	370	20+	492	?	?
Western		520	597	533	539	1081	1033	1245+	1619+	12	?	?	?
Tennessee		4	4	5	6	5	5	5	6	636++			
No. Active Colonies										6			

+ - indicates known active colony, but population size undetermined

? - colony locations, size, and status unknown

NS - not surveyed by the author

QNH 520

Table 3. Growth percentage and compound annual growth rate (r) for nine great blue heron colonies in Tennessee.

Colony	Period	Initial Census	Last Census	Percent Change	Population Growth Rate r*
Armstrong Bend	1977-1988	45	529	1075.6%	22.4%
Savannah Bay	1979-1988	7	60	757.1%	23.9%
Long Island	1983-1988	12	141	1075.0%	49.3%
Wolf Creek	1985-1988	2	27	1250.0%	86.7%
Rowden Light	1985-1988	2	47	2250.0%	105.2%
Duck River	1977-1988	27	203	651.8%	18.3%
Sinking Pond	1977-1988	18	227	1161.1%	23.0%
Reelfoot	1977-1987	90	350	288.8%	13.6%
Wingo	1985-1988	100	154	54.0%	14.4%

$$* r = \frac{\log_e N(t) - \log_e N(o)}{t} 100\%$$

TRIBUTES TO THE FOUNDERS OF THE TENNESSEE ORNITHOLOGICAL SOCIETY

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When any organization reaches the milestone age of 75 years it is certainly a testimonial to the farsightedness of its founders. Such were the organizers of TOS: Dr. George R. Curtis, Mr. Albert F. Ganier, Judge H.Y. Hughes, Prof. George R. Mayfield, Sr., Mr. Dixon L. Merritt, and Prof. A.C. Webb.

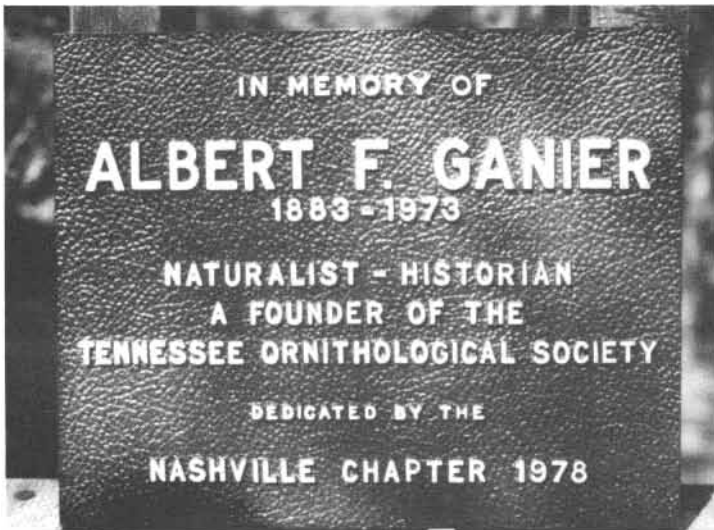
One must be mindful that when the TOS was first organized in October 1915 there was not the widespread interest in nature study and appreciation as we have come to know it today. True, three of the nationwide ornithological organizations, the American Ornithologists' Union, the Wilson Ornithological Society, and the Cooper Ornithological Society have published their respective journals, *The Auk*, *The Wilson Bulletin*, and *The Condor*, continually since the late 1800's. On a more local or regional basis bird students organized, printed journals for a period of time, and then the organizations disappeared into the mist of history. For example, in 1893 the Iowa Ornithological Association was formed and commenced publishing their journal, *The Iowa Ornithologist*. In their initial issue they commented "...to have noticed the lack of organization among the fraternity throughout the Mississippi Valley, while in the East flourishing ornithological societies are numerous." The organizers stressed in the same volume that *The Iowa Ornithologist* "...is the only Magazine, devoted to Ornithology and Oology in the Mississippi Valley." The last issue of their quarterly magazine was released in July 1898.

With this brief background in mind one must admit with pride the boldness exhibited when our founders stepped forward into the uncharted future. George R. Curtis moved away shortly after the founding while Judge H.Y. Hughes and Prof. A.C. Webb died early in the organization's history. Albert F. Ganier, George R. Mayfield, Sr., and Dixon L. Merritt survived and with their varied talents and personalities bequeathed an indelible print that is still very much in evidence throughout the organization today. In fact, these three individuals were held in such high esteem that members have erected permanent memorials to their memories.

Dixon Merritt was the first so honored in 1978 with plaques placed at the nature center that bears his name in the Cedars of Lebanon State Park. The park is located in his home county of Wilson. Companions Albert F. Ganier and George R. Mayfield, Sr. in the early years explored together the fields and woods in the area that has now been preserved as the Radnor Lake State Natural Area in Davidson County. In 1978, with respect and fondness, Nashville Chapter members memorialized Mr. Ganier with an appropriate ceremony and a plaque embedded in a stone that was placed on top of a knob in the park. The knob was also named in his honor. On Sunday, 20 May 1990, Nashville Chapter members gathered once more at Radnor Lake where they presented to the park a plaque honoring George R. Mayfield, Sr. It is now hanging in the nature center and will later be moved to a new building be displayed with other birding material. (Please see pages 114-116 for more details of this event.)

Finally, as a further token of deep gratitude to the farsightedness of all the founding fathers, Margaret Mann has, with singleminded determination, spearheaded the required research and with tenacity has won the approval of the Nashville Historical Commission to have a suitable recognition marker placed on the former site of Faucon's French Restaurant. The restaurant in downtown Nashville was the founding site for the society.

Today, the TOS is recognized as the oldest, continuously active conservation and education organization in Tennessee. Truly, from a tiny acorn an impressive oak has grown.



Photographs of memorials to two of the founders.

HISTORY OF THE ANNUAL SYMPOSIUM AND TOS FALL MEETING

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Since the formation of the TOS in October, 1915 the organization has, over the years, expanded the number and variety of activities for its members. Some examples include: the summer foray, begun in 1936; spring bird counts, begun in 1946; and, the annual hawks counts, begun in 1951. The Fall Meeting and Symposium has a more recent origin.

The first fall Tennessee Ornithological Symposium was held at Pete Smith's Watts Bar Resort, on Watts Bar Lake, 28 October 1967. During the first three years the symposium was informally sponsored by TOS members and held in East Tennessee. In 1970, the TOS assumed formal organizational responsibility.

The genesis for this type of an event occurred on a long automobile trip to Virginia and West Virginia by Wallace Coffey, Ken Dubke, and Charlie Smith. The original idea proposed was that we would invite others, meet in a central location, and if only the three of us showed up it would be considered a success. A total of eleven people attended the initial event so all were in agreement that it was overwhelmingly successful.

The first symposium set the tone and the format for all subsequent gatherings. The original invitation stated the purpose as follows: "To bring to the fore research projects that are currently being carried on and focus attention on areas that participants may wish to explore. Also, a discussion of how the results may be published in *The Migrant* to reach the maximum number of interested individuals."

Since the original printing of the program for the first symposium had a limited distribution, the list of speakers and the abstracts of the papers are given below.

1967 Hawk Migration. Thomas C. Finucane. A summary of this year's results with the cooperative project.

Nesting East Tennessee Osprey: Past, Present and Future. Kenneth H. Dubke. From the evidence on hand it appears there has been a small nesting population for many years. It appears there is still one. A discussion of the evidence and present plans to make an actual census to determine their future.

Amnicola Marsh Nesting Birds. Jon E. DeVore. This relatively new habitat was at optimum condition for nesting marsh species this season. A discussion of field studies carried out there.

Preliminary Study of Nesting Red-winged Blackbirds. Charles R. Smith.

Initiating an Audubon Breeding Bird Census. Joseph C. Howell. There has been considerable talk in recent years on the reduction of certain species of birds. A discussion led by an expert on how

to survey an area to determine absolute abundance, instead of the usual relative abundance.

The Migrant in Progress — Our Changing Times. John Wallace Coffey.

Tennessee's Participation in the Cornell Nest Card Program. Albert F. Ganier. Over a lifetime Mr. Ganier has made an intensive study of Tennessee's various nesting species. He will show there is still a tremendous amount to be learned and how it can be used in the Cornell Nest Card Program.

The next day the symposium participants joined in the traditional Hiwassee Island Barge Trip to view the waterfowl concentrations in the Blythe Ferry area located between Dayton and Cleveland.

For the first ten years, Ken Dubke had the sole responsibility of organizing the event while Wallace Coffey had the task of preparing the colorful brochures for Ken to distribute. Ken also made all of the facility arrangements for the first nine years; then, George R. Mayfield, Jr. offered to shoulder this duty.

For the years 1977 to 1984, T. David Pitts assumed responsibility for lining up a slate of speakers for the programs. George Mayfield continued to arrange for facilities and the meeting locations with the preferred geographical emphasis somewhere in the mid-state area. The central location was desired in order to reduce travel time from distant corners of the state and thus make it more convenient for additional people to attend.

In 1979 the event was held in Gallatin with the arrangements hosted by the Nashville Chapter; field trips and other activities were coordinated by Dot and Paul Crawford. That year set a precedent whereby central Tennessee chapters made arrangements and their members led the popular field trips to nearby birding locations. Since then, all of the middle Tennessee chapters (Columbia, Murfreesboro, Highland Rim, John W. Sellars, and Buffalo River) have been involved. An east Tennessee chapter, Chattanooga, hosted the 1985 meeting at Fall Creek Falls State Park.

In 1985 Fred J. Alsop, III was responsible for the program arrangements. He was followed by Stephen J. Stedman for the years 1986 and 1987. David H. Synder took up the reins for 1988 and 1989.

In 1988 the TOS held a joint meeting with the Alabama Ornithological Society at Land-Between-the-Lakes. The nearby Warioto Audubon Society and Austin Peay State University co-hosted the activities. The meeting moved to Crossville in 1989 with George Mayfield again making the facility and field trip arrangements. In this task he was assisted by members of the newly formed Cumberland County Chapter.

It appears that the original format initiated in 1967 has now been tested by time and has been well received and accepted by the membership. With continued strong interest and support the fall meeting and symposium should be a popular TOS activity into the future.

THE 1990 TOS DISTINGUISHED SERVICE AWARDS

RON HOFF
2512 Gray Hendrix Rd.
Knoxville, TN 37931

At the 1989 TOS Fall Meeting the Board of Directors approved the establishment of annual awards to be given to persons who have made significant and lasting contributions to the Tennessee Ornithological Society. A committee consisting of Ron Hoff (Chair), Barbara Finney, and Richard Newton reviewed nominations and selected 10 recipients based on past contributions and geographical location. Numerous worthy members could not be honored this year. Some of the persons submitting nominations asked to remain anonymous; these requests have been honored and, to be consistent, none of the other persons who prepared nominations are listed. Copies of the nominations and the decisions of the committee have been placed in the editor's files. On behalf of the committee I thank all of the individuals who prepared nominations. On behalf of TOS I express thanks to all of the recipients for their contributions. The recipients are listed alphabetically. The contributions of each recipient are numerous; in fact, an entire issue of *The Migrant* might be necessary to adequately describe their activities. Consequently, a synopsis of their contributions is presented.

SUE BELL
(Mrs. William F. Bell, Sr.)
Nashville Chapter

Since 1949 Mrs. Bell has been an interested, active, and dedicated member of TOS. She has served as State President, Chapter President, and member of the chapter Records Committee. She has participated in Breeding Bird Surveys and was the instigator of the Hawk Watch held at Bon Air. No mention of her talents and activities would be complete without commenting on her gracious hospitality as hostess of innumerable compilations, committee meetings, and other gatherings.

MISS MARY DAVANT
Memphis Chapter

Miss Davant is a charter member of the Memphis Chapter which was organized in January 1930. Over the past 60 years she has been a mainstay of the chapter. Along with Ben Coffey and Jack Embury, two other charter members, she tirelessly promoted the new organization. She served as Chapter President three times, the only member to serve more than once. She also has served as Vice-President for West Tennessee as a State Director on several occasions. She participated in innumerable Chimney Swift banding sessions as part of the famous Memphis project. A librarian, she often researched information for the chapter. She prepared the history of the chapters of TOS for the Golden Anniversary issue. For the past 60 years she has distinguished herself as a leader, worker and friend of the Memphis Chapter and TOS.

KEN DUBKE
Chattanooga Chapter

Mr. Dubke has served as TOS President, Treasurer, and Conservation Committee Chairman in addition to being on numerous other committees and a State Director. He and his wife (see below) have diligently supported and promoted the Chattanooga Chapter of which he has served as President and in other capacities. He has run Breeding Bird Survey routes for 20 years and has worked numerous blocks in the Breeding Bird Atlas project. He was a co-founder of the TOS Symposium and Fall Meeting, of which he has not missed a meeting. He has travelled many miles, written a multitude of letters, and made myriad phone calls on behalf of habitat conservation.

LIL DUBKE
(Mrs. Kenneth Dubke)
Chattanooga Chapter

Mrs. Dubke has served as TOS Vice President and on numerous committees. She has served as President of the Chattanooga Chapter and has for many years compiled and edited "The Chat", the monthly newsletter of the Chattanooga Chapter. She has conducted breeding bird surveys for 17 years and has worked many blocks in the Breeding Bird Atlas project. She was a leader in the effort to preserve Annicola Marsh. She and her husband Ken have participated in numerous Hawk Watches, Raptor Surveys, Sandhill Crane Surveys, and Eagle Surveys. She has tirelessly and enthusiastically promoted birding, not only in the Chattanooga area, but across the state.

DR. KATHERINE GOODPASTURE
Nashville Chapter

Dr. Goodpasture joined the Nashville Chapter in 1940. She soon became one of the leaders in ornithological studies and activities in the area. She has banded numerous birds, maintained accurate records, and written many articles for state, regional, and national journals. For 20 years she coordinated the Breeding Bird Surveys in Tennessee; she ran several routes and was consistently able to maintain a cadre for the completion of the other routes. She directed the monitoring of TV tower kills in Nashville. She has participated in all counts and activities of the Nashville Chapter and has held many offices. She has worked with birds in Tennessee at a time when there were and are distinguished persons contributing to ornithological knowledge of Tennessee. She has complemented them with her broad understanding of research, her careful counsel, and above all her personal ability to inspire and teach. Her name is synonymous with careful work, accurate recording, and scholarly writing.

LOIS HERNDON
(Mrs. Lee R. Herndon)
Lee R. Herndon Chapter

Mrs. Herndon became a member of TOS in 1944. Since then she has held numerous chapter offices. She has participated in and supported both chapter and state activities. When her late husband received justly deserved recognition for his contributions to TOS, many members, including Dr. Herndon himself, recognized that her contributions, although not always as obvious, were especially important.

J.B. OWEN
Knoxville Chapter

By way of his regular columns in the Knoxville newspapers Mr. Owen has reached and influenced more of the general public than perhaps anyone else in TOS. His columns were published in the *Knoxville Journal* from 1960-1972 and in the *Knoxville News-Sentinel* from 1973 to the present. Drawing on his own field experiences, the records of the local chapter and its members, and the publications of recognized authorities he has explained bird life and its study to thousands of readers. He became a member of TOS in 1947; since then he has served in a variety of offices at both the chapter and state level.

DR. ARLO SMITH
Memphis Chapter

Dr. Smith has been an active member of TOS for more than 30 years. During this time he has demonstrated his concerns about environmental issues in a number of ways. He was a leader in the successful efforts to prevent the construction of Interstate 40 through Overton Park and the Memphis Zoo. He authored a definitive work on the wildflowers of the Mid-South. For years he has been a stalwart member of organizations which seek to protect the environment and preserve the natural areas of our state and nation. He has delighted audiences with his presentations and photographs of wildflowers and birds.

NOREEN SMITH
(Mrs. Arlo Smith)
Memphis Chapter

Mrs. Smith has been a member of TOS since 1953. She has served as Chapter Secretary and President and State Director, Vice-President, and President. She has run Breeding Bird Survey routes each year for 23 years, in addition to participating in chapter counts and hikes. She assisted in compiling and tabulating 50 years of bird sighting records in Shelby County for publication. On a statewide basis she is best known for her efforts in the eagle hacking program at Reelfoot Lake. During the first year, she and her husband Arlo ran the project with relief only on weekends. In the following years she continued to recruit and coordinate volunteer participants. Both she and Arlo continue their active participation in the Breeding Bird Atlas project.

DR. JAMES T. TANNER
Knoxville Chapter

Dr. Tanner became a member of TOS in 1940. Since then he has served the society as President, Editor, and Curator in addition to his involvement in numerous committees and other activities of TOS. He was a founder of the chapter in Johnson City and later an active member in the Knoxville Chapter. He has published many articles in *The Migrant* and other journals, but he is most recognized for his study of the Ivory-billed Woodpecker. Many students have benefited over the years from his patient and perceptive counseling and from the high standards of research and writing that he both demonstrated and expected of others.



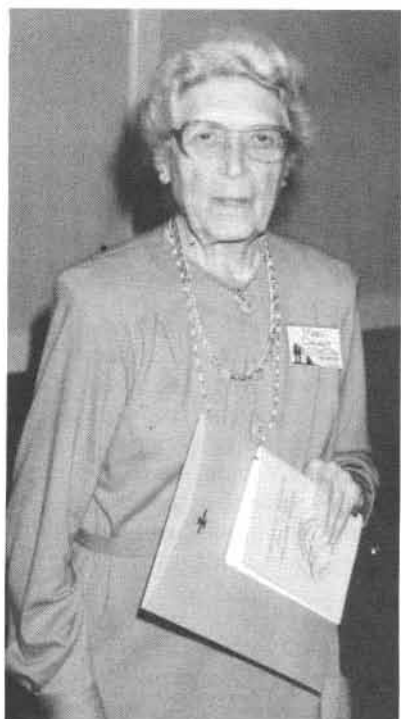
Ken and Lil Dubke



Mrs. Herndon



Sue Bell



Mary Davant



J.B. Owen



Noreen and Arlo Smith

DEDICATION OF PLAQUE HONORING
DR. GEORGE R. MAYFIELD, SR.

Submitted by the
Nashville Chapter of TOS

The 20 May 1990 meeting of the Nashville Chapter of TOS was held at Radnor Lake to dedicate a bronze plaque in memory of Dr. George R. Mayfield, Sr. Seventy people attended. Dr. George R. Mayfield, Jr., his wife Cleo, and their two sons, Rad and Mark, were present for the dedication; their daughter Rebecca, could not attend. The late Dr. Mayfield's wife was unable to attend; she is 101 and lives in Columbia.

Chapter President Dick Newton introduced Dr. George R. Mayfield, Jr. who presented a bronze plaque in memory of his father to Mack Prichard, State Naturalist of the Tennessee Department of Conservation. The plaque is to be placed in the Radnor Lake Nature Center along with a photograph of Dr. Mayfield, Sr. Oscar Patrick designed the plaque. The concept of the plaque was conceived by Katherine Goodpasture (TOS member since 1940) and Vernon Sharp (TOS member since 1921) in 1980. George's plane accident set aside all activities.

George gave a synopsis of his father's life. Vernon Sharp and George Woodring (TOS member since 1927) interjected comments about pertinent activities that occurred in the 1920's and 1930's.

"Dr. Mayfield was born in 1877 near Lawrenceville, Georgia (just east of Atlanta). He graduated from Emory University in 1900 with honors. He moved to Nashville in 1904 to begin graduate study in German at Vanderbilt University where he received M.A. and Ph.D. degrees. He remained at Vanderbilt, eventually becoming Professor of German and department head; he retired in 1947. He took a keen interest in many students, even those who did not take German. Several prominent Nashvillians have confided to me that if it had not been for the encouragement and help of Dr. Mayfield, they would have not graduated from Vanderbilt.

About 1910 he suffered a ruptured appendix and was confined to his room in old Wesley Hall, on the Vanderbilt campus, where the Joint Library now stands. The campus was mostly woods with few buildings at that time. He began listening to birdsongs out his window. This led to his lifelong interest in birds and birding. In the following years he met Albert F. Ganier who shared his interest.

This led to the founding of the Tennessee Ornithological Society on October 7, 1915, when five men, including Mayfield, Ganier, Judge H.Y. Hughes, Professor A.C. Webb, and Dixon Merritt met at Faucon's Restaurant for that purpose. Webb was elected first President but Mayfield and Ganier played leading roles in the development of the society. Dr. George M. Curtis joined TOS shortly after its founding.

In 1916 the first female member was elected, Lillie Lenore Hassock of Nashville. She was to become the Secretary of TOS in 1918 and the wife of Dr. Mayfield in 1920. Their favorite rendezvous consisted of riding the Gendale (#8) street car out 10th Avenue to the end of Radnor Hills and hiking over to Radnor Lake to see the wildflowers and listen to birdsongs.

The 1935 (20th Anniversary Issue) of *The Migrant* describes Dr. Mayfield as "...our most consistent field worker who has done more work in recording the movement of migratory birds than any other member." He served as secretary of TOS in 1916-1917 and twice as President, in 1920-1921 and 1934-1935.

In 1923 a chapter of TOS was formed in Knoxville under the leadership of Harry P. Ijams, a writer for the *Knoxville News-Sentinel*. In 1929 a Memphis chapter was organized under the leadership of Ben B. Coffey, who was a biology student of Lillie Mayfield at old Hume Fogg High School on 8th and Broad. In 1931 the TOS initiated its official publication *The Migrant* whose first editor was George Woodring of Nashville. Ganier and Coffey are among those who have edited this highly regarded journal. In the 1930's a "Blue Grass" chapter of TOS was organized under the leadership of Mayfield, Ganier, and Daniel R. Gray, Sr., of Columbia. Members included birders from Columbia, Pulaski, and Lewisburg. Other chapters were organized prior to 1935 in Clarksville, Murfreesboro, Dickson, and upper East Tennessee under the leadership of Alfred Clebsch, H.O. Todd, and Bruce Tyler, respectively.

Early active Nashville members included Vernon Sharp, Harry Vaughn, Jesse Shaver, Harry Monk and Amelia Laskey (who became a Fellow of the American Ornithologist' Union). Annual field days, usually on the first Sunday in May, were established. These began in Nashville, but were later held by other chapters. Annual meetings began as small gatherings of the faithful on sandbars after lunch at such places as Sycamore Creek, Craggie Hope, Birds I View. In 1938 a constitution was adopted and a Board of Directors from all over the state was formed.

In 1939 a former student of Dr. Mayfield's was running for Governor. He stated that if elected, he would nominate his former teacher to the Conservation Commission. Governor Cooper kept his word and Dr. Mayfield served on the Commission until 1955 and was elected its first chairman." (end of George R. Mayfield, Jr.'s comments.)

This was a chapter effort and many members were involved to make this a successful 75th Anniversary Nashville Chapter meeting.



Photograph of a memorial to a founder.



1. Group photo — Nashville TOS
2. Group photo
3. Group leaving dedication at Radnor Lake Nature Center
4. Group photo at presentation
5. Nashville Chapter President 1989 - 91, Dick Newton
6. Louise Jackson, Oma Vaughn, Frances Abernathy, Lillian Sharp
7. George Woodring, Rad Mayfield, Vernon Sharp
8. David Vogt, Jane Maynard, Mark Mayfield, Ann Houk
9. George R. Mayfield, Jr., Mac Pritchard

A CRISIS IN TENNESSEE ORNITHOLOGY?

CHARLES P. NICHOLSON
Tennessee Valley Authority
Norris, TN 37828

No, this is not about the barrage of threats, such as forest fragmentation, tropical deforestation, cowbirds, global warming, and human population growth, facing our birdlife. It does, however, deal with our ability to detect and react to the impacts of these threats on our birdlife. This is about the dramatic decline in field ornithology which has occurred in Tennessee in the last few years. Here are some examples of this decline:

- Participation in Christmas Bird Counts increased between 1979 and 1984, and then declined by 1989 (1990 data not available as I write this). Consider the number of participants and party hours for four of the largest Christmas Bird Counts in Tennessee between 1979 and 1989.

Knoxville — 1979: 16 observers, 70 party hours
1984: 27 observers, 122 party hours
1989: 21 observers, 72 party hours

Great Smoky Mountains — 1979: 33 observers, 113 party hours
1984: 27 observers, 87 party hours
1989: 19 observers, 72 party hours

Nashville — 1979: 46 observers, 97 party hours
1984: 49 observers, 123 party hours
1989: 18 observers, 62 party hours

Memphis — 1979: 32 observers, 125 party hours
1984: 45 observers, 128 party hours
1989: 35 observers, 96 party hours.

- Participation in the Spring Field Days shows a decline similar to that of the Christmas counts. Both the spring and Christmas counts are "easy" forms of field ornithology, not requiring intimate knowledge of bird songs, rising hours before dawn, or intricately detailed note-taking.
- The number of contributors to the "Season Reports" published in *The Migrant* has declined in recent years.
- Until the mid-1980's, Tennessee had one of the best records of any state in completing all of the U.S. Fish and Wildlife Service Breeding Bird Survey Routes each year. In most (or all?) years since then, one or more routes were not completed. The turnover in observers has also increased in the last few years, which affects the interpretation of the results. I admit (having run over 50 routes in the last 18 years) that BBS routes are not easy, but if we got them all done in the past, why can't we now?
- Participation in the hawk watches each fall has declined to the point that not enough data are being submitted to *The Migrant* to justify retention of the annual report.
- Only about 40 percent of all TOS members contributed bird records to the Tennessee Breeding Bird Atlas Project, despite the efforts of those of us

managing the project to make it easy for everyone to participate. Two-thirds of all the Atlas field-work was done by fewer than 10 percent of all TOS members.

I wish I could explain why this decline is occurring and could prescribe a remedy. While Atlas fieldwork was underway, several skilled birders told me they either did not have the time to participate in atlasing, or did not want to bother with the necessary record-keeping. Yet, many of these same birders (I can not call them amateur ornithologists) drive across the state at the drop of a hat to see "THE" List-building Newbird, while keeping meticulously detailed lists by American Birding Association region, state, and year. The decline in participation is occurring at a time when environmental awareness is supposed to be at an all-time high. Our children are taking environmental education courses, and there is more quality natural history programming on television than ever before. Yet, as I begin my third decade as a TOS member, I am still one of the youngest members of my chapter.

I welcome your responses to my comments and your proposed solutions to the problems described above.



Immature Bald Eagle in hacking tower at Scottsboro.

TOS DURING 1965-1990: A PERSPECTIVE

T. DAVID PITTS

Members and chapters of TOS have been involved in many activities since 1965. Which of these will be of most value to future generations? What could, or should, we have done instead of, or in addition to, those accomplishments? Only the passage of time will allow accurate recognition of our lasting contributions as well as our shortcomings. Each of us has a unique viewpoint. My perspective is biased by many factors such as my occupation as a professional biologist, my 25+ years as a TOS member, my position as a Member-at-Large rather than a chapter member, and my preference for being called a bird-watcher rather than a birder. I ask readers to keep these factors in mind as I review some of the events of the past 25 years and comment on the role and future of TOS.

Two of the most important data collecting activities in Tennessee since 1965 are the North American Breeding Bird Surveys (= BBS) and the Tennessee Breeding Bird Atlas project. Many of the 42 BBS routes in Tennessee were first run in 1966; since then most of these routes have been run each year. This project is sponsored and coordinated by the U.S. Fish and Wildlife Service, not TOS, but most of the participants in Tennessee are members of TOS. Few of the data from Tennessee have been published, but with time the data base will become increasingly valuable. For many species, the BBS data are the only records available that describe the relative sizes of populations since 1966. The Atlas project, which began in 1986, is a short-term (compared to the BBS) effort to describe the range, population size, and other characteristics of each of the bird species that nests in Tennessee. The results of 6 years of intensive data collecting in this project supplement the BBS and will provide a basis of comparison for decades to come. The data are now being prepared for publication in book form.

Several members of TOS have participated in restoration projects during the past 25 years. Breeding populations of Bald Eagles, Osprey, and, more recently, Peregrine Falcons have been either re-established or significantly increased by the release of young birds in Tennessee and adjacent states. As a consequence, the future of these species as breeding birds in Tennessee seems more secure now than in 1965. However, the number of breeding pairs of these species is still low.

Most of the restoration efforts have focused on species which are large and conspicuous. During the next 25 years, much attention will probably be devoted to species whose members are smaller and not as easily recognized by the general public. The Neotropical migrants are beginning to receive some of the attention they deserve. The populations of many Neotropical migrants have declined in recent years; identification of the causes and implementation of solutions will be difficult and expensive, but worthwhile.

One of the first issues of *The Migrant* I received as a new member was the 50th anniversary issue. I learned much about TOS from that issue. However, since that time I have discovered that many additional items could have been presented. Some of these might have been construed as casting shadows on the shining image of TOS. In reality, I think it is important to recognize that not all TOS members agree on certain issues and that TOS, like any other organization composed of persons with diverse interests and backgrounds, will have internal controversies. In earlier

years the egg collectors and those who did not collect eggs were frequently at odds, although this was rarely mentioned in *The Migrant*. In some cases, information on the nesting sites of rare species was not published because of the likelihood that collectors would take the eggs. Today, the issues may differ but diversity still abounds. For example, in the last 25 years birding has become big business. Binoculars, spotting scopes, identification guides, site guides, special tours, and magazines are promoted for the purpose of observing, identifying, and listing various species of birds. "The List" is the primary objective of many birders. Enjoyment of birds by building lists is certainly a legitimate activity, but does listing contribute to ornithology? In some cases, yes; numerous records of range changes and other occurrences have been documented as a result of listers. In many cases, listing contributes little, if any, to ornithology. During my term as editor, I have heard numerous reports of rarities in Tennessee that have never been published. In some cases the parties involved have made no attempt to publish such records. In some cases the attitude seems to have been, "If it is on my list, that is all that counts." In other cases, the persons involved have made preliminary efforts to publish their records but gave up when they realized that publication in a scientific journal requires documentation of identification, a process that some do not wish to complete. In other cases, reports were not submitted because of personal conflicts between individuals. These omissions are unfortunate; future generations will be deprived of some potentially valuable records.

Listing is challenging and can, I am told, be fun and exciting; it can also produce records of value. While I recognize the recreational value of listing and the contributions it may make, the value of intensive study of our common species should not be overlooked. In some cases we know more about the biology of certain rare species in Tennessee than we do about some of the common species. Thankfully, ornithology in Tennessee is not restricted to listing. Some (most, in my experience) listers prefer to be called "birders" not "bird watchers." I am a bird watcher not a lister; in fact, I object to being referred to as a birder. Regardless of what we as individuals prefer to be called, TOS should be broad enough to encompass a diversity of individuals and interests so long as studying birds is our purpose. Each group can make contributions, but each should recognize the motivations and contributions of the other groups.

During the past 25 years there has been a proliferation of organizations and societies promoting one or a few species. In addition to older organizations such as Ducks Unlimited, newer groups such as Quail Unlimited, the American Turkey Federation, the North American Bluebird Society, and the Purple Martin Association have many Tennessee members. Other groups such as the National Audubon Society and the Tennessee Conservation League make important contributions. The TOS can not, and should not, compete with these groups. Many TOS members also actively support many of these other groups. The TOS has defined its role as the recording and promoting of bird studies in Tennessee. I believe this continues to be a legitimate function. The TOS cannot be "everything to everybody." This may be part of the reason for the relatively small membership of TOS and the high turnover rate of members. I suspect that many new members join TOS with the expectation of receiving colorful issues of *The Migrant* that describe identification techniques for beginners, methods of attracting birds to yards and feeders, and other similar types of information. This type of service is important, but I perceive this

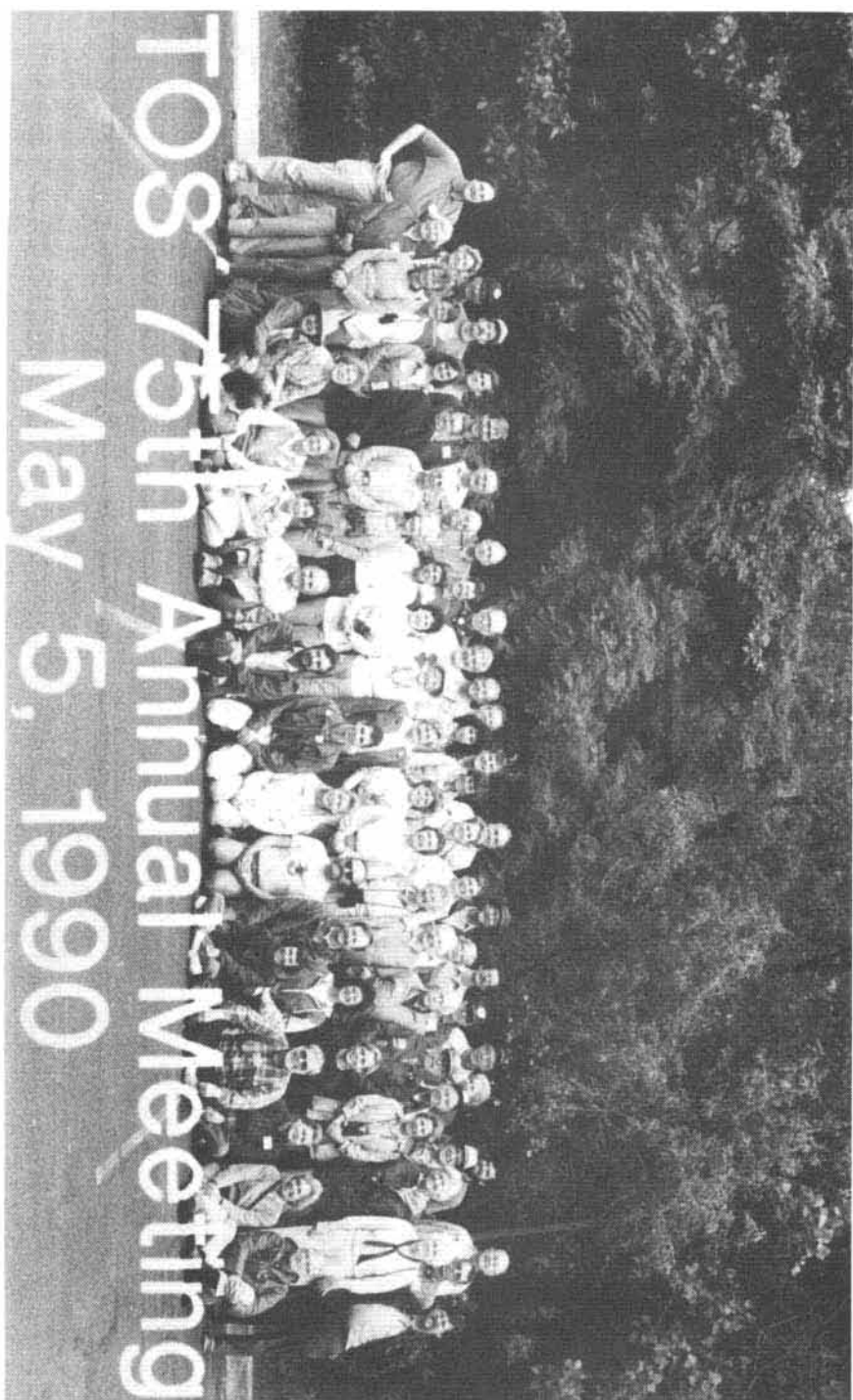
to be a function of the chapters. Some chapters do have effective programs dealing with different levels of identification, and "how-to" sessions on feeders, nest boxes, and landscaping. I think it is important to recognize and serve the needs of new members and less experienced members. Only through the attraction of new members who become long-term members will TOS be able to continue to function. TOS has made many contributions to ornithology in the last 25 years. I urge each member to be an active participant in TOS activities so that the next 25 years will be equally productive.



Jackson Chapter, TOS, August, 1990.

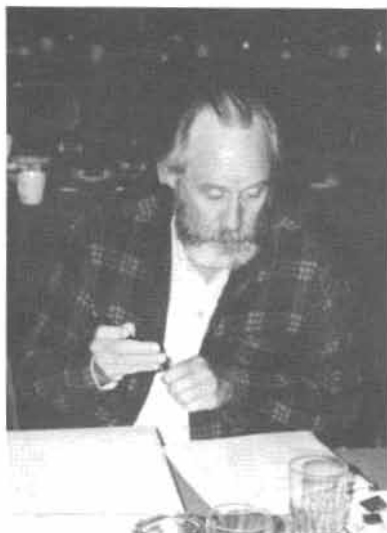


Chattanooga Chapter Field Trip.





Audrey Hoff, Lil Dubke, Ron Hoff



Jeff Wilson



Charles Nicholson



Barbara Finney and Ron Hoff



Bob Hatcher



Head Table at 75th Anniversary Meeting



Bob Ford and David Vogt

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