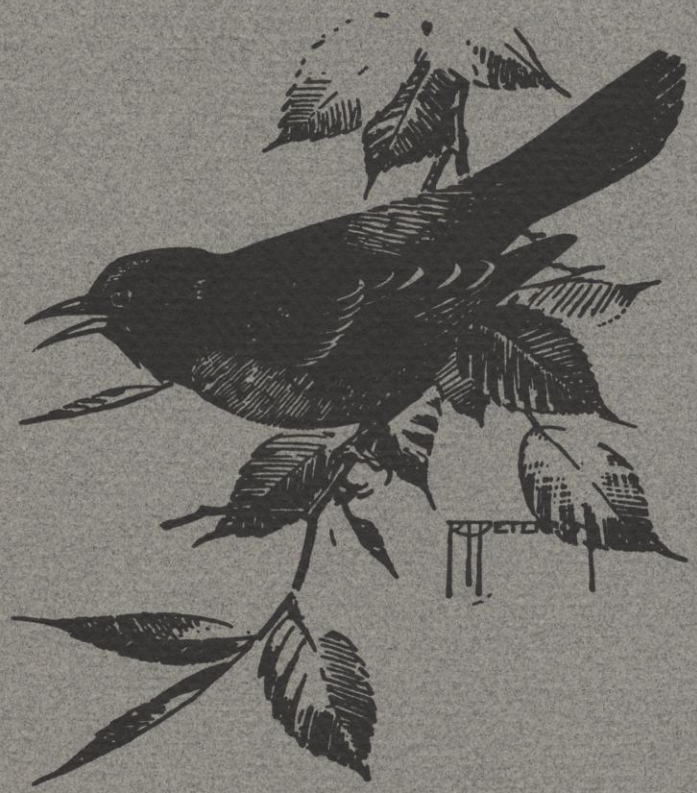
THE ORIOLE

A Quarterly Journal of Georgia Ornithology; Official Organ of the Georgia Ornithological Society



Vol. 49 DECEMBER 1984 No. 4

THE ORIOLE

(ISSN 0030-5553)

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Regular.....$12.00	Library.....$10.00	Patron .....$ 50.00
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Publication Date, February 1986

GEORGIA ORNITHOLOGICAL SOCIETY
Founded December 13, 1936

THE ORIOLE

Vol. 49 DECEMBER 1984 No. 4

OBSERVATIONS ON THE MCKINNEY'S POND HERONRY COMPLEX

Robert L. Humphries

In 1948 the author, together with Wildred T. Neill, first visited the McKinney's Pond heronry in Emanuel County, Georgia. This heronry and others in the near vicinity have been reported on by several authors in the *Oriole* (Neill, 1949; Odum and Humphries, 1954; Denton, 1958; Johnston, 1959; Dopson and Hopkins, 1967; Shanholtzer, *et al.*, 1970). In the 36 years since 1948 the author has visited this complex of heronries once or more in 24 years for a total of 43 visits. Absence from Georgia did not allow visits in the other years.

On almost all these visits an attempt was made to census the nesting populations. Actual nest counts were made in a few years early on but in most cases estimates were made by actual counts in small areas and projecting total numbers for occupied areas. USDA aerial photography was used to facilitate the projections.

Utilization of these areas, species composition, and population sizes have varied widely over this time. Also, the author is not aware of any other observations of colonial wading birds in Georgia covering such a span. Thus, reporting on these observations seems of value.

Locations and descriptions of the area are contained in Odum and Humphries (1954) and Shanholtzer, *et al.*, (1970) and need not be repeated here. One major change has occurred since these descriptions. The property has come into the ownership of the Union Camp Corporation. In 1979-82, the entire upland area was clear-cut, ditched, and planted to pine. Clearing extended into the edges of the limesink ponds containing the heronries. Seeing the ditching beginning, the author contacted Union Camp and informed them of the presence of the heronries. Union Camp was whole-heartedly cooperative in not extending the ditches into the ponds and draining them. Many thanks are due to Mr. Jim Piette and Mr. Gene Santoro of Union Camp for this cooperation.

Dopson and Hopkins (1967) reported a second heronry they called the New McKinney's Pond Rookery as distinguished from the Old McKinney's Pond Rookery. Their location was not precise, but from conversations with Dopson I take it to be a pond 0.6 km SSE of the Old Rookery. The author was not able to locate this heronry until 1975. This same year the author discovered yet a third pond in use 1 km ENE of the Old McKinney's Pond Rookery. This has been named the Ibis Pond Heronry because of the large White Ibis (*Edocimus albus*) population present. Aerial photography and ob-

servation reveal at least five other similar ponds within 1.5 km of the original heronry which may be utilized at times but the author has never seen them occupied when occasional checks have been made.

Because of the nature of the observations, a chronological listing has seemed the best way to offer them. To conserve space, abbreviations of species names are used, thusly: Little Blue Herons (*Egretta caerulea*) = LBH; Great Egrets (*Casmerodius albus*) = GE; Cattle Egrets (*Bubulcus ibis*) = CE; White Ibis = WI; Anhinga (*Anhinga anhinga*) = Ang. Other species of incidental occurrences will be listed. Also, two to ten Green-backed Herons (*Butorides striatus*) were observed on almost every visit but no attempt was made to census or locate nests.

1948 - 31 July. Herons all fledged, nests count could not be made. Present were: Ang., 40 adults, 5 nests with 3 young each; LBH, 14 adult, 11 immature; GE, 52; Wood Storks (*Mycteria americana*), 3; WI, one adult, 100 immature.

1948 - 7 August. Ang., 22, 5 nests; Great Blue Heron (*Ardea herodias*) 3; LBH, 14 adult; 11 immature, one pied, blue and white; GE, 48; Wood Stork, 11; WI, one adult, 45 immature. Neill (1949) records breeding by LBH here in the white plumage on 18 June 1948. Most individuals present in July were in the blue plumage but there was no way to determine parent birds. Strangely, Neill does not mention the Great Egrets which must have been breeding at the time of his visit. In many subsequent visits the author has never seen white LBH except those obviously young-of-the-year. Hopkins (1971) addresses the problem of breeding in the white or pied plumage.

1949 - 17 April. Ang., 12 nests with eggs; Great Blue Heron, 4; LBH, 109 nests, all with eggs; GE, 74 nests, 66 with hatchlings, eight with eggs. This is an early date for extensive nesting. Denton (1958) records counts here on 22 May 1949 indicating an increased population. On 11 July 1949 no wading birds were present in the rookery, again an early date.

1950 - 18 March. GE, 6 nests. No other birds.

1950 - 22 April. Ang., one nest; LBH, 48 nests. At this time a small sawmill was located adjacent to the pond. A subsequent visit on 10 June revealed no herons or Anhingas present. The water level was extremely low. Either the disturbance of the sawmill or the low water level may have caused abandonment.

1951 - 27 May. Ang., 2 nests with young; LBH, 141 nests, 45 with eggs, 4 with hatchlings, 92 undetermined; GE, 44 nests, 4 with eggs, 40 with hatchlings. (Odum and Humphries, 1954).

1951 - 16 July. Both LBH and GE with young. No counts made. Seven immature WI present.

1952 - 13 April and 17 May. Ang., LBH, and GE nesting, no counts made. In May some few LBH still incubating eggs, all others with hatchlings.

1953 - 15 May. Ang., 3 nests; LBH, 90 nests; GE, 239 nests. (Odum and Humphries, 1954).

1954 - 1 May. Ang., 2 nests; LBH, 2 nests; GE, 10 nests.

1954 - 9 July. My notes read: "Pond almost dry, no nesting. Great Blue Herons, Little Blue Herons, and Wood Storks present in small numbers. One adult and one immature White Ibis."

1956 - 14 July. Ang., 4 nests; LBH, one nest; GE, 6 nests. One Wood Stork present.

1958 - 19 April. Ang., one nest; LBH, none; GE, 45 nests. Denton (1958) records a visit on 11 May and it appears that LBH had not begun nesting on 19 April and that some GE had completed nesting by 11 May. This is consistent with the temporal pattern of nesting of these species at this site.

1969 - 30 April. Ang., 2 nests; LBH, 12 nests; GE, 8 nests. WI present, not nesting.

1969 - 5 July. Ang., 5 nests; LBH, 45 nests; CE, 400 nests; GE, none. Shanholtzer, *et al.* (1970) records counts for 6, 21 June and 8 July 1969. Their data are not comparable with those herein since they grouped both the rookery ponds ("Old" and "New"). Those herein include only the "Old McKinney's Pond Rookery." However, the results are consistent.

1970 - 2 May. GE, one nest. Nothing else.

1970 - 25 July. No nesting. No birds present.

1971 - 8 May. LBH, 110 nests; GE, 31 nests.

1972 - 6 May. Ang., 10 nests; LBH, 15 nests; CE, 505 nests; GE, none; WI, 35 adults present, no nests.

1973 - 18 May. Ang., 2 nests. GE, one present, no nests.

1975 - 10 May. This is the first year the present author found the "New" rookery as well as the previously unreported "Ibis Pond" rookery. Each will be listed separately. *Old Rookery.* No wading birds present. *Ibis Pond.* Ang., 10 nests; LBH, 21 nests; CE, 115 nests; WI, c5,000 nests. Present but nests not identified were two Black-crowned Night Herons (*Nycticorax nycticorax*) and one Least Bittern (*Ixobrychus exilis*). This huge congregation of White Ibis was a most striking sight. The numbers flying in and out of the pond were, indeed, the means of first locating it. The number is large but is believed to be reasonable. The nests in ten typical trees were counted and an extrapolation made based on trees and area occupied. *New Rookery.* LBH, 18 nests; CE, 320 nests; GE, one nest; WI, 156 nests.

1975 - 18 July. *Old Rookery.* No birds present. *Ibis Pond.* Ang., 10 near-flying immatures, no nests evident; LBH, 80-100 near-flying young moving about, no nests evident; CE, 121 nests with hatchlings; GE, 2 nests; Yellow-crowned Night Heron (*Nycticorax violaceus*), one immature present; WI, an estimated 10,000 young from three weeks old to fledged present, very few adults. *New Rookery.* Ang., 6 immature; no heron nests identifiable. About 50 immature LBH and 400 immature CE flying about but not leaving pond. No WI seen.

1976 - 1 May. *Old Rookery.* No birds present. *Ibis Pond.* LBH, one immature, no nest; CE, 9 adults, no nests; GE, one nest, one adult; WI, 5 adult and 3 immature, no nests. *New Rookery.* Ang., 6 adults, no nests; CE, one adult and nest; GE, 2 adults and nests; WI, 12 adults, no nests. At sundown, over 100 CE were observed flying into the New Rookery. No other 1976 visit was made and these observations may indicate a later season this year.

1977 - 8 May. *Old Rookery.* No birds. *Ibis Pond.* No birds. *New Rookery.* Ang., one nest with 7-10 day young; LBH, 30 nests, 22 with eggs, 8 with 1-2 day hatchlings.

1978 - 13 May. *Old Rookery.* No birds. *Ibis Pond.* Ang., one adult; LBH, 45 nests; CE, c1,000 nests with eggs; WI, c1,750 nests with eggs, extrapolated from sample counts. *New Rookery.* No birds.

1979 - 5 May. *Old Rookery.* LBH, 3 nests with eggs. *Ibis Pond.* WI, 3 nests with eggs. *New Rookery.* Ang., 4 adults, no nests located; LBH, 18 nests with eggs; CE, c1,000 nests with eggs; WI, c1,000 nests with eggs. Estimates of New Rookery populations are less precise because of more dense vegetation. It should also be noted that preceding this season, in the winter of 1978-9, the entire area surrounding all three ponds was clear-cut of all timber.

1979 - 28 July. *Old Rookery.* No birds. *Ibis Pond.* No birds. *New Rookery.* Ang., 8 adults, no nests located; LBH, 20 immature flying about, no nests identified; CE, c1,000 nests, most with young, a very few with eggs; WI, c1,000 nests with older young.

1980 - 10 May. *Old Rookery.* Ang., 2 adults present; Yellow-crowned Night Heron, one nest with eggs; WI, one nest with eggs. *Ibis Pond.* No birds. *New Rookery.* Ang., 8 nests with eggs; LBH, 8 nests with eggs; CE, 300 nests, one with hatchlings, remainder with eggs; GE, one adult present; WI, 12 adults, no nests.

1980 - 5 July. *Old Rookery.* Yellow-crowned Night Heron, one nest with 4 young. *Ibis Pond.* Three immature Yellow-crowned Night Herons feeding. *New Rookery.* Ang., 5 nests with advanced young; LBH, 2 adult, 200 immature flying about, no nests; CE, 100 nests with young; WI, one adult, no nests.

1981 - 2 May. *Old Rookery.* Ang., 6 nests with eggs; LBH, 20 adults, 3 nests; CE, 750 nests, about half with eggs, other half still building; WI, flock of about 75 flying about, no nests. A Mississippi Kite (*Ictinia mississippiensis*) was observed overhead. *Ibis Pond.* No birds. *New Rookery.* LBH, 20 adults, nest building just beginning. Just prior to this date, the area surrounding all three ponds had been bulldozed in preparation for tree planting. This site preparation extended to the margins of the ponds.

1981 - 3 July. *Old Rookery.* Ang., 15 nests with advanced young; LBH, 25 nests with young, 15 immatures flying about; CE, between 1,000-1,500 nests with both hatchlings and advanced young; WI, one nest with eggs. *Ibis Pond.* No birds. *New Rookery.* Dry, no birds.

1982 - 1 May. *Old Rookery.* Ang., 28 adults, no nests located; LBH, 50 adults, no nests located; CE, 1,200 nesting pairs, nest building going on, 20 per cent with 1,2,3, or 4 eggs, some few incubating; GE, one adult. *Ibis Pond.* No birds. *New Rookery.* No birds. At sundown numbers (>100) of CE and WI flying into Old Rookery. Also a few (<50) LBH and GE.

1982 - 16 May. Two Snowy Egrets (*Egretta thula*) feeding in a flooded pine plantation between the Old Rookery and Ibis Pond. These are the only Snowies the present author has seen in the area although Johnston (1959) recorded them from the Old Rookery. The ponds were not entered on this visit.

1982 - 11 July. *Old Rookery.* Ang., 10 nests, young nearly fledged; LBH, 7 adults, 11 flying immatures; CE, c5,000 nests, eggs to all stages of young, hatchlings to almost fledged; GE, none; WI, 200 nests, young to half-grown. *Ibis Pond.* No birds. *New Rookery.* No birds.

1983 - 16 April. *Old Rookery.* Ang., 5 adults, nests not located. No other birds. *New Rookery* and *Ibis Pond.* No birds.

1983 - 8 May. *Old Rookery.* Ang., one adult. WI, one adult. No other birds here or at the other two sites.

1983 - 26 June. *Old Rookery.* Ang., 8 nests with young; LBH, one nest; CE, c2,000 nests, eggs and young. *Ibis Pond.* No birds. *New Rookery.* LBH, one nest with eggs.

1984 - 28 April. *Old Rookery.* Ang., one adult. *Ibis Pond.* One King Rail (*Rallus elegans*). *New Rookery.* Ang., 2 adults; LBH, 18 nests with eggs; CE, about 100 adults present, nest building, none with eggs located; WI, about 100 adults flying about, no nests.

1984 - 6 May. *Old Rookery.* Ang., 2 adults, one nest. *Ibis Pond.* No birds. *New Rookery.* Ang., one, no nest located; LBH, 30 nests, all with eggs only; CE, 300 nests, some with eggs, some still being built; GE, one adult, no nest located; WI, 2 adults, one nest.

1984 - 6 July. *Old Rookery.* Ang., 2 nests. *Ibis Pond.* No birds. *New Rookery.* Ang., one adult, no nest located; LBH, 25 nests; CE, c2,000 nests; WI, 60 nests.

DISCUSSION

My primary purpose in this paper is to simply record the data and not to reach conclusions. Some discussion seems appropriate, however. In the years 1973 and 1976 the absence of birds may not indicate no nesting those years. In both cases only early visits were made, possibly before intensive nesting occurred. Shanholtzer, *et al.* (1970) addresses the temporal spacing of nesting at these sites. He refers to two distinct nesting periods during 1969 but presents no data earlier than 6 June, stating that only Great Egrets and Anhingas nested in the Old Rookery in late April and early May. On 30 April 1969 there were 12 nests of Little Blue Herons there. Use of the term period does not seem appropriate. Rather, there appears to be a progression of nesting beginning with Great Egrets and Anhingas, followed by Little Blue Herons (occasionally almost as early as the Great Egrets), then the Cattle Egrets and White Ibis. The season appears to begin as early as mid-March but more often in mid-April. The progression appears to shift concurrently with some suggestion of a temporal contraction between the various species in the later seasons. As Shanholtzer (*op. cit.*) suggests it is important to make more than one observation to accurately determine the extent of nesting in this complex of heronries. Ideally, monthly observations from early April through July should give a complete picture.

There is a wide fluctuation in numbers between years. Shanholtzer *et al.* (1970) touches upon this. In the case of the White Ibis, the fluctuations may be related to water levels in their feeding areas in the nearby Ogeechee River swamps. In the years in which White Ibis were absent, the river was abnormally low in spring and early summer.

The use of the three ponds since 1975 (the time of personal observation) presents a shifting pattern for which the present author has no explanation. In the nine-year period the Old Rookery was used for nesting by herons and

ibis in only five years, the Ibis Pond only in four years, and the New Rookery only in eight years. Only in 1975 did extensive nesting take place in two of the ponds, the New Rookery and Ibis Pond, and in 1976 essentially no nesting occurred. The reasons for these shifts are not at all clear. Water levels in the three ponds vary but at the time of arrival of the birds the levels are generally high. The Old Rookery has never been totally dry, the Ibis Pond is often quite low in the June-August period, and the New Rookery has only been dry once in the nine years. Both the Old Rookery and New Rookery have a direct opening into the limestone aquifer near the surface. The Ibis Pond, as far as is known, does not.

In the years when only Little Blue Herons and Great Egrets nested in the Old Rookery there was a segregation of nesting sites with each species utilizing separate areas of the pond. The White Ibis, first seen nesting in 1967, did not follow this pattern, having nests among the areas of the other two. Similarly, the Cattle Egrets nested with all the other species.

Some comments about the relative abundance of the various species appear in order. The Great Egret, before 1967 was present in fairly large numbers, as many as 325 breeding pairs. Since 1967 Great Egrets declined to essentially zero. This change is coincident with the arrival of the Cattle Egret. It is beyond the scope of this paper to speculate on the population dynamics of these two species but at this site a correlation seems obvious. Little Blue Herons have shown a pattern similar to that of the Great Egret but the decline has not been nearly so severe. Cattle Egrets, since their appearance in this site in 1967 (Dopson and Hopkins, 1967), have increased to a large breeding population, even larger than the totals of the two species present before their arrival. In the few years where few or no Cattle Egrets were found it is probably because of the early sampling date, before nesting of Cattle Egrets had begun. White Ibis present an interesting pattern. Apparently White Ibis appeared in this area as a breeding bird sometime between 1958 and 1967. Since 1967, only in eight years have White Ibis nested here, in three of those years in huge numbers. Yet, in more years, ten, no nesting has occurred. The records of White Ibis in the years before 1967 were all after mid-July and probably represent the post-fledging wanderings northward of White Ibis. Similarly, the Wood Stork records in the early years all occurred after mid-July and probably were Florida birds.

It is tempting to draw other conclusions but with the paucity of data they would largely be speculation. Hopefully, some future student can use these conveniently located heronries for more intensive studies.

ACKNOWLEDGEMENTS

The author owes much to many who have assisted in these observations. W. J. Hatcher of Augusta has assisted on over half the visits. Milton Hopkins, Jr. and E. P. Odum have assisted in counts and with expertise. Albert Tate was of great help when large populations were present. J. J. and Perry Kennedy, owners of McKinney's Pond and former owners of the rookery ponds have been helpful and allowed exploration of their property.

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THE J. FRED DENTON BIRD STUDY SKIN COLLECTION

Emil K. Urban

The J. Fred Denton bird study skin collection, housed in the Department of Biology, Augusta College, includes 264 specimens and 130 species obtained in Georgia and South Carolina by Dr. Denton from 1944 to 1975. Donated to Augusta College by Dr. Denton in October 1977, the collection is kept in a Lane bird cabinet whose purchase was made possible by a grant from the Augusta-Aiken Audubon Society in memory of Dr. Denton who died in 1978. Although Augusta College students in ornithology and vertebrate zoology make regular use of the collection, it is available to any serious student of birds.

Well known to all interested in Georgia ornithology, Dr. Denton's contributions to ornithology reached their zenith with the publication of the *Annotated Checklist of Georgia Birds*, prepared by the Checklist Committee which he chaired (Denton, J. F., Baker, W. W., Davenport, L. B., Hopkins, M. N., and Robbins, C. S., 1977, Occ. Pub. No. 6, Georgia Ornithological Society). His contributions to the study of the birds of the state were acknowledged when he was awarded the Earle R. Greene Memorial Award in 1977 by the Georgia Ornithological Society, of which he was a Charter member.

Born in Americus in 1914, Denton started watching birds in Macon when he was 12, and began collecting birds in 1939. Early in his career he spent much time with Thomas D. Burleigh (author of *Georgia Birds*, 1958, Oklahoma Press, Norman) in many areas of the state including north Georgia and, for six weeks, in Newfoundland. From very early on Denton was keen to document the distribution and breeding of the birds of Georgia, particularly adding to the knowledge of Georgia mountain warblers and their population dynamics. Most of his publications on the birds of the state appear in *The Oriole.* (For a partial list of his publications in ornithology and in parasitology, his other professional activity, and obituary, see M. N. Hopkins, 1979, In Memorium: James Frederick Denton, *The Oriole* 44: 1-6; for an announcement of the deposition of his ornithological papers at the Museum of Natural History, University of Georgia, see H. B. Howe, 1981, *The Oriole* 46: 19).

Of the 264 specimens in the Denton collection, 237 were obtained from Georgia in Burke, Richmond (Augusta), Columbia (Appling), McDuffie, Jenkins, Emanuel, Chatham (Savannah, Hutchinson), Glynn (Sea Island), Bibb (Macon), Sumter (Americus), Cobb (Marietta), Union (Suches), White (Tray Mountain), and Echols (Statenville) counties. Fourteen were obtained in South Carolina in Camden (Blackville), Charleston (Edisto Beach) and Aiken (Aiken, Kathwood and North Augusta) counties. Thirteen specimens have no localities. Most specimens were collected in the late 1940's and 1950's although some were collected as early as 1944 and as late as 1975.

The collection includes 39 nonpasserine and 91 passerine species (see Table 1 for a summary). Included in Table 2 are scientific and English names, numbers of species and sex. Table 2 follows the classification, sequence and common English names of the American Ornithologists' Union, 1983, *Checklist of North American Birds*, 6th edition, Allen Press, Lawrence, Kansas. The

Table 1. – Number of species by family/subfamily in J. Fred Denton Bird Study Skin Collection.

Nonpasserine		*Passerine*	
Grebes	1	Flycatchers	6
Ducks	3	Larks	1
Hawks	3	Swallows	1
Falcons	1	Corvids	2
Rails	5	Nuthatches	1
Plovers	1	Creepers	1
Sandpipers, phalaropes and allies	11	Wrens	5
		Kinglets	1
		Thrushes	6
Gulls	1	Mockingbirds, thrashers and allies	3
Terns	2		
Doves	1	Pipits	1
Barn-owls	1	Waxwings	1
Owls	2	Shrikes	1
Caprimulgids	1	Starlings	1
Kingfishers	1	Vireos	4
Woodpeckers	5	Wood-warblers	30
		Tanagers	2
Total	39	Cardinals, grosbeaks and allies	3
		Emberizines	12
		Icterids	6
		Fringilline and cardueline finches	2
		Old World sparrows	1
		Total	91

reader should assume that all specimens are in adult plumage unless immature plumage is specifically designated. Further details on this collection can be obtained by writing Chairman, Department of Biology, Augusta College, Augusta, Georgia 30910.

Department of Biology, Augusta College, Augusta, Georgia 30910.

Table 2. – Species summary of the J. Fred Denton Bird Study Skin Collection.

Species	Scientific Name	Number of Specimens	Age and Sex
Pied-billed Grebe	*Podilymbus podiceps*	1	sex?
Fulvous Whistling-Duck	*Dendrocygna bicolor*	2	sex?, one of wing only
Wood Duck	*Aix sponsa*	2	M and F, wings only
Ring-necked Duck	*Aythya collaris*	2	M and F
Sharp-shinned Hawk	*Accipiter striatus*	1	imm F
Cooper's Hawk	*Accipiter cooperii*	2	M and imm F
Red-tailed Hawk	*Buteo jamaicensis*	1	sex?

American Kestrel	*Falco sparverius*	1	M
Black Rail	*Laterallus jamaicensis*	1	imm F(?)
Clapper Rail	*Rallus longirostris*	1	sex?
Virginia Rail	*Rallus limicola*	1	sex?
Sora	*Porzana carolina*	1	sex?
Common Moorhen	*Gallinula chloropus*	1	F
Killdeer	*Charadrius vociferus*	1	M
Willet	*Catoptrophorus semipalmatus*	1	M
Sanderling	*Calidris alba*	1	M
Semipalmated Sandpiper	*Calidris pusilla*	1	M
Western Sandpiper	*Calidris mauri*	1	F
Least Sandpiper	*Calidris minutilla*	2	M
White-rumped Sandpiper	*Calidris fuscicollis*	3	1 M and 2 F
Pectoral Sandpiper	*Calidris melanotos*	1	M
Stilt Sandpiper	*Calidris himantopus*	1	F
Short-billed Dowitcher	*Limnodromus griseus*	1	M
Common Snipe	*Gallinago gallinago*	1	sex?
American Woodcock	*Scolopax minor*	2	M and F
Laughing Gull	*Larus atricilla*	1	F
Forster's Tern	*Sterna forsteri*	1	imm M
Black Tern	*Chlidonias niger*	1	M
Common Ground-Dove	*Columbina passerina*	1	M(?)
Common Barn-Owl	*Tyto alba*	1	M
Barred Owl	*Strix varia*	1	M
Long-eared Owl	*Asio otus*	1	sex?
Chuck-will's-widow	*Caprimulgus carolinensis*	1	M
Belted Kingfisher	*Ceryle alcyon*	1	F
Red-headed Woodpecker	*Melanerpes erythrocephalus*	2	imm F
Yellow-bellied Sapsucker	*Sphyapicus varius*	2	1 M and sex?
Hairy Woodpecker	*Picoides villosus*	1	F
Red-cockaded Woodpecker	*Picoides borealis*	1	M
Northern Flicker	*Colaptes auratus*	1	F
Eastern Wood-Pewee	*Contopus virens*	1	F
Acadian Flycatcher	*Empidonax virescens*	1	M
Least Flycatcher	*Empidonax minimus*	1	M(?)
Eastern Phoebe	*Sayornis phoebe*	2	F
Great Crested Flycatcher	*Myiarchus crinitus*	1	M
Eastern Kingbird	*Tyrannus tyrannus*	3	2 M and 1 F
Horned Lark	*Eremophila alpestris*	4	F
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	1	imm M
Blue Jay	*Cyanocitta cristata*	1	M
American Crow	*Corvus brachyrhynchos*	1	M
Red-breasted Nuthatch	*Sitta canadensis*	1	F
Brown Creeper	*Certhia americana*	1	F
Carolina Wren	*Thryothorus ludovicianus*	2	1 M and 1 F
Bewick's Wren	*Thryomanes bewickii*	1	F
House Wren	*Troglodytes aedon*	1	M
Winter Wren	*Troglodytes troglodytes*	2	M
Marsh Wren	*Cistothorus palustris*	1	M
Golden-crowned Kinglet	*Regulus satrapa*	1	sex?
Eastern Bluebird	*Sialis sialis*	1	F
Veery	*Catharus fuscescens*	3	1 M, 1 F, sex(?)
Gray-cheeked Thrush	*Catharus minimus*	1	sex(?)
Hermit Thrush	*Catharus guttatus*	4	3 M and 1 F
Wood Thrush	*Hylocichla mustelina*	4	2 M and 2 F
American Robin	*Turdus migratorius*	4	3 M and 1 F
Gray Catbird	*Dumetella carolinensis*	2	M and F
Northern Mockingbird	*Mimus polyglottos*	1	M

Brown Thrasher	*Toxostoma rufum*	4	1 M and 3 F
Sprague's Pipit	*Anthus spragueii*	2	F
Cedar Waxwing	*Bombycilla cedrorum*	1	sex(?)
Loggerhead Shrike	*Lanius ludovicianus*	4	1 M, 2 F, 1 sex(?)
European Starling	*Sturnus vulgaris*	1	F
White-eyed Vireo	*Vireo griseus*	4	2 M, 1 F, 1 sex(?)
Solitary Viro Vireo	*Vireo solitarius*	2	M
Yellow-throated Vireo	*Vireo flavifrons*	1	F
Red-eyed Vireo	*Vireo olivaceus*	3	2 M and 1 sex(?)
Blue-winged Warbler	*Vermivora pinus*	1	M
Golden-winged Warbler	*Vermivora chrysoptera*	2	M
Orange-crowned Warbler	*Vermivora celata*	5	4 M and 1 F
Northern Parula	*Parula americana*	5	3 M, 1 imm M, 1 F
Yellow Warbler	*Dendroica petechia*	1	F
Chestnut-sided Warbler	*Dendroica pensylvanica*	1	sex ?
Cape May Warbler	*Dendroica tigrina*	1	M
Black-throated Blue Warbler	*Dendroica caerulescens*	2	1 M, 1 imm F
Yellow-rumped Warbler	*Dendroica coronata*	3	1 M, 1 F, 1 sex(?)
Blackburnian Warbler	*Dendroica fusca*	1	imm F
Yellow-throated Warbler	*Dendroica dominica*	5	4 M and 1 F
Pine Warbler	*Dendroica pinus*	3	2 M and 1 imm F
Prairie Warbler	*Dendroica discolor*	1	M
Palm Warbler	*Dendroica palmarum*	2	1 F and 1 sex(?)
Bay-breasted Warbler	*Dendroica castanea*	1	M
Blackpoll Warbler q	*Dendroica striata*	3	1 M and 2 F
Cerulean Warbler	*Dendroica cerulea*	2	1 imm F and imm sex(?)
Black and White Warbler	*Mniotilta varia*	1	sex(?)
American Redstart	*Setophaga ruticilla*	4	3 M and 1 F
Prothonotary Warbler	*Protonotaria citrea*	2	1 M and imm sex(?)
Worm-eating Warbler	*Helmitheros vermivorus*	1	M
Swainson's Warbler	*Limnothlypis swainsonii*	5	2 M, 1 F, 1 imm F, 1 sex(?)
Ovenbird	*Seiurus aurocapillus*	1	F
Northern Waterthrush	*Seiurus noveboracensis*	2	1 M and 1 F
Louisiana Waterthrush	*Seriurus motacilla*	2	F
Kentucky Warbler	*Oporornis formosus*	1	sex(?)
Common Yellowthroat	*Geothlypis trichas*	3	M
Hooded Warbler	*Wilsonia citrina*	1	M
Canada Warbler	*Wilsonia canadensis*	1	M
Yellow-breasted Chat	*Icteria virens*	2	M and F
Summer Tanager	*Piranga rubra*	2	M
Scarlet Tanager	*Piranga olivacea*	1	F
Northern Cardinal	*Cardinalis cardinalis*	4	3 M and 1 F
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	2	M
Painted Bunting	*Passerina ciris*	1	M
Rufous-sided Towhee	*Pipilo erythrophthalmus*	3	2 M and 1 F
Bachman's Sparrow	*Aimophila aestivalis*	3	2 M and 1 F
Chipping Sparrow	*Spizella passerina*	3	2 F and 1 sex(?)
Field Sparrow	*Spizella pusilla*	1	F
Vesper Sparrow	*Pooecetes gramineus*	1	D F
Savannah Sparrow	*Passerculus sandwichensis*	11	5 M, 4 F, 1 imm F, 1 sex(?)
Grasshopper Sparrow	*Ammodramus savannarum*	7	4 M and 3 F
Fox Sparrow	*Passerella iliaca*	4	2 M and 2 F
Song Sparrow	*Melospiza melodia*	6	2 M, 3 F, 1 sex(?)
Swamp Sparrow	*Melospiza georgiana*	9	4 M and 5 F
White-throated Sparrow	*Zonotrichia albicollis*	3	2 M and 1 F
Dark-eyed Junco	*Junco hyemalis*	1	M

Bobolink	*Dolichonyx oryzivorus*	2	M
Red-winged Blackbird	*Agelaius phoeniceus*	2	M
Eastern Meadowlark	*Sturnella magna*	3	2 M and 1 F
Rusty Blackbird	*Euphagus carolinus*	2	F
Common Grackle	*Quiscalus quiscula*	7	5 M and 2 F
Northern Oriole	*Icterus galbula*	1	M
Purple Finch	*Carpodacus purpureus*	1	M
Red Crossbill	*Loxia curvirostra*	1	M
House Sparrow	*Passer domesticus*	1	sex(?)

NOTES ON WOOD STORKS IN EAST-CENTRAL GEORGIA

Malcolm C. Coulter[1], Larry Bryan[1], James Comer[2], Lisa Huff[1], Susan Jewell[1], William Lee[1], and Lynne McAllister[1]

Wood Storks (*Mycteria americana*) and other waders have recently been expanding their ranges northward in the eastern coastal states where, in the last few years, a number of small colonies have been found (Ogden 1978). In 1980 a colony of about 100 pairs was discovered near Millen, Jenkins County, Georgia (Tate and Humphries 1980). The Savannah River Ecology Laboratory of the University of Georgia's Institute of Ecology has been studying the storks at this colony since 1982 (Smith *et al.* 1982,1983; Meyers 1984, Coulter *et al.* ms.). We report here the foraging of breeding birds from this colony in east-central Georgia.

In 1984 storks returned to the Millen rookery in early March, and eggs were laid from early April through mid-May (Meyers, Alabama Department of Conservation and Natural Resources, pers. com.). Hatching occured from early May through mid-June. The chicks remained at their nests for the next three months and began dispersing in late July. The storks left the rookery for the season in mid-September.

The storks remain in the vicinity of the rookery after they leave the colony. In 1984 we observed storks until early November when, after a cold spell, most of the birds left the area. A few birds were observed near the rookery during an unseasonably warm period in late December.

We have used fixed-wing aircraft to follow storks from this colony to feeding areas in both South Carolina and Georgia. We have reported elsewhere on our observations of storks in South Carolina (Coulter *et al.* ms.). In 1983, Meyers (1984) recorded groups of up to 67 Wood Storks in Burke, Emanuel, Jenkins and Screven counties in Georgia. In 1984, we observed storks in these same counties as well as Jefferson, Tattnall and Toombs counties in Georgia. It is likely that Wood Storks will be observed in wetlands in this area in future years. We have color-banded young at the Millen colony with green, orange and purple plastic leg bands as well as U. S. Fish and Wildlife Service aluminum bands for individual identification. If banded birds are sighted, we would appreciate information on these observations.

ACKNOWLEDGEMENTS

This research was supported by contract number DE-AC09-76SR00819 between the Institute of Ecology of the University of Georgia and the Department of Energy, and we wish to thank the many people of the Savannah River Ecology Laboratory staff for their support and encouragement during this work. I. L. Brisbin, Jr., W. McCort and M. Smith made helpful comments on this manuscript.

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BREEDING AND BEHAVIOR OF HANDICAPPED TUFTED TITMOUSE

Anselm Atkins

While it may be the rule in nature that the struggle for existence eliminates disadvantaged individuals, it is to be expected that there will commonly be exceptions: individuals which survive and reproduce despite handicaps. It might be of interest to science to know more about these exceptional cases: their rate of occurrence, the kinds and degrees of disadvantage tolerable in the wild, and the extent to which such individuals achieve Darwinian fitness, that is, reproduction.

This study presents a partial history of one such case. A one-footed Tufted Titmouse (*Parus bicolor*) survived in its handicapped condition for over a year at a suburban Atlanta woodlot. It reproduced successfully. It exhibited, moreover, a "fearless" behavior which might be related to its handicap in one of two ways, or in no way. Unfortunately, no information has been obtained as to the cause and extent of the bird's injury; nor is its sex known.

On 9 May 1983, a mature Tufted Titmouse with one foot missing was observed at the tray feeder adjoining a house in the aforementioned woodlot. One-legged birds are not unknown at this station: there have been sightings of a club-footed Mourning Dove (*Zenaida macroura*), a Purple Finch (*Carpodacus purpureus*), and a Carolina Chicadee (*Parus carolinensis*) with one leg. (In another connection, the author has noticed that in the flock of two hundred Rock Doves (*Columba livia*) inhabiting Atlanta's Central City Park, foot deformities appear to exceed five percent.)

The titmouse's injury was to the right leg, which terminated just above the foot. It used its wings vigorously to compensate for difficulties in perching and opening sunflower seeds which it held against a twig with its one good foot. When perching, it dangled or waved the stump at its side. The leg was of some utility, however, for the bird could walk on it (on the feeder tray) slightly, as on a peg-leg. There was no way to guess whether the truncation was accidental or congenital.

The most noteworthy thing about this particular titmouse, however, was its "fearless" behavior. During these first sightings of the bird, such behavior was judged to be defined by the titmouse's demeanor toward other birds at the feeder. It regularly intruded into the feeding space of aggressive birds such as the Red-bellied Woodpecker (*Melanerpes carolinus*) and Mourning Dove. It paid no attention to other feeder birds. This definition of "fearless" is admittedly subjective, but a more quantitative content for the word became available later.

After May 1983, there exist no further written records of the titmouse until winter, 1984, although the author recalls seeing it occasionally in the interval. On 12 May 1984, its presence was again recorded. Its fearless behavior continued to be characteristic. The mere survival of the bird for another year was surprising enough. It was now at least two years old.

On 15 May a quantitatively more precise estimate of the titmouse's fearless behavior was made. It has been the rule at this feeding station that few if any birds take seed from the tray when a human sits a short distance (2 m) away. Those which do come (commonly titmice and Blue Jays (*Cyanocitta*

cristata)) are nervous and do not stay long. The one-footed titmouse, however, came for seed until it had satisfied itself, staying each time until it had selected the seed it wanted, and returning as soon as it had opened and consumed the seed. By this measure of "proximity tolerance" the titmouse is here defined as "fearless." And not only did the bird tolerate the observer at this close distance (2 m). It even searched the observer's body for seed, and took seed freely from hand. By contrast, other birds retired to branches 3 or 4 m away.

On 16 May, the titmouse recognized the observer in the woods and approached for hand-feeding. No seed was then available; but a few hours later, seed now being in pocket, it approached again, and was fed. Under such conditions (*viz*., away from the regular feeding station) it showed some hesitancy, but nevertheless finally came to hand.

On 18 May the observer was hand-feeding this tit in the woods at another location when it became apparent that a group of titmouse fledglings was moving through the trees overhead. There were three or more; one even landed on the observer's elbow. It next began to appear that the one-legged adult was feeding these young. It picked caterpillars from the leaves for them, meanwhile intermittently taking seeds for itself from the observer. It returned to this place the following day, 19 May, and again took seed; the young, however, were absent.

It would have been tempting to conclude at this point that the handicapped bird had successfully mated and reared a family. No nest, however, had been seen, and the possibility remained that this bird was a "bachelor," merely assisting with the feeding of a passing family.

The titmouse appeared sporadically in the area during the next few weeks. It sometimes came to hand, though not with ease or consistency. Then on 6 June it appeared at the feeder in the company of one normal adult and two juveniles. The hypothesis that the one-footed bird was indeed a parent became more plausible.

On 15 June this adult was in the company of two juveniles which it seemed to be feeding with sunflower seeds taken from the tray. Never were two normal adults seen with these juveniles. At times the one-legged bird was the only adult present with the young. On 17 June it was positively verified that this adult was feeding cracked seed particles to the young. There seemed to be no reason to doubt any longer that the one-legged bird had indeed been a parent of a brood. Recall that this adult had been seen with the juveniles for a full month.

These observations raise, but do not answer, a number of questions. It would be most interesting to know what linkage there might be, if any, between the bird's injury, its fearless behavior, and its ability to survive and breed. The following questions might be posed: 1) Did the injury come about as a result of reckless ("fearless") behavior? 2) Conversely, could the fearless behavior be the result (by way of some sort of compensating mechanism) of the injury? 3) On the other hand, can any causality at all be established between this injury and this behavior? 4) Was the bird's survival due in any way to the fearless behavior? 5) Did either the injury or the behavior in any way retard or improve the bird's ability to mate and rear a brood? None of

these questions can be answered with any degree of probability, and must remain purely speculative.

Several statements, however, can be made with something approaching certitude: 1) a Tufted Titmouse did survive for at least a full year notwithstanding its lack of a foot; 2) the handicapped bird was able to mate and rear a family; 3) this same bird exhibited an unusual behavior best described as "fearless."

ACKNOWLEDGEMENT

I would like to thank Georgann Schmalz of Fernbank Science Center for reviewing an earlier version of this article.

2525 McKinnon Drive, Decatur, Georgia 30030.

GENERAL NOTES

REDDISH EGRET AGAIN SEEN ON THE GEORGIA COAST – On 11 October 1984 George Cheeseman, my wife Peggy and I were birding on the south point of Cumberland Island when we noticed a rather large dark heron standing on the beach near a mixed flock of gulls and terns. I immediately passed the bird off as a Great Blue Heron (*Ardea herodias*) but Peggy brought our attention back to it when she pointed out that the bird did not look like a Great Blue Heron and could be a Reddish Egret (*Egretta rufescens*). We walked closer to the bird, viewed it through a 15-60 zoom telescope and discovered it was indeed a Reddish Egret in immature plumage. It remained hunched over during almost all of our observation but the following field marks could be observed. Size was definitely larger than that of a Little Blue Heron (*Egretta caerulea*) but smaller than a Great Egret (*Casmerodius albus*). Plumage was all dark grayish-brown with a hint of rust color on the back of the neck. Legs and bill were dark.

Kleckner (*Oriole* 48: 61-62) has recently summarized previous Georgia sightings of this species. This sighting appears to be the seventh record for Georgia and the second in two years.

An additional bird was seen by Mary Ann Vernocy and Anne Wyand along the Jekyll Island Causeway on 13 October 1984. This individual was described as being more brightly colored than the bird mentioned above so probably represented a different individual. Unfortunately this bird could not be relocated even though the area was searched again only an hour after the original sighting.

Terry S. Moore, 13000 Bucksport Drive, Woodstock, Georgia 30188.

INLAND SIGHTING OF PURPLE SANDPIPER – On 3 November 1984 at about 1100 I found a Purple Sandpiper (*Calidris maritima*) in the company of four Dunlin (*Calidris alpina*) in one of the ponds of the Clayton County Water Treatment Plant in South Atlanta. To my knowledge, this is the first inland record of a Purple Sandpiper in Georgia.

At the time of the sighting the ponds were active with waterbirds as I was spending most of my time checking the grebes and ducks which were present. From the dike of the central pond which was only a few yards above water level I was watching two Lesser Yellowlegs (*Tringa flavipes*) and a Pectoral Sandpiper (*Calidris melanotos*) when four birds flew in and stopped in front of me approximately 15 m away. Using 7X35 binoculars and a 30X telescope I identified these four birds as Dunlin, all in winter plumage. They started feeding almost immediately. Coming from I do not know where there was suddenly a bird in my telescope which was much darker than the nearby Dunlin. I was attracted immediately by the two-tone bill (grayish at the base and dark at the tip) and the yellowish legs. The bird was a little larger and stockier than the Dunlin. The head and breast were uniformly grayish-"purple" and the lower breast and sides were streaked. The bird also had a broken white eyering. The observation lasted about 15 minutes.

I left the area to try to call a few friends and when I came back the birds

were still feeding at the same place. After a few minutes a flock of Killdeer (*Charadrius vociferus*) flying by flushed the Dunlin and the Purple Sandpiper. I stepped out of the car as fast as I could but in the middle of 35 Killdeer flying in every direction I was not able to find where the birds went. They were not relocated later and Liz and Hugh Garrett who were at the same spot one and a half hours later did not find the birds. The next day only two Dunlin were present.

Patrick Brisse, 4960 Gatehouse Way, Stone Mountain, Georgia 30088.

FRANKLIN'S GULL ON LAKE CHATUGE – In the late afternoon of 4 May 1984, my wife, Dorothy, and I were driving across the narrow neck leading to Cedarcliff, the outermost peninsula on Lake Chatuge in Friendship Community in Towns County, Georgia. Extensive lawns at the head of the cove on the west separating Cedarcliff from Chatuge Shores were practically inundated as the lake was full. At the water's edge, with two Ring-billed Gulls (*Larus delawarensis*) I had seen earlier in the day, we spotted a black-headed gull. Returning the half mile to our house, we picked up our binoculars and three field guides and my wife checked over the differences between Franklin's (*Larus pipixcan*) and Laughing Gulls (*Larus atricilla*) as I drove back. As the bird was standing right beside a Ring-billed it was obviously too large to be a Bonaparte's Gull (*Larus philadelphia*) with which we were familiar in all plumages.

Mrs. Green immediately noticed the rosy blush on the breast and with a quick glance at the bold markings on the ends of the wings and the large spectacles we called it a Franklin's Gull and went on our way.

Returning home later on, I discovered that one does not see Franklin's Gulls in Georgia. We have seen thousands where they nest (and hundreds of Laughing Gulls from New England south) and had thought nothing about its being a rarity. Under the circumstances, I considered it wise to return for a second look. It allowed me to walk within 8 to 10 m before flying, giving me a good look at the white wing bar separating black from gray near the end of the primaries, but I must say I was never able to see any gray central tail feathers mentioned in the new *Field Guide to the Birds of North America* (National Geographic Society, 1983, Washington, D.C.).

I returned with camera and 230 mm lens in the evening before sunset for pictures and as it was still present the next morning, 5 May, I took more with the sun at my back. Some of these photos have been published in *American Birds* (38: 911).

This appears to be the fourth record of the species in Georgia. Previous records have recently been summarized by Paget and Manns (*Oriole* 46: 11-12).

Arthur A. Green, Rt. 1, Box 778 (Cedarcliff Rd.), Hiawassee, GA 30546.

WHITE-WINGED DOVE RECORDED IN THE UPPER COASTAL PLAIN – At 1630 on 23 December 1984, Hunter Patterson and I were observing birds at a watering place in Jackson's pasture, in the northeast section of Laurens County. Killdeer (*Charadrius vociferus*) and Mourning Doves (*Zenaida ma-*

croura) were present, along with other species which are common to the pasture in the winter.

I observed four birds depart the wet-weather pond. Three were Mourning Doves, but the trailing bird was showing so much white as it flew that I thought it to be a Killdeer. However, when I brought my binoculars on the bird at its distance of 120 m I was able to identify it as a White-winged Dove (*Zenaida asiatica*). The four birds landed in the pasture for a brief period, flew directly from us to another pond in the pasture, then departed the area. During this time we were able to observe the white symmetrical patches on each wing and the shorter rounded tail with the white band at the tip. All observations were to the east so that the low sun was to our backs.

In the following week we searched the pasture late in the afternoon on several occasions hoping the bird regularly watered at the pond. However, the dove was not seen again.

The *Annotated Checklist of Georgia Birds* (GOS, Occ. Publ. No. 6, 1977) lists the White-winged Dove as accidental in the Coastal Plain, citing five records in the state.

Thomas K. Patterson, 1409 Edgewood Drive, Dublin, Georgia 31021.

A SIGHTING OF A VARIED THRUSH AT ATHENS, GEORGIA – At approximately noon on 11 December 1984 I identified, by use of a field guide, a Varied Thrush (*Ixoreus naevius*) at a bird feeder at my home. The bird seemed to have arrived with a flock of American Robins (*Turdus migratorius*). Although I was not previously acquainted with this species, I had a good view for several minutes as the bird fed on some currants embedded in suet on the top of the feeder. I was first impressed by the pale orange wingbars and then saw the similarly colored eyestripe. I noticed the pale orange underparts and the somewhat smaller overall size than that of a robin. Julie Vorphal, who also saw the bird, confirmed that she observed the dark breast band. After the bird left, I did not see it again at the feeder or in the surrounding area.

The Varied Thrush normally ranges from Alaska through western Canada and the western United States but occurs casually eastward in winter to the East Coast (American Ornithologists' Union, 1983, *Checklist of North American birds*, sixth edition). Apparently the first record of a Varied Thrush for Georgia was that by Daniel Jacobson at Trenton, 17-22 February 1980, reported by G. A. Hall (*American Birds* 34: 777).

J. G. Horne, Rt. 1, Box 118, Bogart, Georgia 30622.

NESTING OF GRASSHOPPER SPARROW IN THE UPPER COASTAL PLAIN – The Grasshopper Sparrow (*Ammodramus savannarum*) is an uncommon summer resident in north Georgia, but is a rare breeding species south of the Fall Line (Denton, *et al.*, *Annotated Checklist of Georgia Birds*, GOS, 1977). In the late spring and summer of 1984, three locations in Laurens County were found in which pairs of singing birds of the species were present, resulting in a nesting record for one of the pairs.

The nesting occurred in a large field 9 km NNE of the courthouse in

Dublin. The field, formerly in cultivation, had recently been planted in pine (*Pinus taeda*) seedlings; therefore the area was essentially fallow, with various weeds and grasses in predominance. On 29 April 1984, Allen Rhodes and I heard the insect-like song of the species as we traveled the field road through the area. We noted at least two birds singing and flying from their perches on the weeds and dead stalks. For the next two weeks the birds remained in the field and breeding appeared imminent.

On 17 May, Chris Haney and I visited the area. As we stopped the car on the field road, the brakes "squealed" and a Grasshopper Sparrow darted out from an area of Bermuda (*Cynodon dactylon*) grass and ran across the road just in front of us, dragging its wings. This behavior, along with the knowledge that the two birds were flying together in the field only four days earlier, caused us to suspect that nesting had recently begun. The area from which the bird had fled consisted of a matting of dead grasses from the prior year with the new growth about 30 cm high. We feared that a diligent search for the nest might inadvertantly result in its destruction. Consequently, reasonably certain that we had discovered the nesting area, we departed. Subsequent observations confirmed this, with the female flushing from the area on each visit, flying weakly for only two or three meters before again settling into the grasses. Usually, the male could be seen singing from the tops of nearby weeds.

On 28 May, I observed an activity and behavior which confirmed that no longer were there eggs in the nest, but nestlings. I approached the nest, and an adult flushed and perched on a weed some 10 m away from the nest area. The other adult was singing on the opposite side of the road. I moved some distance away from the nest to observe the activity. In a few minutes, one adult began to approach the nest with an insect in its beak. Still aware of my presence, however, it cautiously moved away and joined the other adult, which was now about 75 m from the nest. The second adult then began to fly about from perch to perch, leaving the one clutching the insect on the ground out of my view. In a few minutes, the bird, insect in beak, ran across the road toward the nest. After allowing 3 or 4 minutes to pass, I again approached the nest, bending to part the grasses at the nest site. The bird fluttered straight up almost into my face, immediately dropped into a furrow of the pine seedlings, and scurried mouse-like up the row in plain view. At a distance of about 4 m, it stopped and turned to look at me. I was not following. The bird then ran toward me for a short distance, then back again. When it discovered that I still had not moved, the bird closed half the distance between us and reentered the grasses. After several seconds, seeing no other activity, I departed.

In the next several days, I observed the adults carrying insects to the nest quite often. Never did the birds fly directly to the nest; they always flew to the ground while yet some distance away. Nor did I ever see the birds fly directly from the nest.

The young had apparently fledged by 7 June. On two occasions, I watched adults feeding young on the field road. Later in that month the singing was renewed and I believe the pair nested again nearby.

On 7 June, in the same field 1.25 km to the NE of the known nest, another pair of the species was located. On 17 June, an adult was seen to fly

some distance with an insect, alighting in the grasses as if it were feeding young.

Another Grasshopper Sparrow was observed on several occasions in June singing from a wire over a Bermuda hay field, located 6 km N of the known nesting field.

The species, very secretive while in migration and in their winter habitat, are surprisingly conspicuous in breeding season.

Thomas K. Patterson, 1409 Edgewood Drive, Dublin, GA 31021.

LINCOLN'S SPARROW FOUND WINTERING IN AUGUSTA – On 21 December 1984 a Lincoln's Sparrow (*Melospiza lincolnii*) was observed in a Continental Can Company run-off swamp along Deerfield Specialties Rd. south of Augusta. The area is a man-made swamp of standing dead trees and thin understory of dry weeds and grasses in shallow standing water. While listening to the "eek" of the Song Sparrows (*Melospiza melodia*) and the Eastern Phoebe-like "cheep" of the Swamp Sparrows (*Melospiza georgiana*), I heard a lower-pitched flat chip that was unlike that of our usual winter sparrows. When I pished, a Song Sparrow perched in a low bush approximately 7 m away. Below him another sparrow skulked in the weeds but eventually perched beside the Song Sparrow for approximately 1 minute. This sparrow was the size of the Song Sparrow but had a slimmer silhouette including a slimmer head. A light stripe on the top of the head was defined by two rusty stripes on either side. The face was gray with a dark stripe at the eye and a faint white eye-ring. The bill was pale horn-colored. The upper breast was cream-colored with buffy color down the sides to include the flanks. Fine-lined brown streaks covered the buffy area. The throat was pale with a few thin streaks on it also. The wings had a small amount of rust on them similar to the immature Swamp Sparrow.

Since the area is not one normally checked by local birders, the Augusta Christmas Bird Count circle was checked, at which time it was found that the swamp was located approximately 0.5 mile outside the count circle. Due to this, the bird was not looked for on 22 December and could not be included on Augusta's Christmas Bird Count.

The *Annotated Checklist of Georgia Birds* (GOS, Occ. Publ. No. 6, 1977) lists the Lincoln's Sparrow as a rare winter visitor throughout the state and Peterson comments in his *Field Guide to the Birds* (Houghton Mifflin Co., Boston, 1980) that the winter status is uncertain in eastern states due to its low density and the secretive nature of these birds.

Anne R. Waters, 1621 Apple Valley Drive, Augusta, Georgia 30906.

FINANCIAL STATEMENT

The following income and expense information for Fiscal Year 1984 has been provided by the Treasurer:

Beginning balance 1 October 1983		$16,919.77
Income		
Dues	3,440.50	
Life Members	1,640.00	
Interest	2,152.24	
Contributions	300.00	
Other	2,241.63	
	9,774.37	
Expenses		
Oriole (2 issues)	1,570.55	
Goshawk (4 issues)	841.51	
Other	2,573.65	
	4,985.71	
Ending Balance 30 September 1984		$21,708.43

FROM THE FIELD

July – September 1984

PIED-BILLED GREBE – Rare in the summertime, a pair stayed in Augusta during the period as reported by the Augusta A.S. In southwest Atlanta a single bird was also reported all summer long near Fairburn by Dennie and Pam McClure.

EARED GREBE – Georgia's fifth record was a single breeding plumage individual found at the Clayton County Water Treatment Plant (CCWTP) in south Atlanta on 18 August by Patrick Brisse. The bird was photographed and seen by many observers until 5 Sept. when the ponds finally became empty.

BLACK-CAPPED PETREL – Chris Haney reported 8 during his 10-12 July trip and 64 more during his 1-2 Aug. trip. All birds were seen about 90 miles from shore.

CORY'S SHEARWATER – A very high count of 315 was noted 80 miles from shore on 10-12 July (Chris Haney). Large flocks of 100-200 were observed. He also recorded 9 more during the 1-2 Aug. trip.

GREATER SHEARWATER – Probably the largest number ever seen off the Georgia coast was noted 10-12 July when Chris Haney reported 150+ birds, including flocks of 25-50 birds, 80 miles from shore.

AUDUBON'S SHEARWATER – Small numbers were observed by Chris Haney near the Gulfstream: 20 on 10-12 July and 19 on 1-2 Aug.

WILSON'S STORM-PETREL – This species is definitely uncommon in Georgia waters as Chris Haney's report suggests: 20 on 10-12 July and 26 on 1-2 Aug. These were seen 80-90 miles east of St. Catherine's and Sapelo Islands.

LEACH'S STORM-PETREL – Two were rare on 1-2 Aug. about 90 miles east of Sapelo Island. Chris Haney's study shows that although rare, the species seems to be regular in Georgia waters far offshore.

BAND-RUMPED STORM-PETREL – Georgia's fifth record was a single individual found by Chris Haney 80 miles east of St. Catherine's Island on 12 July. Unbelievable were the 19 he found during the 1-2 Aug. trip 90 miles east of St. Catherine's and Sapelo Islands, obviously the highest total ever for the state. The species has been found with more regularity off North Carolina during the last few summers.

MASKED BOOBY – One was reported 50 miles east of Sapelo Island on 2 Sept. *fide* S. R. Rogers. This is only the fifth record for the state, all in just over a year's time.

DOUBLE-CRESTED CORMORANT – Terry Johnson reported the species as being common at Lake Juliette near Macon during Sept.

ANHINGA – On 23 Sept. Sam Pate and Chris Taylor noted a female south of Cuthbert and another one at Lake Seminole in southwest Georgia.

GREAT EGRET – Herons were on the increase this fall in the Piedmont as the following records show. The species was reported from Lake Chatuge (Arthur Green), Carter's Lake in Murray County on 23 July (Harriett DiGioia and Anne Hamilton), and was regularly seen all season long in at least 3 places around Atlanta with a high of 12 birds during Sept. at CCWTP (Patrick Brisse, Dennie and Pam McClure).

SNOWY EGRET – A high inland count of 12 was noted in an Augusta swamp on 18 August by Clarence Belger. In the Atlanta area this very rare species was first noted at CCWTP on 4 August by Robert Manns and remained until 3 Sept. The maximum was 4 birds in early Aug.

LITTLE BLUE HERON – Like the Great Egret, the Little Blue Heron has been on the increase in the last few years in the Piedmont. The species was reported in large numbers from the Augusta Merry Brothers Brickyard Ponds (*fide* Anne Waters) and the Atlanta area with a high of 46 on 28 July (Patrick Brisse). The species was reported all summer long from numerous ponds around Atlanta. Unusual for the Dalton area were 6 seen by Delano Crowe on 4 July and a sighting by Harriett DiGioia on 15 July from Grassy Mountain Rd. in Murray County.

TRICOLORED HERON – Rather unusual for the mountain area was a bird found on 15 July by Harriett DiGioia on Grassy Mountain Rd., Murray County. More expected, but always worth noting were 2 on 18 Aug. and 1 on 15 Sept. around Augusta (*fide* Anne Waters) and singles on 29 Aug. and 15 Sept. in Laurens

County (Tom Patterson).

NIGHT-HERONS – Rare were immature Black-crowned and Yellow-crowned Night-Herons on 15 July along Grassy Mountain Rd., Murray County (Harriett DiGioia).

WHITE IBIS – For a rare visitor to the Piedmont area, post-breeding birds were widely reported from the north part of the state. Harriett DiGioia had 18 birds in 3 sightings on 15, 18 and 23 July in Murray County. Dorothy and Robert Potts reported a single on 20 July at Callaway Gardens and for the first time in many years the species was seen in Atlanta. Six immatures were at CCWTP on 8 July (Terry and Peggy Moore). Single immatures were also seen at Echo Lake on 24-25 July (Peter Schantz) CCWTP on 11 Aug. (Patrick Brisse) and Conyers on 19 Aug. (Francis Michael). An additional bird was at Pendergrass on 15 July (John Paget).

ROSEATE SPOONBILL – Up to 3 birds were at Colonel's Island near Brunswick, Glynn County on 8 July as mentioned by Chris Haney.

WOOD STORK – Of note for the Upper Coastal Plain were 15 birds found by Tom Patterson in Laurens County on 15 July. Four were still there on 26 July.

GREEN-WINGED TEAL – Extremely early for the state was a lone bird found by John Paget at Pendergrass on 6 Sept. Also early for the Atlanta area were 3 individuals seen at CCWTP on 29 Sept. by Peggy and Terry Moore.

BLUE-WINGED TEAL – Two teal on 28 July at CCWTP in Atlanta were quite early (Patrick Brisse). The number picked up to 11 by early Aug.

GADWALL – Extremely early also was a bird at the Chattahoochee Nature Center in north Atlanta on 22 Sept. (Jay Stolar). September sightings of that species in Georgia have previously been only from the Eufaula NWR area.

RING-NECKED DUCK – Anne and Vernon Waters and Clarence Belger observed a female with half-grown young during the period in a pond near the Augusta levee. No previous nesting record exists for the state. In Atlanta, as has been the case in the past few years, a few summered in two different areas (Patrick Brisse, Dennie and Pam McClure). No nesting occurred.

OSPREY – Tom Patterson noticed singles on 26 July at Ben Hall Lake and another at Shenk's Pond from 4 Aug. to 29 Sept., both in Laurens County. Others were noted during the GOS hawkwatch on Grassy Mountain on 22 Sept. and Carter's Lake on 23 Sept.

AMERICAN SWALLOW-TAILED KITE – Chris Haney mentioned a high of 4 birds on 1 July on the Highway 252 bridge over the Satilla River in Camden County.

MISSISSIPPI KITE – Atlanta's third record was a bird carefully studied by Francis Michael and Price Webb near Conyers on 31 Aug.

BALD EAGLE – Inland reports came from the Piedmont area: 25 Aug. at the Cherokee Brickyard pond in Macon (Gus and Marion Kaufman), 2 Sept. at Lake Oconee (Vince and Trina Jackson, Peggy and Terry Moore), 16 Sept. at West Point Lake (Teresa Hartz) and 23 Sept. at Carter's Lake (GOS hawkwatch). Except for the 16 Sept. sighting all birds were immatures.

SHARP-SHINNED HAWK – An early bird was seen along the Chattahoochee River National Recreation Area in north Atlanta on 11 Aug. (Terry and Peggy Moore and Mary Ann Vernocy). Since very few summer records exist in the Piedmont area, it is difficult to say whether the bird was a nester or an early migrant. The species has been found nesting in the Piedmont only a few times.

GOLDEN EAGLE – An immature was spotted on the Lookout Plateau in northwest GA during the 23 Sept. Atlanta A.S. hawkwatch. The bird was most likely one of the birds released there recently.

MERLIN – Two hawkwatches reported the species in Sept. Singles were seen on Grassy Mountain on 22 Sept. (GOS) and on Lookout Plateau on 23 Sept. (Atlanta A.S.).

PEREGRINE FALCON – The Atlanta A.S. Lookout Plateau hawkwatch of 23 Sept. yielded 2 Peregrines. Hugh and Liz Garrett went back the next weekend and recorded 3 more in less than 12 minutes on 30 Sept. This perhaps is the place to be during hawk migration!

PURPLE GALLINULE – Noteworthy were the 10 birds found by Sam Pate and Chris Taylor on 23 Sept. at Lake Seminole in southwest Georgia.

BLACK-BELLIED PLOVER – Dennie and Pam McClure reported a rare transient in south Fulton County on 23 Sept.

SEMIPALMATED PLOVER – The first fall inland arrival was at the Gainesville Airport on 30 July (John Paget). From Atlanta, only one bird was reported at CCWTP from 1-6 Sept. (Patrick Brisse).

AMERICAN AVOCET – Chris Haney found 4 birds at Hutchinson Island near Savannah on 8 Aug. for a rare summer record.

LESSER YELLOWLEGS – An early bird was at CCWTP on 7 July (Patrick Brisse).

SOLITARY SANDPIPER – Also early was a single individual noted by Peggy and Terry Moore at CCWTP in south Atlanta on 8 July. Another was along Grassy Mountain Rd., Murray County, on 16 July as reported by Harriett DiGioia.

UPLAND SANDPIPER – Tom Patterson was the only person to report this species. Early for Laurens County was one on 21 July. His other record for Laurens County was 3 on 25 Aug.

LONG-BILLED CURLEW – Outstanding for Georgia was a high count of 6 birds on the Jekyll Island Causeway on 12 Aug. as reported by Don and Doris Cohrs. Chris Haney saw only one in the same area later that week.

SANDERLING – Rare inland were 2 on 17 July in Laurens County (Tom Patterson) and one on 11 Aug. at CCWTP in south Atlanta (Patrick Brisse).

SEMIPALMATED SANDPIPER – Tom Patterson sighted several early birds on 17 July in Laurens County. Tom was also the only one to report inland Western Sandpipers with singles on 26 Aug. and 15 Sept. also in Laurens County.

LEAST SANDPIPER – One bird at CCWTP on 8 July was early for the Atlanta area (Peggy and Terry Moore).

BAIRD'S SANDPIPER – Donna and Patrick Brisse discovered a single bird among Least Sandpipers on 1 Sept. at CCWTP. The bird was seen the next day by Dennie and Pam McClure, and Don and Doris Cohrs. This represents the third local record, all in just over a year.

PECTORAL SANDPIPER – Again from CCWTP, an early date was set when Patrick Brisse found a bird on 7 July. Tom Patterson also reported the species from Laurens County with a very good count of 65+ on 4 Aug.

STILT SANDPIPER – Better coverage of inland shorebird habitats produced more records than usual. Tom Patterson sighted 2 in Laurens County on the early date of 17 July. In Atlanta, all reports came from CCWTP and were of single individuals 28 July and 16 Sept. (Patrick Brisse), 24 Sept. (Paul Raney) and 29 Sept. (Peggy and Terry Moore).

BUFF-BREASTED SANDPIPER – Atlanta's second and third records occurred when 3 birds were found in south Fulton County on 2 Sept. (Dennie and Pam McClure) and 2 were found at CCWTP on 5-6 Sept. (Francis Michael and others). Other reports came from Laurens County, where the species is regular in the fall, with 6 on 14 Sept. and 3 on 15 Sept. (Tom Patterson) and from Hutchinson Island near Savannah with 2 on 29 Sept. (Chris Haney).

SHORT-BILLED DOWITCHER – Increasing inland over the past few years, singles were reported from Macon on 29 July (Dick Lux, Joyce and Don Duncan), Laurens County on 21 July and 12 Aug. (Tom Patterson) and Atlanta on 18 Aug. (Patrick Brisse). Tom Patterson also reported 2 birds on 15 Sept. identified as dowitcher sp. only.

LONG-BILLED DOWITCHER – Atlanta's second record was a bird identified by call at CCWTP on 24 Sept. (Francis Michael and Paul Raney).

WILSON'S PHALAROPE – Chris Haney reported a good count of 11 from Hutchinson Island near Savannah on 8 Aug.

POMARINE JAEGER – Summer records in Georgia are rare so Chris Haney's sightings of single birds on 10 July and 1 Aug. are worth mentioning. Both were from the edge of the Gulfstream, 90 miles offshore.

FORSTER'S TERN – Only two inland sightings were reported, both from Atlanta. A single bird was seen at Sweetwater Creek State Park on 28 July (Dennie and Pam McClure) and two more were at CCWTP on 5 Sept. (Francis Michael).

BRIDLED TERN – Chris Haney reported only a small quantity from his offshore trips this summer: 1 on 10 July and 4 on 2 Aug.

SOOTY TERN – Ten birds were seen 95 miles east of St. Catherine's Island on 12 July. Although rare in the state, this species has been seen in recent summers far offshore.

BLACK TERN – For the first time in many years, Black Terns were noted in Atlanta. Seven birds were at CCWTP on 4 Aug. (Patrick Brisse and Robert Manns) and another was there on 19 Aug. (Hugh Garrett and others).

PILEATED WOODPECKER – For a short time a Pileated Woodpecker was clocked at 48 miles per hour by Sam Pate and Chris Taylor on 23 Sept. while they were on their way to Lake Seminole.

OLIVE-SIDED FLYCATCHER – The species was once again reported from its regular fall location along the Chattahoochee River National Recreation Area in north Atlanta between 27 Aug. and 23 Sept. (Peggy Moore, Atlanta A.S.). Up to 2 birds were seen on 16 Sept.

GRAY KINGBIRD – Rare outside the usual coastal location was a bird in downtown Brunswick mentioned in the last report. Chris Haney noted the same bird again on 8 July and 2 there on 16 Aug.

TREE SWALLOW – The species was already back at Skidaway Island, Chatham County, on 28 July when Chris Hany noted 20 birds.

BANK SWALLOW – The only inland report was a lone bird at CCWTP on 11 Aug. (Patrick Brisse). Does anyone see Bank Swallows during the fall migration anymore?

FISH CROW – Four birds were seen and heard at Lake Oconee on 2 Sept. by Vince and Trina Jackson, Peggy and Terry Moore. This and the spring records for the Athens area are probably evidence of increasing numbers in the Piedmont area.

RUBY-CROWNED KINGLET – Nancy Iha reported an early bird on 11 Sept. in the Marietta area.

GRAY-CHEEKED THRUSH – Francis Michael reported the only fall sighting, an individual at Conyers on 10 Sept.

CEDAR WAXWING – Worth mentioning were 2 adults and 4 immatures at the Chattahoochee National Forest Work Center on 1 Sept. as reported by Harriett DiGioia. The species has been found nesting in the mountains in the past. Early for Atlanta were 2 immatures along the Chattahoochee River on 21 Sept. (Paul Raney).

SOLITARY VIREO – Fernbank Forest in Atlanta seems to be a good spot to find early vireos every year. This year Georgann Schmalz noted an early bird on 22 Sept.

PHILADELPHIA VIREO – Grassy Mountain seems to be on the migration path of this species. Following last fall's sighting of a dozen birds in late Sept., 6 were seen this year on 21 Sept. Harriett reported the species again on 27 Sept. In Atlanta, although less common than the previous year, 8 reports were received between 12 Sept. (Paul Raney) and 21 Oct. (Nancy Iha).

WARBLERS – Although the fall migration was rather dull in Atlanta, most of the species were reported in small numbers. On the other hand, a tremendous wave of warblers (1000+) occurred on Potato Patch Mountain near Lake Conasauga on 27 Sept. according to Harriett DiGioia and lasted a few days. I would appreciate general comments on landbird migration for future issues.

LAWRENCE'S WARBLER – On 21 Sept. Harriett DiGioia reported this hybrid for the second time from Lake Conasauga in the Cohuttas. Although relatively rare, hybrids of the Golden-winged and Blue-winged Warblers have been noted more often in recent years.

GOLDEN-WINGED WARBLER – An early migrant was seen in Stone Mountain, east of Atlanta, on 12 Aug. (Patrick Brisse).

NASHVILLE WARBLER – Peggy and Terry Moore and Nancy Iha reported single birds from different areas in Marietta on 1 Sept. John Paget noted another in Forsyth County on 15 Sept. and the last one was seen on Joyce and Don Duncan's farm near Kathleen on 30 Sept.

CHESTNUT-SIDED WARBLER – Early reports in Atlanta came from the Chattahoochee River (Paul Raney) and Stone Mountain (Patrick Brisse), both on 24 Aug.

YELLOW-RUMPED WARBLER – The first ones were seen on Potato Patch Mountain in the Cohuttas on 27 Sept. by Harriett DiGioia and in College Park on 2 Oct. by Dennie and Pam McClure.

CERULEAN WARBLER – Terry Moore received 8 reports from Atlanta and the north

Piedmont area between 11 Aug. (Patrick Brisse) and 17 Sept. (John Paget). Atlanta is definitely on the migration route of the species as it is rarely reported to the east of Atlanta.

AMERICAN REDSTART – Although a few summered in the Piedmont, the activity seems to pick up in late July every year and sightings were again reported from Atlanta and Columbus during this period.

CONNECTICUT WARBLER – Very rare as a fall transient, one was observed by Don and Joyce Duncan on 10 Sept. near their home in Kathleen.

WILSON'S WARBLER – Only 2 birds were sighted during the period, both from Atlanta: one on 5 Sept. by Peggy Moore and another on 19 Sept. by Paul Raney.

YELLOW-HEADED BLACKBIRD – On 30 Sept. Chris Haney observed a female at Hutchinson Island, Chatham County. More field work will probably show the species to be a regular visitor to Georgia.

BROWN-HEADED COWBIRD – An interesting note came from Macon where a Blue-gray Gnatcatcher and a male Eastern Bluebird were seen alternately feeding an immature cowbird (Ocmulgee A.S.).

PURPLE FINCH – A female frequented Tom Davis's feeder during the period (*fide* Terry Moore). Photos were taken. This represents the first summer record for the Atlanta area and probably for the state.

HOUSE FINCH – Again the species was reported summering in Atlanta and Columbus with nesting occurring at least in Atlanta.

Patrick Brisse, 4960 Gatehouse Way, Stone Mountain, Georgia 30088.

Eared Grebe at CCWTP 18 August - 5 September 1984 (Photo by Skip Williams).

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