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NESTING OF THE TREE SWALLOW IN TENNESSEE

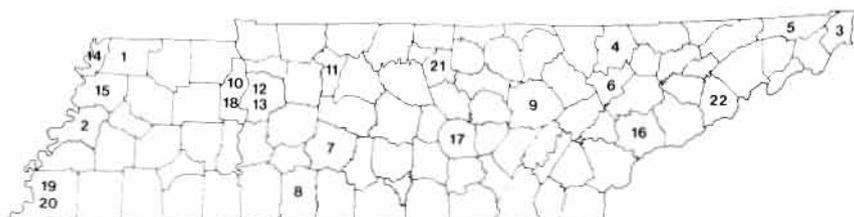
CHARLES P. NICHOLSON AND T. DAVID PITTS

Although a part of Tennessee's nesting avifauna since at least 1918 (Ganier 1964), Tree Swallows (*Tachycineta bicolor*) have greatly expanded their nesting range in recent years. This increase has not been restricted to Tennessee, but has occurred along much of the southern edge of the bird's range. Although it possibly nested in western Kentucky in the late 1800's (Pindar 1925), the first positive nesting in Kentucky was in 1973 (Stamm 1976), and since then the population has increased to the point that 80 pairs were reported in Ballard County in June 1980 (Kleen 1980). The first nest record for North Carolina was in Ashe County in 1979 (LeGrand and Potter 1980), and the second was in Buncombe County in 1981 (Duyck 1981). The first nest record for Oklahoma was also in 1979 (Lehman and Schram 1979). In Missouri, the Tree Swallow has recently been found nesting in large numbers south of its former range (Kleen 1980), and nests also have recently been reported from Arkansas (Jackson 1980). Robertson (1980) in a summary of range expansions for the 5-year period 1976-1980, noted that Tree Swallows have increased their range to the south in the Rockies, Appalachians, and Midwest. Coinciding with the range expansion has been an increase in production of offspring from traditional breeding areas such as northern Illinois (Kleen 1980) and Pennsylvania (Hall 1981).

In this paper, we review the nesting distribution (Figure 1) and breeding of the Tree Swallow in Tennessee. We have relied on published observations, our own unpublished notes, and other unpublished material made available to us. It is possible that other nest records exist of which we are unaware.

NESTING DISTRIBUTION

The first nest of Tree Swallows in Tennessee was found by A. F. Ganier at Reelfoot Lake, most likely in Obion County, in 1918 (Ganier 1964). This gives some support to Pindar's (1925) designation of the species as a rare nester in southwest Kentucky at the turn of the century. Although suitable nesting habitat, in the form of dead trees standing in or near water, existed from prior to 1918 until the present, the nesting population at Reelfoot Lake must have been extremely low, and non-existent later, because Ganier and numerous other observers failed to find the species during the nesting season in succeeding years (Whittemore 1937). From 1918 until 1960, the only nesting season report of Tree Swallows in



- | | |
|-----------------------------------|-----------------------------------|
| 1. Obion Co. — 1918 — nest | 12. Humphreys Co. — 1974 — summer |
| 2. Lauderdale Co. — 1942 — summer | 13. Humphreys Co. — 1975 — nest |
| 3. Johnson Co. — 1964 — summer | 14. Lake Co. — 1976 — nest |
| 4. Campbell Co. — 1967 — summer | 15. Dyer Co. — 1977 — nest |
| 5. Sullivan Co. — 1967 — summer | 16. Blount Co. — 1979 — nest |
| 6. Anderson Co. — 1968 — nest | 17. Warren Co. — 1980 — nest |
| 7. Maury Co. — 1968 — nest | 18. Benton Co. — 1981 — nest |
| 8. Lawrence Co. — 1972 — summer | 19. Shelby Co. — 1981 — summer |
| 9. Cumberland Co. — 1972 — nest | 20. Shelby Co. — 1982 — nest |
| 10. Benton Co. — 1973 — summer | 21. Smith Co. — 1982 — nest |
| 11. Cheatham Co. — 1973 — summer | 22. Cocke Co. — 1982 — nest |

FIGURE 1. Breeding season distribution of the Tree Swallow in Tennessee, showing first year of occurrence during the breeding season ("summer") and of evidence of nesting ("nest") by counties.

Tennessee was from Open Lake in Lauderdale County, where Ganier and Clebsch (1942) observed 3 birds on 19 June 1942.

Beginning in 1960, a number of nesting season records were made without finding nests. At Reelfoot Lake, B. B. Coffey, Jr. (1960) saw 1 Tree Swallow on 22 May 1960, and J. Ellis (1963) reported the species on 15-16 May 1963. K. H. Dubke reported a single bird at Shady Valley, Johnson County, on 14 June 1964, and another bird from an unspecified location near Elizabethton on 24 May (Dubke 1964). Two Tree Swallows were at the Tri-City Airport, Sullivan County, on 31 May 1967 (McPeak 1967).

Since 1967, Tree Swallow nests have been reported almost annually. From 1967-1969, Tree Swallows were reported on the Elk Valley Breeding Bird Survey route in Campbell County. In 1968, 3 nests were found in Eastern Bluebird (*Sialia sialis*) nest boxes below Norris Dam, Anderson County (Olson 1968). In the following year, 5 nests were found (Campbell 1969), but the species apparently did not use the site again until 1979. Also in 1968, an immature and 2 adult birds were observed at a dead snag at the Monsanto ponds near Columbia, Maury County (Gray 1968). The 1968 nests were the first definite nesting records for the state since 1918.

In 1972, 2 nests were found at Crockett Bottoms, near the Obion River, Obion County (Pitts 1973). This site (Figure 2) was used for nesting each year for 10 years (Pitts, field notes), but it was apparently not used in 1982. During 1972, a nest was also reported in a bluebird nest box near a pond in Cumberland County (West 1973). On the 1972 foray in Lawrence County, (26-29 May), 2 Tree Swallows were observed but no nest reported (Alsop and Williams 1974).



FIGURE 2. Tree Swallow on nest tree, Crockett Bottoms, Obion County, Tennessee, 1973. Photo by T. D. Pitts.

In 1973, Tree Swallows were again reported nesting at Reelfoot Lake (Bierly 1973). During this same year, 12 birds were reported on the Pond Creek Breeding Bird Survey route in Cheatham County. Three Tree Swallows were reported on the Benton County foray, held 25-28 May 1973 (Alsop 1976). Although these were reported as transients, they were possibly nesting birds. Across the Tennessee River at the Duck River Unit of the Tennessee National Wildlife Refuge, Humphreys County, 2 Tree Swallows were observed by J. Ledbetter on 21 June 1974 (Waldron 1974), and on 15 June 1975, 2 adults feeding 4 bob-tailed young were observed by M. L. Bierly, W. J. Jones, and E. Holzhausen (Waldron 1975). On 1 June 1975, a single Tree Swallow was observed at Ashland City Marsh, Cheatham County, by Bierly and D. Vogt (Williams 1975).

In 1976, Tree Swallows again nested at the Monsanto ponds, Maury County, where O. Hotchkiss reported an adult feeding fledged young on 6 June (Williams 1976). A single nest was also found in Lower Blue Basin, Reelfoot Lake, apparently the first Lake County nest record (Pitts, field notes). In 1977, W. G. Criswell found a Tree Swallow nest along the Mississippi River in Dyer County (Waldron 1977). In 1979, a Tree Swallow again nested near Norris Dam in Anderson County, and M. L. Davis observed an adult with 3 fledged young at a pond near Louisville, Blount County (Dubke and Dubke 1979).

In 1980, a Tree Swallow nest was reported in Warren County by C. Malone (Bierly, pers. comm.). During that same year, Pitts toured the middle portion of Reelfoot Lake on 11 June searching for Tree Swallows, and observed at least 18 birds. A similar route in 1981 produced 8 Tree Swallows. In 1982, both authors searched the north and middle parts of Reelfoot Lake on 18 June and counted 24 Tree Swallows.

On 9 June 1981, Ben and Lula Coffey saw 10 Tree Swallows, including adults feeding young, at Camden Landing, Benton County. The first Shelby County nesting season records were made by the Coffeys at North Lake on 18 June 1981, when they observed 5 Tree Swallows (Waldron 1981). The following year, they observed 6 pairs using cavities in willows at North Lake on 18 May.

There were several other 1982 nest reports. These included a nest at Douglas Lake, Cocke County, reported by J. A. Koella (pers. comm.), and a nest at a farm pond near Dixon Springs, Smith County, observed by Nicholson (Figure 3). During May and June, Nicholson also did field work at New Johnsonville and the Duck River Unit, Tennessee National Wildlife Refuge, Humphreys County. Swallows were common along the shoreline of Kentucky Lake and in the dewatering area at the refuge, and on 16 June 1982 Nicholson counted 35 swallows, including several fledged young and adults at cavities, in the refuge area.

BREEDING BIOLOGY

Because many of the Tree Swallow nests reported in Tennessee have been in relatively inaccessible cavities over water, information on egg-laying dates, clutch size and hatching success is limited and is mostly from nests in bluebird boxes. Full accounts of nesting, from nest site selection through fledging of young, are available for only a few nests.

FIGURE 3. Farm pond nesting habitat, near Dixon Springs, Smith County, Tennessee, 1982. Photo by C. P. Nicholson.



FIGURE 4. Tree Swallow nest in bluebird nest box near Norris Dam, Anderson County, Tennessee, 1979. Photo by C. P. Nicholson.



Tree Swallows select nest sites in Tennessee as early as late April. In 1968, Tree Swallows built a nest between 24 and 30 April, when eggs were found (Olson 1968). In 1972, Adele West first noticed Tree Swallows around a nest box in her yard on 30 April (West 1974), and Nicholson observed a pair of Tree Swallows entering a cavity in a wood fence post on 30 April 1982. Eggs have been observed in nests as early as 30 April 1968 and as late as 27 June 1968, when a box was used by swallows for a second brood (Olson 1968). Dates of apparently complete clutches include 18 May 1972 (West 1973), 22 May 1918 (Ganier 1964), 19 June 1977 (Waldron 1977), and 27 June 1968. There have been 2 reports of clutches of 4 eggs, 3 reports of 5 eggs, and 2 reports of 6 eggs. The 2 eggs remaining in the clutch collected by Ganier (1964) (the other 2 were broken) measure 18.4 x 14.1 and 18.4 x 13.9 mm (M. D. Williams pers. comm.) and are preserved in the Louisiana State University Museum of Zoology.

The only actual observation of the hatching of Tree Swallow eggs in Tennessee is that of West (1973), who observed it on 5 June 1972, after an incubation period of 18 days. A nest observed by Olson (1968) hatched around 14 May 1968. West (1973) observed young leave the nest on 1 June 1972, 19 days after hatching, and a brood at Norris Dam fledged on 20 July 1968, the latest record for Tennessee (Olson 1968). After fledging, Tree Swallows may rapidly leave the nest area. Olson (1968) was unable to locate Tree Swallows near the nest the day after they fledged on 20 July 1968. Tree Swallows were present at North Lake, Memphis until 20 July 1982 (Waldron 1982).

All Tree Swallow nests, for which habitat descriptions are available, have been either over water or near water. Nest sites include large and small dead trees standing in water (Figure 2), willows along a shoreline, a wood fence post in water (Figure 3), and bluebird nest boxes (Figure 4) up to 0.4 km from water. The water may be large, impounded reservoirs such as Kentucky or Douglas Lakes, natural lakes such as Reelfoot, farm ponds, or moving water such as the Clinch River below Norris Dam.

The Tree Swallow is unique among North American passerines in that the female requires two years to achieve plumage maturity, which resembles that of the male bird (Tyler 1963). First year females, with dull brown back plumage, are capable of breeding. The nests observed by Bierly (1973), West (1973), and one of the nests reported by Pitts (1973) were attended by first year females.

DISCUSSION

In recent years, Tree Swallows have nested throughout Tennessee (Figure 1), except in the southeast corner of the state and in the mountains along the eastern border. Two areas, Reelfoot Lake and Benton-Humphreys Counties, have large populations which have likely used the area for several years. Most other areas have been used only for 1 year or 2 consecutive years, although at the Monsanto Ponds and Norris Dam, Tree Swallows returned for one season after an absence of several years. Reasons for Tree Swallows not returning to some nest areas are not clear. In some cases, the habitat has changed through loss of standing dead trees, and in a few cases it is possible the area was not checked the year following discovery of the birds.

Tree Swallows are relatively early migrants, both to and from their nesting grounds, making it difficult to distinguish migrants from nesting birds. By mid-March Tree Swallows are not uncommon on Reelfoot Lake and in other parts of Tennessee. Nesting Tree Swallows may be on territory by late April, when northward-moving migrants may still be present. Small numbers of Tree Swallows present in suitable nesting habitat in late April or May should be suspected of nesting, and such areas should be rechecked throughout the season. Southward migration through Tennessee begins early in July. Pitts, for example, observed an estimated 1000 Tree Swallows at one site on the north side of Reelfoot Lake on 10 July 1976. At Crockett Bottoms, where 2-3 pairs normally nest, several dozen pairs often occur in early July. Adult swallows have been observed still feeding nestlings in other parts of the state in early July. Later in the fall, huge numbers of Tree Swallows migrate through the state, especially in West Tennessee, where 500,000 were reported from the Reelfoot Lake area on 18 October 1970 (Patterson 1970).

The reasons for the Tree Swallow's recent range expansion are not known. Suitable nesting habitat has probably increased in Middle and East Tennessee with impoundment of rivers and construction of farm ponds. The recently filled Tellico Lake with its areas of flooded timber should be observed for evidence of nesting Tree Swallows. Recent flooding of bottomlands and resultant timber kills in West Tennessee have also created new nesting habitat. Nesting habitat, however, has been available at Reelfoot Lake for years with little Tree Swallow use until recently. Prior to the formation of Reelfoot Lake in 1811-12, nesting habitat was probably available in the many oxbow lakes of the Mississippi River and other West Tennessee rivers. Another factor which has an effect on Tree Swallow population levels nationwide is the large number of nest boxes placed primarily for bluebirds (Zeleny 1976).

If present trends continue, we predict that the Tree Swallow will become a widespread and common nesting species in Tennessee. Continued documentation of this range change is important. Also needed is additional information on nesting activities, site fidelity, and survival rates. It is important to remember that this range expansion is not restricted to Tennessee, and information on the species in Tennessee will help to understand the species throughout its range.

LITERATURE CITED

- ALSOP, F. J., III. 1976. The 1973 foray: Benton County. *Migrant* 47:81-86.
- , AND M. WILLIAMS. 1974. The 1972 foray: Lawrence County. *Migrant* 45:1-9.
- BIERLY, M. L. 1973. Tree Swallows nesting at Reelfoot Lake. *Migrant* 44:97.
- CAMPBELL, J. M. 1969. The season — Eastern ridge and valley region. *Migrant* 40:69-70.
- COFFEY, B. B., JR. 1960. The season — Memphis. *Migrant* 31:43-44.
- DUBKE, K. H. 1964. The season — Elizabethton. *Migrant* 35:42-44, 66-67.
- , AND L. H. DUBKE. 1979. The season — Eastern ridge and valley region. *Migrant* 50:88-90.
- DUYCK, B. E. 1981. Range expansion of nesting Tree Swallows. *Chat* 45:98-100.
- ELLIS, J. O. 1963. Two days at Reelfoot Lake. *Migrant* 34:21-23.
- GANIER, A. F. 1964. A Tennessee nesting of the Tree Swallow. *Migrant* 35:51.
- , AND A. CLEBSCH. 1942. A week in West Tennessee. *Migrant* 13:32-35.
- GRAY, D. R., III. 1968. Tree Swallow nesting in Maury County. *Migrant* 39:61.
- HALL, G. A. 1981. Appalachian region. *Amer. Birds* 35:822-825.
- JACKSON, J. A. 1980. Central southern region. *Amer. Birds* 34:902-904.
- KLEEN, V. M. 1980. Middlewestern prairie region. *Amer. Birds* 34:898-899.
- LEGRAND, H. E., JR., AND E. F. POTTER. 1980. Ashe County breeding bird foray — 1979. *Chat* 44:5-13.
- LEHMAN, P., AND B. SCHRAM. 1979. The changing seasons. *Amer. Birds* 33:839-844.

- McPEAK, D. 1967. The season — Bristol. *Migrant* 38:53-55.
- OLSON, F. B. 1968. Tree Swallows nesting in East Tennessee. *Migrant* 39:59-60.
- PATTERSON, D. E. 1970. The season — Western coastal plain region. *Migrant* 41:83-84.
- PINDAR, L. O. 1925. Birds of Fulton County, Kentucky. *Wilson Bull.* 37:77-88, 163-169.
- PITTS, D. 1973. Tree Swallows nesting in Obion County. *Migrant* 44:95.
- ROBERTSON, W. B., JR. The changing seasons. *Amer. Birds* 34:869-874.
- STAMM, A. L. 1976. Tree Swallows nesting in Jefferson County. *Kentucky Warbler* 52:13-14.
- TYLER, W. M. 1963. Tree Swallow, pp. 384-400. In Bent, *Life Histories of North American Flycatchers, Larks, Swallows and Their Allies*. Dover Publ., New York.
- WALDRON, M. 1974. The season — Western coastal plain region. *Migrant* 45:100-101.
- . 1975. The season — Western coastal plain region. *Migrant* 46:87-88.
- . 1977. The season — Western coastal plain region. *Migrant* 48:102-103.
- . 1981. The season — Western coastal plain region. *Migrant* 52:95-96.
- . 1982. The season — Western coastal plain region. *Migrant* 53:87.
- WEST, MRS. E. M. 1973. Nesting of Tree Swallows in Cumberland County. *Migrant* 44:95-96.
- WHITTEMORE, W. L. 1937. Summer birds of Reelfoot Lake. *J. Tenn. Acad. Sci.* 12:114-128.
- WILLIAMS, M. D. 1975. The season — Central plateau and basin region. *Migrant* 46:88-89.
- . 1976. The season — Central plateau and basin region. *Migrant* 47:99-100.
- ZELENY, L. 1976. *The bluebird*. Indiana Univ. Press, Bloomington.

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ROUND TABLE NOTES

FIRST TENNESSEE RECORD OF CARIBBEAN COOT — At 1300 on 8 November 1981, Andrew P. Avel and I visited Chickamauga Boat Harbor, approximately one-half mile upstream from Chickamauga Dam, Hamilton County, Tennessee. As we gazed over a flock of approximately 30 American Coots (*Fulica americana*), I noticed that the frontal shield of one coot (Figure 1) extended to the top of its head past its eyes; whereas on the other coots, the shield ended just above the eyes. Since the coots were tame enough to come as close as 5 feet to accept food, we did not have to use binoculars to determine that the shield of this one coot was also broader, tinged with yellow on top, and showed no indication of red. By using *A Field Guide to the Birds East of the Rockies*, Fourth Edition, by Roger Tory Peterson, I identified this bird as a Caribbean Coot (*F. caribea*) — the first record of the species in Tennessee. I had seen a Caribbean Coot in Everglades National Park during the previous winter, and since then have carefully checked flocks of American Coots for a possible Caribbean Coot.

The Caribbean Coot is an accidental species from the Caribbean Islands. The first sighting of the species in the United States was in Fort Lauderdale, Florida on 28 January 1974 (Bolte, W. J., 28:3, 1974, *American Birds*). Since that time, Caribbean Coots have been spreading north in Florida as far as St. Marks on the



FIGURE 1. Caribbean Coot near Chickamauga Dam, Hamilton County, Tennessee, November 1981. Photo by H. K. McLean.

Gulf Coast (Ripley, S. D., 1977, *Rails of the World*). Caribbean Coots have been sighted in Miami in 1976, at Port St. Lucie in 1979, and at the Eco-pond in Everglades National Park in 1981 (*American Birds*, 30:3, 1976; 33-3, 1979; and 35:3, 1981).

The Caribbean Coot sighted at the Chickamauga Boat Harbor was very aggressive towards the other coots. The way the bird held its left wing indicated it may have been injured.

The Caribbean Coot was also observed by Gary Hartman and Dorothy Hartman on 8 November 1981. On 9 November 1981, the sighting was confirmed by J. B. Owen, Robert J. Floyd, and Kenneth H. and Lillian H. Dubke. The bird was apparently unable to fly, and remained throughout the winter, through the summer of 1982, and was recorded on both the 1981 and 1982 Chattanooga Christmas Bird Counts (G. S. Hartman, pers. comm.). Whether the Caribbean Coot was overlooked prior to 8 November 1981 is not known. Observers should closely check all coots and be alert for future occurrences.

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FURTHER COMMENTS ON THE CARIBBEAN COOT IN TENNESSEE — At its meeting on 6 August 1983, The Tennessee Ornithological Society Certification Committee discussed the Caribbean Coot (*Fulica caribea*) in Hamilton County, Tennessee. The consensus of the committee was to include the coot on the official confirmed list of Tennessee birds. Although the origin of the bird and even its specific status (DeBenedictis, *American Birds* 36:150, 1982) are debatable, the bird was added to the list for the following reasons: 1) The most recent American Ornithologists' Union Committee on Classification and Nomenclature checklist (in press) recognizes *F. caribea* as a distinct species; 2) The bird was not banded, and showed no signs of having been in captivity; 3) The bird was less tame than several American Coots (*F. americana*) in the same area; 4) An attempt was made to determine if the coot had escaped from area waterfowl breeders. No escapes were reported; 5) The Caribbean Coot was aggressive towards American Coots, and did not closely associate with them. The Caribbean Coot has never been seen in flight, and apparently has a crippled left wing, which may have resulted from a collision with one of the many powerlines or some other structure in the area.

Because of its crippled status, the Caribbean Coot will not be included in future Christmas Bird Count or Spring Field Days tabulations.

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THE YELLOW WARBLER IN WEST TENNESSEE — The eastern subspecies of the Yellow Warbler, *Dendroica petechia aestiva*, reaches the south-western limits of its breeding range in central Oklahoma, northern Arkansas, and central Alabama (AOU 1957). This range encompasses West Tennessee, where there are few historic summer records of Yellow Warblers. In recent years, there has been an increased number of nesting season reports from West Tennessee. This note summarizes available information on the status of the Yellow Warbler as a breeding bird in Tennessee, west of the Tennessee River. This species is a fairly

early spring migrant, with birds passing through in mid- to late April, and nesting birds are on territory by early May. Fall migration begins early and reports from late July and early August may be birds in passage.

Based on historic records from western Kentucky, the Yellow Warbler may have been of fairly regular occurrence in northwest Tennessee in the late 1800's and early 1900's. According to Leon G. Pindar (1889, 1925), it was present in Fulton County, Kentucky in the late 1880's and in 1893, but its abundance apparently varied greatly from year to year, and it was absent during some summers. Gordon Wilson (1923) described the Yellow Warbler as a common summer resident in Calloway County, Kentucky. West Tennessee had no resident ornithologists during this same period, and little published information is available. Samuel Rhoads (1895) did not observe Yellow Warblers in West Tennessee during his 1895 statewide survey. It was not until the 1930's that ornithologists were regularly reporting from West Tennessee.

Ben B. Coffey, Jr. observed a Yellow Warbler on 15 July 1935, south of Union City, Obion County. During this same period, several ornithologists (e.g. Whittemore 1937) were working Reelfoot Lake. None reported Yellow Warblers during the nesting season. Single Yellow Warblers were reported by Walker (1952) from near the Tennessee River in Benton County on 11 July 1950, and by Coffey in Hardin County on 29 June 1959.

Since 1971, there have been reports of more than 1 Yellow Warbler, or of birds present during more than 1 year, from Benton, Lauderdale, and Shelby Counties, as well as the Reelfoot Lake area, and scattered reports of single birds elsewhere. Scattered reports include 1 bird reported in 1971 by Victor Julia on the Moscow Breeding Bird Survey route, Fayette County, and 1 bird observed by James M. and Betty Reid Campbell on the McNairy County Foray on 24 May 1981. Eight Yellow Warblers were reported on the Benton County Foray, 25-28 May 1973 (Alsop 1976), and others have been observed in recent years at Camden Landing (Waldron 1981). Yellow Warblers have also been regularly observed directly across the Tennessee River in Humphreys County.

In 1972, single Yellow Warblers were reported by Gina Manning on the Tiptonville and Paw Paw BBS routes. Both of these routes extend from Lake County into Obion County, and are in the general vicinity of Reelfoot Lake. Yellow Warblers were also recorded on the Tiptonville route by Kenneth H. Leggett in 1976 (3 birds), and on the Paw Paw route by Leggett in 1977 (3 birds), 1980 (2 birds), and 1981 (1 bird). The only record, to my knowledge, of Yellow Warblers from Reelfoot Lake itself is that of 2 singing birds observed by David Pitts and me on 18 June 1982. Both of these birds were in the vicinity of Nix Towhead, just north of Samburg, Obion County.

Other Yellow Warblers have been reported near or along the Mississippi River. Seven were reported on the Lauderdale County Foray, 24-25 May 1975 (Coffey 1976). Two of these were at the Fort Pillow State Park lake, where the Coffeys later observed 2 birds on 12 June 1975 (Coffey 1976). Yellow Warblers have occurred on Mud Island, in Memphis, Shelby County, since 1979, when a single bird was observed on 14 July by James G. Holt (Waldron 1979). In June 1980 and 1982, a maximum of 2 Yellow Warblers was observed at the same site, and on 31 May 1981, a nest was found by Jeff Wilson.

Recent established populations of Yellow Warblers have been recorded near the Tennessee River in Benton County, near the Mississippi River in Shelby and Lauderdale Counties, and in the Reelfoot Lake area. These reports probably reflect an increasing population in West Tennessee, with birds apparently invading from the north. The Mississippi and Tennessee Rivers may be functioning as corridors for the southward expansion, or, alternatively, the birds may be found there solely because of the presence of moist, shrubby habitats. Because of population decreases in other parts of its range, the Yellow Warbler has for several years been included on the Blue List published in *American Birds* (Tate and Tate 1982), and the species should be closely watched in West Tennessee during future years.

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LITERATURE CITED

- ALSOP, F. J., III. 1976. The 1973 Foray: Benton County. *Migrant* 47:81-86.
- AMERICAN ORNITHOLOGIST'S UNION. 1957. Checklist of North American birds, 5th Ed. Baltimore, Lord Baltimore Press. 691 pp.
- COFFEY, B. B., JR. 1976. The 1975 Foray: Benton County. *Migrant* 47:1-7.
- PINDAR, L. O. 1889. List of the birds of Fulton County, Kentucky. *Auk* 6:310-316.
- . 1925. Birds of Fulton County, Kentucky. *Wilson Bull.* 37:77-88, 163-169.
- RHOADS, S. N. 1895. Contributions to the zoology of Tennessee. No. 2. *Birds. Proc. Acad. Nat. Sci. Phil.* 1895:463-501.
- TATE, J., JR., AND D. J. TATE. 1982. The Blue List for 1982. *American Birds* 36:81-86.
- WALDRON, M. G. 1979. The season — Western coastal plain. *Migrant* 50:85-86.
- . 1981. The season — Western coastal plain. *Migrant* 52:95-96.
- WALKER, T., JR. 1952. Summer birds of Camp Mack Morris, Benton County, Tennessee. *Migrant* 23:5-6.
- WHITTEMORE, W. L. 1937. Summer birds of Reelfoot Lake. *J. Tenn. Acad. Sci.* 12:114-128.
- WILSON, G. 1923. Birds of Calloway County, Kentucky. *Wilson Bull.* 35:129-136.

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NESTING SEASON RECORDS OF WILLOW FLYCATCHERS IN WEST TENNESSEE — The first Tennessee nests of Willow Flycatchers (*Empidonax traillii*) were discovered in upper East Tennessee in 1958 (Herndon, *Migrant* 29:37-42, 1958). Since then nests have been observed in other parts of the state including Knox County (Alsop, *Migrant* 42:25-26, 1971) and Davidson County (Alsop and Goodpasture, *Migrant* 43:81-84, 1972). No nests have been reported from West Tennessee.

The first nesting season records for West Tennessee were the 6 birds seen on the Benton County foray in 1973 (Alsop, Migrant 47:81-86, 1976). Apparently the only other nesting season records for West Tennessee are from Obion County. On 10 June 1976 I observed 4 singing Willow Flycatchers in Crockett Bottom. This area is a shallow water impounded area of approximately 300 ha at the junction of the North and Middle Forks of the Obion River in eastern Obion County. It is a part of the Gooch Wildlife Management Area. Prominent vegetation includes scattered bald cypress (*Taxodium distichum*), both living and dead, and buttonbush (*Cephalanthus occidentalis*). Since 1976, with the exception of 1977 when I did not visit the area in the nesting season, 1 to 3 Willow Flycatchers have been observed singing and patrolling territories each year, including 1982. Several hours have been spent observing the singing birds and trying to locate nests; however, the dense growths of buttonbush are almost impenetrable, and nonsinging birds are difficult to follow. No nests have been found. I spent many hours in Crockett Bottom during the nesting seasons of 1971 and 1972 without encountering the species; few visits were made during the years 1973-1975 when Willow Flycatchers apparently began using the area.

On 18 June 1982 Charles P. Nicholson and I heard 2 Willow Flycatchers at Reelfoot Lake. One bird was singing at the north end of Brewer's Bar and the other at the south end of Nation's Ditch. Both sites are in Obion County near the Lake County boundary.

In addition to the above records, I heard 2, or possibly 3, Willow Flycatchers at the Middle Fork of the Obion River near Gleason (Weakley County) on 21 May 1981; the site was not checked later to determine if the birds remained during the nesting season.

The above records indicate that Willow Flycatchers have been present in West Tennessee during the nesting season since at least 1973. While the late migration and nesting of the species may cause them to be overlooked, the distinctive songs are easily detected making the species, or at least the males, conspicuous to observers in the field at this time of year. I predict, as have others (e.g. Alsop, Migrant 49:89-90, 1978), that nests will be found in the near future.

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BOOK REVIEW

WEST VIRGINIA BIRDS — DISTRIBUTION AND ECOLOGY. By George A. Hall. 1983. Special Publication No. 7, Carnegie Museum of Natural History, Pittsburg. 190 pp, photos, maps, drawings. \$20.

The bulk of this book is accounts of the 304 species of birds recorded in West Virginia. Species accounts describe seasonal distribution, early and late dates, breeding and wintering populations, the location of specimens in museums, and subspecies collected in the state. Population information includes data from Breeding Bird Survey routes, Singing Male Censuses, Christmas Bird Counts, and fall banding at the Allegheny Front Migration Observatory. Information on behavior and nesting biology is not included. Maps, drawings by George Sutton, and photos by Hal Harrison illustrate several species.

Introductory chapters are devoted to an account of the history of West Virginia ornithology and descriptions of the physiography, climate, major avian habitats and avifaunal regions of the state. Hall recognizes 3 avifaunal regions. The Allegheny Mountains region is easily separated from the other 2, but the resemblance between the Western Hills and the Ridge and Valley regions is high. The avifaunal analysis is not as detailed as that in Mengel's "Birds of Kentucky," but is certainly adequate. Hall lists 14 species which reach the southern limit of their range in West Virginia. He mentions the perhaps accidental summer occurrences of the Magnolia Warbler and Savannah Sparrow in southwestern Virginia and northeastern Tennessee in the mid-1970's, but does not mention the regular occurrence of Alder Flycatchers on Roan Mountain since the late 1970's. Hall speculates why some of the boreal species do not nest further south in the more extensive boreal forests of North Carolina and Tennessee. The lack of wetland habitat in the southern mountains probably accounts for the absence of the Common Snipe, Nashville Warbler, and Northern Waterthrush, and an island effect may explain the absence of some other species. For some species, Hall admits there is no ready explanation. Black-and-white habitat photos accompany this section. A map showing the major river systems, which are frequently mentioned in the text, would have been a useful addition. Appending sections include a gazetteer (which should be required in such books), an extensive listing of cited literature through May 1982, and a list of literature consulted but not cited in the text.

"West Virginia Birds" is well produced, free of errors, and reasonably priced considering its 8½ x 11 inch format. Studying it will help us understand our Tennessee avifauna. I recommend it.

CHARLES P. NICHOLSON

THE SEASON



SUMMER: 1 JUNE - 31 JULY 1982

Temperatures across the state were near normal and rainfall was slightly below normal.

Several new nesting locations for several species were reported. Willow Flycatchers and Yellow Warblers were observed on territory at Reelfoot Lake, and new Willow Flycatcher locations were reported from the eastern regions. Tree Swallows were found nesting in the Memphis area and at Douglas Lake, and a new Bank Swallow colony site was observed near Memphis. Cliff Swallows were also reported from new locations. Documentation of new nesting locations such as these is one of the most important aspects of the Summer Season Report, and such occurrences should continue to be reported in the future.

Among other significant finds were a Golden-crowned Kinglet nest on Roan Mountain, and Pine Siskins with young in the Great Smoky Mountains National Park. As usual, several reports of lingering species were received. These are described in the following reports.

WESTERN COASTAL PLAIN REGION — *Grebe-Kestrel*: Pied-billed Grebe: 11 Jun (2) MEM (DAV). White Ibis: 9 Jul (9 imm), 20 Jul (2) Hillville, HNWR (WDR); 27 Jul (1 imm) MEM (JLS). Ruddy Duck: 20 Jul (pair) Robco Lake, MEM (BBC, LCC). Mississippi Kite: 27 May (2) MEM (JLS); 30 May (56) FPSP (DM, GM); 17 Jun (1) CB (TDP), 19 Jun (1) HNWR (JRW), 19 Jul (13) SFSP (BBC, LCC), 6-8 Aug (6-8) MEM (JLS). Sharp-shinned Hawk: 6 Aug (1) MEM (JLS). Cooper's Hawk: 5 Jun (1) 2 mi SSE of Big Sandy (BBC, LCC); 18 Jun (1) RL (CPN, TDP). Red-shouldered Hawk: 24 Jul (1) TN 100, Hatchie River (BBC, LCC); 24 Jul (1) S of Jack's Creek, Chester Co. (BBC, LCC). Marsh Hawk: 19 Jun (1) Trenton (DM, GM). American Kestrel: 16 Jun (2) Covington, (1) Pleasant Hill (BBC, LCC); 17 Jun (4) Hornbeak (BBC, LCC).

Sandpiper-Sparrow: White-rumped Sandpiper: 2-5 Jun (30) PP (WPP, WRP). Willow Flycatcher: 25 May - 17 Jun (2 singing) CB (TDP); 18 Jun (2 singing) RL (CPN, TDP). Tree Swallow: nesting on North Lake, MEM, 1 mi N of Mississippi state line, 18 May (6 pairs) using willow cavities near N shore of North Lake, seen over lake through 20 Jul; 5 Jun (2) Camden Landing (BBC, LCC). Bank Swallow: 28 Jun, 19 Jul (40) nesting, Mississippi River bank 15 mi N of colony on Wolf River (BBC, LCC); 20 Jul (200) North Lake (BBC, LCC). Cliff Swallow: 1 Jul (80 active nests) Mansard Island Boat Dock, Henry Co. (TDP). Carolina Wren: 23 Jun (22 heard in 10.5 mi circuit N of US 64, E of Hatchie River) (BBC, LCC). (This is

an unusual number for such a circuit, numbers in other areas were much less). Swainson's Warbler: 22 Jun (1) Wolf River, N of Rossville, 23 Jun (1) Hatchie River and US 64, 24 Jun (3 at 3 different locations) TN 100, Hatchie River, 24 Jun (3 at 3 different locations) S Fork, Forked Deer River, Chester Co. (BBC, LCC). Yellow Warbler: 18 Jun (2) RL (CPN, TDP); 22 Jun (2) Mud Island, MEM (CHB, DAD, JRW, MGW). Grasshopper Sparrow: 22 Jun (1) 1 mi SW of Rossville (LCC). White-throated Sparrow: 2 Jul (1) MEM (BBC, LCC).

Locations: CB — Crockett Bottoms, Obion Co.; FPSP — Fort Pillow State Park; HNWR — Hatchie National Wildlife Refuge; MEM — Memphis; PP — Phillipy Pits, Lake Co.; RL — Reelfoot Lake, Obion Co.; SFSP — Shelby Forest State Park.

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EASTERN RIDGE AND VALLEY REGION — A close watch during the period revealed several interesting observations. Ring-necked Ducks and Lesser Scaup were present at the Kingston Steam Plant in July. Good numbers of late moving White-rumped and Semipalmated Sandpipers were still traveling north at Kingston in early June. Nonbreeding Ring-billed Gulls were on Douglas Lake in June and July.

Encouraging news is continuing to be reported regarding the small nesting population of Osprey on Watts Bar Lake. This year a high total of six active nests were reported. Also, it is of interest that five Barn Owl sites are being monitored in the region.

It certainly seems reasonable to expect more, but only three reports were received regarding the conspicuous Red-headed Woodpecker. Do we have more that are not being reported, or are they really an uncommon nesting species? Nesting activity by a pair of Tree Swallows was observed on Douglas Lake. This is one species that is rapidly expanding its range southward and all suitable nesting habitat should be closely watched in the future.

In many sections of the country the Loggerhead Shrike seems to be disappearing as a nesting species. From the reports received, we seem to have the usual small scattered nesting pairs. Keeping in mind what is happening elsewhere, it is requested that all nesting activity be reported so that we can closely monitor our resident population for change.

Loon-Coot: Common Loon: 5 Jun (3) NRL (JCH). Pied-billed Grebe: 4 Jun (1) PHL (MD). Great Blue Heron: first bird present on NRL 23 Jun, then up to 3 since (JCH); 1-2 per day DOL (JAK). Green Heron: regular w/max 17 Jul (30) DOL (JAK). Little Blue Heron: 10-14 Jul (1-3) SAB (KHD, LHD); 17, 24 Jul (7) DOL (JAK). Great Egret: one regular SAB 3 Jun - 10 Jul, then up to 4 regular (KHD, LHD); 21 Jun - 31 Jul (1) AUS (RLK); 17-31 Jul (11-12) DOL (JAK); 11 Jul (7) French Broad R. KNC (MLD, PDH, HKM) — a high count for this area; 20 Jul (2) Cherokee Dam (WKJ); 24 Jul (2) DOL (WKJ). Black-crowned Night Heron: 10 Jul (1 adult) SAB (KHD, LHD). Yellow-crowned Night Heron: 4, 8 Jul (nest w/at least 1 young) Lesser Alcoa Marsh (Gregg N. Lagerberg). Blue-winged Teal: 12, 26 Jul (1) KSP (KHD, LHD). Ring-necked Duck: 12-31 Jul (2 female) KSP (KHD, LHD). Lesser Scaup: 12-31 Jul (1-3 males, 2 females) KSP (KHD, LHD). Sharp-shinned Hawk: 16 Jun (1) South KNC (ARH). Cooper's Hawk: 13 Jun (1)

WHP (JAK). Bald Eagle: 19 Jun (1 imm) Cherokee Lake (MLD, LJF); 7 Jul (1 ad) NRL (JCH); 27 Jul (1 imm) Chickamauga Lake (Greg Reed); 30 Jul (1 imm) Tellico Lake (WKJ). Osprey: 5 Jun (1) French Broad River, KNC (MLD, Chris Hamilton); 6 active nests on Watts Bar Lake — the highest number ever (WKJ, T. Ed Beddow). American Coot: 2 Jun, 12 Jul (1) KSP (KHD, LHD).

Sandpiper-Owls: Spotted Sandpiper: 19 Jul (1) KSP (KHD, LHD); 22 Jul (2) KSP (SJS); 26 Jul AUS (RLK). Solitary Sandpiper: 11 Jul (2) DOL (JAK); 22 Jul (1) KSP (SJS). Greater Yellowlegs: 17 Jul (2) DOL (JAK). Lesser Yellowlegs: 2 Jun (2) KSP (KHD, LHD); 10 Jul (2) KSP (MWA); 19 Jul (15) KSP (KHD, LHD); 22 Jul (1) KSP (SJS); 24 Jul (4) DOL (JAK). Pectoral Sandpiper: 22 Jul (1) KSP (SJS); 26 Jul (10) KSP (KHD, LHD); 24 Jul (3) DOL (JAK). White-rumped Sandpiper: 2-7 Jun (35-132) KSP (KHD, LHD). Least Sandpiper: 12 Jul (1) KSP (KHD, LHD); 17 Jul (4) DOL (JAK); 22 Jul (5) KSP (SJS). Stilt Sandpiper: 2 Jun (1) KSP (KHD, LHD); 22 Jul (1) KSP (MWA, SJS); 31 Jul (19) KSP (MWA). Semipalmated Sandpiper: 2-7 Jun (10-32) KSP (KHD, LHD); 12-26 Jul (5-40) KSP (KLD, LHD); 24 Jul (2) DOL (JAK). Western Sandpiper: 18-26 Jul (1-4) KSP (KHD, LHD, MWA, ARH, RDH). Sanderling: 30 Jul (1) KSP (MWA). Ring-billed Gull: 20 Jun - 31 Jul (up to 7) DOL (JAK); 2 Jul (1) KSP (MWA). Caspian Tern: 19 Jul (1) KSP (KHD, LHD); 24-25 Jul (3) DOL (JAK); 30 Jul (1) KSP (MWA). Black Tern: 20 Jun (1) DOL (JAK); 28 Jul (2) NRL (JCH). Barn Owl: 2 active nest sites WHP (JAK); at least 3 active nest sites in WGC (RLK *et al.*); one road kill Sullivan County, 20 Jun (GDE).

Woodpecker-Veery: Red-headed Woodpecker: only 1 nest found near JNB (4 young fledged) RLK *et al.*; present at 2 locations KNX (*vide* J. B. Owen). Willow Flycatcher: 2 nests near JNB and 2 nests AUS (RLK *et al.*); 1-19 Jun (1) SAB (KHD, LHD). Horned Lark: 12 Jun (1 fledgling) UT Plant Science Farm, KNC (Dean Brown, MLD); 2-4 regular KSP (KHD, LHD, SJS); 20+ first part of season on farm WHP (JAK). Tree Swallow: on 6 and 13 Jun 2 adults were observed going in and out of a willow tree snag on DOL; on 20 and 27 Jun they were still present, but successful nesting could never be ascertained (JAK). Cliff Swallow: 5 nests in a barn near JNB (RLK); 9 nests at 1-40 at Midtown exit, Roane County (MWA, ARH); 4 nests at Hwy 33 bridge over NRL, Union County (JBO) — first NRL nest record; during the season 20 were usual at the Walters Bridge (Hwy 25 over DOL) and 80-100 at Swann's Bridge over DOL (JAK). Purple Martin: the usual late season gathering areas along the Hiwassee River Area did not materialize this year (KHD, LHD). House Wren: on a quick 1¼ hour tour of Newport's residential area on 6 Jul JAK counted 16 singing birds. Veery: several singing birds noted at Frozen Head State Park, Morgan County (James M. Campbell, Betty Ried Campbell, Lou Fuller).

Shrike-Sparrow: Loggerhead Shrike: 23 Jun (active nest) JNB (RLK); observed at 2 locations in KNC and Rutledge during Jun (MLD, PDH, CPN); 19 Jun (2 adults w/4 young) East Brainerd, Chattanooga (Robin A. Rudd); 8 Jul (adult w/2 young) SAB (KHD, LHD). Prothonotary Warbler: 8 Jun one along the Watauga River (RLK); at least 3 singing early Jun near 1-40 bridge over Holston River, east of Knoxville (JAK). Northern Oriole: 6 Jun (1) Little Chucky Creek, GNC (HS); 13 Jun (pair gathering nesting material) Johnson Bible College, KNC, not seen on later visits (MLD, PDH). Rose-breasted Grosbeak: 22 Jun (1 female) Eastern State WMA, KNC (Beth Lacy). Blue Grosbeak: at least 6-8 singing birds WGC (RLK *et al.*). Dickcissel: none noted in usual WHP location, however, 3 were found in

GNC (JAK). House Finch: 13 Jun (1) Greeneville (HS); several observations of young birds in the Elizabethton-Johnson City Area, but no actual nests found this year (Lee R. Herndon Chapter, TOS). Grasshopper Sparrow: at least 7 singers on farm WHP, 4 locations in Blount County and everywhere else they have previously been seen or heard (JAK); 2-3 new locations Elizabethton-Johnson City Area this year (RLK, GDE, Richard Lewis).

Locations: AUS — Austin Springs; DOL — Douglas Lake; GNC — Greene Co.; JNB — Jonesboro; KNC — Knox Co.; KNX — Knoxville; KSP — Kingston Steam Plant; NRL — Norris Lake; PHL — Patrick Henry Lake; SAB — Savannah Bay; WGC — Washington Co.; WHP — White Pine.

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EASTERN MOUNTAIN REGION — Temperatures during the period were near normal. Rainfall was below normal until the last week of July, when 75 percent of the total rain for the period fell.

Few reports were received during this period. Are each of us doing our part in contributing personal sightings for inclusion in our state journal, *The Migrant*?

Probably the best find during the period was the second confirmed state nesting record of the Golden-crowned Kinglet, at Roan Mountain. Three birds that have recently declined in this area, the Willow Flycatcher, Blue Grosbeak and Grasshopper Sparrow, seemed to be more prominent this season than during the past three or four. The reason is yet unknown, but bears further investigation next year. Purple Martin populations made a slight comeback this season but are not yet back to normal levels.

Egret-Owl: Great Egret: 4-6 Jul (1-3) WatL (GDE). SNOWY EGRET: 1 Jun (1) WatR (GOW). Yellow-crowned Night Heron: 1 nest successful, ELI, same location as previous years, seen through end of period (GDE *et al.*). Wood Duck: good nesting reports, several broods in area. Bufflehead: 1 bird spent entire summer on WibL (RLK *et al.*). Sharp-shinned Hawk: 16 Jun (1) RM (MD); 15 Jul (1) RM (RAP). Cooper's Hawk: 27 Jun (1) ELI (GDE). Spotted Sandpiper: 23 Jul (1 early fall) RC (RLK). Ring-billed Gull: unusual summer sighting 26 Jun (1) WatL (GDE). Great Horned Owl: 2-3 active nest sites near SHL (RL *et al.*).

Flycatcher-Vireo: Willow Flycatcher: 7 Jun (1 singing male) SHV, 15 Jun (2 singing males) RM village, 18 Jun (2 singing males) CF, 25 Jun (2 singing males) Unicoi (RLK *et al.*). Alder Flycatcher: 15 Jun (1) RM, first sighting, 18-26 Jun (2-4 singing males) RM above 5000' elevation (RLK, RL). Purple Martin: last seen 20 Jul (2) ELI (HLF). Common Raven: regular on RM, IMG, Indian Gap, GSMNP and near Doe River Gorge. Black-capped Chickadee: 12 Jun (2) New-found Gap, GSMNP (ARH, RDH). Red-breasted Nuthatch: numerous all period on RM above 5000' elevation. GOLDEN-CROWNED KINGLET: 7 Jul (1 nest, 5 young fledged) RM (RLK) only second reported nest in state. Cedar Waxwing: good numbers all period. Warbling Vireo: 2 separate nesting birds near SHL (RL *et al.*).

Warbler-Sparrow: Swainson's Warbler: 31 Jul (1 singing) RMSP (DTC). Golden-winged Warbler: 2-3 regular RMSP (RLK *et al.*). Magnolia Warbler: 3

Jun (1 late) SV (GOW). Blackburnian Warbler: 10 Jul (1) Newfound Gap, GSMNP (KTOS). Prairie Warbler: 27 Jun (1 nest) WatL (GOW). Canada Warbler: 6 Jun (first spring sighting) IMG (HHD). Blue Grosbeak: 2-3 singing males near SHL (RL *et al.*). House Finch: young birds near SHL during period (RL *et al.*). PINE SISKIN: 12 June (6 apparently feeding young) Indian Gap, GSMNP (ARH, RDH). Grasshopper Sparrow: 5-6 singing males at new location near SHL (RL *et al.*). White-throated Sparrow: 18 Jul (1) ELI (HLF), thorough search next day and week could not relocate the bird, first ELI summer record.

Locations: CF — County Farm near Elizabethton; ELI — Elizabethton area; GSMNP — Great Smoky Mountains National Park; IMG — Iron Mountain Gap; RC — Roans Creek; RM — Roan Mountain; RMSP — Roan Mountain State Park; SHV — Shady Valley; SHL — South Holston Lake; SV — Siam Valley near Elizabethton; WatL — Watauga Lake; WatR — Watauga River; WibL — Wilbur Lake.

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MWA—Marc W. Armstrong
 CHB—Carolyn H. Bullock
 BBC—Ben B. Coffey, Jr.
 LCC—Lula C. Coffey
 DTC—Dot T. Crawford
 DAD—Dolly Ann Daily
 MLD—Marcia L. Davis
 MD—Martha Dillenbeck
 HHD—Helenhill Dove
 KHD—Kenneth H. Dubke
 LHD—Lillian H. Dubke
 GDE—Glen D. Eller
 HLF—Harry L. Farthing
 PDH—Paul D. Hartigan
 ARH—Audrey R. Hoff
 RDH—Ron D. Hoff
 JCH—Joseph C. Howell
 WKJ—Wesley K. James
 RLK—Richard L. Knight

JAK—J. Anthony Koella
 RL—Richard Lewis
 DM—Don Manning
 GM—Gina Manning
 HKM—H. Kenneth McLean
 CPN—Charles P. Nicholson
 WPP—William P. Peeples
 WRP—W. Robert Peeples
 RAP—Rick A. Phillips
 TDP—T. David Pitts
 WDR—W. Dean Rundle
 HS—Helen Spees
 SJS—Stephen J. Stedman
 JLS—John L. Stokes
 DV—Dave Vance
 MGW—Martha G. Waldron
 GOW—Gary O. Wallace
 JRW—Jeff R. Wilson
 KTOS—Knoxville Chapter TOS

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