

Bulletin of the OKLAHOMA ORNITHOLOGICAL SOCIETY

Vol. 30

June/September 1997

Nos. 2-3

THE FIRST LISTING OF OKLAHOMA BIRDS

By John S. Tomer

As early as 1823, Titian Ramsey Peale and Thomas Say, members of Major Stephen H. Long's expedition to the Rocky Mountains, mentioned birds they had seen in Oklahoma (James 1823). Other early explorers of the region such as James W. Abert also made ornithological observations (Abert 1846). However, Dr. Samuel Washington Woodhouse was the first scientist who studied and listed the birds found in Oklahoma (Tomer 1974). To him belongs the distinction of having prepared the first listing of birds for the state.

Woodhouse, a Philadelphia medical doctor and ornithologist, came to Indian Territory in 1849 with an expedition of the United States Army Topographical Engineers to survey the boundaries of the Creek Indian lands that would later become a part of the state of Oklahoma (Tomer and Brodhead 1992). The survey party was led by Brevet Captain Lorenzo Sitgreaves. Woodhouse, who served as physician-naturalist, was instructed to observe, collect and to report on the natural history of the area.

The party arrived at Fort Gibson on 6 June 1849 and proceeded 40.2 km due north along the east boundary line of the Creek lands. At a point about 3.7 km south of present Chouteau in Mayes County, they turned west on 1 August to survey the northern boundary of the reservation (Fig 1).

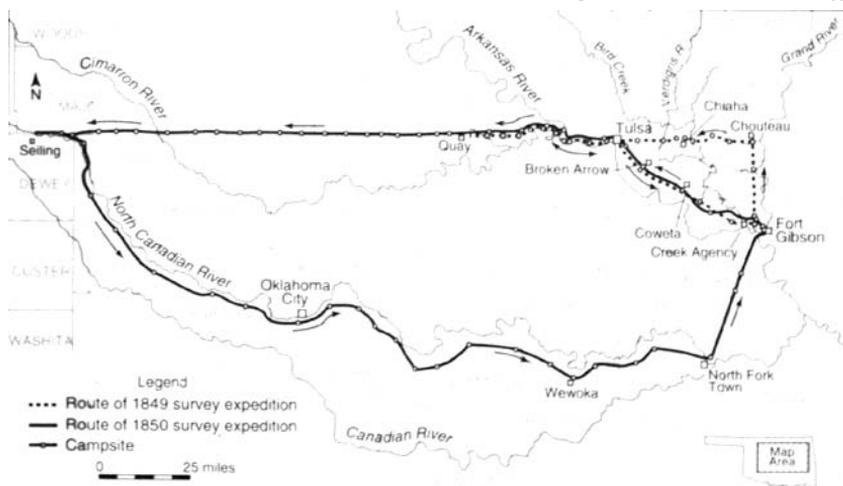


Fig. 1. Routes of the Creek Boundary Expeditions where S.W. Woodhouse studied Oklahoma birds in 1849 and 1850.

They crossed the Verdigris River, passed through the Creek towns of Chiaha and Tallassee (Tulsa), crossed the Arkansas River, and moved onto the prairies. The survey ended on 19 October at Bald Eagle Mound, a landmark 3.2 km west of the present town of Quay on today's Pawnee-Payne county line (Fig. 1). They had surveyed slightly more than 125.5 km along the northern boundary line of the Creek lands.

The expedition returned to Fort Gibson by retracing their path to Tallassee, where they turned southeast along the old Dawson Road. They followed the high land between the Verdigris and the Arkansas Rivers through the Creek town of Broken Arrow to Koweta Mission, and then to the Creek Agency, arriving at the fort on 1 November (Fig. 1).

After ending their field work for that year, the expedition left Fort Gibson on 5 November 1849. Woodhouse arrived at Philadelphia on 29 December. There, at the Academy of Natural Sciences of Philadelphia (ANSP), he curated his specimens and wrote his natural history report, dated 20 February 1850, for Sitgreaves' official account of the expedition (Sitgreaves and Woodruff 1858). Woodhouse's report apparently was allowed no proofing, and it contains many errors of construction and spelling.

The species list in Sitgreaves' account is the first Oklahoma bird list (Woodhouse 1858a). It contained all of the species that Woodhouse observed in Indian Territory, 6 June to 5 November, 1849 (Table 1). Woodhouse listed bird species by their scientific names, following closely the nomenclature of Audubon's *Birds of America*, octavo edition, 1840-1844, at that time the latest listing of North American birds (Coues 1903). Many of the scientific names used in 1849 are now considered synonyms of their present names, and the names currently accepted are shown on the list (Table 1).

Woodhouse's bird list contained 114 species names. Two of these were typographic errors and one was a subspecies of a species already listed, leaving a total of 111 species on the list (Table 1). The list reproduced here has been converted into current English nomenclature and follows the American Ornithologists' Union's (1983) check-list and supplements.

Several of these species are notable. The Passenger Pigeon (*Ectopistes migratorius*), Carolina Parakeet (*Conuropsis carolinensis*), and Ivory-billed Woodpecker (*Campephilus principalis*) became extinct in the United States after Woodhouse visited Oklahoma. The Swallow-tailed Kite (*Elanoides forficatus*) has been extirpated in Oklahoma, as well as other places in the Mississippi Valley, apparently by the spread of agriculture, logging, and the sport of shooting these beautiful birds by settlers (Meyer 1995). The Common Raven (*Corvus corax*) is no longer found nesting on the bluffs along the Verdigris River, apparently vanishing from this part of the state as it became more densely populated (Nice 1931).

Today the Brant (*Branta bernicla*) is a rare migrant in the state (Baumgartner and Baumgartner 1992). Woodhouse listed the species in his 1849 report, and in his 1853 report (Woodhouse 1853) he noted that it was "abundant in the large streams of the Indian Territory..." a statement considered to be mistaken by Margaret and Leonard Nice (1924) and not acknowledged by later students of Oklahoma bird life (Nice 1931, Sutton 1967, Baumgartner and Baumgartner 1992).

In September 1849 Woodhouse collected what he thought was a Peregrine Falcon (*Falco peregrinus*), apparently the only one that he saw in Oklahoma. The bird, however, was actually a Prairie Falcon (*F. mexicanus*), a species not described and named until 1850 by Herman Schlegel from a specimen taken in Mexico (Tomer and Brodhead 1992). The identification was corrected when the specimen was moved from the ANSP to the National Museum of Natural History (NMNH) in 1859 (Woodhouse 1849-1850b). This record is corrected on the list.

In the last few decades the Fish Crow (*Corvus ossifragus*) has expanded its range northward along the Arkansas and Red Rivers into Oklahoma (Baumgartner and Baumgartner 1992). The first modern Oklahoma record was in 1956. The young of the Common Crow (*C. brachyrhynchos*) can be misidentified as Fish Crows, so Woodhouse may have erred in reporting *C. ossifragus*. Sutton (1967) wrote that Woodhouse's records of Fish Crows in Indian Territory, New Mexico, and California are difficult to explain. Woodhouse's report of the Fish Crow has been questioned by most later students of Oklahoma birds.

Woodhouse listed the chickadee he saw in Oklahoma as the Black-capped Chickadee (*Parus atricapillus*), possibly because Audubon (1834) had described the Carolina Titmouse (Chickadee) (*P. carolinensis*) as occurring in only Louisiana, Florida, and other southeastern states. The identification of Woodhouse's chickadee as the Carolina is indicated on the corrected list (Table 1).

The normal range of the Boat-tailed Grackle (*Quiscalus major*) is along the Atlantic coast from New York and New Jersey southward, throughout peninsular Florida, and west along the Gulf Coast to southeastern Texas (American Ornithologists' Union 1983), and the species is not known to occur in Oklahoma. Woodhouse did not collect a specimen, and Sutton (1967) wrote that the "statement of Woodhouse ...that ... *Quiscalus major*...[was] 'abundant' in Indian Territory cannot be explained; no comment elsewhere in literature suggests the possibility that this conspicuous bird inhabited any part of Oklahoma before 1953 [sic.=1853]." The Boat-tailed Grackle has not been accepted as an Oklahoma bird on the basis of Woodhouse's report.

Sutton (1971) questioned the status of the Black-throated Blue Warbler (*Dendroica caerulescens*) that appears on Woodhouse's list. It was noted later by Woodhouse as being "common" in Indian Territory (1853),

but it is generally considered an unusual, rare migrant in Oklahoma (Sutton 1967, Baumgartner and Baumgartner 1992).

In 1850 Woodhouse returned to Indian Territory. The Survey that year was led by Lieutenant Israel Carle Woodruff. They arrived at Fort Gibson in early June and began the westward survey of the Creek lands boundary line on 23 July 1850. They surveyed slightly more than 235 km until they ended the survey on 5 September on the west bank of the North Canadian River northeast of Seiling in present Major County (Fig. 1). The party returned to Fort Gibson via the North Canadian River, passing through the present site of Oklahoma City and the Creek towns of Wewoca and North Fork Town (Fig. 1). They left Fort Gibson to return to the East on 13 October 1850.

During the 1850 survey Woodhouse reported an additional 49 bird species that were not mentioned in his 1849 bird list (Table 1). He included 45 of these species in an unpublished manuscript that summarized both the 1849 and 1850 Indian Territory natural history work (Woodhouse 1852b, Tomer 1974). Two more birds found in Oklahoma in 1850, the Sharp-shinned Hawk (*Accipiter striatus*) and the Yellow-rumped Warbler (*Dendroica coronata*), are mentioned in the report of his 1851 field work in Texas, New Mexico, Arizona and California (Woodhouse 1853). The Swainson's Thrush (*Catharus ustulatus*) was entered in the specimen catalog of the ANSP (Woodhouse 1949-50a), and the McCown's Longspur (*Calcarius mccownii*) was entered in the specimen catalog of the NMNH (Woodhouse 1849-50b). Both of these specimens were apparently collected in Indian Territory in 1850 but not mentioned in any of the Creek boundary reports.

There are two questionable birds (Table 1) mentioned among the additional species from 1850. The Red-cockaded Woodpecker (*Picoides borealis*) has been found only in the pine forests of the southeastern part of the state (Baumgartner and Baumgartner 1992). This area was not visited by Woodhouse in 1850. The Lewis' Woodpecker (*Melanerpes lewis*) is found only at the western end of the Oklahoma panhandle (Baumgartner and Baumgartner 1992), another area not visited by Woodhouse in 1850.

A perplexing specimen among Woodhouse's 1850 collection is ANSP 33244. Woodhouse wrote that he found only the Mississippi Kite (*Ictinia mississippiensis*); however, specimen 33244 was identified by James W. Parker as a Plumbeous Kite (*I. plumbea*) (Parker 1981). Both the Mississippi and Plumbeous kites were named *I. plumbea* at that time (Audubon 1840). This specimen has an ANSP tag which says that it was taken in Indian Territory at "Fort Gibson 1850" (see Tomer 1974). It is also listed in the ANSP catalog – which was remade in 1888 apparently by Witmer Stone – as simply, "*Ictinea plumbea*".

Two other tags on the kite specimen, in Spanish, indicate that it may not have been taken in Indian Territory (Parker 1981). In 1853 Woodhouse had joined an expedition to Honduras where he made a collection of birds that were brought to the ANSP in 1854 (Tomer and Brodhead 1992). Parker (1981) believed that the Plumbeous Kite speci-

men was one of these birds, mistakenly attributed to the Indian Territory collection during cataloging.

The most important bird that Woodhouse found in Indian Territory in 1850 was a dove that he collected on 6 September on the North Canadian River in present Blaine County. He later described it as a new species, *Ectopistes marginella* (Woodhouse 1852a). It is now considered a western subspecies of the Mourning Dove, *Zenaida macroura marginella* (Tomer 1974).

Many of Woodhouse's Oklahoma records were documented with specimens. He reported collecting 57 specimens of 27 species in 1849 (Woodhouse 1858a). About 90 Oklahoma specimens were entered in the ANSP catalog in 1888 and the NMNH catalog in 1859 (see Tomer 1974). About 52 of these specimens representing 28 species are present in the collections today.

In studying Woodhouse's ornithological work in Indian Territory, we conclude that he reported 108 species in 1849 and an additional 47 species in 1850 for a total of 155 indisputable species (Table 1). These do not include the questionable Brant, Fish Crow, Boat-tailed Grackle, Lewis' Woodpecker, Red-cockaded Woodpecker, and the doubtful Plumbeous Kite.

The next comprehensive bird studies were made in Oklahoma about 40 years later when Dr. Albert Heald Van Vleet, a professor of biology at the University of Oklahoma, made a collection of 169 species in 1898-1902 (Van Vleet 1902). Professor George W. Stevens at Northwest Normal School collected and observed Oklahoma birds in 1891-1914. His list of about 221 species from both Van Vleet's and his own studies were included in a list in the Annual Report of the State Game and Fish Warden (Stevens 1912). Woodhouse's bird list from about five or six months of work during two years agrees well with these later studies. His reports are our best evidence for what the bird life of Oklahoma was like in the days before European settlement. They adequately establish Samuel W. Woodhouse as the father of Oklahoma ornithology.

LITERATURE CITED

- Abert, J. W. 1846. Journal of Lieutenant J. W. Abert from Bent's Fort to St. Louis in 1845. 29th Cong., 1st sess., Sen. Doc. 438, Serial 477.
- American Ornithologists' Union. 1983. Check-list of North American birds, 6th edition. Am. Ornithol. Union, Lawrence, Kansas.
- Audubon, J. J. 1834. Ornithological biography. Vol. 2. Adam and Charles Black, Edinburgh.
- Audubon, J. J. 1840-44. The birds of America. Octavo ed., 7 vols. (Dover reproduction, New York, 1967).
- Baumgartner, F. M. and A. M. Baumgartner. 1992. Oklahoma bird life. Univ. Oklahoma Press, Norman.
- Coues, E. 1903. Key to North American birds. 5th ed. Dana Estes and

Company, Boston.

- James, E. 1823. Account of an expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819 and '20 ... under the command of Stephen H. Long. 2 vols. (Reprint, Univ. Microfilms, 1966).
- Meyer, K. D. 1995. Swallow-tailed Kite (*Elanoides forficatus*). In: The birds of North America, No. 138 (A. Poole and F. Gill, eds.). Acad. Nat. Sci., Philadelphia, and Am. Ornithol. Union, Washington, D.C.
- Nice, M. M. 1931. Birds of Oklahoma. Revised ed. *Publ. Okla. Biol. Sur.* 3:1-224.
- Nice, M. M. and L. B. Nice. 1924. Birds of Oklahoma. *Univ. Okla. Bull., New Ser.* 20, *Univ. Stud.* 286.
- Parker, J. W. 1981. Comments on Mississippi Kite specimens collected by S.W. Woodhouse in Indian Territory. *Bull. Okla. Ornithol. Soc.* 14:29-31.
- Sitgreaves, L. 1853. Report of an expedition down the Zuni and Colorado Rivers. 32nd Cong., 2nd sess., Sen. Exec. 53.
- Sitgreaves, L. and I. C. Woodruff. 1858. Northern and western boundary line of the Creek Country. 35th Congr., 1st sess., House Exec. Doc. 104, Serial 958.
- Stevens, G. W. 1912. Tentative list of birds of Oklahoma. In: Oklahoma State Game and Fish Warden. Field Forest and Stream in Oklahoma being the 1912 annual report of the State game and fish warden, John B. Doolin, to the Governor of the State of Oklahoma, the Honorable Lee Cruce [compiled by F. S. Barde], pp. 96-108. Co-operative Publ., Guthrie, Oklahoma.
- Sutton, G. M. 1967. Oklahoma birds. Univ. Oklahoma Press, Norman.
- Sutton, G. M. 1971. The Black-throated Blue Warbler in the southwestern United States. *Bull. Okla. Ornithol. Soc.* 4:11-15.
- Tomer, J. S. 1974. The ornithological work of S.W. Woodhouse in Indian Territory. *Bull. Okla. Ornithol. Soc.* 7:17-54.
- Tomer, J. S. and M.J. Brodhead, eds. 1992. A naturalist in Indian Territory: The journals of S.W. Woodhouse, 1849-50. Univ. Oklahoma Press, Norman.
- Van Vleet, A. H. 1902. Birds of Oklahoma. In: Territory of Oklahoma Department of Geology and Natural History. Second Biennial Report 1901-1902, pp. 101-166. State Capital Co., Guthrie, Oklahoma.
- Woodhouse, S. W. 1849-50a. Indian Territory specimen entries in Bird Specimen Catalog. Located in: Acad. Nat. Sci. Philadelphia, Dept. Ornithol., Philadelphia.
- Woodhouse, S. W. 1849-50b. Indian Territory specimen entries in Bird Specimen Catalog. Manuscript. Located in: Smithsonian Inst., Natl. Mus. Nat. Hist., Div. Birds, Washington, D.C.
- Woodhouse, S.W. 1852a. Description of a new species of *Ectopistes*. *Proc. Acad. Nat. Sci. Philad.* 6:104-105.
- Woodhouse, S.W. 1852b. Report on the natural history of the country occupied by the Creek Indians ... 1849 and ... 1850. Manuscript.

Located in: Smithsonian Inst. Natl. Anthropol. Arch., File 3243, Washington, D.C.

Woodhouse, S.W. 1853. Report on the natural history ... birds. In: Sitgreaves, L., Report of an expedition down the Zuni and Colorado Rivers, pp. 58-105. 32nd Cong., 2nd sess., Sen. Exec. Doc. 59, Ser. 668.

Woodhouse, S.W. 1858a. [Natural history report of 1849]. In: Sitgreaves, L., and I. C. Woodruff, Northern and western boundary line of the Creek Country, pp. 5-15. 35th Cong., 1st sess., House Exec. Doc. 104, Ser. 958.

Woodhouse, S.W. 1858b. [Natural history report of 1850]. In: Sitgreaves, L. and I. C. Woodruff, Northern and western boundary line of the Creek Country, pp. 25-28. 35th Cong., 1st sess., House Exec. Doc. 104, Ser. 958.

5911 EAST 46TH STREET, TULSA, OKLAHOMA 74135. Accepted 26 April 1997.

Table 1. Bird species found in Indian Territory by S.W. Woodhouse in 1849 and 1850.

1849	17. Red-tailed Hawk (<i>Buteo jamaicensis</i>)	33. Black-billed Cuckoo (<i>Coccyzus erythrophthalmus</i>)
1. Pied-billed Grebe (<i>Podilymbus podiceps</i>)	18. American Kestrel (<i>Falco sparverius</i>)	34. Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)
2. American White Pelican (<i>Pelecanus erythrorhynchos</i>)	19. Prairie Falcon (identified by Woodhouse as Peregrine Falcon) (<i>Falco mexicanus</i>)	35. Eastern Screech Owl (<i>Otus asio</i>)
3. Great Blue Heron (<i>Ardea herodias</i>)	20. Greater Prairie Chicken (<i>Tympanuchus cupido</i>)	36. Barred Owl (<i>Strix varia</i>)
4. Great Egret (<i>Ardea alba</i>)	21. Wild Turkey (<i>Meleagris gallopavo</i>)	37. Common Nighthawk (<i>Chordeiles minor</i>)
5. Green Heron (<i>Butorides virescens</i>)	22. Northern Bobwhite (<i>Colinus virginianus</i>)	38. Chuck-will's-widow (<i>Caprimulgus carolinensis</i>)
6. [Brant] (<i>Branta bernicla</i>)	23. Sora (<i>Porzana carolina</i>)	39. Whip-poor-will (<i>Caprimulgus vociferus</i>)
7. Canada Goose (<i>Branta canadensis</i>)	24. American Coot (<i>Fulica americana</i>)	40. Ruby-throated Hummingbird (<i>Archilochus colubris</i>)
8. Wood Duck (<i>Aix sponsa</i>)	25. Killdeer (<i>Charadrius vociferus</i>)	41. Belted Kingfisher (<i>Ceryle alcyon</i>)
9. Mallard (<i>Anas platyrhynchos</i>)	26. Greater Yellowlegs (<i>Tringa melanoleuca</i>)	42. Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>)
10. Black Vulture (<i>Coragyps atratus</i>)	27. Pectoral Sandpiper (<i>Calidris melanotos</i>)	43. Red-bellied Woodpecker (<i>Melanerpes carolinus</i>)
11. Turkey Vulture (<i>Cathartes aura</i>)	28. American Woodcock (<i>Scolopax minor</i>)	44. Downy Woodpecker (<i>Picoides pubescens</i>)
12. Swallow-tailed Kite (<i>Elanoides forficatus</i>)	29. Bonaparte's Gull (<i>Larus philadelphia</i>)	45. Hairy Woodpecker (<i>Picoides villosus</i>)
13. Mississippi Kite (<i>Ictinia mississippiensis</i>)	30. Mourning Dove (<i>Zenaida macroura</i>)	46. Northern Flicker (<i>Colaptes auratus</i>)
14. Bald Eagle (<i>Haliaeetus leucocephalus</i>)	31. Passenger Pigeon (<i>Ectopistes migratorius</i>)	47. Pileated Woodpecker (<i>Dryocopus pileatus</i>)
15. Northern Harrier (<i>Circus cyaneus</i>)	32. Carolina Parakeet (<i>Camuropsis carolinensis</i>)	48. Ivory-billed Woodpecker (<i>Campephilus principalis</i>)
16. Red-shouldered Hawk (<i>Buteo lineatus</i>)		

49. Eastern Wood-Pewee
(*Contopus virens*)
50. Acadian Flycatcher
(*Empidonax virens*)
51. Willow Flycatcher
(*Empidonax traillii*)
52. Eastern Phoebe
(*Sayornis phoebe*)
53. Great Crested Flycatcher
(*Myiarchus crinitus*)
54. Eastern Kingbird
(*Tyrannus tyrannus*)
55. Scissor-tailed Flycatcher
(*Tyrannus forficatus*)
56. Purple Martin
(*Progne subis*)
57. Tree Swallow
(*Tachycineta bicolor*)
58. Cliff Swallow
(*Hirundo pyrrhonota*)
59. Blue Jay
(*Cyanocitta cristata*)
60. American Crow
(*Corvus brachyrhynchos*)
61. [Fish Crow]
(*Corvus ossifragus*)
62. Common Raven
(*Corvus corax*)
63. Carolina Chickadee
(identified by Woodhouse
as Black-capped Chickadee)
(*Parus carolinensis*)
64. Tufted Titmouse
(*Parus bicolor*)
65. White-breasted Nuthatch
(*Sitta carolinensis*)
66. Carolina Wren
(*Thryothorus ludovicianus*)
67. Blue-gray Gnatcatcher
(*Poliophtila caerulea*)
68. Eastern Bluebird
(*Sialia sialis*)
69. Hermit Thrush
(*Catharus guttatus*)
70. Wood Thrush
(*Hylocichla mustelina*)
71. American Robin
(*Turdus migratorius*)
72. Northern Mockingbird
(*Mimus polyglottus*)
73. Brown Thrasher
(*Toxostoma rufum*)
74. American Pipit
(*Anthus rubescens*)
75. Cedar Waxwing
(*Bombicilla cedrorum*)
76. Loggerhead Shrike
(*Lanius ludovicianus*)
77. White-eyed Vireo
(*Vireo griseus*)
78. Red-eyed Vireo
(*Vireo olivaceus*)
79. Blue-winged Warbler
(*Vermivora pinus*)
80. Northern Parula
(*Parula americana*)
81. Yellow Warbler
(*Dendroica petechia*)
82. Black-throated Blue Warbler
(*Dendroica caerulescens*)
83. Black-throated Green
Warbler
(*Dendroica virens*)
84. Blackpoll Warbler
(*Dendroica striata*)
85. Cerulean Warbler
(*Dendroica cerulea*)
86. Black-and-white Warbler
(*Mniotilta varia*)
87. Prothonotary Warbler
(*Protonotaria citrea*)
88. Northern Waterthrush
(*Seiurus noveboracensis*)
89. Kentucky Warbler
(*Oporornis formosus*)
90. Common Yellowthroat
(*Geothlypis trichas*)
91. Hooded Warbler
(*Wilsonia citrina*)
92. Yellow-breasted Chat
(*Icteria virens*)
93. Summer Tanager
(*Piranga rubra*)
94. Northern Cardinal
(*Cardinalis cardinalis*)
95. Blue Grosbeak
(*Guiraca caerulea*)
96. Indigo Bunting
(*Passerina cyanea*)
97. Dickcissel
(*Spiza americana*)
98. Eastern Towhee
(*Pipilo erythrophthalmus*)
99. Spotted Towhee
(*Pipilo maculatus*)
100. Lark Sparrow
(*Chondestes grammacus*)
101. Grasshopper Sparrow
(*Ammodramus
savannarum*)
102. White-throated Sparrow
(*Zonotrichia albicollis*)
103. White-crowned Sparrow
(*Zonotrichia leucophrys*)
104. Eastern Meadowlark
(*Sturnella magna*)
105. Rusty Blackbird
(*Euphagus carolinus*)
106. [Boat-tailed Grackle]
(*Quiscalus major*)
107. Common Grackle
(*Quiscalus quiscula*)
108. Brown-headed Cowbird
(*Molothrus ater*)
109. Orchard Oriole
(*Icterus spurius*)
110. Baltimore Oriole
(*Icterus galbula*)
111. American Goldfinch
(*Carduelis tristis*)
- 1850**
112. Snowy Egret
(*Egretta thula*)
113. Green-winged Teal
(*Anas crecca*)
114. Blue-winged Teal
(*Anas discors*)
115. Northern Shoveler
(*Anas clypeata*)
116. Gadwall
(*Anas strepera*)
117. American Wigeon
(*Anas americana*)
118. [Plumbeous Kite]
(*Ictinia plumbea*)
119. Sharp-shinned Hawk
(*Accipiter striatus*)
120. Merlin
(*Falco columbarius*)
121. American Avocet
(*Recurvirostra americana*)
122. Lesser Yellowlegs
(*Tringa flavipes*)
123. Upland Sandpiper
(*Bartramia longicauda*)
124. Long-billed Curlew
(*Numenius americanus*)
125. Least Sandpiper
(*Calidris minutilla*)
126. White-rumped Sandpiper
(*Calidris fuscicollis*)
127. Great Horned Owl
(*Bubo virginianus*)
128. Burrowing Owl
(*Speotyto cuculularia*)
129. Chimney Swift
(*Chaetura pelagica*)
130. [Lewis' Woodpecker]
(*Melanerpes lewis*)
131. [Red-cockaded
Woodpecker]
(*Picoides borealis*)
132. Horned Lark
(*Eremophila alpestris*)
133. Bank Swallow
(*Riparia riparia*)
134. Barn Swallow
(*Hirundo rustica*)
135. Brown Creeper
(*Certhia americana*)
136. Bewick's Wren
(*Thryomanes bewickii*)
137. House Wren
(*Troglodytes aedon*)
138. Golden-crowned Kinglet
(*Regulus satrapa*)
139. Ruby-crowned Kinglet
(*Regulus calendula*)
140. Swainson's Thrush
(*Catharus ustulatus*)

141. Yellow-throated Vireo (<i>Vireo flavifrons</i>)	149. Clay-colored Sparrow (<i>Spizella pallida</i>)	Longspur (<i>Calcarius ornatus</i>)
142. Warbling Vireo (<i>Vireo gilvus</i>)	150. Vesper Sparrow (<i>Pooecetes gramineus</i>)	157. Bobolink (<i>Dolichonyx oryzivorus</i>)
143. Yellow-rumped Warbler (<i>Dendroica coronata</i>)	151. Savannah Sparrow (<i>Passerculus sandwichensis</i>)	158. Red-winged Blackbird (<i>Agelaius phoeniceus</i>)
144. Pine Warbler (<i>Dendroica pinus</i>)	152. Fox Sparrow (<i>Passerella iliaca</i>)	159. Western Meadowlark (<i>Sturnella neglecta</i>)
145. American Redstart (<i>Setophaga ruticilla</i>)	153. Lincoln's Sparrow (<i>Melospiza lincolni</i>)	160. Yellow-headed Blackbird (<i>Xanthocephalus xanthocephalus</i>)
146. Wilson's Warbler (<i>Wilsonia pusilla</i>)	154. Dark-eyed Junco (<i>Junco hyemalis</i>)	161. Purple Finch (<i>Carpodacus purpureus</i>)
147. Scarlet Tanager (<i>Piranga olivacea</i>)	155. McCown's Longspur (<i>Calcarius mccownii</i>)	
148. Chipping Sparrow (<i>Spizella passerina</i>)	156. Chestnut-collared	

Note: Questionable or doubtful species are shown in brackets.

GENERAL NOTE

Breeding records of Tree Swallows at Grand Lake, Oklahoma. - At Grand Lake, Delaware County, Oklahoma, on 17 June 1994, we observed two adult Tree Swallows (*Tachycineta bicolor*) landing on the ends of iron pipes. These pipes appeared to be an abandoned dock or jetty, and the ends of the pipes were open. They were located on the lakefront of private property, about 4 km north and 1 km west of the intersection of Cherokee St. and O'Daniel Parkway in the city of Grove. At normal lake levels, these pipes are at the edge of the water; however, in June 1994 they were surrounded by water. On 20 June 1994, we returned and again observed two adult Tree Swallows. After the second visit we suspected that these birds were not migrants, but possibly nesting.

On 24 June 1994 we visited the site and observed four adult Tree Swallows. We approached close enough to look into the pipes and discovered two nests. One nest was empty; the other held a single nestling. We returned on 26 June with Rollin Bland, who photographed the swallows at that time. The photographs were forwarded to the Oklahoma Bird Records Committee, and these records were accepted (Grzybowski, J.A. 1995, *Scissortail* 45:35-36).

In late November 1994, we placed two bluebird nesting boxes within 10-15 m of the pipes to attract Tree Swallows and/or Eastern Bluebirds (*Sialia sialis*). On 14 May 1995, we saw several Tree Swallows near the pipes and nesting boxes. On 27 May we observed one Tree Swallow on a box and another peering from the hole of the box. Late that day we examined the box and found a neat nest made of grasses, totally lined with feathers, and containing two eggs. The second box was empty. On 2 June the nest in the first box held four eggs, and the other box had a House Sparrow (*Passer domesticus*) nest, which we removed. We found both boxes infested with ants on 11 June. The Tree Swallow nest had five

eggs. We placed a small amount of axle grease on the poles to discourage the ants. We saw no Tree Swallows in the area at the time.

On 17 June 1995 we saw no mature Tree Swallows in the area. We checked the boxes and found no ants. The nest had six eggs. As we were closing the box, a feather blew from the nest. A Tree Swallow flew overhead, caught the feather in midair, and returned it to the box. On 24 June one swallow flew from the box as we approached. There were still six eggs in the nest. A check on 3 July revealed three eggs had hatched. Our visits on 8 July and 14 July seemed to disturb the swallows, so we did not open the box. The nest box was empty on 23 July. Examination of the nest indicated a successful fledging of Tree Swallows. There were two eggs remaining and a large quantity of pin feather scales. The nest was flattened and contained some fecal material. No Tree Swallows nested in 1996, and none was reported in the general area that year.

There are no previous records of Tree Swallows for the Grand Lake area in the summer (V.F. Seibert, pers. comm.). Sutton (1967, Oklahoma birds, Univ. Oklahoma Press, Norman) states that the Tree Swallow is an uncommon migrant with the nearest known nesting in Colorado and in the northeastern corner of Kansas. The Baumgartners (1992, Oklahoma bird life, Univ. Oklahoma Press, Norman) report that Tree Swallow occurrence at Lake Eucha, Delaware County is "very rare." They also indicate that a few nesting records exist for the state in recent years, and that ones for Oologah Reservoir in Nowata County and at the Sequoyah National Wildlife Refuge on the eastern border of the state suggest a southward extension of the species' breeding range. In Arkansas, the Tree Swallow is a "rare and irregular summer resident" (James, D.A. and J.C. Neal, 1986, Arkansas birds, Univ. Arkansas Press, Fayetteville). James and Neal summarize five confirmed instances of nesting in Arkansas and mention that there are several other summer records. The Tree Swallow is listed as common transient and a rare to locally uncommon summer resident in Missouri (Robbins, M.B. and D.A. Easterla, 1992, Birds of Missouri, Univ. Missouri Press, Columbia). Robbins and Easterla indicate that these swallows are rare to uncommon breeders statewide and are most numerous in areas of dead trees standing in water. In Kansas, the Tree Swallow is a common transient and rare, local summer resident in the eastern part of the state (Thompson, M.C. and C. Ely, 1992, Birds in Kansas, Vol. 2., Univ. Kansas Museum Natural History, Lawrence). The early Kansas nesting records are limited to major rivers in the northeastern part of the state, but the recent flooding of standing timber during the building of large reservoirs has allowed an increase in both numbers and extent of breeding range (Thompson and Ely 1992). Tree Swallows are also now using bluebird boxes in Kansas, and our observations at Grand Lake suggest that the same trend may be starting for northeastern Oklahoma.

We thank Richard Svoboda who graciously allowed us access to his property, and Patricia Seibert who assisted with the organization of the material for the manuscript. — Margaret P. Long and Chester I. Long, 60701 E. 265th Pl., Rt. 1, Box 798-1, Grove, Oklahoma 74344. Accepted 28 April 1997.

INSTRUCTIONS TO CONTRIBUTORS

The *Bulletin of the Oklahoma Ornithological Society* publishes original papers dealing with the birds of Oklahoma and adjacent counties of bordering states. The *Bulletin* seeks especially articles dealing with the statuses of species within the state, summaries and syntheses of major bird banding programs, invasions or extirpations, documented population changes, the history of Oklahoma ornithology, identification of confusing species or plumages, unusual occurrence records, and local studies of avian behavior or ecology. Submission of high-quality photographs and original artwork that illustrate unusual records or ornithological events is also encouraged. Two types of articles are published: Regular Articles, which are longer papers reporting multiple observations or syntheses of existing information, and General Notes, which report single events. The Editor will assist contributors in classifying manuscripts into these categories.

Manuscripts should be submitted to the Editor in triplicate, typed double-spaced with letter-quality printing and a font size of 12 point. Use high-quality bond paper with at least 3 cm margins and no hyphenation at the end of lines. Measurements are metric (e.g., kilometers rather than miles). Dates are done in European style (24 July 1997) and for time use a 24-hour clock without a colon (e.g., 2130). Numbers less than 10 are spelled out, except for measurements (e.g., 2.0 cm). Common names of birds are capitalized; the scientific name for each species is provided parenthetically at first mention.

Regular Articles should generally follow a standardized format, beginning with an Introduction, followed by Methods, Results, Discussion, Acknowledgments, and Literature Cited. The Introduction should state the aims of the paper and place it within the existing knowledge of the topic; readers should be told why the subject is interesting and worthy of reading about. Methods should provide enough information to allow evaluation and replication of the research. The Results should concisely state the findings and not duplicate information that is presented in tables or figures. The Discussion should begin with a statement that summarizes the main results, and this section should develop the significance of the research to Oklahoma ornithology and bird study more generally. Some speculation is allowed, but the Discussion should, for the most part, follow logically from the Results. Only literature that is

mentioned goes into Literature Cited, and citations within the text and Literature Cited should be carefully checked to make sure they match. The format of Literature Cited follows that of recent issues. Notes have no sections or internal headings. In Notes, literature citations should be done parenthetically within the text at first mention (e.g., Lish, J.W., 1997, *Bull. Okla. Ornithol. Soc.* 30:1-6); thereafter, only the author and year are used (e.g., Lish 1997). Use of tables and figures is encouraged; tables and figure legends should also be typed double-spaced throughout. Figures should be submitted as letter-quality line drawings or original photographs. Black-and-white glossy prints are preferred, but color prints can at times be accommodated.

Manuscripts will be reviewed by at least two outside reviewers in addition to the Editor. In some cases, a member of the Editorial Board may be designated as a Special Editor to work with an author on a particular manuscript. When revision is required, authors will be asked to return their revised manuscript promptly. Minor editorial changes to manuscripts will be shown to authors for their approval before publication, and in some cases authors will be asked to proofread page proofs prior to publication. The Editor welcomes inquiries about proposed manuscripts, and he and the Editorial Board will be happy to assist authors who may be inexperienced at scientific writing.

THE BULLETIN, the official organ of the Oklahoma Ornithological Society, is published quarterly in March, June, September, and December, at Norman, Oklahoma. Subscription is by membership in the OOS: \$5 student, \$10 regular, \$15 family, \$15 or more sustaining, per year. Life membership \$200. Treasurer, Marty Kamp, 6422 Indianapolis PL., Tulsa, OK 74136. Editor, Charles R. Brown, Department of Biological Sciences, University of Tulsa, 600 S. College Ave., Tulsa, OK. 74104-3189; Editorial Board, Mary Bomberger Brown, Vicki Byre, Jeff Cox, Joseph Grzybowski, James Hoffman, Douglas Mock, Gary Schnell, and John Tomer. Questions regarding subscription, replacement copies, back issues or payment of dues should be directed to: William A. Carter, OOS Membership/Circulation chairman, P.O. Box 65, Ada, Oklahoma 74821-0065. ISSN 0474-0750