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THE MIGRATION OF SANDHILL CRANES IN GEORGIA*

Thomas K. Patterson

The primary purpose of this paper is to identify the corridor and dates of migration of the Sandhill Cranes *(Grus canadensis)* which pass through Georgia in the spring and fall of each year. Migration behaviors which are noted in the records, or can be deducted from them, are discussed. At the beginning, there is a summary of the history of the question of the subspecific identification, followed by information on the status of the migratory subspecies responsible for most, if not all, of the records.

SUBSPECIFIC IDENTIFICATION

Until recently, the subspecies of the Sandhill Crane which migrates through the state has been the subject of some speculation and debate. Without a specimen, Burleigh (1958) included only the non-migratory resident of the Okefenokee, the Florida Sandhill Crane *(G.c. pratensis),* in his volume of state birds, and referred to the few migratory records in the central part of the state as "undoubtedly pertaining to one or both of the races nesting farther north."

As early as 1941, Francis Harper (Walkinshaw, 1949) reported his suspicion that the Greater Sandhill Crane *(G.c. tabida)* "migrates at least occasionally through the Okefenokee . . . " Walkinshaw strongly supported this view, but in his early research had little evidence and few records to advance his opinion beyond that of speculation. Some years later, Cypert (1957) reported seeing 522 cranes on Chesser Prairie in the Okefenokee on 29 January 1957. Walkinshaw (1960) took this significant record of wintering birds and other migration records east of the Mississippi to conclude that the eastern population of the Greater Sandhill Crane moves from its breeding grounds in the northern lake country to a concentration point in northwestern Indiana at the Jasper-Pulaski Wildlife Area, from which "they definitely proceed toward southern Georgia and apparently into Florida." In Georgia, he correctly concluded that "the line of flight appears to be from the northwestern part of the state, through the Atlanta region and the Piedmont National Wildlife Refuge area to the Okefenokee Swamp area." Nevertheless, at that time there was still no substantive proof in Georgia, and Walkinshaw's conclusions remained only reasonable assumptions.

*See also GENERAL NOTE by J. G. Horne in this issue. - Ed.

In the past decade, evidence has been produced which confirms Harper's and Walkinshaw's early opinions. Williams and Phillips (1972), studying crane populations in northern Florida, banded some 100 wintering Greater Sandhill Cranes at Payne's Prairie, 10 km south of Gainesville. Some of these banded birds were later found on breeding grounds in the north; and one bird (DeVore, 1972), captured in Tennessee while in migration and released, was found dead of apparently natural causes a few weeks later near Jackson, Michigan. More recently, as a part of a continuing study of the Greater Sandhill Cranes, birds on breeding grounds in Wisconsin have been fitted with green patagial tags (Melvin, 1977) by researchers at the University of Wisconsin/Stevens Point. Several of these birds have been located on wintering grounds in Florida. Four of these birds, out of the 180 now tagged, were seen on the ground on 18 March 1976 in Haralson County near Buchanan, Georgia (Dr. Lyle E. Nauman, pers. comm.). Cooperating in these same studies, researchers at St. Cloud State University at St. Cloud, Minnesota, have attached radio transmitters (Ron Crete, pers. comm.) to birds on breeding grounds in that state. An enroute tracking study of the migrating birds was completed in the fall of 1977. Since these studies concluded in Florida, the results (in print) will presumably show that the birds tracked through Georgia.

Consequently, the eastern population of *(G.c. tabida* is known to migrate into and through Georgia in spring and fall of each year. Apparently there is little evidence to suggest that either of the other two migratory subspecies nesting in the north, the Canadian Sandhill Crane *(G.c. rowani)* or the Lesser Sandhill Crane *(G.c. canadensis),* migrates east of the Mississippi. However, the few crane records in the Atlantic seaboard states (Walkinshaw, 1973), including a 1961 specimen of a Lesser Sandhill taken in Maryland, seem to open the possibility of accidental occurrence in the state of other subspecies.

The eastern population of *G.c. tabida* breeds in Wisconsin, Minnesota, Michigan, southeastern Manitoba, and southwestern Ontario (Drewien, *et al.,* 1975). This population, large in the 19th century, had become so rare in the early 20th century (Henika, 1936) that there was fear for its ultimate preservation. In 1944, Walkinshaw (1949) estimated only 162-260 breeding pairs, even though the numbers had apparently begun to increase by then from earlier lows. In the early 1970's, the population was estimated at 7000 birds and increasing (Drewien, et al., *op. cit.*); and 1976 estimates (Melvin, *op. cit.*), based on censuses at Jasper-Pulaski, placed the numbers between 12,000-15,000 birds. Melvin, using family groupings and behavioral differences to distinguish *pratensis* from *tabida,* has accounted for 4500 of this population wintering in central and northern Florida, and at the Okefenokee National Wildlife Refuge in Georgia. The wintering population at the Refuge in 1977/78 was estimated to be 800-1000 birds (John R. Eadie, Refuge Manager, pers. comm.), in addition to the 200 resident Florida Cranes.

THE MIGRATION RECORDS

The Georgia records of spring and fall crane migration are listed in Table 1. Included are all published records through the 1977 season which are found in *The Oriole, The Migrant, Audubon Field Notes*

Table 1. Migration Records of the Sandhill Crane in Georgia.

Spring

Date	Location	Number	Groups	Authority	Reference
20 Feb. 1976	Forsyth, Monroe Co.	7	1	Johnson	Am. Birds 1976, 30 (3): 706
21 Feb. 1975	Piedmont NWR, Jones/Jasper Co.	50	1	Refuge Personnel	Refuge Records
22 Feb. 1977	Osierfield, Irwin Co.	158+	3	Hopkins	Oriole 1977-42 (2): 35
24 Feb. 1978	Jacksonville, Telfair Co.	22	1	Dopson	Field Notes
25 Feb. 1977	Jacksonville, Telfair Co.	45	1	Dopson	Field Notes
26 Feb. 1977	Piedmont NWR, Jones/Jasper Co.	Flocks	3	Refuge Personnel	Refuge Records
28 Feb. 1977	Piedmont NWR, Jones/Jasper Co.	40	1	Refuge Personnel	Refuge Records
28,29 Feb. 1976	Piedmont NWR, Jones/Jasper Co.	60+	3	Refuge Personnel	Refuge Records
1 Mar. 1965	Osierfield, Irwin Co.	79	2	Hopkins	Oriole XXX, 71
1 Mar. 1970	Fitzgerald, Ben Hill Co.	35	1	Hopkins	Field Notes
1 Mar. 1974	Osierfield, Irwin Co.	200+	1	Hopkins	Field Notes
1 Mar. 1974	Jacksonville, Telfair Co.	82	1	Dopson	Field Notes
1 Mar. 1975	Fitzgerald, Ben Hill Co.	75+	1	Hopkins	Oriole 1975-40 (142):16
2 Mar. 1965	Dalton, Whitfield Co.	75+	1	Hall	AFN 1965, 19 (3) 378
2 Mar. 1967	Osierfield, Irwin Co.	130+	3	Hopkins	Field Notes
2 Mar. 1972	Piedmont NWR, Jones/Jasper Co.	300	1+	Refuge Personnel	Refuge Records
2 Mar. 1977	Osierfield, Irwin Co.	109	2	Hopkins	Field Notes
3 Mar. 1961	Osierfield, Irwin Co.	Heard	2+	Hopkins	Oriole XXVI, 11
3 Mar. 1970	Piedmont NWR, Jones/Jasper Co.	Flock	1	Refuge Personnel	Refuge Records
3 Mar. 1974	Piedmont NWR, Jones/Jasper Co.	Flock	1	Refuge Personnel	Refuge Records
3 Mar. 1976	Osierfield, Irwin Co.	97	2	Hopkins	Field Notes
4 Mar. 1961	Osierfield, Irwin Co.	Heard	2+	Hopkins	Oriole XXVI, 11
4 Mar. 1976	Jacksonville, Telfair Co.	35	1	Dopson	Field Notes
4, 5 Mar. 1973	Piedmont NWR, Jones/Jasper Co.	130	2	Refuge Personnel	Refuge Records
5 Mar. 1956	Osierfield, Irwin Co.	23	1	Hopkins	Oriole XXI, 11
5 Mar. 1961	Zebulon, Pike Co.	20	3	Peters	Oriole XXVI, 30
5 Mar. 1961	Decatur, Dekalb Co.	75	1	Peters	Oriole XXVI, 30
5 Mar. 1971	Piedmont NWR, Jones/Jasper	100	1	Refuge Personnel	Refuge Records
5 Mar. 1972	Piedmont NWR, Jones/Jasper	100	1	Refuge Personnel	Refuge Records
5 Mar. 1973	Piedmont NWR, Jones/Jasper	6 *(G)	1	Refuge Personnel	Refuge Records
5 Mar. 1973	Osierfield, Irwin Co.	28+	2	Hopkins	Field Notes
5 Mar. 1978	Fitzgerald, Ben Hill Co.	100+	1+	Hopkins	Field Notes
6 Mar. 1952	Piedmont NWR, Jones/Jasper Co.	60	1	Walkinshaw	Oriole XVIII, 13-15
6 Mar. 1978	Jacksonville, Telfair Co.	17	1	Dopson	Field Notes
6 Mar. 1978	Piedmont NWR, Jones/Jasper Co.	2 (G)	1	Refuge Personnel	Refuge Records
7 Mar. 1953	Atlanta, Fulton Co.	115	2	Peters	Oriole XVIII, 45
7 Mar. 1964	Osierfield, Irwin Co.	239	2	Hopkins	Oriole XXIX, 21
7 Mar. 1966	Dalton, Whitfield Co.	Flock	1	Hall	AFN 1966, 20 (3) 423
7 Mar. 1977	Osierfield, Irwin Co.	10	1	Hopkins	Field Notes
7 Mar. 1978	Osierfield, Irwin Co.	81	1	Hopkins	Field Notes
7 Mar. 1978	Piedmont NWR, Jones/Jasper	Flock	1	Refuge Personnel	Refuge Records
8 Mar. 1962	Osierfield, Irwin Co.	49	1	Hopkins	Oriole XXVII, 9
8 Mar. 1964	Chickamauga B'field,Catoosa Co.	60	1	Bullard	Migrant 35 (1): 16
8 Mar. 1967	Ocilla, Irwin Co.	Flock	1	Hopkins	Field Notes
8 Mar. 1969	Osierfield, Irwin Co.	560	5	Hopkins	Field Notes
8 Mar. 1969	Fitzgerald, Ben Hill Co.	80	2	Hopkins	Field Notes
8 Mar. 1978	Osierfield, Irwin Co.	Flock	2	Hopkins	Field Notes
8 Mar. 1978	Jacksonville, Telfair Co.	8+ (G)	2	Dopson	Field Notes
8 Mar. 1978	Dublin, Laurens Co.	12+	1	Dopson	Field Notes
9 Mar. 1969	South Dawson Co.	13	1	Paget	Oriole 1969 - 34 (4) 80
10 Mar. 1960	Osierfield, Irwin Co.	113	1	Hopkins	Oriole XXV, 10
10 Mar. 1962	Milledgeville, Baldwin Co.	21	1	Weaver	Oriole XXVII, 9
10 Mar. 1963	Okefenokee, NWR Ware/Charlton	45	1	Cypert	AFN 1963, 17:318
10 Mar. 1968	Athens, Clarke Co.	Flock	2+	Tramer	Oriole 1968-33 (3):32
10 Mar. 1977	Fitzgerald, Ben Hill Co.	10	1	Hopkins	Field Notes
3-11 Mar. 1968	Piedmont NWR, Jones/Jasper Co.	Flock	3+	Refuge Personnel	Refuge Records
11 Mar. 1970	Fitzgerald, Ben Hill Co.	237	2	Hopkins	Field Notes
11 Mar. 1975	Jacksonville, Telfair Co.	15	1	Dopson	Field Notes
11 Mar. 1978	Piedmont NWR, Jones/Jasper Co.	Flock	1	Refuge Personnel	Refuge Records
11 Mar. 1978	Fitzgerald, Ben Hill Co.	18 (G)	1	Hopkins	Field Notes
12 Mar. 1966	Fitzgerald, Ben Hill Co.	100+	1	Hopkins	Field Notes
12 Mar. 1967	Fitzgerald, Ben Hill Co.	Flock	1	Hopkins	Field Notes
12 Mar. 1972	Piedmont NWR, Jones/Jasper Co.	25	1	Refuge Pers.	Refuge Records
13 Mar. 1960	Decatur, Dekalb Co.	40	1	Smith	Oriole XXV, 10
13 Mar. 1966	Alpharetta, Fulton Co.	34	1	Fink	Oriole 1966 - 31 (1):12, 13
13 Mar. 1966	Atlanta, Fulton Co.	8	1	Fink	Oriole 1966 - 31 (1):12, 13
13 Mar. 1966	Piedmont NWR, Jones/Jasper Co.	Heard	1	Refuge Personnel	Refuge Records
13 Mar. 1971	Osierfield, Irwin Co.	96	1	Hopkins	Field Notes
13 Mar. 1971	East Ben Hill Co.	100+ (G)	1	Hopkins	Field Notes
13 Mar. 1971	Piedmont NWR	50	1	Refuge Personnel	Refuge Records
13 Mar. 1978	Fitzgerald, Ben Hill Co.	40+	1	Hopkins	Field Notes
13 Mar. 1978	Jacksonville, Telfair Co.	7	1	Dopson	Field Notes
14 Mar. 1964	Fitzgerald, Ben Hill Co.	Heard	1	Hopkins	Oriole XXIX, 71
14 Mar. 1978	Osierfield, Irwin Co.	13	1	Hopkins	Field Notes

Table 1 Cont'd

Date	Location	Number	Groups	Authority	Reference
15 Mar. 1965	Osierfield, Irwin Co.	26	1	Hopkins	Oriole XXX, 71
15 Mar. 1975	Clinchfield, Houston Co.	75+	1	Hopkins	Oriole 1977 - 42 (2): 31
15 Mar. 1978	Osierfield, Irwin Co.	Flock	1	Hopkins	Field Notes
15 Mar. 1978	Jacksonville, Telfair Co.	35	1	Dopson	Field Notes
11,14,15 Mar. 1957	Piedmont NWR, Jones/Jasper Co.	525+	3+	Ambrosen	Oriole XXII, 24
16 Mar. 1966	Osierfield, Irwin Co.	Flock	1	Hopkins	Field Notes
17 Mar. 1975	Chickamauga B'field,Catoosa Co.	22	1	Dubke	Migrant 46 (3):68
18 Mar. 1962	Osierfield, Irwin Co.	Heard	1	Hopkins	Field Notes
18 Mar. 1965	Dawnville, Whitfield Co.	123	2	Hamilton	Oriole XXX, 71
18 Mar. 1968	Osierfield, Irwin Co.	Heard	1	Hopkins	Field Notes
18 Mar. 1977	Fitzgerald, Ben Hill Co.	10	1	Hopkins	Field Notes
19 Mar. 1933	Okefenokee NWR, Ware, Charlton	19	1	Walkinshaw	Oriole XVIII, 13-15
19 Mar. 1961	Augusta, Richmond Co.	30	1	Denton	Oriole XXVI, 32
19 Mar. 1962	Osierfield, Irwin Co.	46	3	Hopkins	Oriole XXVII, 9
20 Mar. 1940	Okefenokee NWR, Ware, Charlton	200	1	Walkinshaw	Oriole XVIII, 13-15
20 Mar. 1955	Macon, Bibb Co.	19	2	Johnston	Oriole XXI, 7
22 Mar. 1958	Piedmont NWR, Jones/Jasper Co.	75	1	Refuge Personnel	Refuge Records
22 Mar. 1977	Fitzgerald, Ben Hill Co.	30	1	Hopkins	Oriole 1977 - 42 (3):69
23 Mar. 1958	Dawsonville, Dawson Co.	34	1	Kahl	Oriole XXIII, 24
24 Mar. 1940	Jackson Lake, Jasper Co.	40	1	Wharton	Oriole V, 18-19
18-30 Mar. 1976	Buchanan, Haralson Co.	4 (G)	1	Nauman	Personnel Comm.
Mar. 1916	Okefenokee NWR, Ware/Charlton	100	1	Walkinshaw	Oriole XVIII, 13-15
	Spring Totals. 96 Records	5872+ Birds	132+ Groups		
Fall					
18 Oct. 1962	Roswell, Fulton Co.	Flock	1	Griffin	AFN 1963, 17:318
19 Oct. 1956	Savannah, Chatham Co.	5	1	Tomkins	Oriole XXI, 11
19 Oct. 1959	Piedmont NWR, Jones/Jasper Co.	Heard	1	Refuge Personnel	Refuge Records
20 Oct. 1964	Fitzgerald, Ben Hill Co.	10	1	Hopkins	Field Notes
23 Oct. 1959	Columbus, Muscogee Co.	1	1	Wells	Oriole XXV, 10
24 Oct. 1957	Piedmont NWR, Jones/Jasper Co.	20	1	Ambrosen	Oriole XXII, 41
26 Oct. 1965	Athens, Clarke Co.	48	1	Tramer	Oriole XXX, 113
26 Oct. 1966	Piedmont NWR, Jones/Jasper Co.	Flocks	2+	Refuge Personnel	Refuge Records
27 Oct. 1945	Coleraine, Camden Co.	Flock	1	Hebard	Oriole, XVIII, 10
28 Oct. 1962	Gainesville, Hall Co.	22	1	Peters	Oriole XXIII, 35
29 Oct. 1957	Waycross, Ware Co.	19	1	Chamberlain	AFN, 12:19-21
31 Oct. 1949	Piedmont NWR, Jones/Jasper Co.	15	1	Ambrosen	Oriole XV, 8
25-31 Oct. 1967	Piedmont NWR, Jones/Jasper Co.	Flocks	2+	Refuge Personnel	Refuge Records
Oct. 1965	Piedmont NWR, Jones/Jasper Co.	Flocks	2+	Refuge Personnel	Refuge Records
1 Nov. 1942	Piedmont NWR, Jones/Jasper Co.	15	1	Fleetwood	Oriole XII, 34
1 Nov. 1951	North Fulton Co.	3 (G)	1	Peters	Oriole XVII, 31
1 Nov. 1968	Piedmont NWR, Jones/Jasper Co.	Heard	1	Refuge Personnel	Refuge Records
1 Nov. 1975	Albany, Dougherty Co.	4	1	Pritchett	Dougherty County Birds
1-4 Nov. 1967	Piedmont NWR, Jones/Jasper Co.	Flocks	2+	Refuge Personnel	Refuge Records
5 Nov. 1959	Piedmont NWR, Jones/Jasper Co.	Heard	1	Refuge Personnel	Refuge Records
10 Nov. 1957	Lake Lanier, Forsyth Co.	35	1	Cooke	Oriole XXII, 42
12,13 Nov. 1965	Roswell, Fulton Co.	4 (G)	1	Fink	Oriole XXX, 96
13 Nov. 1976	Northeast Laurens Co.	1 (G)	1	Patterson	Oriole 1977 - 42 (1):17
14 Nov. 1977	Jacksonville, Telfair Co.	40 (G)	1	Dopson	Field Notes
16 Nov. 1975	McRae, Telfair Co.	36	3	Dopson	Field Notes
17 Nov. 1973	Thomasville, Thomas Co.	4	1	Crawford	Oriole 1976 - 41 (1): 2
17 Nov. 1974	Atlanta, Fulton Co.	40+	1	Bailey	Am. Birds 1975, 29:41
17 Nov. 1974	Columbus, Muscogee Co.	20	1	Miller	Am. Birds 1975, 29:41
18 Nov. 1959	Osierfield, Irwin Co.	62	1	Hopkins	Oriole XXIV, 44
24 Nov. 1964	Okefenokee NWR, Ware/Charlton	11	1	Cypert	AFN 1965, 19:26
24 Nov. 1972	Osierfield, Irwin Co.	16	1	Hopkins	Field Notes
27 Nov. 1947	Coleraine, Camden Co.	Flock	1	Hebard	Oriole XVIII, 10
28 Nov. 1975	Marietta, Cobb Co.	36	1	DiGioia	Oriole 1975 - 40 (4):49
30 Nov. 1976	Osierfield, Irwin Co.	1 (G)	1	Hopkins	Oriole 1977 - 42 (1): 17
1 Dec. 1973	Ringgold, Catoosa Co.	1 (G)	1	Dubke	Personnel Comm.
2 Dec. 1973	Jacksonville, Telfair Co.	2	1	Dopson	Field Notes
3 Dec. 1975	Forsyth, Monroe Co.	40	1	Johnson	Oriole 1975 - 40 (4):49
4 Dec. 1975	Jacksonville, Telfair Co.	45	2	Dopson	Field Notes
5 Dec. 1975	Jacksonville, Telfair Co.	24 (G)	1	Dopson	Field Notes
7 Dec. 1972	Marietta, Cobb Co.	7	1	Neville	Am. Birds 1973, 27:44
7 Dec. 1975	Fitzgerald, Ben Hill Co.	Heard	1	Hopkins	Field Notes
9 Dec. 1977	Jacksonville, Telfair Co.	63	1	Dopson	Field Notes
Early Dec. 1977	Macon, Bibb Co.	12	1	Haines	Pers. Comm.
10 Dec. 1977	Silver Lake, Decatur Co.	3 (G)	1	Buckner	Pers. Comm.
	Fall Totals. 44 Records	665+ Birds	51+ Groups		
Spring, Post Migration					
24 Apr. 1944	Clarkesville, Habersham Co.	3 (G)		Chamberlain	AFN 9: 324-326
24,25 Apr. 1955	Clarkesville, Habersham Co.	1 (G)		Chamberlain	AFN 9:324-326
May 1894	Augusta, Richmond Co.	2		Burleigh	Georgia Birds: 212
10 May 1977	Augusta, Richmond Co.	1 (G)		Belger	Oriole 1977 - 42 (3):66
Winter Records, Outside Okefenokee					
20 Dec.-20 Jan. 1950	Central Camden Co.	2 (G)		Witter	Oriole XXI, 32
29 Jan. 1977	Bufala NWR, Quitman Co.	1		Pate	Oriole 1977 - 42 (2):35

* (G) - Ground Records

(AFN), and *American Birds,* along with numerous unpublished records. Milton Hopkins, Jr. and William Dopson, Jr., at whose suggestion this article was written, provided records from their field journals. Both farmers, their outdoor occupation provides unusual exposure to the calling birds at the migration seasons. Personnel at the Piedmont National Wildlife Refuge searched the Refuge narratives and monthly reports for their unpublished records.

As the listed records are subjected to evaluation and interpretation, two factors must be considered. Few of the birds which apparently fly through Georgia are recorded. In any given season, less than 5% of the estimated population has been reported. Furthermore, disproportionate numbers of the records are from three locations in middle and south central Georgia. Hopkins, in 21 years of crane watching, Dopson, in only four years, and personnel from Piedmont NWR have provided a total of 91 records from these localities, more than 60% of the total.

A summary of the seasonal records by five year periods is presented in Table 2. The increase in observations through the years appears to confirm the projection of the increase in population of the migratory cranes. The current period, if records continue at the same rate through 1979, will produce 64 records and more than 2000 birds, an increase of 150% from the 800 birds reported two decades ago. However, in that period of time there undoubtedly has been a significant increase in the numbers and awareness of interested observers.

Table 2. Seasonal Summary of Sandhill Crane Georgia Migration Records by Five-year Periods.

Period	SPRING Records	SPRING Birds	FALL Records	FALL Birds	TOTAL Records	TOTAL Birds
Prior to 1950	4	359	4	30	8	389
1950-1954	2	175	1	3	3	178
1955-1959	5	676	9	142	14	818
1960-1964	15	738	4	43	19	781
1965-1969	19	1228	6	52	25	1280
1970-1974	16	1489	7	90	23	1579
1975-sp. 1978*	35	1207	13	305	47	1508
TOTALS	96	5872	44	665	140	6537

*Years 1975-1978 includes four spring and three fall seasons.

Table 3 summarizes the spring and fall records in approximate 10-day periods. The summary clearly shows that the spring migration is compacted into the first 20 days of March, with 90% of the birds reported in that brief period. The earliest record is 20 February (1976); the latest, 24 March (1940). The few spring records past that date are shown as post migration, since these late birds are possibly aged or otherwise infirm, as was Chamberlain's acknowledged "cripple" on 24 April 1955. Fall migration appears to be more leisurely accomplished, with a fairly

even distribution of numbers over an approximate seven-week period from the earliest on 18 October (1962) through the latest on 10 December (1977).

Table 3. Summary of Seasonal Sandhill Crane Georgia Migration Records by Ten-day Periods.

SPRING	Records	%	Birds	%
20-29 Feb.	8	8.3	382	6.5
1-10 Mar.	48	50.0	3294	56.1
11-20 Mar.	35	36.5	2013	34.3
21-30 Mar.	5	5.2	183	3.1
TOTALS	96		5872	
FALL	Records	%	Birds	%
18-31 Oct.	14	31.8	140	21.0
1-10 Nov.	7	15.9	57	8.6
11-20 Nov.	8	18.2	207	31.1
21-30 Nov.	5	11.4	64	9.6
1-10 Dec.	10	22.7	197	29.6
TOTALS	44		665	

However, an analysis of the records of the recent past 10 years, presented in Table 4, reveals a possibly significant change in the migration pattern. In spring, although the period of main migration remains unchanged, the advent of February records points to an earlier departure from the wintering grounds. In fall, December records have replaced the October records of a few years ago, indicating a later period of migration. Main fall migration is now indicated to be the 30-day period between 10 November and 10 December. The time spent at the southern wintering grounds appears to have diminished correspondingly.

Spring migration is undoubtedly hurried by the birds' urge to arrive on the breeding grounds. In fall, group sizes are smaller, and there are more "stragglers". Probably slowed by the juveniles, which are believed to remain with the parents until the following spring (Walkinshaw, 1973), the cranes apparently pause for periods of rest and nourishment. Spring records more than double fall records and spring birds outnumber fall birds by nearly nine to one. There appears to be no ready explanation for this disparity. Records from neighboring Tennessee (DeVore, *op. cit.)* are nearly equal between seasons, although the number of fall birds is fewer due to the smaller group sizes. This disparity in the number of records between the seasons has been consistent since the 1960-64 period.

Table 4. Summary of Seasonal Records by Ten-day Periods, Past Ten Seasons* Only.

SPRING	Records	%	Birds	%
20-29 Feb.	8	15.4	382	11.7
1-10 Mar.	26	50.0	2103	64.5
11-20 Mar.	16	30.8	743	22.8
21-30 Mar.	2	3.8	34	1.0
TOTALS	52		3262	
FALL	Records	%	Birds	%
18-31 Oct.	0	0	0	0
1-10 Nov.	2	9.5	4	1.0
11-20 Nov.	6	28.6	141	35.7
21-30 Nov.	3	14.3	53	13.4
1-10 Dec.	10	47.6	197	49.9
TOTALS	21		395	

*Spring records include 1969 thru 1978; fall, 1968 thru 1977.

THE MIGRATION CORRIDOR

The plotting (Figure 1) of the records of Sandhill Crane migration in the state suggests a migration corridor 100 km wide, running at 170 degrees from the northwestern section of the state through the Atlanta area, through the Piedmont NWR and the Macon area in the central part of the state, and through Telfair, Ben Hill, and Irwin Counties to the Okefenokee Swamp in the south. This corridor, as arbitrarily defined, contains 90% of the records and 97% of the birds reported. The center appears to be a direct line of flight to and from the wintering grounds with Jasper-Pulaski as the point of origin in fall and as the destination in spring. This center, if extended through Tennessee, intersects with Hiwassee Island and the Dale Hollow Reservoir, both areas of numerous crane records presented by DeVore *(op. cit.)*. In Florida, the extension of the center crosses Payne's Prairie, and other known wintering areas to the south pointed out by Melvin *(op. cit.)*.

In 21 years of observation, Hopkins has only five fall records. Thirty miles to the east, in just four years, Dopson has accumulated six fall records. This suggests that the majority of fall birds tends to proceed directly to the Okefenokee. Some winter there, and some apparently use the Refuge as a stop-over; others may simply overfly it on their way farther south.

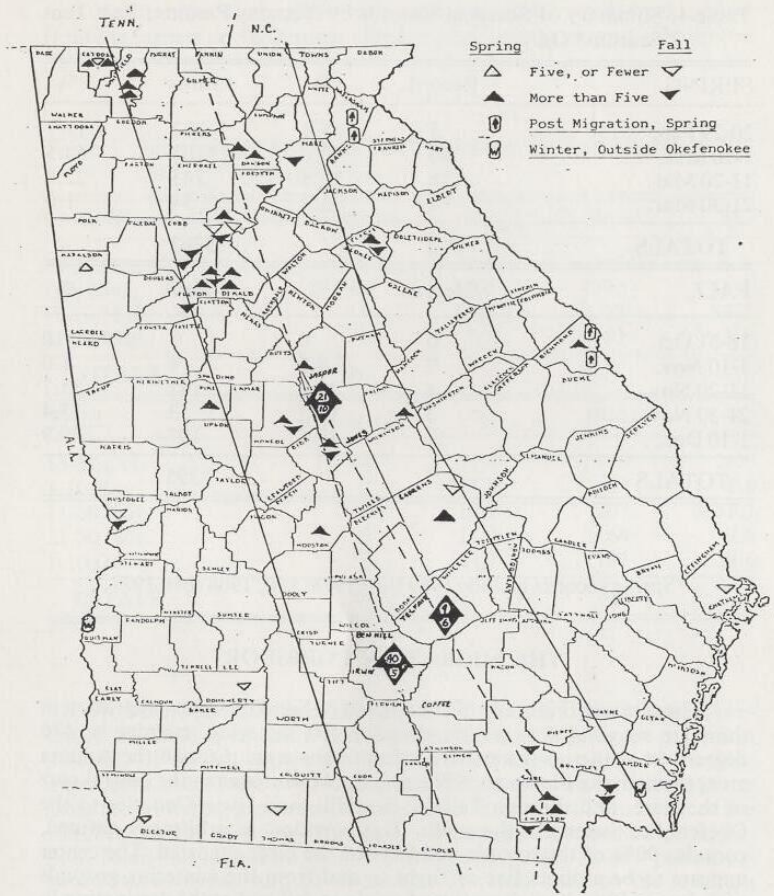

Figure 1. Migration records of the Sandhill Crane in Georgia.

MIGRATION BEHAVIORS

Many of the records provide detailed information such as weather conditions, time, estimated altitude, and direction of flight. Much of this information is helpful in considering the behaviors and habits of the migrating birds.

Many records are of birds "heard only", or reported as "nearly out of sight". Cranes are capable of high altitude flight. Walkinshaw (1973) cites instances in which *Grus* have been reported by airline pilots over the North Sea at 4300 meters, and over the Himalayas at twice that height. Hopkins estimates observations up to 1200 meters, an altitude at which the birds would appear as mere "specks" in the sky and could only be seen with binoculars.

Cranes are most often heard before they are seen. The "calling" of cranes in flight is frequent and is audible for up to five km (Walkinshaw, 1973). Nevertheless, in large flocks sometimes only a single bird or two is heard. Quite probably there are long periods in flight in which the birds are silent.

Furthermore, cranes are believed to fly both day and night in migration, stopping for food and rest as necessary. Walkinshaw (1973) states that European Cranes *(Grus grus)* begin spring migration in mid-morning after they have eaten, and normally fly the remainder of the day and through the first night without stopping. He implies that the haibts of the Sandhill Crane are similar. Consequently, the probability of night migration, and of silent, high altitude flight might explain how so many of the large birds apparently pass through Georgia unnoticed.

Frontal systems and inclement weather seem to force the birds to lower altitudes. Hopkins cites an instance in which 100 cranes grounded by rain near dusk had departed the area before sunrise under clear skies. Walkinshaw (1973) states that fall cranes appear to follow frontal systems, an observation reported to me by Dopson. Other than birds forced down by weather or by the need for food and rest, most records are between 09:00 and 16:00 hours. There are no records of high flying birds seen in late afternoon, nor of birds heard at night.

Birds are often reported as "circling", "appearing disorganized", or "confused." Williams (1970) describes such behavior of Sandhill Cranes departing Payne's Prairie in migration. For several minutes after rising from the Prairie, the birds circled and ascended, arranged a formation, then broke it in apparent confusion as other small groups attempted to join the larger one. Then, "suddenly they all turned to a northward heading and slipped into three long 'V' formations." Afterward, further attempts were made to consolidate the three flocks, followed by another spiraling ascension before the birds disappeared to the north in stable groups. Walkinshaw (1973) suggested that such "spiraling ascensions" are a search for favorable thermals for flight. Hopkins reports an occasion in which birds first observed circling at 200 meters ascended to 800 meters as he watched, before stabilizing into formation and heading north. On occasion, birds appear to circle in order to assess a roosting or feeding area. Once Dopson and I observed a small formation at 500 meters over the drained lake at Little Ocmulgee State Park in Telfair County. The birds broke formation and circled several times before re-grouping and continuing south. Since this mid-afternoon behavior resulted in no apparent altitude change, we surmised that the birds might have been considering alighting.

In the spring, groups apparently often follow other groups, possibly maintaining visual or auditory contact. Hopkins has observed as many as five groups passing overhead within an hour of elapsed time.

SUMMARY

The eastern population of the Greater Sandhill Crane, currently increasing in numbers, is known to migrate from its breeding grounds in the northern lake country into and through Georgia on its way to and from its southern wintering grounds. Ninety-six spring records and 44 fall records report the observations of over 6,500 birds passing through the state. Spring migration begins as early as 20 February (1976). The latest record is 24 March (1940). Fall migration occurs from the early record on 18 October (1962) through the latest on 10 December (1977). Recent records over the past 10 years show a changing migration pattern, with spring migration coming earlier and fall migration later. Ninety-seven per cent of the records are in a 100 km wide corridor running at 170 degrees from the northwestern section of the state through the Atlanta region, the Piedmont National Wildlife Refuge, to the Okefenokee and into central Florida. Cranes appear to be forced into low altitude flight or to become grounded in inclement weather. However, since the birds are believed to migrate by night as well as by day, and since they are capable of high altitude, silent flight, more than 95% of the birds apparently pass through the state unnoticed.

ACKNOWLEDGEMENTS

To Milton Hopkins, Jr., and William Dopson, Jr., for their encouragement, support, and assistance, as well as for their records;

To Ron Shell and Deborah Holle, Manager and Assistant at the Piedmont NWR, for searching the Refuge Narratives and Monthly Reports for crane migration records;

To all those who responded to my requests for information, including John Eadie, Refuge Manager at Okefenokee NWR; Lyle E. Nauman, Associate Professor of Wildlife at the University of Wisconsin at Stevens Point; Ron Crete, Graduate Researcher at St. Cloud (Minn.) State University; Ken Dubke, President of the Tennessee Ornithological Society, and to many others who forwarded individual and area records;

And to the late Dr. J. Fred Denton, who maintained an interest in the progress of this paper, and who provided encouragement and direction in its preparation.

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FRANKLIN'S GULL NEAR SAVANNAH RIVER MOUTH

Thomas C. Smith

On Saturday 18 March 1978 I was driving east along the northernmost dike which runs east-west in the U. S. Corps of Engineers' dredge site on Barnwell Island across the Savannah River from Savannah, Ga. The Corps calls this Area 13. On the left is marsh; on the right is the built spoil area. On that day there was a good bit of water in the spoil area along the dike, varying from perhaps one inch to several inches deep. The day was bright and sunny and the air was clear.

At about 3:30 p.m. there were a few Ring-billed Gulls *(Larus delawarensis),* several Bonaparte's Gulls *(L. philadelphia)* in winter plumage, and various smaller shore birds flying low about the area when I noticed what I thought was a Laughing Gull *(L. atricilla)* flying toward us. The bird was in full summer plumage, which made it quite conspicuous. It flew about over the water in front of the car above and below our level, circling and dipping to the water at a distance of about 12 feet to 50 yards. It was quickly obvious that this bird had very distinctive wing markings and was not a Laughing Gull. The white border between the gray and black at the wing tips and the white-tipped black primaries were vivid and clear. I pointed this out to my friend who had a copy of *Birds of North America* (Robbins, C. S., et al. 1966. Golden Press, New York, N. Y.) opened on her lap to the page on black-headed gulls and she was able to see all of this herself. The bird was flying about among several Bonaparte's Gulls and they appeared much the same size when compared with the larger Laughing Gull. The clear, distinctive wing markings and relative smallness of this bird made us positive that we were seeing a Franklin's Gull *(L. pipixcan).* We watched it for more than five minutes under perfect conditions and from very close before it moved some distance away. We drove on, then came back about 20 minutes later. It had returned to the road. We were able to get out of the car and observe it again for several more minutes, again confirming the markings and size of it. During the time that it was flying about, it was over both Georgia and South Carolina territory. I went back the next day hoping to see it again, but had no luck then or on subsequent trips.

On 5 August 1978, while we were birding on the same area, Bob Lewis of the faculty of Lander College, Greenwood, S. C., told me that he had seen a Franklin's Gull in South Carolina within 10 days following the sighting reported here. (Also, *fide* Dr. Sidney Gauthreaux, Clemson University. - *Ed.*)

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ANOTHER RUFFED GROUSE FROM ATHENS, GEORGIA

Philip E. Hale, Jeffrey J. Jackson,
and A. Sydney Johnson[1]

At approximately 10:00 hrs on 6 December 1977, a Ruffed Grouse *(Bonasa umbellus)* was killed when it crashed through a window at the home of Ms. Kay Postero on Westview Drive, a residential section within the Athens, Georgia, city limits. Ms. Postero discovered the bird and brought it to us for identification. We acquired the bird, measured it, examined crop and gizzard contents to obtain information on recent feeding habits, and had the carcass examined for parasites. A study skin was prepared by Robert J. Hamilton and deposited at the University of Georgia Museum of Natural History (Catalog Number 3354).

The Grouse was an adult male; it appeared in good physical condition, possessing abundant subcutaneous fat. An eastern redcedar *(Juniperus virginiana)* seed was found encapsulated in the tissue just anterior to the left eye. The crop was empty, but the gizzard contained seeds of privet *(Ligustrum sinense),* snailseed *(Cocculus carolinus),* bush honeysuckle *(Lonicera mackii),* and grit. All these species are common in the Athens area and are found on brushy vacant land which adjoins the suburban residence where the bird was found. Fifteen parasites of 3 species were recovered *(Brachylaima virginiana,* 1; *Dispharynx nasuta,* 1; *Heterakis bonasae,* 13). These parasites have been reported during previous examinations of Grouse from the mountainous regions of the Southeast (Davidson et al., 1977), and they also occur to some extent in other southeastern hosts.

Gizzard contents and parasite burden indicate that this bird originated in the Southeast and probably spent at least a short period of time in the Athens vicinity. Because adult Grouse are normally quite sedentary (Eng, 1959), it seems likely that this individual inhabited the area near where it was killed for over a year. The zoo of Athens Memorial Park nearby has not held any Ruffed Grouse, at least in recent years (personal communication, Karl Enter, Animal Caretaker).

Pursglove (1975) reported a Ruffed Grouse killed just outside of Athens by a hunter in January, 1973. That bird, an adult female, was free of parasites and had been feeding heavily on privet fruits (erroneously reported as *Forestiera acuminata)* and Japanese honeysuckle *(Lonicera japonica)* leaves; both of these plants grow in greatest abundance in the Piedmont. Typically the southeastern limit of the Grouse's range in Georgia has been considered to be a few mountainous northeastern counties (Hein, 1970). The present account, that of Pursglove (1975), and recent unsubstantiated reports of Grouse that we have received from Clarke, Cobb, Gwinnett, Jasper, and Morgan Counties may indicate a modern range expansion or reinvasion by the species.

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Certainly habitat conditions of the Piedmont region have changed markedly in recent years. Virtually all of the Piedmont region was cleared for agriculture in the early 1800's and is only now returning to mixed pine-hardwood forest. The widespread naturalization of exotic evergreen understory plants such as privet and Japanese honeysuckle may be creating conditions more favorable to Grouse than those existing even prior to the mass conversion of forests to cropland. However, range limits of most birds are labile, and continually fluctuate with environmental factors such as weather or for unknown reasons. Occurrence of Grouse in the Piedmont may be only a temporary phenomenon related to population conditions within their normal range.

Because of the secretive nature of Ruffed Grouse, careful observation will be needed to determine if a breeding population presently occurs in this region. We solicit details of any sightings and are particularly interested in receiving specimens taken in the Piedmont.

ACKNOWLEDGEMENT

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A BOBWHITE DELUSION

George A. Dorsey

There is an interesting trick that I have used with the Bobwhite *(Colinus virginianus),* which I chanced to discover quite some years ago, but about which I am somewhat hesitant to write, since it is often all too effective, and it could possibly be used by someone in a detrimental way. It is a hoax played upon the birds, and I have been reluctant to use it very often, because it seems to be a cruel thing to do. It is somewhat akin to the "squeak" and to the "wren-scold" (lately called "pishing" by some observers), which are employed by many bird observers when they want to bring birds out of hiding, so that they may be seen and counted.

In my field wanderings I have used imitations of birds a good deal in attempting to see the birds. At best, however, both whistled imitations and the playing of tape recordings cannot elicit normal behavior patterns from the birds, and they may be somewhat harmful if used to excess (Bogle, 1975; Glinski, 1976). On the other hand, when you want to see the bird, you try to attract it in some way. I was probably one of the earlier observers to make use of the "wren-scold" imitation, which I discovered some time before 1930 by trying to attract Carolina Wrens, and found that I also caused other birds to come to see what the confusion was all about.

This is the story of my discovery of what I shall call an atrocious trick. On October 3, 1934, in what was at that time open countryside southwest of College Park, Georgia, I was walking slowly and quietly along a ridge overgrown with broomstraw grass and widely-spaced young pines, when I heard a bird note with which I was not familiar. In tonal quality it slightly suggested the song of a Field Sparrow, but it was much softer and somewhat elfin, a bit haunting and uncertain in delivery. It consisted of about seven short, peeping notes, clear and sweet, uttered in a regular series with a gradual climb in pitch. The first note was a bit longer in time duration, followed by a very short pause, and then the succeeding notes came in regular timing, climbing the scale for about two whole notes.

I could not quite locate the direction from whence the sound was coming, although I looked and listened carefully. I approached it cautiously and then it ceased, although I saw no movement of any kind. I stood still for a while, hoping that the bird would begin calling again, but everything remained quiet. Then I tried imitating the note, which was rather easy to do, hoping that I might entice the bird to resume its calling, or perhaps to come into sight.

I whistled my imitation three or four times, when I received a surprise, and then I came to realize and understand what I had been hearing. A female Bobwhite came to within about a dozen feet of where I stood, and began to call in an excited manner. Soon afterwards a male Bobwhite joined her. These birds seemed for the moment to have gone crazy. Both birds, and particularly the female, were calling with a rapid,

smacking and twittering clucking, difficult to discribe, but anxious and persuasive in tone, and continuous in repetition. Both birds were looking anxiously in my direction, nervously pacing from side to side, and moving their heads in short, quick jerks, raising and lowering them. The male seemed to act with the most vigor.

What it all meant was that I had heard a baby Bobwhite, very likely more than one, giving a twittering call as it followed the parent, unaware of my presence. On my closer approach the parent had given an inaudible signal for the young birds to hide. The human intruder had then come to stand too close, and then for the Bobwhite parent an unprecedented thing happened — one of the young birds was apparently twittering as if no danger were near, and right where the invading human was standing! The baby bird must be called away from the danger.

Each time I began the whistled imitation again, the parental anxiety was renewed in force, and they ran, and sometimes flew, from side to side, calling frantically, especially the male by now, whose entreating cry had changed to a rapid "clook-clook-clook-clook-clook . . . " The notes of the female were mostly a clicking sound, but also I wrote in my notebook: "chuck-whoit! chuck-whoit-chuck! . . . clook-clook-clook-clook-clook . . . " and: "t(ch)oit! Tew-i-see-see-seet!" and: "teesee-see-seet!" At times the female uttered a repeated, pleading "whoi-it!" which was clear and glinting in tone-quality. Some of the notes were so gentle and entreating that they sounded to my ear like exactly what they were — notes to call a very young bird to a solicitous parent. There was something almost human about some of the cries.

After a while the parent birds stopped on a low perch, remaining there but continuing to call most persuasively, hoping to lure away from me what they took to be a recalcitrant offspring. These birds were obviously so agitated that I began to feel somewhat ashamed and regretful. I was causing these birds a great deal of misery. I stopped my imitation and quietly walked away, being careful to place my feet in such a way that I would not step upon a young bird in hiding.

This ruse seemed such a malicious thing to do to parent Bobwhites that I decided not to use it, except sparingly. Accordingly, the next time I tried it was on July 2, 1965, at Rome, Georgia, when I heard a Bobwhite singing in thick growth on a ridge. I was not able to get a glimpse of the bird by careful stalking, so I tried the ruse of whistling like a baby bird, standing quite still while I whistled. The Bobwhite continued to sing, perhaps about sixty feet away, apparently ignoring the sound, but after I had given my imitation a few times another adult Bobwhite approached, giving what Stoddard (1931) calls the "scatter call," a plaintive, quite musical three-noted utterance, which from this individual bird was: "whurl-ee-tchi(k)!" — a bit less musical than some of the similar calls I have heard.

This call was repeated several times from about twenty feet away, the bird remaining concealed in a brush pile. Each time I would whistle the peeping notes this bird would respond with two or three repetitions of this "scatter call," or gathering signal. I moved slowly closer to the brush pile, and whistled the baby calls again. Then the bird moved upward into view, and began to utter the same sort of clucking notes as the birds of 1934. I was surprised to see that the bird was in male plumage.

As I continued my imitation the bird began to advance toward me, becoming very excited, with tail feathers spread widely, and continuing the chatter of pleading notes, its voice whining between the cluck notes. As I continued to give the imitation the bird approached to about six feet from where I stood, tail spread, fluttering its wings, and calling very persuasively and excitedly. Then it ran completely around me in a circle, coming to within four feet, and going through something of the feigned injury ruse. Then it returned to the brush pile, continuing an endless repetition of its cluck-whine calling. Again it seemed that I had gone far enough with the trick, and I moved quietly away. The singing Bobwhite had never ceased its song while this was taking place.

On July 28, 1965, at Rome, Georgia, I gave in to the temptation to try the trick again, when a Bobwhite flew from the path ahead of me, uttering a warning note. When I began my imitation this time, two female Bobwhites came near, but stayed in the cover of a thick growth of smilax and low bushes at the side of the path, where they were not easy to see. These two adult females ran back and forth on the ground, calling with the same persuasive notes. I did not continue the experiment for very long this time.

This ruse seems to work best when I am alone, but I managed to demonstrate it to a biology student in July, 1970, no exact date recorded, and on June 22, 1972, at Rome, I was with a small group of young boys of a "day camp," and we walked along the same ridge. We suddenly surprised a female Bobwhite with about a dozen small young birds, which scurried rapidly to hide at her signal. She then tried the broken wing ruse with us. I quickly commanded the boys not to chase her, but to stand very still where they were. I began my imitation of a young bird, and the parent bird returned, coming rather close to us, and with ruffled feathers and vibrating wings, she gave the same gentle, low clucking, and then she ran in a circle around us, which amazed the boys. At times this bird became so excited that she fluffed her feathers out and vibrated her body so rapidly that she appeared somewhat indistinct to view. Again, I terminated my imitation rather soon, and I guided the boys away carefully, so as to avoid having any of the young birds stepped upon.

The last time I tried this trick with success, up to the time of this writing, was on August 24, 1974, at Rome, when I had a camera with me, and I wanted to try to get a photograph. I came upon a female Bobwhite with a group of nearly half-grown young, and although my imitation brought the parent bird fairly close, my photographs were not successful, because she always flew across any open space, and the camera recorded only a blurred image.

This operation does not bring any direct physical harm to the birds, but they become so emotionally disturbed that it seems to be a cruel thing to do, although it is quite interesting. It has worked only too well on these six occasions that I have related here.

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GENERAL NOTES

SANDHILL CRANES IN CLARKE COUNTY, GEORGIA — This note lists and briefly describes sightings of several flocks of Sandhill Cranes *(Grus canadensis)* from my home in western Clarke County, where I have lived since July, 1968. This note covers the period from that date through March, 1978. Aside from the general interest in such sightings, interest may also attach to the larger number of sightings, six, than the two reported by Tramer (1968a, 1968b) and to the fact that no other sightings of cranes for this area have been published in *The Oriole* from 1968 through 1977.

My first sighting was of a flock of seven cranes on the morning of 20 March 1969. These birds were in a large, isolated field about 0.5 mile west of my home. The date was provided from a written notation by Mrs. Jonny Howell, who accompanied me to see these birds after their bugling in the field had attracted my attention. The birds seemed to be resting; they were on the ground at least an hour, finally departing when we came too close.

On the afternoon of 26 February 1975, I saw three large flocks of cranes at about the same time, flying very high. I was able to watch and count only one of these three flocks, which contained approximately 50 birds. All three flocks were "drifting" in the characteristic spring migration pattern as described by Hopkins (1977). Curiously, for the period of time that I could see the three flocks, their direction of movement was ESE. On 13 March 1976, again in the afternoon, I saw six cranes in flight (direction not noted).

On 18 November 1977, at 6:30 P.M. (EST), I heard and then saw seven cranes flying low in a well defined V-shaped formation, no more than one-third the altitude of the three high-flying flocks of 26 February 1975, and moving definitely and deliberately south.

On 11 March 1978, at almost noon, I heard and then saw a flock of about 60 cranes flying north. This flock was low compared to other spring migration flights seen but higher than the flock seen the preceding 18 November. Some drifting, assembling, and disassembling were noted. On 12 March 1978, I heard and then saw a flock of about 40 cranes at 4:00 P.M., flying north very high. This flock, when approximately overhead, was near the limit of visibility with the unaided eye.

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MONK PARAKEETS IN AUGUSTA — On 1 March 1978 Bill Gibbs and I saw two Monk Parakeets *(Myiopsitta monachus)* on the Georgia Regional Hospital grounds in the south section of Augusta. The birds were observed on that day also by Mr. and Mrs. Sam Pursley on whose lawn the birds were feeding on patches of mistletoe *(Pharadendron flavescens)* berries in an elm *(Ulmus americana)* tree. They also were feeding on the berries of a swamp privet *(Forestiera acuminata)*. The Pursleys said the birds had been in the vicinity of their home since November, 1977. Clarence Belger observed the birds on 2 March 1978 and confirmed the sighting.

The Monk Parakeet is about the size and shape of a Mourning Dove (excepting the head). Its back is parrot green; its head and breast are light gray, with darker feathered edging; the belly and thighs are bright yellow; the tail is bluish-green; the primaries a bright dark blue; the bill is flesh colored; the legs and feet a bluish-gray. This description matches very closely a painting of the Monk Parakeet (John Bull and Edward R. Ricciuti, painting, Arthur Singer, Audubon, Volume 76/Number 3, page 48, May 1974), and a personal sighting description (Doris Cohrs, Oriole, Volume 38, No. 1, page 11, March 1973).

On 15 March 1978 we were called to the home on Apple Valley Drive of Mrs. Walter Brumbeloe who said "large green birds" were building a nest in an old squirrel's nest in a tree in her yard. The Brumbeloe home is only a few blocks from the hospital grounds.

When we arrived at the Brumbeloe's we found a large mass of sticks with a side opening in a clump of mistletoe about 30-35 feet above the ground in the crotch of a water oak *(Quercus nigra)*. The stick nest was about two feet in length, a foot or more protruding backwards from the mistletoe clump. The opening, a small circular hole at the bottom of the nest, was within the clump of mistletoe. The diameter of the nest at the time we observed it was between two and three feet. The tree is in the front yard of the home about 20-30 feet from a heavily travelled street in a well populated neighborhood. The parakeets were not at the site when we arrived, but returned in about twenty minutes, immediately entering the nest. Anne and Vernon Waters verified indentification of the birds on 15 March. The Brumbeloes first noticed them on 9 March.

We observed them on 15 March for over two hours while they fed on mistletoe berries and apparently carried on nest building activities. Selecting green twigs from the clump of mistletoe in which the nest was placed, and grasping them in their bills, they would gnaw the twigs, then bend them back and forth until they snapped from the parent plant. With the twigs cross-wise in their beaks, they would carry them to the opening of the nest where they would lay the sticks down and work with them to get them inside the nest. Sometimes the birds would get inside and pull the sticks in after them. We did not observe them taking any other material to or inside the nest.

At six o'clock they entered the nest and did not come out again that day. Mrs. Brumbeloe stated she had clocked them each day since 9 March and that near 6 o'clock was always the time they settled down

inside the nest at night. This very strongly suggests that the birds are using the nest as a roosting site.

Doris Cohrs (Oriole; March, 1973, page 11) tells of one Monk Parakeet building a nest in a pine tree, using it for a roost for several months, then abandoning it.

There have been four other sightings of the Monk Parakeet in Georgia. One was in Atlanta in 1973. I was unable to find the dates of the sightings in Athens, Sapelo, Sea Island, and St. Simons Island. This species has not been established as nesting in Georgia.

The parakeet seems to have established itself in New York, especially around New York City, New England, the Middle Atlantic States, Virginia, Maryland, mid-western states and California. They are breeding regularly, according to Dr. Ward B. Stone, wildlife pathologist at the New York State Department of Environmental Conservation. Two clutches are produced in a single season. The first clutch is laid in April; nestlings are fledged by June. The second nesting is in July with the young fledged by the end of summer.

At present the parakeets reported in this note seem to be using the nest as a roost. Further observation during nesting season will reveal if indeed the Monk Parakeet is nesting in Augusta.

We can come to one definite conclusion, however. The Monk Parakeet can survive cold weather, for it has survived one of the coldest winters on record for the Augusta area.

Eulalie E. Gibbs, 816 Hammond Drive, North Augusta, South Carolina 29841

SIXTY WILSON'S PHALAROPES SEEN IN RICHMOND COUNTY — On 5 May 1978 Clarence Belger and I watched a flock of 60 Wilson's Phalaropes *(Steganopus tricolor)* feeding in a large wet weather pond located in a grassy field just off the Augusta levee. This flooded pond area was created in a low lying part of the field by the intense rains of the previous week. Clarence Belger originally observed the large flock earlier in the day and I was fortunate in that they were still present when we arrived at 4:30 P.M.

At first there were only a few birds in the pond, but then a large flock came wheeling in showing dark wings and white tails in flight. We counted them several times, arriving at an exact total of 60 Phalaropes. Fifty-nine of them were in spring plummage, the combination of white, rust, and black being very distinctive. Several were spinning around and around in a circle in the water, darting their needle-like black bills occasionally into it. According to Chandler S. Robbins, Bertel Brunn, and Herbert S. Zim, (A Guide to Field Identification; Birds of North America, Golden Press., New York., 1966.) this is their usual feeding behavior for which they are well equipped with lobed toes enabling them to swim easily. The flock was studied in good light from approximately 50 feet using 7X35 binoculars and a 20X scope. We also noted one bird

feeding in the flock that was in winter plummage — a white bird with dark back and absolutely no rust color at all. Also seen in the pond with the Wilson's Phalaropes were: four Greater Yellowlegs *(Totanus melanoleucus),* four Lesser Yellowlegs *(Totanus flavipes),* and one Stilt Sandpiper *(Micropalama himantopus).*

Several times the entire flock picked up and flew, the whole group flying as one, swooping and turning, appearing first dark and then light in color as they turned. Once they flew off until they were almost out of sight, but then turned and came back to land in exactly the same pond as before to resume feeding.

In a personal conversation with Gerald Knighton, he indicated that he was successful in seeing three of the Wilson's Phalaropes in the same ponds about 7:00 P.M. the same evening and on 7 May 1978 Jeannine Angermann and Clarence Belger visited the same field and were able to see one remaining Phalarope.

This is the third report of Wilson's Phalaropes in Richmond County. The Annotated Checklist of Georgia Birds (Occasional Publication No. 6, Georgia Ornithological Society) lists previous reports of the bird in Augusta on 1 June 1975 with a photograph taken and 13-16 Sept 1962. According to Gerald Knighton, only one and two birds respectively were seen on these two previous occasions, which makes a flock of 60 quite an unusual occurence.

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

DICKCISSELS IN AUGUSTA — On 20 May 1978 on our Audubon Society Field trip, the group which included Vernon and Anne Waters, Clarence Belger, Bill and Lee Gibbs, Joe and Delma Knipp, Jeannine Angermann, Elaine Gates, and Walter Scott observed one male Dickcissel *(Spiza americana)* perched atop a tall oak tree in the middle of a large field of mixed grasses and buttercups. His song is very distinctive — a sort of wheezy "dick, dick'cis,cis,cis" which can be heard from a long distance and which was a good aid in identification.

On 21 May 1978 two males were seen here, but although the fields were searched by Anne Waters and Clarence Belger, no females were found.

According to the Annotated Checklist of Georgia Birds (Occasional Publication No. 6, Georgia Ornithological Society) the Dickcissel is an uncommon and erratic summer resident in the Appalachian Valley, Piedmont, and Upper Coastal Plain, and a rare transient anywhere in the state. Augusta is located on the fall line with this sighting occurring below the fall line in a field off the levee near the Savannah River.

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

DICKCISSELS IN SUMMER IN GORDON COUNTY, GEORGIA — Two colonies of Dickcissels *(Spiza americana)* inhabited large fields on the Looper farm in Murray County, Georgia, from June, 1955, until the summer of 1962 (Hamilton, 1956. Oriole 21:30-31; 25:22), but they were not found after land use changes in ensuing years. The purpose of this note is to report their occurrence in adjoining Gordon county in June, 1978.

On 3 June 1978 Chip Kreischer and the writer heard a Dickcissel singing in a grassy field during a breeding bird survey. On 5 June I returned to the field, accompanied by Harriett DiGioia, Delano and David Crowe, and Harry and Jean White. We heard a bird singing almost at once and after searching located it near the top of a hill perched on a sweet gum *(Liquidambar styraciflua)* sprout two feet taller than the surrounding fescue *(Festuca* sp.). There was ample time to examine it with binoculars and zoom scope. At times it flew into the grass, where it was silent for as long as five minutes. Then it flew again into the sweet gum or a tall weed and sang for several minutes. Delano Crowe saw another bird which he believed to be a female Dickcissel.

The location was two miles east of I-75 on Redbud Road. Part of the large field had been plowed, but fescue and other grasses covered the major portion. Sweet gum and oak *(Quercus* sp.) sprouts from 3 to 4 feet tall were scattered among the 15-inch tall grasses.

On leaving we drove along a road bounding the field and heard a second singing male. This bird also sang from tree sprouts on a grassy hillside. This spot was about one-half mile cross-country from the first sighting and the singer was therefore deemed to be a second male. In neither location did we find a nest. By 19 June the entire field had been plowed, all grassy areas being turned under, and it is not known what happened to the Dickcissel.

Anne P. Hamilton, 704 Greenwood Drive, Dalton, Georgia.

GLOSSY IBIS AND WILSON'S PHALAROPES OBSERVED IN LAURENS COUNTY — On the afternoon of 7 May 1978 Allen Rhodes and I noted a Glossy Ibis *(Plegadis falcinellus)* and a pair of Wilson's Phalaropes *(Steganopus tricolor)* feeding on the mudflats at a natural pond in Jackson's pasture in the northeast section of Laurens County, Georgia. During the half-hour observation, the Ibis was approached to within forty meters and the Phalaropes to within fifteen meters. Binoculars and a 20-45X telescope were utilized in the confirmation of fieldmarks. On the following day, identifiable photographs were taken from approximately those same distances using a 400 mm. lens. On the afternoon of 10 May Paul Riddle and I noted that the Glossy Ibis was still present and that a third Wilson's Phalarope had apparently joined the pair which were previously seen. On 12 May when the pond was next visited, the birds were not seen.

Unsettled weather conditions prevailed in the area from 7-9 May, with two frontal systems moving through, bringing frequent rain showers and morning fog.

The *Annotated Checklist of Georgia Birds* (Occasional Paper No. 6, Ga. Ornith. Soc.) lists the Glossy Ibis as "rare", and the Wilson's Phalarope as "accidental" in the interior of the state.

T. K. Patterson, 1409 Edgewood, Dublin, Georgia 31021

SUCCESSFUL NESTING OF GLOSSY IBIS ON THE GEORGIA COAST — While conducting aerial heronry surveys of the Georgia coast during 1978, we observed an unusually large number (50-60) of Glossy Ibis *(Plegedis falcinellus)* perched in low shrubs on a large marsh island in the lower Altamaha River (Lat. 31° 20' 05" N; Lon. 81° 22' 15" W). On-the-ground inspection revealed approximately 40 young, nearly fledged Glossy Ibis mixed with nesting great and snowy egrets. All young birds were out of the nest; about half were running through the dense *Spartina alterniflora* and the other half flying from limb to limb in the shrubby vegetation.

Hillestad reported Glossy Ibis nesting activity on this island in 1970; however, the colony was destroyed by severe weather that year. Hillestad (1971. Johnson, Hillestad, Shanholtzer, Shanholtzer. An Ecological Survey of the Coastal Region of Georgia. A Report to the National Park Service. 387 pp.) also observed unsuccessful Glossy Ibis nesting attempts in the Satilla River heronry (Lat. 30° 58' N; Lon. 81° 29' 30" W).

Although Glossy Ibis have been observed at both locations for the past 3 years, this year's young were the first that have been seen successfully fledged at either location.

Ron R. Odom, Georgia Department of Natural Resources, Game and Fish Division, Social Circle, Georgia 30279

CASPIAN TERNS IN THE GEORGIA MOUNTAINS — The Pocket Checklist of Georgia Birds (1969, Ga. Orn. Soc.) listed the Caspian Tern *(Sterna caspia)* as "common all year on coast, non-breeding, accidental in the interior at Columbus". The Annotated Checklist of Georgia Birds (1977, Ga. Orn. Soc.) changed the last phrase to "occasional in interior in late summer and fall". Apparently it has not been recorded in the mountain region of the state. Meyers does not mention it in his "Birds of the Hiawassee Plateau and Surrounding Slopes: A Preliminary List" *(Oriole* 42: 46-59).

Thrice in the last year I have seen Caspian Terns at Lake Chatuge in Towns County, Ga. On 25 August 1977 I saw one bird. This was reported in *American Birds* (32: 204). On 12 June 1978 I saw a group of four Caspian Terns, all with the full black cap of the breeding plumage.

On 23 July 1978 I saw another group of four birds.

The Caspian Tern can sometimes be confused with the Royal Tern *(S. maxima).* I am very familiar with both species, particularly with the Royal, since I have banded hundreds at a colony in Florida. In every case reported here I saw the stout red bill, the extensive dark area on the underside of the primaries, and the tail only slightly forked. On two of the above occasions, I heard the birds call. The Royal almost never ventures far from salt water unless carried by a storm. There had been no hurricanes or unusual storms before any of the above birds were seen.

The Caspian Tern may follow the larger river valleys in migration. Imhof regards it as "uncommon" but not rare in the Tennessee River valley of northern Alabama, where it is most often seen in the Fall, sometimes as many as 20 at a time (1976. *Alabama Birds.* Univ. of Ala. Press, University, Ala.)

On the basis of the above evidence, I would hazard a guess that the Caspian Tern is perhaps more regular as a migrant in the Tennessee River drainage of Georgia than has been realized heretofore. It is to be looked for there on the larger lakes and rivers in both spring and fall.

Robert W. Loftin, University of North Florida, Box 17074, Jacksonville, FL 32216.

FROM THE FIELD

The format of this informal column precludes presentation of detailed accounts of rare birds. Records listed here are largely unchecked and their appearance in this column should not be considered to constitute scientific publication. They are intended primarily to bring interesting sightings to the attention of the membership and to alert others to look for unusual species in the areas indicated.

NORTH GEORGIA

At the Wayne Poultry Processing Plant near Pendergrass, Wilson's Phalaropes were discovered by Joel and Vicki Volpi 5 May. Terry Moore saw 18 of them plus approximately 50 White-rumped Sandpipers same place and date. Largest number of phalaropes seen was 20 on 6 May by Joel; a female lingered until 13 May.

Two very much out of season Sandhill Cranes were reported from Lake Notteley, Union County, 13 May by Joe Greenberg. An Olive-sided Flycatcher was spotted by Billy Pulliam at John Ward Swamp, Atlanta, 13 May. Three Wilson's Warblers showed up. In the Atlanta area Michael Robison found the first on 2 May at Emory University's President's Estate and Richard Parks spotted the second at Piedmont Park 10 May. The third sighting was by Harriett DiGioia on the Cohutta Ranger District, Chattahoochee National Forest, Murray County, Forest Service Road 17, on 1 August for the only known summer record for the state.

Don and Doris Cohrs banded two Connecticut Warblers 14 May at South River, Atlanta; another one was seen in the same locale 21 May. A Mourning Warbler was seen by Don on 14 May at this same place. Male and female House Finches were observed building a nest by Terry Moore at Colony Square, Atlanta, 27 June.

On 21 May two Dickcissels were watched by Clarence Belger in a field off Lover's Lane, Augusta; one was there 22 May. Harriett DiGioia reports the following sightings from the Cohutta Ranger District: female-plumaged Western Tanager at the Cohutta Overlook, U. S. Highway 76, Gilmer County, on 17 July for the only known summer record for the state; immature Tennessee Warbler along Forest Service Road 68, Fannin County, on 26 August — previous earliest known date was 29 August, 1976; Blue-winged Warbler, Jacks River Field, Georgia Highway 2, on 31 August; adult and immature Nashville Warblers on 11 September, Songbird Management Area, Murray County; another was seen on Forest Service Road 68, Fannin County, on 17 September.

(Compiled by Harriett G. DiGioia, U. S. Forest Service, 401 Old Ellijay Road, Chatsworth, Ga., 30705.)

SOUTH GEORGIA

T. K. Patterson and Milton Hopkins found a Purple Gallinule nest with 5 eggs on 2 June 1978 near Dublin (Laurens County). The same nest on 26 June contained 1 young and 2 eggs. Patterson found a Least Bittern nest on 20 May that held 5 eggs which had hatched by 7 June.

During the summer, Patterson noted Snowy Egrets (1 on 13 August and 2 on 20 August), Louisiana Herons (1 on 20 August, 2 on 31 August), and a Double-crested Cormorant on 26 August. Patterson monitored shorebird migration in the county and noted Least and Semipalmated Sandpipers first on 29 July. Upland Sandpipers were present on 6 August (2) and on 8 and 26 August (1 each day). A Long-billed Dowitcher was identified by call on 10 August and a Semipalmated Plover was seen on 13 August. A Black Tern and a probable Forster's Tern were present on 12 August.

Barn Swallows returned to their Thomas County nesting site to breed a second year (see *Oriole* 43:20, 1978). Robert and Beth Crawford found a nest with 4 young on 4 June and by 14 June the young birds had left the nest. A second brood was attempted: 4 more eggs were in the nest on 27 June. In Grady County, Wilson Baker and Robert Crawford saw an Osprey on 8 June.

Brent Ortego continued his weekly surveys of waterbirds at Eufaula National Wildlife Refuge (near Columbus). He found that a Double-crested Cormorant, an Osprey, and a Forster's Tern summered at the refuge (3 cormorants were seen on 17 June). A Common Loon and an American Wigeon were noted on 24 June. A Least Tern was seen on 13 June and a Caspian Tern on 1 July. Two Herring, 6 Ring-billed, and 14 Laughing Gulls were counted on 17 June. Ortego and Isabelle Ragland conducted an eight-hour count on 22 July and in addition to the summering cormorant, Osprey, and Forster's Tern, they saw 236 Canada Geese, 59 Mallards, 2 adult Bald Eagles, and 1 Willet.

(Compiled by Robert L. Crawford, Tall Timbers Research Station, Rt. 1, Box 160, Tallahassee, Fla. 32312.)

NEWS AND COMMENTS

DATA NEEDED

During two years of research at Eufaula National Wildlife Refuge Brent Ortego and James Earl Kennamer have made extensive observations on 250 species and have obtained additional information on 20 other species from *Alabama Birdlife, American Birds,* and *The Oriole.* They will begin writing a paper for The Oriole during June 1979 entitled "Birds of Eufaula National Wildlife Refuge." The paper will include data on where each species has been found on the refuge, their dates of occurrence and maximum abundance during each season.

They are asking for help from GOS members to fill some gaps in their observations. They are especially in need of observations on the abundance and dates of occurrence of woodland species. All submitted

observations will be appreciated and the source of data used in the paper will be properly cited.

Send data to:

Brent Ortego
Department of Zoology-Entomology
Auburn University
Auburn, Alabama 36830
Phone: 205-826-4087 or 205-826-4850

RECENT LITERATURE

Birds of Grady County, Georgia. Herbert L. Stoddard, Sr. 1978. Tallahassee, Fla., Bulletin of Tall Timbers Research Station, No. 21. 175 p. No charge. Edited with additional material by Roy Komarek and Robert L. Crawford. This book is a posthumous summary of more than 40 years of field-work by one of the most distinguished researchers in American ornithology. It contains species accounts of 223 species recorded from the county, based on extensive collecting and meticulous observation. Each species account includes a summary of status, dates of arrival and departure, nesting dates, and sub-species recorded in the county. But the best part of the book is the charming and illuminating anecdotes based on the author's personal experience with birds in south Georgia. Many of these are not only interesting but suggest further avenues for research.

Appendices include a massive table of 29 consecutive Christmas Counts taken by Stoddard alone between 1937 and 1965 on essentially the same territory. This is a fascinating table (125 adult Turkeys seen by one man in one day must be a record), but some information on the meterological variables for each count would have been welcome. Another appendix is a catologue of 799 voucher specimens representing 236 taxa, collected in Grady County.

Students of the abundance and distribution of southern birds will find this volume indispensable. When taken together with the long-term studies of TV tower casualties carried out by Stoddard and others just across the county line in Florida (Tall Timbers Bulletins 8 and 18), we get a comprehensive picture of the birdlife of this region.

This is the most interesting book published on Georgia birds since Burleigh.

Robert W. Loftin, Dept. of History, U. of N. Fla., Jacksonville, Florida 32216.

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