THE BREEDING BIRDS OF REELFOOT LAKE, TENNESSEE

The Tennessee Ornithological Society’s 1984 Foray

T. David Pitts

The Tennessee Ornithological Society (TOS) held its 1984 foray at Reelfoot Lake on 12 May and 21-24 June. Additional observations were made during other parts of the nesting season. The primary objective of the foray was to determine breeding bird numbers and distribution, but neither foray date was at the peak of nesting activity. April weather was abnormally wet and cool, and early May was stormy with heavy rain and tornado strength winds in northwest Tennessee. Nesting and migration were delayed in several species; consequently, many of the 150 species recorded on 12 May were transients. Virtually all 87 species recorded 21-24 June could be considered nesting species. Some species had completed nesting and were relatively inconspicuous; this caused a lower count than an early June survey would have shown. The foray was restricted to Reelfoot Lake and the adjacent publicly owned lands: Reelfoot National Wildlife Refuge, Reelfoot Lake State Park, and the Reelfoot Wildlife Management Area. All of the foray area lies in the Mississippi River floodplain, with the west half in Lake County and the east half in Obion County. No data from the bluffs to the east of Reelfoot Lake or from the batture land west of the lake are included in this report.

On 12 May, 11 parties participated in the foray. Seven parties were in boats and 4 were on land; several of the boat parties spent time on land in remote parts of the lake. Each party was assigned a separate part of the foray area, resulting in little overlap of results. On 21 June, 2 parties (1 by boat and 1 by car) worked the foray area. On 22 June 1 boat party was in the area, and on 23-24 June 1 land party worked the area. Weather was excellent for all of the foray except for showers on 23 June.

A summary of the formation of Reelfoot Lake in 1811-1812 and the subsequent settlement of the area is given by Smith and Pitts (1982). The same report also presents a physical, chemical, and biological description of Reelfoot Lake. J.J. Audubon journeyed on the Mississippi River several times, but left no notes indicating he had visited the Reelfoot Lake area (Deaderick 1940). The first extensive ornithological records for the Reelfoot Lake area are apparently those of Pindar (1889, 1925) for the years 1884-1893 from Fulton Co., Kentucky, which is north of Reelfoot Lake and includes a small part of the Reelfoot Lake watershed and the north end of what is now the Reelfoot National Wildlife Refuge. A.F. Ganier began...
visiting Reelfoot Lake in 1911 and published many of his observations; his summary of the aquatic birds of Reelfoot Lake (1933) is especially valuable. Ben B. Coffey, Jr., and his wife Lula, began birding the Reelfoot Lake area in the 1920's and continue to do so; most of their observations remain unpublished. Wendell Whittmore spent the summer of 1936 at the Reelfoot Lake Biological Station; the summary of his notes (Whittmore 1937) provides a basis for detecting changes in bird populations during the past 50 years. Mengel in his *Birds of Kentucky* (1965) included many notes on Reelfoot Lake birds. Two Breeding Bird Survey routes border, in part, Reelfoot Lake; Christmas Bird Counts have been held at Reelfoot Lake since 1934; numerous TOS spring meetings and field trips have taken place at Reelfoot Lake; and, many individual visits to Reelfoot Lake have been reported. In spite of all of this documentation, the current status of many breeding, or potentially breeding, birds on Reelfoot Lake was not known. Relatively few reports in the last 25 years deal with areas of the lake accessible only by boat; most reports concern areas accessible by automobile.

**FORAY RESULTS**

Foray results are presented in the form of lists of the relative abundance of species found on 12 May and on 21-24 June, and an annotated list. Available evidence indicates those 93 species marked by asterisk nested at Reelfoot Lake in 1984.

**RELATIVE ABUNDANCE: 12 May**

The 150 species observed on 12 May are listed below in order of abundance.


RELATIVE ABUNDANCE: 21-24 June


ANNOTATED LIST

The following list consists of species seen during the foray and additional species that have nested or that may be expected to nest at Reelfoot.
Lake. The numbers following each species indicate the total individuals recorded on 12 May and 21-24 June, respectively.

1. Pied-billed Grebe 6/0; Whittemore (1937) found it to be a fairly common summer resident; no nesting season reports or evidence of nesting in recent years, although it may do so in small numbers.

2. Double-crested Cormorant 1/0; as many as 200 pairs formerly nested at Reelfoot (Ganier 1933); only one pair was present in 1963 (Gersbacher 1964); no evidence of nesting in recent years although the number of transients on Reelfoot is increasing.

3. Anhinga 0/0; Ganier (1933) estimated at least 50 pairs were present in 1932; the only confirmed nest in recent years was in 1977 (Pitts 1982b); Waldron (1984) reported on individual during the 1984 nesting season.

4. American Bittern 2/0; an unconfirmed report (Reelfoot NWR records) of calling and possible nesting near the Tennessee-Kentucky border in the summer of 1984.

5. Least Bittern* 8/17; the breeding population is much larger than indicated by the foray results (pers. obs); Mengel (1965) describes the breeding population at Reelfoot as the largest in the south; F.J. Alsop, III, found about 20 nests near boat trails while searching for nests of Red-winged Blackbirds in 1970 (pers. comm.).

6. Great Blue Heron* 217/100 (estimated); the colony on Little Ronaldson Slough (Pitts 1982b) is increasing in size; an aerial photo survey in March 1984 showed 250 active nests (Pullin 1984). The nesting population is apparently larger now than in the 1930's (Ganier 1933, Whittemore 1937) but much smaller than it was in the late 1950's and early 1960's (Gersbacher 1964).

7. Great Egret* 57/4; Whittemore (1937) described this as the most common and most conspicuous bird on the lake with at least 2,500 present during the nesting season. Gersbacher (1964) implies that the population was high in 1963, but she does not give a population estimate. About 15 pairs nested in the Little Ronaldson Slough Colony in 1984 (Pullin 1984).

8. Snowy Egret 1/0; not known to have nested at Reelfoot, although 1 was seen at the Little Ronaldson Slough Colony in 1981 (Pitts 1982b); formerly nested in a colony 13 km south of Reelfoot Lake (Ganier 1951).

9. Little Blue Heron 9/0; small numbers have nested on Reelfoot (Ganier 1951); usually present in small numbers during breeding season (pers. obs.) but no evidence of recent nesting; previously nested in a large colony south of Reelfoot Lake (Ganier 1951).

10. Cattle Egret 22/1; previously nested 32 km to the south of Reelfoot Lake at Dyersburg (Coffey 1964) but is not known to have nested at Reelfoot.

11. Green-backed Heron* 5/4; both Ganier (1933) and Whittemore (1937) considered this species to be a common summer resident on the lake, although they both noted its preference for timbered shorelines. Whittemore (1937) reported seeing as many as 30 a day. It is still common in the watershed and surrounding area. The low numbers of this conspicuous species seen on the foray were, to me, unexpected and are unexplained.

12. Black-crowned Night-Heron 0/0; Vaughn (1933) and Woodring
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(1934) reported 12 nests; Gersbacher (1964) reported only 1 nest and noted the decline. There are no recent nest records.

13. Yellow-crowned Night-Heron* 6/0; the summer population (presumed to nest) is much larger than indicated by the foray; 10-20 are regularly seen north of Champey’s Pocket (pers. obs.).

14. Black-bellied Whistling Duck 0/0; this species has apparently occurred and nested once at Reelfoot Lake (Pitts 1982a).

15. Canada Goose 2/0; the Giant Canada Goose (Branta canadensis maxima) formerly nested at Reelfoot (Hanson 1965), but by the time of Pindar (1886) the nesting population had apparently declined and eventually was extirpated.

16. Wood Duck* 151/110; although many use nest boxes, natural cavities are still commonly used for nesting at Reelfoot.

17. Mallard* 51/8; most of the nesting season records are of semi-domesticated individuals that are primarily found at the periphery of the lake, especially near boat docks and houses.

18. Blue-winged Teal 37/0; has nested in southern Illinois (Gore and Foss 1974) but there is no evidence of nesting at Reelfoot Lake.

19. Lesser Scaup 4.0; late migrant.

20. Hooded Merganser* 0/0; although not recorded on the foray, this species nests regularly, but in small numbers (Reelfoot NWR records); the nesting population is apparently much smaller than that of Hatchie NWR (Waldron 1982a).

21. Black Vulture* 9/2; a mid-summer visit to the Little Ronaldson Slough heron colony might have resulted in a significantly larger number, as this species is found in heron colonies (Spofford 1942).

22. Turkey Vulture* 31/27.

23. Osprey* 7/2; Ganier (1933) reported that 1 or 2 pairs were normally present during the summer; apparently nesting has occurred each year since then, although nest success has not been documented; in recent years 2-4 pairs have nested.

24. Mississippi Kite* 11/11; Pindar (1925) described it as a rare summer resident; Whittemore (1937) did not report it.

25. Bald Eagle 0/0; Ganier (1931) reported 3-4 nesting pairs; continued nesting, but in diminishing numbers, until the early 1960’s; nest building has been observed in late winter and early spring in several recent years; an active restoration project coordinated by the Tennessee Wildlife Resources Agency and effectively carried out by the Memphis Chapter of TOS may speed the recovery of the nesting population. Thirteen young eagles have been released (1981-1984) at a site near Little Ronaldson Slough.

26. Sharp-shinned Hawk 0/0; while it has not been recorded during the nesting season in recent years or by Whittemore (1937), it may have been a common nesting species earlier (Pindar 1925).

27. Cooper’s Hawk 0/0; a record of 1 on 18 June 1982 (Waldron 1982b) indicates it may nest, although not in the numbers of 1880-1890 when it was considered a common resident (Pindar 1925).
28. Red-shouldered Hawk* 17/10; based on the amount of courtship display (which takes place early in the year), I believe the nesting population is considerably larger than indicated by the foray results.

29. Broad-winged Hawk 0/0; it nests regularly, but in small numbers, in the Reelfoot Lake watershed; I can find no positive evidence of nesting in the foray area.

30. Red-tailed Hawk 1/0; commonly nests in the wooded farmland of the lake watershed, but rarely nests in the foray area.

31. American Kestrel 1/0; rarely nests in the foray area, but does so, in small numbers, in the watershed.

32. Peregrine Falcon 0/0; formerly nested in tall bald cypress trees (Spofford 1943) but, as elsewhere in eastern United States, was a victim of pesticides; last Reelfoot nest fledged young in 1947 (Hickey 1968).

33. Wild Turkey* 18/13; flocks are present in the Walnut Log area and on the Reelfoot Wildlife Management Area near Champey's Pocket.

34. Northern Bobwhite* 4/1; the low foray numbers reflect the lack of suitable habitat for this species on the foray area.

35. King Rail 1/0; Whittmore (1937) listed it as a fairly common summer resident; I suspect it to be more numerous than the foray results indicate; few, if any, foray participants deliberately searched for this species.

36. Virginia Rail 1/0; no evidence of nesting but habitat appears suitable and it has nested at several other sites in Tennessee (Alsop undated).

37. Sora 2/0; it is being overlooked as a nesting species?

38. Purple Gallinule* 0/7; most of the records, including a nest with eggs, were from the south end of Brewer's Bar; this is the same area where Ganier (1933) found a colony nesting in 1923 and subsequently. Details of the nest and observations will be reported separately.

39. Common Moorhen* 18/13; like the Purple Gallinule, most of the observations, including adults with young, were near the south end of Brewer's Bar.

40. American Coot* 99/3; Ganier (1933) described it as a common summer resident, at least on certain parts of the lake; apparently the breeding population has dropped sharply in recent decades.

41. Semipalmated Plover 7/0; migrant.

42. Killdeer* 15/5.

43. Greater Yellowlegs 14/0; migrant.

44. Lesser Yellowlegs 15/0; migrant.

45. Solitary Sandpiper 7/0; migrant.

46. Willet 1/0; migrant.

47. Spotted Sandpiper 5/0; may have previously nested but positive nest records are lacking (Pindar 1925; Ganier 1933) and Whittemore (1937) found it only as a migrant.

48. Semipalmated Sandpiper 11/0; migrant.

49. Least Sandpiper 13/0; migrant.
50. Baird’s Sandpiper 35/0; migrant.
51. Pectoral Sandpiper 10/0; migrant.
52. Dowitcher sp. 2/0; migrant.
53. American Woodcock 0/0; probably is an uncommon nesting species in the foray area as it is elsewhere across Tennessee (Pitts 1978).
54. Ring-billed Gull 2/0; migrant.
55. Caspian Tern 9/0; migrant.
56. Forster’s Tern 4/0; migrant.
57. Least Tern 0/0; while not recorded on the foray, it is frequently seen feeding in Reelfoot Lake, especially Lower Blue Basin, during and following the nesting season; the nearest known nest sites are the sandbars of the Mississippi River.
58. Rock Dove* 3/0.
59. Mourning Dove* 42/11.
60. Black-billed Cuckoo 2/0; has nested elsewhere in west Tennessee (Roever 1951) but does not nest regularly in the mid-south area. I am not aware of any Reelfoot Lake area nesting records.
61. Yellow-billed Cuckoo* 26/43; one of the latest nesting species to arrive, as indicated by the foray results.
62. Common Barn-Owl 0/0; this species formerly nested in Wood Duck nest boxes around the lake, but as elsewhere in Tennessee, the population has declined drastically. My last record was in 1974.
63. Eastern Screech-Owl* 0/2; also uncommon in much of the lake watershed.
64. Great Horned Owl* 0/1; Whittemore (1937) described it as a rare permanent resident, which is apparently still correct; elsewhere in river bottom woodlands (seemingly similar to Reelfoot Lake habitat) of northwest Tennessee, it is a common resident.
66. Common Nighthawk* 5/0; the low numbers may be due to the lack of suitable nest sites.
67. Chuck-will’s-widow 0/0.
68. Chimney Swift* 92/27; seen over all parts of the lake and suspected to use large hollow trees for nesting and roosting.
69. Ruby-throated Hummingbird* 38/14.
70. Belted Kingfisher* 6/2; the flood plain on which Reelfoot Lake is located provides few suitable nest sites; it is more numerous in the hills of the watershed.
71. Red-headed Woodpecker* 71/34.
72. Red-bellied Woodpecker* 96/43.
73. Downy Woodpecker* 42/10.
74. Hairy Woodpecker* 13/3.
75. Northern Flicker* 11/11.
76. Pileated Woodpecker* 50/8.
77. Eastern Wood Pewee* 81/49.
78. Acadian Flycatcher* 66/31.
79. Willow Flycatcher* 1/4; the status of this species in Tennessee has been recently reviewed (Pitts 1982c); while numerous breeding season records exist, no nests have been found at Reelfoot Lake or elsewhere in west Tennessee.
80. Least Flycatcher 3/0; migrant.
81. Eastern Phoebe* 7/4; records were scattered from north half of lake; apparently no records were near buildings.
82. Great Crested Flycatcher* 131/30.
83. Eastern Kingbird* 195/2; of the large wave of migrants seen on the first foray date, few remained to nest; Whittemore (1937) likewise rarely found it on the lake.
84. Horned Lark* 15/76; although the foray area was primarily restricted to Reelfoot Lake and the surrounding wooded areas, some cultivated fields were included, thus explaining the numbers of this species.
85. Purple Martin* 37/19; all apparently nest in artificial cavities on the periphery of the lake.
86. Tree Swallow* 44/7; the breeding population at Reelfoot is apparently continuing to increase; its breeding status in Tennessee has been recently reviewed (Nicholson and Pitts 1982); a nest with eggs was found by Don Manning on 12 May.
87. Northern Rough-winged Swallow* 13/16; while assumed to be nesting, I am not aware of nest records from the foray area.
88. Bank Swallow 0/0; although not seen on the lake during the foray, the species frequently nests in the sandy banks of the nearby Mississippi River.
89. Barn Swallow* 54/31.
90. Blue Jay* 40/3; probably present in larger numbers than the June count indicates.
91. American Crow* 96/47.
92. Fish Crow* 2/2; while occurring regularly, but in small numbers, in the Reelfoot area, I am not aware of positive nest records.
93. Carolina Chickadee* 134/35.
94. Tufted Titmouse* 20/11.
95. White-breasted Nuthatch* 20/11; the nesting population is apparently restricted to areas with mature timber stands.
96. Brown Creeper 0/0; foray participants were asked to search for this species; I am not aware of any nest records from Reelfoot Lake. It has nested in adjacent Dyer County (Criswell 1979) and in southern Illinois (George 1972).
97. Carolina Wren* 115/50.
98. House Wren 1/0; the nearby towns of Union City and Martin have
small, but regular, nesting populations; I am not aware of northwest Tennessee nest records outside of towns.

99. Sedge Wren 1/0;

100. Blue-gray Gnatcatcher* 191/55; abundant over the lake and in adjacent woodland.

101. Eastern Bluebird* 7/49; not found out in lake; records from farmland at periphery of lake.

102. Veery 2/0; migrant.

103. Gray-cheeked Thrush 40/0; migrant.

104. Swainson's Thrush 78/0; migrant.

105. Wood Thrush* 36/10.

106. American Robin* 12/11; records from lawns and urban areas.

107. Gray Catbird* 24/1.

108. Northern Mockingbird* 5/3; the foray results reflect the small number of human dwellings visited in the foray area.


110. Cedar Waxwing 109/0; no evidence of nesting; Pindar (1925) recorded it throughout the summer but found no nests.

111. Loggerhead Shrike* 2/0; still commonly found in the lake watershed.

112. European Starling* 500+/11; generally restricted to the periphery of the lake.

113. White-eyed Vireo* 92/42.

114. Yellow-throated Vireo* 9/0; nests in the watershed and probably also in the foray area.

115. Warbling Vireo* 7/11.

116. Philadelphia Vireo 2/0.

117. Red-eyed Vireo* 58/20; Whittemore (1937) found this to be the most abundant of the vireos at Reelfoot; as elsewhere, its numbers have declined at Reelfoot; loss of habitat may be partially, but apparently not entirely, responsible for the decline.

118. Golden-winged Warbler 1/0; migrant.

119. Tennessee Warbler 83/0; migrant.

120. Nashville Warbler 4/0; migrant.

121. Northern Parula* 47/35; unlike many of the warblers, the population remains high as in 1936 (Whittemore 1937).

122. Yellow Warbler* 11/8; territorial activity was observed, as in recent years, but no nests have been found at Reelfoot Lake; Pindar (1925) described it as a common nesting species in the 1880's. Nicholson (1982) reviewed west Tennessee records; it has recently nested near Memphis.

123. Chestnut-sided Warbler 9/0; migrant.

124. Magnolia Warbler 20/0; migrant.

125. Cape May Warbler 1/0; migrant.
126. Yellow-rumped Warbler 92/0; winter resident and abundant migrant.
127. Black-throated Green Warbler 1/0; migrant.
128. Blackburnian Warbler 2/0; migrant.
129. Yellow-throated Warbler* 18/18; although known to forage and nest in sycamore trees in the Mississippi Valley, at Reelfoot, where there are few sycamores, it is found in cypress trees even out over the lake as also noted by Whittemore (1937).
130. Palm Warbler 12/0; migrant.
131. Bay-breasted Warbler 20/0; migrant.
132. Blackpoll Warbler 232/0; the number for 12 May is conservative.
133. Cerulean Warbler* 13/5; Whittemore (1937) found it to be fairly common in some areas and equal in abundance to the Northern Parula; like many of the nesting warblers its numbers have declined in recent decades. Unoccupied, but seemingly suitable, habitat at Reelfoot supports the idea of problems during migration or on the wintering grounds.
134. Black-and-white Warbler 2/0; no evidence of nesting either recently or in the past (Whittemore 1937) although both Pindar and Whittemore (1937) considered it a rare summer resident.
135. American Redstart* 40/2; this species was considered by Whittemore (1937) to be a very common summer resident; the beginning of the population decline at Reelfoot is not well documented.
136. Prothonotary Warbler* 190/112; as in the past, this is an abundant nesting warbler at Reelfoot.
137. Worm-eating Warbler 1/0; migrant.
138. Swainson's Warbler* 8/2; while more numerous than the June count indicates, it is restricted to a few localities.
139. Ovenbird 3/0; Whittemore (1937) did not list it as a summer resident, but Pindar (1925) recorded it as a common summer resident.
140. Northern Waterthrush 4/0; migrant.
141. Louisiana Waterthrush* 4/0; uncommon, but regular, nesting species in the watershed; possibly present in larger numbers than indicated by the foray results.
142. Kentucky Warbler* 27/12.
143. Mourning Warbler 1/0; migrant.
144. Common Yellowthroat* 195/87.
145. Hooded Warbler* 6/0; Whittemore (1937) found it to be a common summer resident, a situation not now true.
146. Wilson's Warbler 4/0; migrant.
147. Canada Warbler 10/0; migrant.
148. Yellow-breasted Chat* 11/12; Whittemore (1937) found it to be much more common and widely distributed than foray results indicate.
149. Summer Tanager* 41/12.
150. Scarlet Tanager 2/0; not recorded by Whittemore (1937) as a nesting species.
152. Rose-breasted Grosbeak 34/0; migrant.
153. Blue Grosbeak* 1/1; not recorded by Whittemore (1937).
154. Indigo Bunting* 508/162.
155. Dickcissel* 82/25; Whittemore (1937) had only 2 summer records about the lake.
156. Rufous-sided Towhee* 5/1; although commonly found in the watershed, it is rarely found during the nesting season in the vicinity of the lake; Whittemore (1937) did not record it.
157. Chipping Sparrow* 0/3; restricted to lawns on the periphery of the lake.
158. Field Sparrow* 2/7.
159. Song Sparrow 0/0; has apparently nested recently in the Lake County (Waldron 1976), but the small and irregular number of nesting season records indicates it is not yet established as a nesting species.
160. Lincoln’s Sparrow 2/0; migrant.
161. White-throated Sparrow 4/0; migrant.
162. Bobolink 32/0; migrant.
163. Red-winged Blackbird* 956+/322; the most abundant nesting species on Reelfoot Lake.
165. Common Grackle* 217+/51; Whittemore (1937) noted that this species was outnumbered only by Red-winged Blackbirds.
166. Brown-headed Cowbird* 124/48; Pindar (1925) considered it to be rare until 1893.
167. Orchard Oriole* 11/8; Whittemore (1937) had only 9 summer records and considered it to be rare; Pindar (1925) described it as a rare summer resident.
168. Northern Oriole* 18/10; mostly associated with elms (many of which have now died) and cottonwoods, especially along the Mississippi River. Pindar (1925) recorded it as a common summer resident; Whittemore (1937) had no records of it.
169. House Finch 0/0; to my knowledge there are no records of this species, at any season, for the Reelfoot Lake area; this situation will likely change if the westward range expansion continues.
170. American Goldfinch* 13/9; also an uncommon nesting species in the watershed.
171. House Sparrow* 28+/85; limited to periphery of the lake where it occasionally uses natural cavities over water; not recorded by Pindar (1925) or Whittemore (1937).
DESIDERATA

The status of several nesting, or potentially nesting, species remains unclear. Information is especially needed on the following species: Pied-billed Grebe, Green-backed Heron, Yellow-crowned Night-Heron, Least Bittern, Red-shouldered Hawk, King Rail, Common Moorhen, Purple Gallinule, American Coot, Great Horned Owl, Eastern Kingbird, Willow Flycatcher, Fish Crow, and Yellow Warbler.

LIST OF PARTICIPANTS

Wendell Crews and his staff from the Reelfoot National Wildlife Refuge provided boats and guide service on 12 May; this assistance was a key factor in coverage of some relatively inaccessible areas and is gratefully acknowledged.

In addition to the staff from Reelfoot NWR, the following participated in the foray: Diane Bean, Ivon Beaver, Carolyn Bullock, Ben B. Coffey, Jr., Lula C. Coffey, Helen Dinkelspiel, Harold Elphingstone, Jim Ferguson, Paul Hamel, Susan Keeton, Don Manning, Mark Mayfield, Charles P. Nicholson, George Payne, David Pitts, Damien Simbeck, Arlo Smith, Noreen Smith, Mike Todd, Wallace Todd, Martha Waldron, and Jeff Wilson.

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