CHILTON COUNTY, ALABAMA -SUMMER BIRD COUNT

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INTRODUCTION

An investigation of Chilton County, Alabama, breeding birds was undertaken 16-18 June 2000 by Alabama Ornithological Society members and friends. Despite proximity to Birmingham and Montgomery, and countless transits by birders on Interstate Highway 65 running through the eastern part of the county, few observers have spent much time birding this interesting area. Many count participants voiced surprise at the range of habitats and enjoyed the experience.

This survey was the first of hopefully many future Summer Bird Counts (SBC). The SBC program will target one or more Alabama counties with limited recent breeding season data. By dividing a county into small parcels using teams of experienced observers, we expect to unearth important data on breeding species in little-worked areas. Different counties will be covered each year, usually in mid-June to reduce overlap with migration.

The SBC will supplement information generated by the U. S. Fish and Wildlife Service Breeding Bird Survey (BBS). Comprising annually repeated routes of 50 roadside, three-minute point counts, the BBS is most valuable as a monitoring tool (Robbins, Bystrak, and Geissler 1986). Though range information is generated for many birds, the BBS has deficiencies as an investigatory tool, particularly for low-density species (Sauer, Pendleton, and Orsillo 1995). In contrast, the SBC program relies on experienced birders choosing birding sites within their assigned areas by habitat type and richness, and thus rare species may be better detected. For special birds of interest, observers can spend additional time and effort when suitable habitat is encountered, and when found locations of these birds are mapped. Each area is covered in a single morning by a party. Party-hours and party-miles are recorded, and numbers of all bird species are noted. Additionally, evidence of breeding activity (carrying food, nest construction, etc.) is recorded when observed for any species; this assessment is similar to that done in breeding bird atlas work.



Figure 1. County map of Alabama showing the location of Chilton County (darkened), the site of the first Alabama Summer Bird Count.

STUDY AREA AND METHODS

Geographically, Chilton County is in a transition zone between the Appalachian Mountains, Piedmont, and Coastal Plain (Fig. 1). For bird reporting purposes, the county has been considered wholly in the Inland Coastal Plain. However, the Fall Line (northern boundary of the Coastal Plain) traverses the northern and east-central portions of the area, allowing for Mountain Region influence in the north and east. Additionally, parts of the county, particularly in the southwest, have upland habitats that could be considered "Coastal Plain hills," with elevations rising to about 700 feet (210 meters). The Coosa River is a dominant feature along the eastern boundary of the county, with parts of Lay, Mitchell, and Jordan lakes represented (Lineback 1973, DeLorme 1998).

Habitats range from deciduous woodland through pine forest to low-lying fields and pastures. Water habitats are restricted primarily to the lakes of the Coosa River and small lakes and ponds scattered throughout the county; swamp and marsh habitats are very limited. Urban and suburban areas are found

primarily in a band along U.S. Highway 31 running north to south through the east-central part of the county, with the main towns of Jemison, Thorsby, Clanton, and Verbena in this corridor. Part of southwest Chilton County is within the Oakmulgee Unit of Talladega National Forest.

Twenty-eight parties comprising 33 observers covered Chilton County 16-18 June (one, 14, and 13 parties, respectively); many teams worked different areas two mornings. The official period for tallying numbers of birds each day was 0515 to 1100 hours. A total of 149.4 party-hours (60.6 auto, 77.3 foot, 11.5 boat) was spent, covering 1202 party-miles (1124 auto, 41 foot, 37 boat; total 1923 party-km). Additionally, five hours and 23 miles (36.8 km) were expended seeking nocturnal species; this count should not be considered representative of a full search for nocturnal birds.

Analysis of count results included parameters such as regions of the county, location above or below the Fall Line, day of counts, and both raw values and birds per party-hour (the last favored over raw values for comparisons). The Fall Line divided a few party areas; unless specific bird locations were known, a party area was labeled as above or below the line by which section predominated for that area. In most cases birds of interest were marked on the party area maps, and a computer-generated map was used to plot these occurrences.

Weather was constant through the weekend, with low wind speeds and temperatures ranging approximately 70-85° F (21-29.4° C). Only minimal dawn precipitation occurred 17 June, though some areas experienced fog early that morning that diminished bird activity.

RESULTS AND DISCUSSION

The count.— A total of 107 species was recorded (Table 1). One hundred and four species were counted during the official morning count hours and three species were encountered solely outside the morning period or during pre-count scouting. Because this was the first large-scale summer count in the Inland Coastal Plain, several single-day high counts were set (Table 1). Aside from party area maps and field lists, each party received a list of birds of special attention. Of 28 species on this list, 15 were found on the count (Table 1).

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Breeding Daily Total per Area" Species Total Main Areas Frequency Mean party-hour max. max. status NE", AFL' NW, BFL SE, AFL COMMON LOON CPs PIED-BILLED GREBE 0.07 0.04 Anhingak 0.04 0.07 1 Great Blue Heron 61 4.08 2.18 SE, AFL 29 21 16 2 Great Egret 5 0.33 2 4 0.18 Little Blue Heron 4 0.27 2 4 0.14 Green Heron 41 2.74 21 14 1.46 CONF WHITE IBIS 0.07 0.04 NW, AFL WOOD STORK 10 0.67 10 0.36 Black Vulture 79 5.29 52 13 15 2.82 Turkey Vulture 133 8.90 72 26 SW 18 4.75 17 1.14 17 9 2 CONF Canada Goose 0.61 CONF 17 9 Wood Duck 52 3.48 40 SE, AFL 1.86 12 0.80 8 Mallard 6 3 0.43 NE, AFL Mississippi Kite 4 2 0.27 2 3 PROB^m W, BFL 2 0.14 2 1 SE, AFL BALD EAGLE 0.13 0.07 PROB CP Cooper's Hawk NW, BFL PROB Red-shouldered Hawk 44 2.95 23" 22 1.57 Broad-winged Hawk 23 1.54 16 13 0.82 CONF Red-tailed Hawk 31 2.07 15 16 1.11 CONF SW, BFL American Kestrel 3 0.20 3 0.11 PROB Wild Turkey 27 1.81 20 13 0.96 CONF NE, AFL Northern Bobwhite 168 11.24 84 20 25 6.00 PROB

TABLE 1. Chilton County Summer Bird Count Totals, 16-18 June 2000.

TABLE 1. Continued

Species	Total	Total per party hour	Daily max.	Area max.	Frequency	Mean	Breeding status	Main Area
Killdeer	44	2.95	22	10	15	1.57	PROB	
LAUGHING GULL	1	0.07	1	1	1	0.04		SE, AFL
Rock Dove	219	14.66	178	92	6	7.82		SE, AFL
Eurasian Collared-Dove	16	1.07	10	10	4	0.57		NW, BFL
Mourning Dove	960	64.26	505	126	28	34.29	PROB	
Common Ground-Dove	5	0.33	3	3	2	0.18	CONF	NE, AFL
Yellow-billed Cuckoo	105	7.03	58	9	27	3.75		
Barn Owl	CP							
E. Screech-Owl	11	0.74	5	2	7	0.39		
Great Horned Owl	2	0.13	1	1	7 2 8	0.07		
Barred Owl	16	1.07	14	4	8	0.57	PROB	
Chuck-will's-widow	73	4.89	56	30	10	2.61		
Chimney Swift	217	14.52	116	28	25	7.75		NW
Ruby-thr. Hummingbird	45	3.01	27	6	19	1.61	PROB	
Belted Kingfisher	44	2.95	26	19	13	1.57		
Red-heaced Woodpecker	36	2.41	23	7	15	1.29		
Red-bellied Woodpecker	214	14.32	110	17	28	7.64	CONF	
Downy Woodpecker	102	6.83	56	8	26	3.64		
Hairy Woodpecker	7	0.47	4	2	5	0.25		
Northern Flicker	54	3.61	33	8	18	1.93	PROB	
Pileated Woodpecker	57	3.82	35	8	19	2.04	CONF	BFL
Eastern Wood-Pewee	96	6.43	58	17	22	3.43		NW, BFL
Acadian Flycatcher	71	4.75	46	12	18	2.54		SW, BFL

Species	Total	Total per party hour	Daily max.	Area max.	Frequency	Mean	Breeding status	Main Area
Eastern Phoebe	196	13.12	100	19	27	7.00	CONF	
Great Crestec Flycatcher	221	14.79	108	21	27	7.89	CONF	
Eastern Kingbird	342	22.89	172	41	25	12.21	CONF	BFL
Loggerhead Shrike	27	1.81	15	7	10	0.96	CONF	
White-eyed Vireo	410	27.44	210	36	28	14.64	PROB	
Yellow-throated Vireo	64	4.28	41	9	21	2.29		
Red-eyed Vireo	364	24.36	207	38	27	13.00	PROB	SW
Blue Jay	445	29.79	248	45	28	15.89	CONF	
American Crow	1008	67.47	597	120	27	36.00		
Fish Crow	42	2.81	24	13	10	1.50		low in NW
Purple Martin	908	60.78	542	103	26	32.43	CONF	
N. Rough-w. Swallow	114	7.63	69	18	17	4.07		AFL
Cliff Swallow	254	17.00	232	150	4	9.07	CONF	SE, AFL
Barn Swallow	975	65.26	673	233	26	34.82	CONF	SE
Carolina Chickadee	338	22.62	166	42	28	12.07	CONF	NE, AFL
Tufted Titmouse	386	25.84	225	28	28	13.79	CONF	
Whbreasted Nuthatch	17	1.14	13	6	7	0.61	PROB	E, AFL
Brown-headed Nuthatch	141	9.44	66	20	22	5.04	CONF	
Carolina Wrea	488	32.66	231	36	28	17.43	CONF	
Blue-gray Gnateatcher	223	14.93	123	29	25	7.96	CONF	
Eastern Bluebird	480	32.13	245	40	27	17.14	CONF	NW, BFL
Wood Thrush	403	26.97	211	33	28	14.39		
American Rooin	239	16.00	122	47	24	8.54	CONF	

TABLE 1. Continued

Species	Total	Total per party hour	Daily max.	Area max.	Frequency	Mean	Breeding status	Main Area
Gray Cathird	62	4.15	37	12	17	2.21	CONF	low in SE
Northern Mockingbird	741	49.60	396	94	25	26.46	CONF	NW, BFL
Brown Thrasher	260	17.40	147	21	26	9.29	CCNF	
European Starling	328	21.95	166	74	19	11.71	CCNF	
Northern Parula	99	6.63	53	18	19	3.54		AFL
Yellow-throated Warbler	18	1.20	14	8	4	0.64		SE, AFL
Pine Warbler	246	16.47	118	43	27	8.79	CONF	
Prairie Warbler	199	13.32	108	24	24	7.11	CONF	low in SE
Black-and-white Warble	er 9	0.60	6	2	7	0.32	CONF	NW
American Redstart	6	0.40	4	2	5	0.21		
Prothonotary Warbler	12	0.80	10	2 8	3	0.43		
Worm-eating Warbler	1	0.07	1	1	1	0.04		SE, AFL
Swainson's Warbler	11	0.74	6	3	6	0.39	PROB	NW, BFL
OVENBIRD	2	0.13	1	1	2	0.07		
Louisiana Waterthrush	29	1.94	22	16	13	1.04	PROB	SE
Kentucky Warbler	101	6.76	49	15	23	3.61	PROB	NE, AFL
Common Yellowthroat	320	21.42	183	24	26	11.43	PROB	
Hooded Warbler	209	13.99	111	22	25	7.46	CONF	low in NW
Yellow-breasted Chat	776	51.94	434	71	28	27.71	CONF	
Summer Tanager	185	12.38	88	14	27	6.61	CONF	
Scarlet Tanager	4	0.27	4	2	2	0.14	PROB	W, BFL
Eastern Towhee	687	45.98	367	65	28	24.54	CONF	
Bachman's Sparrow	1	0.07	1	1	1	0.04		SE, AFL

Species	Total	Total per party hour	Daily max.	Area max.	Frequency	Mean	Breeding status	Main Area
Chipping Sparrow	278	18.61	142	53	23	9.93	CONF	BFL
Field Sparrow	151	10.11	79	32	22	5.39	CONF	BFL
Lark Sparrow	2	0.13	2	2	1	0.07		SW, BFL
Grasshopper Sparrow	1	0.07	1	1	1	0.04		SE, AFL
Northern Cardinal	827	55.35	444	83	28	29.54	CONF	
Blue Grosbeak	348	23.29	193	65	24	12.43	CONF	BFL,low NE
Indigo Bunting	1068	71.49	564	110	28	38.14	PROB	BFL
Red-winged Blackbird	215	14.39	111	40	22	7.68	PROB	low in NE
Eastern Meadowlark	260	17.40	130	60	19	9.29	CONF	BFL,low NE
Common Grackle	227	15.19	140	32	25	8.11	CONF	Part Control of the C
Brown-headed Cowbird	196	13.12	106	18	24	7.00	PROB	
Orchard Oriole	133	8.90	72	21	23	4.75	CONF	BFL
House Finch	201	13.45	111	45	17	7.18	CONF	
American Goldfinch	46	3.08	25	9	14	1.64	PROB	NE, AFL
House Sparrow	195	13.05	96	61	15	6.96	CONF	NW, BFL

TABLE 1. Continued

- "= highest daily count
 "= highest count in a single party
 "= number of parties reporting species
 "= average party total
 "= predominat region of species
 "= uppercase denotes unexpected species
 "= count period only

- b = compass quadrant of county (e.g., NW = northwest)
 i = above Fall Line
 i = below Fall Line

- " = bold denotes species of special interest

 = confirmed

 = probable

 = bold denotes noteworthy single-day counts

Recording observed breeding-related activities was an interesting feature of this count. Codes were placed on field sheets for the type of activity observed for each species. Using customary breeding bird atlas designations, of 104 species in the official count, 45 (43.3 %) were confirmed as nesting, and 22 (21.2%) were considered probable nesting species (Table 1). Most of the other species encountered should be considered possible breeders in the county, though this assessment is tenuous for large waders, certain raptors, and a few others discussed in the species accounts.

Species Accounts.— The following comments on selected species are based on personal experience, the Alabama bird records database, and Imhof (1976).

Common Loon – An individual was discovered on Lay Lake while scouting a few days before the count. Despite presence of alternate plumage, this was considered a non-breeding, summering bird. Alabama has no breeding records, but summering individuals are rare but regular.

Pied-billed Grebe — A rare and local breeder throughout the state, Pied-billeds are not expected in most areas. One calling bird was found in the southwest quadrant.

Anhinga – Uncommon and local as a breeding bird in the Coastal Plain, one bird was spotted in the southeast corner of the county.

White Ibis - This species breeds in numbers in certain Coastal Plain areas, but was not expected in Chilton County. The immature seen in flight above the Fall Line in the northwest quadrant probably ranged from a distant colony.

Wood Stork – Ten Wood Storks in two parties (above and below the Fall Line) were a surprise, particularly for mid June. However, this year witnessed an earlier-than-usual influx of storks into several Alabama areas, and these birds were part of that phenomenon. Breeding has not been proven in the state, and these likely were only visitors.

Mississippi Kite – Predominantly a Coastal Plain species, Chilton County is at the edge of the main breeding range. Four kites, including a pair seen on consecutive days, were found in three Coastal Plain areas, and another was noted before the count above the Fall Line on Lake Jordan.

Bald Eagle – A pair of this magnificent species on Lake Jordan suggested breeding. Eagles nest in scattered locations in the state and have been seen previously in nesting season on this section of the Coosa River.

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suitable habitat. Whip-poor-will was discovered last summer in the Coastal Plain portion of Bibb County; limited searching with recorded tapes in the Chilton County portion of Talladega National Forest did not yield positive results. That area has trees with evidence of Red-cockaded Woodpecker activity, but no birds were found on the count. The absence of Yellow Warbler on the count is surprising, as this bird has bred farther south in the state at several locations.

Personal comment. — This count not only generated interesting and important data—it was a lot of fun! Many birders almost cease activity during the breeding season, pausing between spring and fall migrations. Other than the Breeding Bird Surveys, information on our nesting birds is poor, at best, in many areas. The SBC program is a good excuse to explore new territories, listen to bird song, and observe our incredible birdlife in its most important season.

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