

THE ORIOLE

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



VOL. XI. NO. 2

APRIL, 1946

THE ORIOLE

Editor—J. FRED DENTON, 1510 Pendleton Road, Augusta, Ga.
Business Manager—RALPH HAMSEY, JR., 1578 N. Decatur Road, N. E., Atlanta, Ga.
Treasurer—RAY C. WERNER, 758 Wildwood Road, Atlanta, Ga.
Department of Education—MISS MABEL ROGERS, Milledgeville, Ga.

THE ORIOLE is mailed to all members of the Georgia Ornithological Society not in arrears for dues. Classes of membership are as follows:

Associate	} \$1.00; Regular, \$2.00; Sustaining, \$5.00; Life, \$25.00
Library	
Out-of-State	

CONTENTS

THE BREEDING STATUS OF THE COWBIRD IN GEORGIA By J. Fred Denton	24
BIRD LIFE OF THE CAMP STEWART, GEORGIA, REGION By William C. Grimm	27
GENERAL NOTES: Grinnell's Water-thrush in Georgia in Winter, 43; White-eyed Vireo at Augusta in Winter, 43; Notes from the Ocmulgee River bottom, Wilcox County, Georgia, 44; Sight record of a White Pelican at Cordele, 44; White-crowned Sparrow again at Tifton, 44; Catbird wintering in Jones County, Georgia, 45.	
SPRING—By Claire M. Gordon	45
'TIS MAY—By Ruth Bryant Sneed	45
DOUBTING THOMAS—THE PAINTED BUNTING—By Louis C. Fink	45
NEWS AND COMMENTS	46

THE ORIOLE

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

Vol. XI

April, 1946

No. 2

THE BREEDING STATUS OF THE COWBIRD IN GEORGIA

By J. FRED DENTON

The question as to whether the Cowbird (*Molothrus ater ater*) breeds or has ever bred in Georgia has long been debated among students of Georgia ornithology. Over sixty years ago Bailey (1883) reported a Cowbird egg supposedly collected in either McIntosh or Wayne County, Georgia, sometime between 1853 and 1865. Years passed with no additional reports of Cowbird eggs from Georgia or adjoining states and Bailey's record which lacked certain essential data became generally discredited. The fourth edition (1931) of the A. O. U. Check-List cited the southern limit of the Cowbird's breeding range on the Atlantic slope as being central Virginia. A few years later Burleigh (1936) reported finding Cowbird eggs and fledglings in nests of Red-eyed Vireos in the vicinity of Asheville, N. C., thus extending the known breeding range south in the mountains to that locality. He also discussed the regular appearance in July in the southeastern states of young Cowbirds of the year and cited personal records made at Athens, Ga., and Asheville, N. C. As an explanation of his failure to find adult birds in summer in the vicinity of parasitized nests at Asheville, and of the regular appearance in July of young birds south of the accepted breeding range, Burleigh proposed the hypothesis that Cowbirds lay eggs during their spring migration. So far as I can determine, there have been no reports since 1936 of Cowbird eggs from the Carolinas or Georgia, and no further discussion of Burleigh's theory of egg laying during migration. The summer status of the Cowbird in Georgia is summarized in the recently published (1945) *Birds of Georgia* as follows: "Eggs laid by migrants may possibly result in young produced within the State (Burleigh, 1936), as young birds are sometimes observed in mid-summer."

While searching for Swainson's Warbler nests in a small canebrake about a mile south of Augusta, Georgia, on July 5, 1945, I discovered an Indigo Bunting's nest. This nest was situated seven feet above the ground in the "head" of a cane growing just inside of the swamp margin. On this date it contained a single fresh egg which I marked with red nail polish. When next I returned to the area on July 12, accompanied by Sgt. Brooke Meanley, the nest was examined as routine and found

to contain two Bunting eggs, one of which was the egg marked when the nest was discovered, and one fairly fresh Cowbird egg. The Cowbird egg was collected and sent to the U. S. National Museum with the request that my identification of it be confirmed. On July 24, Dr. Alexander Wetmore wrote as follows: "I feel sure after comparison with specimens in our collection that this egg is that of a Cowbird as you suppose. I have gone over it in some detail to establish this. It agrees in color and size with specimens in our collection and differs from the eggs of any other birds that might be considered that are found in the area where it was obtained." The egg now reposes in the collections of the U. S. National Museum.

No adult Cowbirds were noted in the vicinity of the parasitized nest at the time it was found. However, this does not exclude the possibility of their having been present since an exhaustive search of the area was impossible then. In general, the area is of the type which one might expect Cowbirds to frequent. The swamp where the nest was located along with the adjoining over-grown fields had been fenced about a month previously and cattle turned in. About 200 yards from the nest site there is a permanent pasture in which cattle had been present all summer.

Because of the pressure of duties it was not until nine days later, on July 21, that I was able to get in the field again. Soon after arriving on the levee just south of Augusta I noted a flock of 18 Cowbirds perched in a tree growing in the borrow pit. Having in mind Burleigh's contention that the first flocks observed in July consisted entirely of young of the year I studied this flock carefully. It consisted of one adult male, two adult females and 15 young of the year. Just a few minutes later a second flock of approximately 250 Cowbirds was noted on the telegraph wires beside a railroad. Within this flock which also was predominantly young of the year, 25 adult males were actually counted and more than this number of females noted.

Reference to notes made the two previous summers that I have been in Augusta revealed that in 1943 the first summer flock of Cowbirds was observed on July 25. Although no specific notes were made on the individuals comprising this flock of approximately 25 birds, it was noted that it contained both adult males and females. My first record of the Cowbird for the summer of 1944 was a flock estimated to contain 500 birds noted on July 16. This flock also contained some adult birds.

A search through the literature revealed that except for Burleigh's (1936, 1933) observations at Athens very little has been published on the time of appearance in Georgia of flocks of Cowbirds in summer or the composition of the first flocks appearing. Concerning the bird in the Augusta area Murphey (1937) simply states, "It returns to this region in July and August . . ." without giving specific dates or commenting on the composition of the flocks. The extreme dates for the occurrence of

the Cowbird in the Atlanta area are given by Griffin (1941) as July 1, 1898, and April 20, 1886. Greene (1933) states, "On August 7, 1930, I recorded about 80 birds, males and females, in a field near the city waterworks. These were early migrants as there seem to be no breeding records in the state." He also states that that is his earliest fall record for the occurrence of the Cowbird in the Atlanta area. There have been no July or early August records reported from other sections of the state.

The finding of the egg reported above definitely establishes the Cowbird as a breeding Georgia bird. On the basis of this record and the other evidence discussed, it is my opinion, and the same opinion has been expressed previously by Burleigh (1936), that the record published by Bailey should be accepted as a valid Georgia breeding record.

The date of laying, between July 5 and 11, of the Augusta egg excludes any possibility of its having been laid in migration and assures the presence at Augusta during that period of at least one adult bird although none had been seen earlier in the summer and none were seen until nine days later. In my opinion the breeding records from the vicinity of Asheville, N. C., were not the result of eggs laid in migration as suggested by Burleigh but were simply evidence of breeding of an obscure resident population.

Contrary to the general opinion expressed by Burleigh that the first fall flocks of Cowbirds observed in July in the Carolinas and Georgia south of the bird's previously accepted breeding range consisted entirely of young of the year, the first flocks which have been observed at Augusta during the past three years have contained some adults. Since the Cowbird is a hardy species which normally lingers well into October before migrating from the northern part of its breeding range, there is no logical reason, other than the scarcity of breeding records, for considering the flocks which are observed regularly in Georgia in July as migrants from further north. It seems more logical to me to consider these flocks as evidence of the post-breeding season flocking of birds which have bred within the general area rather than as evidence of migration from areas north of Georgia.

If the conclusions expressed above concerning the July flocks are correct, then the Cowbird must be a fairly common though inconspicuous breeding bird in certain sections of Georgia and the examination of a number of nests of probable hosts in likely localities by Georgia bird students should yield additional breeding records. Furthermore, the reporting of all records of the occurrence of Cowbirds in Georgia in summer and the recording of data on the composition and movements of the first fall flocks observed will undoubtedly help clarify its summer status in the state.

REFERENCES

- Bailey, H. B. 1883. Memoranda of a collection of eggs from Georgia. Bull. Nuttall Ornith. Club, 8: 37-43.
 Burleigh, T. D. 1936. Egg laying by the Cowbird during migration. Wilson Bull., 48: 13-16.
 . 1938. The birds of Athens, Clarke County, Georgia. Occasional paper No. 1 of G. O. S., 35 pp.
 Greene, E. R. 1933. Birds of the Atlanta, Georgia, area. Bull. No. 2, Georgia Society of Naturalists, 46 pp.
 Griffin, W. W. 1941. Migration of birds in the Atlanta region. Oriole, 6: 17-23.
 Murphey, E. E. 1937. Observations on the bird life of the middle Savannah Valley, 1890-1937. Contr. Chas. Mus., No. IX, 61 pp.
 1314 Meigs St.
 Augusta, Ga.

BIRD LIFE OF THE CAMP STEWART, GEORGIA, REGION*

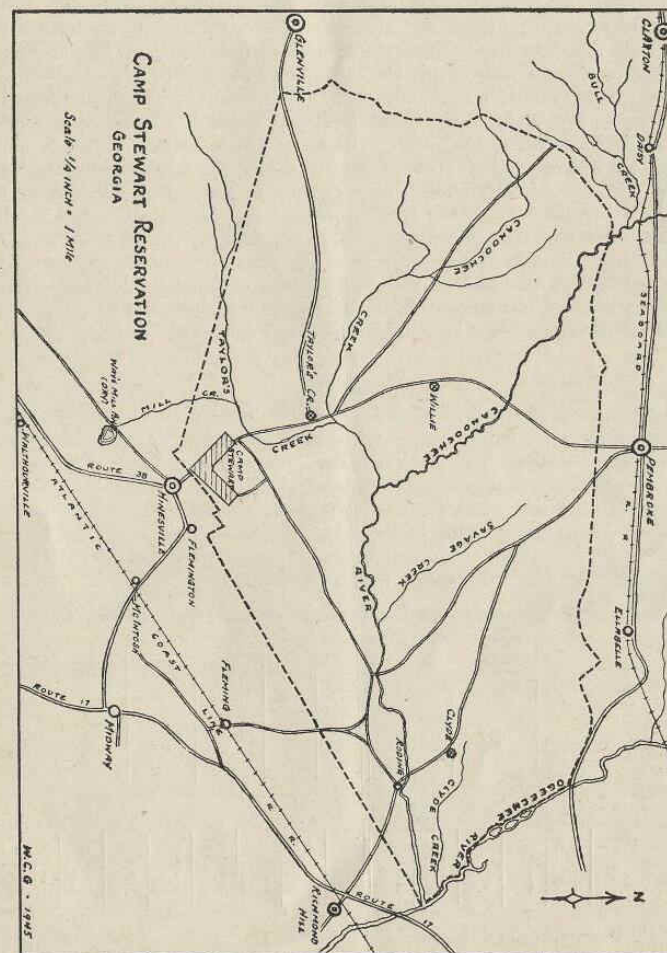
By WILLIAM C. GRIMM

The Camp Stewart Reservation is located in the southeastern portion of Georgia and comprises some 280,000 acres of lower Coastal Plain pineland and swamp. Included within its boundaries are large parts of Liberty, Bryan, Long, and Evans Counties and a small portion of eastern Tattnall County. The town of Hinesville is within one mile of the southern boundary while Pembroke is within a distance of two miles on the north. Close to the western boundary are both Glennville and Claxton. The Ogeechee River bounds the reservation on the east (see map).

The eastern and southern portions of the area are relatively poorly drained and consist for most part of swamp land and low, wet pine barrens. Proceeding toward the west there is an increase in the average elevation above sea level, the topography becomes more rolling, and the land is much better drained. Elevations above sea level range from less than 20 feet in the eastern portion to around 170 feet in the extreme northwest.

During the period in which these observations were made, from March 1942 to September 1945, permanent habitations did not exist on the greater portion of the reservation aside from the camp area proper, which lies just north of Hinesville. Most of the land northward of the Canoochee River was used as firing range and was closed to trespass much of the time prior to the spring of 1945. Practically all of the former habitations on the area, including the small towns of Taylor's Creek, Willie, and Clyde, were completely razed and the areas formerly under cultivation have grown up in broom sedge, dog fennel, briars, and brush. In the eastern portion the former habitations were widely scattered but the better lands of the western portion were more or less extensively cultivated.

*The author is indebted to Herbert L. Stoddard of Thomasville, Ga., for reading the manuscript and making helpful suggestions.



The region is drained principally through the Canoochee and the Ogeechee Rivers. The former stream bisects the reservation, entering it in the northwestern portion, and meandering extensively in its course it flows into the Ogeechee at the extreme southeastern corner. The principal tributaries of the Canoochee River here are Canoochee Creek, which flows through Evans and Liberty Counties, Taylor's Creek, which flows through Liberty County, and Savage Creek in Bryan County. Clyde Creek flows from a point north of the former village of Clyde in Bryan County and enters the Ogeechee River about a mile north of where the Canoochee enters that stream. Drainage from a portion of the extreme southeastern section is by the way of the North Newport and Midway Rivers. Small creeks, runs, and "branches" are fairly numerous. Broad flood plains and alluvial swamps border the rivers and the larger creeks. There are no natural lakes or ponds in the region but mill ponds exist along some of the streams. The largest of these artificial ponds is Glisson's Mill Pond on the upper part of Canoochee Creek in Evans County.

CLIMATE

The two long established stations of the United States Weather Bureau located nearest to the region are those at Savannah and at Waycross. Both of these stations have records covering a period of 40 years or more. The data in the accompanying table are taken from "Climate and Man" (Yearbook of the United States Department of Agriculture for 1941). Weather observations were made at a station in Camp Stewart since January 1941, but these do not cover a period of sufficient length to afford reliable data on average weather conditions.

TABLE OF TEMPERATURES AND PRECIPITATION AT SAVANNAH AND WAYCROSS

	Temperature				Killing Frost		Growing Season						
	Jan. Av.	July Av.	Max.	Min.	Last in spring	First in fall							
Savannah, Chatham Co	52.7	81.2	105	8	Feb. 28	Nov. 28	273 days						
Waycross, Ware Co.	53.4	81.9	106	4	Mar. 9	Nov. 18	254 days						
Average Precipitation													
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Savannah	2.53	3.27	2.92	2.40	3.2	4.77	6.64	6.55	5.72	2.48	1.80	2.38	44.67
Waycross	3.06	4.06	3.37	2.8	3.79	6.22	6.95	5.68	4.58	2.54	2.02	2.84	47.98

From the data presented in the table it is evident that the summer months are, on an average, those having the heaviest rainfall. During that season precipitation comes normally in the form of thunderstorms, often with heavy rainfall during comparatively brief periods. At Camp Stewart the month of August in 1943 had 14.35 inches and July 1945 had

14.66 inches. During the period of this study there were seven months in which the recorded precipitation was less than one inch and all of these occurred between October and May. October 1943 was the driest month with only .02 inches of recorded precipitation. In general the winters are mild with rather frequent frosty mornings but ice rarely remains on puddles and pools until noon. A trace of snowfall was recorded on December 14, 1943. The temperature rises rather rapidly in March and April and average temperatures of 80 degrees or higher are recorded during the months of June, July, and August in this region.

HABITATS

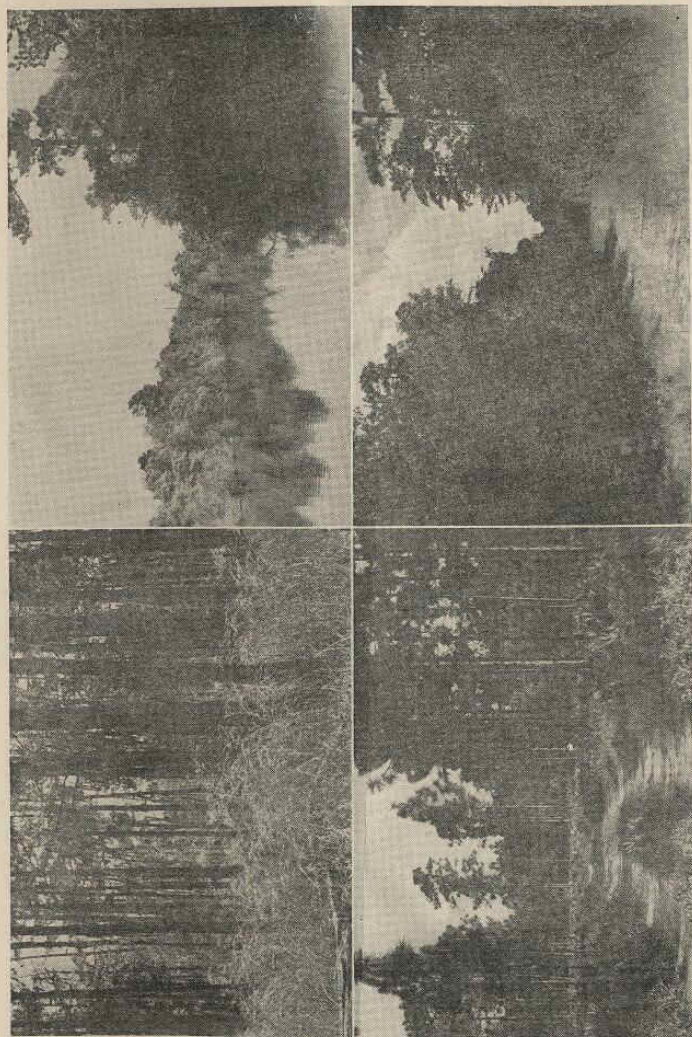
The Pine Barrens: The pine woods constitute a major environmental type in this region. With the exception of a few stands of comparatively young second growth timber, the trees are widely spaced and the woodlands have an open, park-like aspect. There are signs of rather extensive turpentine operations in former years and likewise abundant evidence of recurrent forest fires.

The prevailing species of pine present is a good indication of the soil drainage. On the drier and better drained soils the dominant species is very likely to be long-leaf pine (*Pinus palustris*) while the slash pine (*Pinus Elliottii*) occurs more extensively on the moister sites. On the wettest and more or less boggy situations the pond pine (*Pinus serotina*) may be associated with the slash pine or even occur as a relatively pure stand.

The pine-woods understory includes a rich variety of grasses, sedges, and showy flowering plants. When fires are excluded, or do not occur too frequently, there soon occurs a more or less dense growth of shrubby species such as the saw palmetto (*Serenoa serrulata*), running oak (*Quercus pumila*), dwarf live oak (*Quercus minor*), dwarf wax myrtle (*Myrica pumila*), gallberry (*Ilex glabra*), wicky (*Kalmia hirsuta*), stagger-bush (*Xolisma ferruginea*), huckleberries, and blueberries.

There are places in the pinelands where various scrubby oaks are abundant, or even quite dominant. Locally these are referred to as the "oak ridges." Here the soil is very sandy, dry, and apparently less fertile than elsewhere for the ground cover is generally sparse and often considerable bare, white sand is exposed. Such sites probably originated from old beach lines or dunes of deep sand. A variety of scrubby live oak (probably *Quercus virginiana* var. *geminata*) occupies an extensive barren north of the Canoochee River in Bryan County. Other oaks common in the barrens are the turkey oak (*Quercus Catesbaei*), blue jack (*Quercus cinerea*), dwarf post oak (*Quercus margaretta*), and occasionally the black jack oak (*Quercus marilandica*).

The wettest areas are indicated by the presence of such species as the pond pine (*Pinus serotina*), swamp black gum (*Nyssa biflora*), sweet



UPPER LEFT—Pine barrens with moss-festooned cypresses, Camp Stewart Reservation, April 19, 1942. UPPER RIGHT—Canechoes River near Bashlor's Bridge, March 21, 1943. LOWER LEFT—Typical pine barren with rabbit-to undergrowth, with rabbit-to undergrowth, Hinesville and Taylor's Creek, April 30, 1942. LOWER RIGHT—A typical swamp road between Taylor's Creek and Wille, August 4, 1945.

gum (*Liquidambar styraciflua*), and often scattered small cypresses (*Taxodium ascendens*). Frequently there are extensive thickets of titi (*Cliftonia monophylla*), wax myrtle (*Myrica cerifera*), and the rabbit-eyed blueberry (*Vaccinium virgatum*). The wet pinelands quite often have a characteristic bog aspect and the presence of a number of plants of distinct bog affinity is a noteworthy feature of the flora. Among the latter are *Sphagnum* moss, pitcher plant (*Sarracenia minor*), sundew (*Drosera brevifolia*), the fringed orchids (*Blephariglotis*), and the Pogonias (*Pogonia* sp.) and grass pinks (*Limodorum* sp.).

The Brown-headed Nuthatch, Pine Warbler, Pine-woods Sparrow, Red-cockaded Woodpecker, Southern Meadowlark, Bluebird, Kingbird, and the Red-headed Woodpecker are characteristic birds of the pinelands everywhere. The Florida Nighthawk occurs commonly in the more open growth where the ground vegetation is not too dense while the Chuck-will's-widow seems to prefer the thickets, only venturing out into the open pinelands under the cover of darkness. The Mockingbird, Logger-head Shrike, Crested Flycatcher, Flicker, Red-bellied Woodpecker, Summer Tanager, Florida Grackle, Florida Blue Jay, Wood Pewee, Mourning Dove, and the Sparrow Hawk are commonly found here also. The Bob-White is fairly common in the pinelands and the Wild Turkey is frequently met with, particularly when the acorns are dropping from the oaks. Prairie Warblers are quite partial to open areas where there are thickets of young pines, gums, and titi.

The Pine Barren Ponds: Throughout the pinelands there are ponds of various sizes formed in shallow depressions and fed by surface run-off. As a rule, water, ranging in depth from a few inches to a foot or more, is retained throughout the year. A striking and characteristic feature of these ponds are their moss-festooned cypresses (*Taxodium ascendens*) but occasional ponds are more or less exclusively occupied by black gum (*Nyssa biflora*). A species of holly (*Ilex myrtifolia*) is commonly associated with the cypress and gum. Bordering thickets consist of such swamp shrubs as sweet pepperbush (*Clethra alnifolia*), wax myrtle (*Myrica cerifera*), button-bush (*Sephalanthus occidentalis*), gallberry (*Ilex glabra*) fetter-bush (*Pieris nitida*), and blueberries (*Vaccinium* sp.).

During the warmer months these ponds afford trysting places for wading birds for there is usually a plentiful supply of food in the form of frogs and tadpoles, aquatic insects, various crustaceans, and small fishes. Numbers of American Egrets and Little Blue Herons, particularly young birds, frequent the ponds after the breeding season is over. Often there are flocks of White Ibises present from spring until fall.

The Swamps: Another major habitat type in this region is the swamp land which is nearly as extensive as the pine barren type. The swamps may be divided into two classes: the alluvial swamp and the non-alluvial.

The latter occupy low-lying, poorly drained areas and they are more or less wet the greater portion of the year. The water usually accumulates in little pools between the hummocks which have been built up about the bases of the trees and clumps of shrubs. There is a dense undergrowth of swamp shrubs and impenetrable tangles of vines such as *Smilax laurifolia*, *Smilax auriculata*, *Decumaria barbara*, *Glsemium sempervirens*, and *Anisostichus crucigera*. There are comparatively few herbaceous plants in the understory but the cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regular*), and chain fern (*Lorinseria aerolata*) are frequently common. Prominent among the trees of the swamps are the red maple (*Acer rubrum* var. *tridens*), swamp black gum (*Nyssa biflora*), sweet gum (*Liquidambar styraciflua*), water oak (*Quercus nigra*), sweet bay (*Magnolia virginiana*), red bay (*Persea pubescens*), and loblolly bay (*Gordonia lasianthus*).

The alluvial swamps border the creeks and rivers and are subject to frequent inundations from the streams. Some species of trees are characteristic of this type of swamp such as the bald cypress (*Taxodium ditichum*), tupelo gum (*Nyssa aquatica*), water elm (*Planera aquatica*), and pumpkin ash (*Fraxinus profunda* var. *Ashei*).

The birds of the swamp forest include the Hooded and Parula Warblers, Carolina Wren, Tufted Titmouse, Carolina Chickadee, Wood Thrush, Red-bellied Woodpecker, Yellow-billed Cuckoo, and the Crested and Acadian Flycatchers. The Prothonotary Warbler seems to be quite partial to alluvial swamplands. When in the swamps one is seldom out of sight or sound of the Florida Red-Shouldered Hawk or the Southern Pileated Woodpecker. During the hours of darkness the same may be said of the calling of the Florida Barred Owl. The brushy borders of the swamps are inhabited by White-eyed Vireos, Cardinals, Brown Thrashers, Mockingbirds, and Towhees but these birds do not range into the interior.

The Hammocks: There are a few places where typical hammock vegetation occurs. These are principally on gently sloping terrain adjacent to swamps and are recognized by the large live oaks (*Quercus virginiana*), wateroaks (*Quercus nigra*), bull bays (*Magnolia grandiflora*), American holly (*Ilex opaca*), and devil-wood (*Osmonthus americana*). Beneath the trees there is usually a dense understory of such species as the witch hazel (*Hamamelis virginiana*), wax myrtle (*Myrica cerifera*), dwarf sumach (*Rhus copallina*), red buckeye (*Aesculus pavia*), beauty berry (*Callicarpa americana*), saw palmetto (*Serenoa serrulata*), sparkleberry (*Vaccinium arboreum*), and Elliott's blueberry (*Vaccinium Elliottii*). Usually, too, there are tangles of woody vines, principally *Smilax*, muscadine (*Vitis rotundifolia*), and the yellow jessamine (*Gelsemium sempervirens*).

A good many of the swamp trees are deciduous, but most of those occurring on the hammocks are evergreen, thus affording ideal cover for birds during the winter months. While none of the breeding species are exactly confined to the hammock habitat, a number of species are

commonly found here. The Yellow-throated and Parula Warblers find the moss-festooned live oaks much to their liking and so, it seems, do the Blue-Gray Gnatcatchers. The Red-eyed Vireo, Yellow-throated Vireo, Cardinal, Towhee, Mockingbird, Flicker, Red-bellied Woodpecker, Crested Flycatcher, Carolina Wren, and Florida Blue Jay are common. Occasionally the Pileated Woodpeckers take up residence on the more isolated hammocks.

The Watercourses: The Canoochee River, Ogeechee River, and Glisson's Mill Pond are the only areas of open water large enough to be considered as a special habitat type. The smaller creeks and runs are often scarcely distinguishable from the surrounding swamp. The Canoochee River meanders extensively, often nearly doubling back upon its course several times in traversing a single mile. During periods of low water numerous sand bars are exposed in its many loops and bends. Often the river banks are barely perceptible and the swamp forest crowds down to the water's edge, some of the trees such as Ogeechee Gum (*Nyssa ogeche*) and water elm (*Planera aquatica*) even invading the channel itself. In other places low bluffs are present and there the pinelands often reach the river.

Glisson's Pond is an old impoundment on the upper part of Canoochee Creek in Evans County, which formerly served as a storage reservoir for a grist mill. It has a water surface of approximately sixty acres. The shallower waters, including the greater portion of the southern part, is growing up in an almost pure stand of pond cypress (*Taxodium ascendens*). There are good growths of aquatic plants in practically all parts of the pond.

The watercourses are frequented by numbers of aquatic and wading birds. During the summer months the Water-turkey, American Egret, Little Blue Heron, Green Heron, Ward's Heron, Yellow-crowned Night Heron, White Ibis, Wood Ibis, and Wood Duck have been seen frequently. Wood Ducks, Pied-billed Grebes, and Belted Kingfishers are rather common during the winter months. Wild ducks, and even geese, have been reported a number of times but none except the Wood Duck and Blue-winged Teal were recorded during this investigation.

The Cultivated Land: In this classification are considered the farms, gardens, home grounds, orchards, roadside thickets, etc. Many of the older homes in both the town and country are surrounded by magnificent live oaks, magnolias, and other trees. It is in such situations that the Orchard Oriole occurs most commonly. Many woodland birds like the Parula Warbler, Yellow-throated Warbler, Crested Flycatcher, Wood Pewee, and the Florida Blue Jay are also attracted into town by the presence of such trees.

The home grounds, roadsides, and gardens are well-tenanted by Mockingbirds, Loggerhead Shrikes, Cardinals, Brown Thrashers, White-eyed Towhees, and Carolina Wrens. The Eastern Ground Dove is much more numerous in the cultivated areas than elsewhere and certainly the same

thing can be said about the Bob-white. Very often about the home grounds multiple-roomed houses or strings of gourds are provided as home sites for the flocks of Purple Martins. Bluebirds will utilize any convenient cavity and frequently nest in the bird boxes provided for their use. Carolina Wrens sometimes nest about sheds and have even nested in flower vases on porches and Chimney Swifts utilize chimneys as nesting sites. The two introduced species, the English Sparrow and the European Starling are very seldom observed far from towns or farm buildings.

ANNOTATED LIST OF SPECIES

PIED-BILLED GREBE: *Podilymbus podiceps podiceps*.—Winter visitant. One was seen on the Canoochee River near Roding on February 5, 1944 and another at Glisson's Pond on March 4, 1944. On September 6, 1943 one was injured when it flew into wires on the hospital grounds.

DOUBLE-CRESTED CORMORANT: *Phalacrocorax auritus* subsp.—On April 25, 1945 two Double-crested Cormorants were observed in flight about 4 miles West of Hinesville.

WATER-TURKEY: *Anhinga anhinga leucogaster*.—Not uncommon along the Canoochee and Ogeechee Rivers during the summer months. On September 24, 1944 one was seen at Glisson's Pond.

GREAT BLUE HERON: *Ardea herodias herodias* and **WARD'S HERON:** *Ardea herodias wardi*.—Great Blue Herons are seen occasionally throughout the year. Summer records may safely be assumed to be *wardi*. Very likely some of the birds seen in winter are of the northern race *herodias*.

AMERICAN EGRET: *Casmerodius albus egretta*.—Common summer resident. Two were seen at a pond between McIntosh and Midway on March 8, 1943.

SNOWY EGRET: *Leucophox thula thula*.—The only record of the Snowy Egret was a single bird seen near Midway on May 15, 1945.

LITTLE BLUE HERON: *Florida caerulea caerulea*.—Common summer resident. On March 7, 1945 two adult birds were seen at a cypress pond a few miles northwest of Hinesville. Two immature birds were seen at the same pond on November 28, 1944. On May 11, 1943 eleven adults were seen at this pond. A bird partly blue and partly white was seen on June 18, 1944.

EASTERN GREEN HERON: *Butorides virescens virescens*.—A fairly common summer resident. Several were seen along the Canoochee River on April 25, 1943. One was seen along Taylor's Creek on September 27, 1943.

YELLOW-CROWNED NIGHT HERON: *Nyctanassa violacea violacea*.—Two were seen along Taylor's Creek on June 6, 1943. On June 18, 1944 several adult and immature birds were encountered along the Canoochee between Bashlor's Bridge and Roding. One was seen near Midway on June 15, 1945.

AMERICAN BITTERN: *Botaurus lentiginosus*.—The Bittern appears to be an uncommon migrant and winter resident. Records of single birds were obtained on August 23, 1944, February 8, 1945, and March 14, 1945 all from the vicinity of Flemington.

WOOD IBIS: *Mycteria americana*.—An estimated 50 birds were present along Taylor's Creek in the vicinity of the Pembroke Road on July 5, 1945. Maj. Wendell L. Pickard states that he has seen these birds a number of times when he was fishing along the Canoochee River.

WHITE IBIS: *Guara alba*.—The White Ibis is a summer resident, sometimes quite common. On April 1, 1944 a flock of at least 75 birds was seen near Fleming. On April 16, 1944 Charles Fraser saw three flocks totaling more than 100 birds near Flemington. A flock of about 150 was seen flying over the camp area early on the morning of April 4, 1945. On May 30, 1945 about 60 birds were seen at a cypress pond a few miles northwest of Hinesville, about half of which were immature birds.

BLUE-WINGED TEAL: *Anas discors*.—On March 31, 1944 two males and two females were seen on a barrow-pit pond near Flemington. On April 1, 1944 there were four males and two females present. They were seen last on April 6.

WOOD DUCK: *Aix sponsa*.—Fairly common permanent resident. Wood Ducks are frequently encountered along the rivers and creeks. They were numerous along the Canoochee River on June 18, 1944. One was seen flying over the camp hospital ground early on the morning of September 11, 1945.

TURKEY VULTURE: *Cathartes aura septentrionalis*.—Common permanent resident. Two downy young were found beneath a tangle of greenbriar on April 4, 1942. On September 8, 1945 a tailless bird was seen soaring in a fully normal manner although its appearance was quite unusual.

BLACK VULTURE: *Coragyps atratus*.—Common permanent resident. The two vultures do not associate to any great extent. Flocks are usually composed of birds of but the one species.

SHARP-SHINNED HAWK: *Accipiter striatus velox*.—One record; that of a bird seen along Taylor's Creek at the Pembroke Road on March 7, 1945.

COOPER'S HAWK: *Accipiter cooperii*.—Apparently a fairly common permanent resident. Seen frequently in the pine barrens. One was seen on the camp hospital grounds on July 17, 1945. It was being pursued by purple martins.

EASTERN RED-TAILED HAWK: *Buteo jamaicensis borealis*.—Uncommon and recorded most frequently during the winter months. Two were seen in flight near Flemington on September 6, 1945.

FLORIDA RED-SHOULDERED HAWK: *Buteo lineatus alleni*.—The Red-shouldered hawk is common throughout the year. Its shrill call is one of the characteristic sounds in the swamp forest. On May 1, 1943 a nest was located in a slash pine about 40 feet from the ground. Well developed young were in the nest. On February 17, 1943 a pair observed near Way's Mill Pond west of Hinesville acted very much as if they had a nest nearby.

MARSH HAWK: *Circus cyaneus hudsonius*.—The Marsh Hawk is a rather common winter resident. Two were seen just south of Taylor's Creek near the Pembroke Road on October 10, 1943. Three were seen near Flemington on March 30, 1944 which is the latest date they were recorded in the spring.

OSPREY: *Pandion haliaetus carolinensis*.—One was observed in flight just north of Hinesville on April 15, 1944.

LITTLE SPARROW HAWK: *Falco sparverius paulus*.—A fairly common resident in the pine barrens. There is an apparent increase in the Sparrow Hawk population during the winter months and part of these birds may be representatives of the northern race *sparverius*.

EASTERN BOB-WHITE: *Colinus virginianus virginianus*.—Common permanent resident. Between April 22 and 28, 1945 it was noted that the coveys had broken up and numerous mated pairs were seen along the roadsides. A pair with 9 very young chicks was seen on June 23, 1945. On September 29, 1943 a male bird was observed crossing a road with a family of small, downy chicks.

EASTERN WILD TURKEY: *Meleagris gallopavo silvestris*.—The Wild Turkey is present in goodly numbers throughout most of the area, ranging through the pine barrens and the swamps. In the fall they seek out the oak ridges when the acorns are dropping. On July 4, 1945 Mr. Irving Clapp saw a brood of about a dozen poults along the Pembroke Road near Willie. These were "about the size of ordinary white leghorn chickens."

KING RAIL: *Rallus elegans elegans*.—One was seen in a wet area about an artesian well near Clyde on April 1, 1944.

FLORIDA GALLINULE: *Gallinula chloropus cachinnans*.—On April 28, 1942 one was found, apparently exhausted, in the camp area north of Hinesville.

KILLDEER: *Charadrius vociferus vociferus*.—Common winter resident from October until April. On June 11, 1945 one was seen in a field along the roadside near Roding.

WILSON'S SNIBE: *Capella delicata*.—Winter resident. One was seen on February 8, 1944 in a marshy area at Liberty Field near Flemington. On April 1, 1944 several were flushed along the roadside near Fleming.

SPOTTED SANDPIPER: *Actitis macularia*.—Fairly numerous at times during the spring and fall migration. Earliest date in spring was April 8, 1942; latest in fall was September 18, 1943. Several were seen along the Canoochee River near Roding on April 24, 1943. One present at artesian well about 4 miles north of Fleming on May 2, 1943.

EASTERN SOLITARY SANDPIPER: *Tringa solitaria solitaria*.—A fairly common migrant. Spring records range between April 21 (1943) and May 2 (1943). Fall records between July 23 (1944) and September 26 (1943).

RING-BILLED GULL: *Larus delawarensis*.—Two were seen on March 30, 1944 in the camp area north of Hinesville.

EASTERN MOURNING DOVE: *Zenaidura macroura carolinensis*.—Mourning Doves are common throughout the year but their numbers are greatest during the winter months when large flocks are seen. Between February 16 and March 30, 1944 flocks totalling several hundred birds remained about Liberty Field near Flemington. Large flocks were seen in the vicinity of Glisson's Pond on October 25, 1942.

EASTERN GROUND DOVE: *Columbigallina passerina passerina*.—The Ground Dove seems to be a rather uncommon permanent resident. It was never seen except in cultivated areas and in the towns. Usually only one or two birds were seen at a time. On November 22, 1944 Charles Fraser saw a flock of about 20 at Hinesville. A flock of nine was seen in the camp area on July 4, 1945.

YELLOW-BILLED CUCKOO: *Coccyzus americanus americanus*.—A fairly common summer resident in the swamp woods. Earliest spring record was April 22, 1945.

FLORIDA BARRED OWL: *Strix varia georgica*.—Common resident of the swamp woods.

CHUCK-WILL'S-WIDOW: *Caprimulgus carolinensis*.—A common summer resident in the pine barrens and adjacent swamps. The earliest date in spring that the birds were heard was on March 30, 1945. The last one heard calling was on July 10, 1945.

FLORIDA Nighthawk: *Chordeiles minor chapmani*.—Common summer resident. The first Nighthawks appear about mid-April (April 11, 1944). After the first week in August their number perceptibly decreases. Eleven birds were seen flying southward on September 12, 1945 but these may have been migrants of the northern race *minor*. Often during the summer months the birds were heard to utter a low, guttural "kow" when at rest on pine limbs. A female gave this note, alternating it with the usual "peent," just before the act of copulation early on the morning of June 13, 1945.

CHIMNEY SWIFT: *Chaetura pelagica*.—Common summer resident from April (March 29, 1945) until late September (September 24, 1943).

RUBY-THROATED HUMMINGBIRD: *Archilochus colubris*.—A fairly common summer resident. The earliest spring record was one reported at Hinesville on March 26, 1944 by Charles Fraser.

EASTERN BELTED KINGFISHER: *Megasceryle alcyon alcyon*.—Uncommon permanent resident. On June 18, 1943 several were seen along the Canoochee River and one was seen along Taylor's Creek on September 26, 1943. Spring and winter records are more numerous.

SOUTHERN FLICKER: *Colaptes auratus auratus*.—Fairly common permanent resident. Apparently more numerous during winter months when part of the birds are undoubtedly winter residents of the northern form *luteus*.

SOUTHERN PILEATED WOODPECKER: *Ceophloeus pileatus pileatus*.—Common resident of the swamp forests but occasionally seen in the pinelands. A pair were seen at the nest hole near Flemington on May 13, 1943. This nest was about 40 feet from the ground in a partially dead red maple tree. It was located at the edge of swamp woods along a drainage canal.

RED-BELLIED WOODPECKER: *Centurus carolinus*.—A common permanent resident of the pine barrens and swamp alike.

RED-HEADED WOODPECKER: *Melanerpes erythrocephalus erythrocephalus*.—A common summer resident. Very few of these birds are seen during the winter months. On January 18, 1945 a few were seen near Hinesville. They do not become common until about April 20 in this vicinity and few are seen later than mid-October.

YELLOW-BELLIED SAPSUCKER: *Sphyrapicus varius varius*.—A fairly common winter resident. The first birds appear in later October (October 31, 1943) and the last are seen in early April (April 2, 1944). Two males were observed on a pecan tree near Flemington on February 22, 1944.

SOUTHERN HAIRY WOODPECKER: *Dryobates villosus auduboni*.—A fairly common resident of the swamp forests.

SOUTHERN DOWNY WOODPECKER: *Dryobates pubescens pubescens*.—A rather uncommon resident of both the pine and swamp forests.

RED-CKADEED WOODPECKER: *Dryobates borealis borealis*.—A relatively uncommon resident in the pine barrens. At infrequent intervals two or three of these birds would be seen working the pine trees on the camp hospital grounds. On February 9, 1945 one was observed being chased by a Red-bellied Woodpecker.

EASTERN KINGBIRD: *Tyrannus tyrannus*.—A common summer resident from early April (April 4, 1945) until mid-September (September 11, 1944). Frequents the pine barrens and cultivated areas.

SOUTHERN CRESTED FLYCATCHER: *Myiarchus crinitus crinitus*.—Common summer resident of both the pine and swamp forests. Earliest date of spring arrival was April 7, 1945.

EASTERN PHOEBE: *Sayornis phoebe*.—A fairly common winter resident from October (October 9, 1944) until late February or early March.

ACADIAN FLYCATCHER: *Empidonax virescens*.—A common summer resident of the swamp woods from late April (April 21, 1945) until September.

EASTERN WOOD PEEWEE: *Myiochanes virens*.—Common summer resident from mid-April (April 15, 1945) until September (September 13, 1944).

TREE SWALLOW: *Iridoprocne bicolor*.—Common migrant and occasional winter resident. The earliest fall record was that of October 6, 1943. One bird was seen along the Canoochee River as late as April 24, 1943. A migrating flock of about 200 was seen at Liberty Field near Flemington on April 19, 1945.

ROUGH-WINGED SWALLOW: *Stelgidopteryx ruficollis serripennis*.—A common migrant, particularly in the fall. On July 28, 1945 a small flock was seen near Flemington. Few are seen after mid-September (September 15, 1945).

BARN SWALLOW: *Hirundo rustica erythrogaster*.—A fairly common transient both in the spring and fall. Has been recorded in the spring between April 13 (1944) and April 29 (1944) and in the fall between August 7 (1945) and September 13 (1945).

PURPLE MARTIN: *Progne subis subis*.—Common summer resident. The earliest arrival in spring was on March 2, 1945. Birds utilizing houses on the camp hospital grounds left about July 20, 1945. A flock seen perched on wires near McIntosh on September 4, 1945 and two birds seen near Flemington on September 15, 1945 were quite possibly migrants.

FLORIDA BLUE JAY: *Cyanocitta cristata cristata*.—A common permanent resident of both the pine and swamp forests.

SOUTHERN CROW: *Corvus brachyrhynchos paulus*.—Common permanent resident.

FISH CROW: *Corvus ossifragus*.—Occasionally observed during the summer months.

CAROLINA CHICKADEE: *Parus carolinensis carolinensis*.—A fairly common permanent resident of the swamp forest.

TUFTED TITMOUSE: *Parus bicolor*.—A very common permanent resident in the swamp forest but rarely entering the pinelands.

FLORIDA NUTHATCH: *Sitta carolinensis atkinsi*.—A rather uncommon permanent resident.

RED-BREADED NUTHATCH: *Sitta canadensis*.—An individual was observed in the pine woods north of Hinesville on March 17, 1942. Another was observed in the same habitat near Fleming on April 1, 1944.

BROWN-HEADED NUTHATCH: *Sitta pusilla pusilla*.—A very common permanent resident of the pine woods. On January 13, 1945 a pair was observed beginning the excavation of a nest site. On March 24 a bird, presumably incubating was flushed from this cavity. A pair were feeding young in a cavity on May 3, 1942.

BROWN CREEPER: *Certhia familiaris americana*.—A fairly common winter resident from November (November 1, 1944) until March (March 17, 1942).

HOUSE WREN: *Troglodytes aedon* subsp.—House wrens are fairly common as winter residents. The earliest fall record was that of October 10, 1943 and the latest spring record was April 22, 1945. One was heard singing on November 21, 1943.

WINTER WREN: *Troglodytes troglodytes* subsp.—Winter Wrens are fairly common winter residents of the swamp woods. Earliest fall record was October 10, 1943 and latest spring record April 2, 1944.

FLORIDA WREN: *Thryothorus ludovicianus miamensis*.—Very common permanent resident, particularly in the swamp forest. These wrens occur in the towns and one nested in a vase on a porch in Hinesville. On June 6, 1944 a nest containing 5 eggs was observed inside of a cow shed.

EASTERN MOCKINGBIRD: *Mimus polyglottos polyglottos*.—A very common permanent resident except in the deep swamp woods. On April 14, 1942 a nest found in a muscadine vine contained 5 eggs. On July 5, 1944 a female was observed building a nest about 10 feet from the ground near the end of a branch on a slash pine. On the 17th of this July this nest was blown down and the 18th the bird commenced to rebuild in a nearby long-leaf pine.

CATBIRD: *Dumetella carolinensis*.—Common winter resident from late September (September 26, 1942) until late April or early May (May 2, 1943).

BROWN THRASHER: *Toxostoma rufum rufum*.—Fairly common permanent resident of thickets bordering swamps, roadsides, etc.

ROBIN: *Turdus migratorius*.—Robins are abundant winter residents, often occurring in large flocks in the swamp forests during this season. Both the northern and southern races are probably represented. The earliest fall record was that of October 31, 1943. Most of the birds depart by March 15 but on April 8, 1945 three were seen in the pinelands just north of the camp area.

WOOD THRUSH: *Hylocichla mustelina*.—Locally the Wood Thrush is not uncommon as a summer resident in the swamp forests. The earliest arrivals were noted on April 15, 1942 and on the same day again in 1945. One was seen in the swamp along Taylor's Creek on September 26, 1943.

EASTERN HERMIT THRUSH: *Hylocichla guttata faxoni*.—A fairly common winter resident from early November (November 5, 1944) until the middle of April (April 18, 1942).

OLIVE-BACKED THRUSH: *Hylocichla ustulata swainsoni*.—One record. One of these birds was seen on April 23, 1944 in the swamp woods north of the camp area.

VEERY: *Hylocichla fuscescens*.—One was seen in the swamp woods along Taylor's Creek on April 30, 1944.

EASTERN BLUEBIRD: *Sialia sialis sialis*.—A common permanent resident of the pine barrens. A nest in a bird box on the hospital grounds contained 4 eggs on March 27, 1945. A nest in a cavity in a pine contained well-fledged young on July 14, 1944.

BLUE-GRAY GNATCATCHER: *Poliopitula caerulea caerulea*.—A rather common summer resident of the swamp forest. On a very few occasions birds have been seen in winter. One was seen at the edge of Goshen Swamp near Flemington on February 27, 1945.

EASTERN GOLDEN-CROWNED KINGLET: *Regulus satrapa satrapa*.—The Golden-crown does not seem to be common here as a winter resident. On November 15, 1944 several were seen in company with Ruby-crowned Kinglets, which is the earliest date they were recorded in the fall.

EASTERN RUBY-CROWNED KINGLET: *Regulus calendula calendula*.—Usually abundant in the spring and fall during migrations; less common as a winter resident. October 15, 1944 was the earliest fall record and April 17, 1943 was the latest date it was recorded in the spring.

AMERICAN PIPIT: *Anthus spinoletta rubescens*.—Irregularly common as a winter resident. On February 24, 1944 a flock of eight birds was seen at Liberty Field. During the week of December 3-9, 1944 Charles Fraser observed large flocks near Hinesville.

CEDAR WAXWING: *Bombycilla cedrorum*.—Flocks of Waxwings were observed on several occasions between Hinesville and Taylor's Creek from March 25 to April 25, 1945. On February 27, 1945 a small flock was seen in the swamp along Taylor's Creek near the Pembroke Road. A small flock was also seen in this locality on April 27, 1943.

LOGGERHEAD SHRIKE: *Lanius ludovicianus ludovicianus*.—Common permanent resident in the pinelands and in cultivated areas. On April 14, 1944 a pair were seen building a nest on the hospital grounds. It was placed about 30 feet from the ground on the limb of a long-leaf pine. On May 29 the parents were feeding the young which were out of the nest. Another nest, built about 15 feet from the ground in a black gum, held nearly fledged young on August 13, 1945.

EUROPEAN STARLING: *Sturnus vulgaris vulgaris*.—A fairly common permanent resident about the camp area and evidently increasing. On December 27, 1944 a flock of about 30 was present on the hospital grounds.

WHITE-EYED VIREO: *Vireo griseus griseus*.—A common summer resident of thickets everywhere. On March 5, 1944 and March 8, 1945 they were heard singing. One was seen on November 25, 1944 and there is a possibility that a few may winter.

YELLOW-THROATED VIREO: *Vireo flavifrons*.—A fairly common summer resident. It was first heard singing on March 25, 1945 and on September 7, 1945 one was heard singing in the swamp woods just north of the camp area.

BLUE-HEADED VIREO: *Virea solitarius* subsp.—Does not seem to be common as a migrant. A few were seen on March 17, 1942.

RED-EYED VIREO: *Vireo olivaceus*.—A rather common summer resident in the swamp forest. Earliest date of spring arrival was April 1, 1945.

BLACK AND WHITE WARBLER: *Mniotilta varia*.—A regular but not common migrant. Recorded in March and April in the spring (March 13, 1945 and April 30, 1944 being the extremes). One was observed in a patch of swamp woods in the camp area on August 24, 1945. Several were seen in the swamp south of Taylor's Creek on September 26, 1943.

PROTHONOTARY WARBLER: *Protonotaria citrea*.—Common summer resident of the creek and river swamps. First observed in spring along Taylor's Creek in April (April 17, 1945). Several were seen at Glisson's Pond on May 14, 1943. It also occurs in numbers in the swamp about Midway.

SOUTHERN PARULA WARBLER: *Compsothlypis americana americana*.—An abundant summer resident in the swamp forest, hammocks, and shade trees wherever the Spanish moss is abundant. They arrive in early March (March 5, 1944) and are very common before the end of the month.

MYRTLE WARBLER: *Dendroica coronata coronata*.—Abundant migrant and common winter resident. The first birds appear in the fall during late October (October 24, 1943). A few were observed in spring at late as April 28, 1943.

BLACK-THROATED GREEN WARBLER: *Dendroica virens* subsp.—One was seen in the swamp woods south of Taylor's Creek on October 15, 1944.

YELLOW-THROATED WARBLER: *Dendroica dominica dominica*.—Common summer resident of the swamp forests and hammocks. On February 18, 1945 a male was singing in the swamp south of Taylor's Creek and several were seen and heard on February 25, 1945.

BLACK-THROATED BLUE WARBLER: *Dendroica caerulescens* subsp.—Occasionally seen during the spring migration in April. One male was seen along the Canoochee River on April 23, 1943; another near Liberty Field on April 25, 1944; a third in the swamp south of Taylor's Creek on April 30, 1944.

BLACK-POLL WARBLER: *Dendroica striata*.—Two were seen near Glisson's Pond on May 9, 1943.

NORTHERN PINE WARBLER: *Dendroica pinus pinus*.—A common permanent resident of the pinelands. On February 11, 1945 males seemed to be singing everywhere in the pine woods. A pair was observed feeding young in the nest on May 20, 1945. It was placed closed to the trunk of a long-leaf pine at an elevation of about 20 feet.

NORTHERN PRAIRIE WARBLER: *Dendroica discolor discolor*.—Not uncommon as a summer resident in brushy clearings where there are small trees. The earliest date observed in spring was March 25, 1945. A pair was seen on July 23, 1944 in a thicket bordering the swamp just north of the camp area.

WESTERN PALM WARBLER: *Dendroica palmarum palmarum*.—Very common winter resident from October (October 14, 1943) until April (April 24, 1943).

YELLOW PALM WARBLER: *Dendroica palmarum hypochrysea*.—This sub-species is much less common than the Western Palm Warbler. Most of the records of it are during the spring migration. They seemed to be quite numerous on March 31, 1945.

ORANGE-CROWNED WARBLER: *Vermivora celata celata*.—Rather uncommon as a winter resident. Several birds were seen in a pine north of Fleming on December 23, 1944.

OVEN-BIRD: *Seiurus aurocapillus* subsp. —On April 30, 1944 a number of Oven-birds were present in the swamp woods south of Taylor's Creek. Another was seen along Taylor's Creek on April 21, 1945.

NORTHERN WATER-THRUSH: *Seiurus noveboracensis* subsp. —A Northern Water-thrush was observed along Taylor's Creek on August 22, 1943 and several were seen in the same vicinity on September 26, 1943.

LOUISIANA WATER-THRUSH: *Seiurus motacilla*.—A fairly common migrant. One was observed at Glisson's Pond on May 9, 1943.

YELLOW-THROAT: *Geothlypis trichas* subsp. —Yellow-throats occur throughout the year and are not uncommon about the cypress ponds, the borders of the swamps, and along the watercourses.

HOODED WARBLER: *Wilsonia citrina*.—Common summer resident of the swamp forests. One was seen near Flemington on March 30, 1943 which is the earliest date it was recorded in the spring.

AMERICAN REDSTART: *Setophaga ruticilla*.—A fairly common migrant. Earliest spring record was April 16, 1944. Fall records range between September 13 (1942 & 1944) to September 26 (1943). An immature male was seen in the swamp south of Taylor's Creek on May 20, 1945.

ENGLISH SPARROW: *Passer domesticus*.—A common permanent resident in the towns, the camp area just north of Hinesville, and about farm buildings.

BOBOLINK: *Dolichonyx oryzivorus*.—Irregularly common as a spring migrant. In 1942 a single male was seen on May 3. During the spring of 1944 several flocks were seen including the following: one of about 50 males on April 28; one of about 40, about half males and half females, on May 6; one of about 50 which was predominately females on May 9. None were observed in either 1943 or 1945.

EASTERN MEADOWLARK: *Sturnella magna magna*.—The large flocks seen during the winter months undoubtedly are winter residents of this race. Such flocks, numbering from a couple of dozen to several hundred birds, are observed every winter.

SOUTHERN MEADOWLARK: *Sturnella magna argutula*.—A common permanent resident of the pinelands.

EASTERN RED-WING: *Agelaius phoeniceus phoeniceus*.—Flocks of Red-wings were seen irregularly during the winter months. On December 11, 1943 several flocks of 40 or more birds each were seen, all of which were males. Charles Fraser has reported Red-wings as breeding regularly about a pond between McIntosh and Midway.

ORCHARD ORIOLE: *Icterus spurius*.—Locally common as a summer resident. They have been seen frequently on a hammock at Liberty Field and in the town of Hinesville. At the latter place a male was seen on April 2, 1945.

FLORIDA GRACKLE: *Quiscalus quiscula quiscula*.—A common permanent resident. On April 27, 1945 a female was building a nest in a long-leaf pine on the camp hospital grounds. Large flocks of grackles seen during the winter months are undoubtedly migrants of other races from the north.

EASTERN COWBIRD: *Molothrus ater ater*.—A fairly common winter resident from late October (October 27, 1943) until March (March 2, 1945).

SCARLET TANAGER: *Piranga olivacea*.—A male was seen at the edge of the swamp north of the camp area on April 27, 1943 and another male near Flemington on April 30, 1945.

SUMMER TANAGER: *Piranga rubra rubra*.—A common summer resident particularly in the pinelands. The earliest date it was recorded in the spring was on April 8, 1945. One was seen on September 19, 1944.

EASTERN CARDINAL: *Richmondia cardinalis cardinalis*.—A common permanent resident everywhere except in the deeper swamps.

INDIGO BUNTING: *Passerina cyanea*.—On April 4 a male was seen near the border of the swamp south of Taylor's Creek. A male and a female were seen a few miles northwest of Hinesville on May 1, 1944.

PAINTED BUNTING: *Passerina ciris ciris*.—A rather rare and local summer resident. A male was observed near Flemington on May 13, 1943. During the summer of 1945 a pair was seen frequently at the edge of the drainage canal between Flemington and Hinesville. On April 20, 1944 five males and a number of females were seen feeding with the English Sparrows at the post stables.

EASTERN GOLDFINCH: *Spinus tristis tristis*.—A common winter resident from November (November 21, 1943) until April (April 25, 1944). On February 11, 1945 large flocks were feeding on the fruits of the red maples in the swamps just north of the camp area.

RED-EYED TOWHEE: *Pipilo erythrophthalmus* subsp. —A common winter resident from October (October 10, 1943) until April (April 2, 1944).

WHITE-EYED TOWHEE: *Pipilo erythrophthalmus alleni*.—A common permanent resident of the thickets and brushy borders of the swamps.

EASTERN VESPER SPARROW: *Pooecetes gramineus gramineus*.—A fairly common winter resident from November (November 3, 1943) until March (March 16, 1945).

PINE-WOODS SPARROW: *Aimophila aestivalis aestivalis*.—Common during the summer months in the pinelands. On March 11, 1945 numerous males were heard singing. One was heard singing on September 24, 1944.

SLATE-COLORED JUNCO: *Junco hyemalis* subsp. —A winter resident usually uncommon but occasionally quite numerous. On March 1, 1944 six birds were seen at a cypress pond near Hinesville and males were heard to sing. On November 24, 1944 a good many were present along the swamp south of Taylor's Creek in the company of White-throated Sparrows. A few were seen near Bashlor's Bridge on the Canoochee River on January 1, 1945.

EASTERN CHIPPING SPARROW: *Spizella passerina passerina*.—The Chipping Sparrow is an abundant winter resident. Every summer a few birds were seen about the camp area just north of Hinesville. On July 1, 1943 one was observed gathering nesting material and the same day an adult was seen feeding young birds. On June 7, 1945 an adult was seen on the hospital grounds accompanied by two fledglings which were begging for food.

EASTERN FIELD SPARROW: *Spizella pusilla pusilla*.—A fairly common winter resident from November (November 21, 1943) until April (April 2, 1944).

WHITE-THROATED SPARROW: *Zonotrichia albicollis*.—A common to abundant winter resident from October (October 24, 1943) until April (April 28, 1943).

SONG SPARROW: *Melospiza melodia* subsp. —Song Sparrows are fairly common winter residents from late October (October 31, 1943) until April. In 1944 one was seen at late as April 23.

P. O. Box 424
Linsville, Pa.

GENERAL NOTES

GRINNELL'S WATER-THRUSH IN GEORGIA IN WINTER.—In a Christmas bird census from Savannah, Georgia, made on December 26, 1931 (*Bird Lore* 34 (1):53) a Water-thrush (*Seiurus* sp.) was reported thus first suggesting that Water-thrushes of some form may occasionally winter in coastal Georgia. However, no further records were published and no specimens were obtained in Georgia in winter until March 2, 1945, when I collected a female Grinnell's Water-thrush (*Seiurus noveboracensis notabilis*) in a swamp just south of Augusta, Georgia. The bird flew up from a temporary rain pool in a logging road in response to my squeaking.

Whether this bird should be classed as a winter resident or an early spring migrant is a rather perplexing question. The Northern Water-thrush normally arrives in Augusta in spring about April 15, while the earliest spring date for Athens is April 15, 1923 (Burleigh, 1938) and for Atlanta April 19, 1930 (Griffin, 1941). The fact that this bird was present at Augusta almost six weeks ahead of its usual arrival time suggests that it was wintering here. On the other hand there is evidence that it might have been a very early migrant. I am certain that the bird did not winter in the particular section of swamp where it was collected since the area was worked thoroughly many times during the winter. Also, the temporary pool was not present until the rains of a few days before. Yellow-throated Warblers arrived in the area in mass the night before and it is probable that the Water-thrush came in with them.

Since the collection of this specimen Hebard (*Oriole* X: 5) has reported seeing a Water-thrush (*Seiurus* sp.) in Camden County, Georgia on February 26, 1945. Also, Brooke Meanley and Lewis H. Mounts, both competent field observers, have reported (personal communications) unusually early records of the Northern Water-thrush (*Seiurus noveboracensis subsp.*) At Macon, Bibb County, Georgia during the spring of 1945. Meanley observed a single bird about six miles southeast of Macon on March 15, and Mounts observed a single bird near his home north of the city on March 25. In view of these additional 1945 records and the statement of Griscom (*Audubon Magazine*, July-August, 1945, p. 252) that during the 1945 spring season, "The birds wintering in tropical America began arriving in North America on earliest dates ever known," it seems more likely that my specimen as well as the others observed in 1945 were early spring migrants. However, the possibility of an occasional bird wintering still exists so Georgia bird students should be on the lookout for them and whenever possible collect them to confirm the record and the form of Water-thrush involved.

Appreciation is expressed to Dr. John W. Aldrich, Fish and Wildlife Service, Washington, D. C., for identifying the specimen in question.—J. FRED DENTON, 1314 Meigs St., Augusta, Ga.

WHITE-EYED VIREO AT AUGUSTA IN WINTER.—Normally the White-eyed Vireo (*Vireo griseus*) departs from the Augusta area by the last week in October and its presence here after November 1 has not been previously

detected. However, during the past winter (1945-46) either late migrants or potential winter residents were encountered in Richmond County, Georgia, on three occasions. The first was an unsexed bird collected on November 4; the second, a bird observed at very close range on November 18; and the third a female collected on December 9. In all three instances the birds were squeaked from canes fringing swamps in the Savannah River bottom. The two specimens are referable to the northern race, *noveboracensis*; the breeding form of the White-eye at Augusta has not been satisfactorily determined.—J. FRED DENTON, 1314 Meigs St., Augusta, Ga.

NOTES FROM THE OCMULGEE RIVER BOTTOM, WILCOX COUNTY, GEORGIA.—During January and February, 1946, the writer made several trips to the Ocmulgee River swamp ten miles from Fitzgerald, Georgia, for the purpose of hunting and observing wildlife. On January 13 a Bewick's Wren was sighted along a fence row some 200 yards from the spot where a specimen of the species was procured last year. On the same date a flock of 8 Prairie Horned Larks was noted in an open field bordering the swamp. In the swamp proper on January 27th, 20 Yellow-throated Warblers, 3 Black and White Warblers and 2 Blue-gray Gnatcatchers were noted and approached to within 10 feet when desired.

On February 16 and 17 in the vicinity of Bowen's Mill several interesting winter residents and early spring migrants were observed. A most surprising record was of 12 Purple Martins flying over the State Fish Hatchery on the 16th. On the 17th the following winter residents were seen in the river bottom: 1 Purple Finch, 1 Black and White Warbler, 1 Sharp-shinned Hawk (end of tail square) chasing a Flicker. Yellow-throated Warblers were common in the pines where they were associating with Pine Warblers, Ruby and Golden-crowned Kinglets, Brown Creepers, Chickadees, Titmice, etc.—BROOKE MEANLEY, Lawson General Hospital, Atlanta, Georgia.

SIGHT RECORD OF A WHITE PELICAN AT CORDELE.—On October 10, 1945, my brother Bill and I were making field investigations on Lake Blackshear, a hydro-electric lake near Cordele, Crisp County, and were noting the number and kinds of waterfowl which had arrived on the lake. In one of the estuaries, Gum Creek, we noted a White Pelican (*Pelecanus erythrorhynchos*). The bird was within easy view, the characteristic shape and white color being easily discernible; as it took flight the black wing tips were clearly visible. Although I was on the lake many times after this, I did not see the Pelican again. ORLIN K. FLETCHER, State Department of Public Health, Cordele, Georgia.

WHITE-CROWNED SPARROW AGAIN AT TIFTON.—Until recently three specimens of *Zonotrichia leucophrys* have been referable to lower Georgia, one from near Savannah and two near Tifton.

On February 25, 1946, I collected slightly west of Tifton an adult and an immature of this species, both males, in brushy thickets almost a quarter mile apart. It is of coincidental interest that the latter was within a

few feet of the spot where my January 1943 specimen was taken. Both are obviously examples of the eastern form, *Z. l. leucophrys*, and they remain in my collection.—ROBERT A. NORRIS, 505 West 8th Street, Tifton, Georgia.

CATBIRD WINTERING IN JONES COUNTY, GEORGIA.—While taking the Christmas bird count December 23, 1945, I observed a Catbird (*Dumetella carolinensis*) in a Crataegus thicket at the cotton mill in East Juliette, Georgia. This is my first winter record of the species from this area.—RAYMOND J. FLEETWOOD, Fish and Wildlife Service, Round Oak, Ga.

SPRING

I wake in the morning; life seems gray—
I hear a Thrush at break of day,
A Titmouse's whistle, A Cardinal's "cheer,"
Isn't life gay at this time of year!

Claire M. Gordon,
Atlanta, Ga.

'TIS MAY

When comes the merry month of flowers
To sunny lawns, to shady bowers,
To garden plots, to window sills,
All down the lanes, and on the hills,
The black and rust-colored Oriole
Airs out a lay that thrills my soul
While flitting 'round from tree to tree
In search of food industriously.
And thus he sings the livelong day,
" 'Tis May! 'Tis May! 'Tis May! 'Tis May!

Ruth Bryant Sneed,
Lake View, S. C.

DOUBTING THOMAS—THE PAINTED BUNTING

The Painted Bunting's hard to take
When first you see him in a book.
"Those paint-pot colors can't be real,"
You say, as first you start to look.
So, doubting, do you search through swamp
And grass for artist-pallete wraith,
Until a rainbow on a post
Throws back his head, confirms your faith.

Louis C. Fink,
Rutherford, N. J.

NEWS AND COMMENTS

NEWS OF MEMBERS—ROBERT (BOBBY) NORRIS, former editor of *The Oriole* and very active field ornithologist, after serving three years in the Navy is home again. Having been sworn in at Macon on March 4, 1943, Robert underwent basic training at Bainbridge, Md., for three months. Thereafter for 16 months he was stationed at the U. S. Naval Hospital, Charleston, S. C., where he was trained in laboratory technology. In January 1945 he was assigned aboard the U. S. S. "Crockett," aboard which he made three Pacific trips and covered many of the islands before the war ended. Following his discharge in March, Robert rested at home for a few weeks then entered the University of Georgia where he now is completing his training in Zoology. EARLE R. GREENE, since the closing of the Higgins Corporation, has accepted a position with the War Assets Corporation. Unfortunately, his new position necessitates his remaining in New Orleans. Of late Earle has been very busy with the publication of his latest ornithological contribution, a book entitled "Birds of the Lower Florida Keys." FREDERICK V. HEBARD of Philadelphia (and Georgia) has made three trips to southeast Georgia since Christmas and on each has made extensive bird observations. THOMAS D. BURLEIGH spent April on the Camp Stewart Reservation at Hinesville where he cooperated in carrying out experiments on the effects of DDT on birds and other wildlife. Dr. Odum, Dr. Denton and Robert Norris visited him while he was there and inspected the project.

A. B. C. MEETINGS—The Atlanta Bird Club has had several interesting meetings during the past few months. At the February meeting Sgt. Brooke Meanley, now at Lawson General Hospital, spoke on "Birds of the Canebrake." His talk dealt mainly with his studies of the Swainson's Warbler in the Ocmulgee River bottom near Macon. At the March meeting the A. B. C. enjoyed a special treat in a talk entitled "Birds Half Way around the World" by Lt. Richard A. Parks who recently returned from the Pacific. Mr. Parks illustrated his lecture with water colors painted in the Pacific.

MENABONI PAINTINGS SHOWN—The original bird paintings of Athos Menaboni were exhibited before the annual meeting of the Florida Audubon Society at Winter Park on March 2, 1946.

NEW EXCHANGE—*The Oriole* announces with pleasure the addition to its list of exchanges of the following journal:

Flower and Feather, Mary Thomas Peacock, Editor, 1514 Bailey Avenue, Chattanooga 4, Tenn.

PUBLICATION DEADLINE—The next issue of *The Oriole* goes to press JUNE 15. All short notes and news items for inclusion in this issue must be in the hands of the Editor by this date.