THE ORIOLE

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THE ORIOLE

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SHOREBIRDS IN MAN-MADE HABITATS NEAR ATLANTA

By

WILLIAM W. GRIFFIN

The Piedmont of Georgia with its rolling, forested, hills and relatively swift streams is practically devoid of natural habitat for most of the migrant shorebirds. Man has altered his natural surroundings, however, and in several ways has created or caused to be created new conditions, new habitats, which are attractive to shorebirds. Artificial ponds—there are no natural lakes in the Piedmont—with their resulting bars, shores and occasionally drained basins are often suitable. The dredging and straightening of stream channels may sometimes cause the formation of desirable sand bars. Frequently the clearing and plowing of a lowland field will result in the formation of a fine mud flat during rainy periods. With these we are familiar, for it is in such situations that practically all shorebird observations from the Piedmont region have been made in the past. Until recently, however, bird students around Atlanta had not realized the importance of two additional man-made environments as favored shorebird habitats: sewage disposal plants and airports.

Disposal Plants.—The writer's first experience with some of the shorebirds was at a sewage disposal plant located five miles north of Atlanta at the edge of the Bobby Jones Golf Course. Here a number of shallow sludge pits from several hundred to several thousand square feet in area were diked off. During wet weather shallow pools formed on some of these pits creating ideal conditions for such species as Semipalmated Plover (*Charadrius hiaticula*), Greater Yellow-legs (*Totanus melanoleucus*), Lesser Yellow-legs (*Totanus flavipes*), Spotted Sandpiper (*Actitis macularia*), Solitary Sandpiper (*Tringa solitaria*), Pectoral Sandpiper (*Erolia melanotos*) and Least Sandpiper (*Erolia minutilla*). In the spring of 1938 all of the above species were noted at this spot. Subsequently use of this disposal plant was discontinued and a heavy growth of vegetation soon covered the area.

Off and on during the ensuing years observations were made at the South River Disposal Plant five miles south of Atlanta. Here the sludge pits were small, quick drying or surrounded by thick vegetation and not nearly so attractive to shorebirds. Nevertheless, Solitary Sandpipers and both the Yellow-legs occasionally frequented them in migration.

In 1950 the writer decided to investigate other disposal plants about Atlanta in the hope that larger, more open, sludge pits similar to those existing in 1938 near the Bobby Jones Golf Course could be found. With one exception, all other disposal plants were unsuitable; there were no particularly desirable sludge pits. At most of them gravel spray beds had been installed. These were circular in shape with long sprinkling arms revolving slowly from an axis in the center of each bed and spraying sewage along their entire length. Apparently shorebirds avoided this type spray bed because it was constantly necessary to dodge the sweeping arms.

One plant, however, proved to be desirable. This was the Intrenchment Creek Disposal Plant located six miles southeast of Atlanta in DeKalb County. Here, in addition to a couple of permanently wet sludge pits, was situated a large crushed rock spray bed with stationary sprinklers dispersed every yard or so. Intermittently these sprinklers would spray various sections of the bed with sewage so that it was constantly wet and not dissimilar to the tide or wave washed gravel beds so choice to shorebirds in coastal regions.

Nine species of shorebirds were observed at the Intrenchment Creek Disposal Plant during the spring and fall migrations of 1950. Killdeer (*Charadrius vociferus*) were permanent residents of the spray bed. During winter and in migrations flocks of over 75 were frequently present. Several Semipalmated Sandpipers (*Ereunetes pusillus*) and Least Sandpipers were seen during August. One Semipalmated collected on August 20 and one Least collected on August 28 probably represent the first specimens from the region, although, of course, there are a good many previous sight records for these species, particularly the latter, from the Atlanta area. Wilson's Snipe (*Capella gallinago*) were common about a marshy plot adjoining one of the sludge pits. Also observed were Spotted Sandpipers, Solitary Sandpipers, Greater and Lesser Yellow-legs and Pectoral Sandpipers.

It was rather surprising to find during both spring and fall migration seasons small flocks of 15 or more Pectoral Sandpipers, generally dwellers of the marshy mud flat, walking gingerly over the rocks of the spray bed, running under the sprinkling water, in search of food. Nevertheless the Pectorals, like most of the other species, foraged impartially on sludge pits as well. Only the Killdeer seemed generally to avoid the sludge pits,

whereas the Spotted and Solitary Sandpipers definitely preferred them to the spray bed.

Since suitable habitat was provided regardless of weather conditions, a few shorebirds could be found at this disposal plant at all times during the migration seasons. During periods of drought, Killdeer occurred about the spray bed in noticeably larger numbers. Apparently these birds foraged in the open fields nearby so long as the fields remained damp, but congregated at the spray bed when the fields became parched and dry.

Airports.—Perhaps even more surprising than the occurrence of shorebirds at disposal plants was their discovery at the Atlanta Municipal Airport in Hapeville. On several occasions in rainy weather I have observed large numbers of plovers, sandpipers, gulls and terns at airfields along the Atlantic coast — at St. Simon's Island, Georgia, and at Quantico, Virginia. But these fields were very close to good natural habitat, and I had not suspected that our inland airport, ordinarily dry and far removed from an area where shorebirds concentrate, would harbor them in any numbers. Yet within a period of several days following the heavy rain of August 30, 1950, eleven species were found there.

The Atlanta airport has two new runways, each nearly a mile and a half in length, and several older runways somewhat shorter. Numerous taxi strips, turn arounds, and loading and parking zones are also hard surfaced. Large areas adjacent to these strips have been planted to grass, and there are to be found vast expanses of exposed red clay from which the earth movers have borrowed dirt to construct the fills for the new runways. Rain in any quantity converts these bare borrow areas into mud flats and leaves large but shallow pools standing in the low spots of the asphalt and concrete runways. Evaporation is rapid, however, and water is seldom found standing on the runways more than one day after a rain. Likewise the borrow areas dry out shortly after the rain ceases.

Incident to a hurricane which swept the Gulf Coast and moved through Alabama with diminished velocity, heavy rains occurred in Atlanta on the night of August 30 and cloudy, drizzly, conditions prevailed throughout the day on August 31. It was on this latter date and the several days following that the observations of shorebirds were made. Here is a list of the species seen during this period.

Semipalmated Plover: *Charadrius hiaticula.* On September 1 a single bird was collected as it fed with Killdeer in a muddy borrow area located on the Clayton County side of the airport. The next day George W. Sciple and I observed three more birds in the same spot, although it was almost dry at the time. This species had not previously been collected in the Atlanta region.

Killdeer: *Charadrius vociferus.* From 75 to 100 birds of this species were to be found in the fields and on the runways during the entire period — August 31 to September 4. The species is always abundant at the airport, however.

Black-bellied Plover: *Squatarola squatarola.* A single male still in breeding plumage was collected on August 31 from a grassy field on the Fulton County side of the airport. This is the first specimen from the interior of Georgia, although there have been several previous sight records from Atlanta.

Wilson's Snipe: *Capella gallinago.* Three birds were seen about a puddle in one of the grassy fields on September 4.

Spotted Sandpiper: *Actitis macularia.* George Sciple and I saw one bird about puddles in a borrow area on September 2.

Solitary Sandpiper: *Tringa solitaria.* On September 2 one was seen in the borrow area in company with the Spotted Sandpiper. It remained until September 4.

Pectoral Sandpiper: *Erolia melanotos.* On August 31 several small flocks of about ten birds each were seen about the standing water on the runways in company with peep sandpipers and Killdeer. Next day they were found also at the borrow areas. Their numbers gradually dwindled, but even on September 4, two days after the runways had become completely dry and the borrow areas were baked clay, three birds were seen with Killdeer on the runways.

Least Sandpiper: *Erolia minutilla.* A few individuals of this species associated closely with other peeps and with Pectoral Sandpipers on both runways and borrow areas. As late as September 4 two birds were still present at a borrow area, then very dry, on the Clayton County side of the airport.

Semipalmated Sandpiper: *Ereunetes pusillus.* On August 31, about 15 birds of this species were identified about the pools on the runways. Next day three birds were found with Western Sandpipers at a borrow area. None were seen after this date.

Western Sandpiper: *Ereunetes mauri.* On September 1, ten birds were definitely identified as they foraged with other peeps about one of the muddy borrow areas on the Clayton County side. Possibly they had been present here the previous day but were not seen as this particular area had not been examined. On September 3 a female was collected from a small flock of peeps. I believe this to be the first specimen from Atlanta.

Black Tern: *Chlidonias niger.* Three birds were seen coursing the runways on August 31. As late as September 3 these three were still present, flying lazily up and down the dry runways just as though they were following some salt water creek in the marshes along our coast.

It is interesting to postulate a theory concerning the presence of these birds at the Atlanta airport. Shorebirds migrating over the region encounter bad weather and are forced to alight at the first spot offering suitable habitat. The asphalt runways closely resemble streams; the grassy expanses resemble marshes; the open borrow areas, mud flats. Obviously ducks are sometimes misled by this semblance, for several persons working about airports have told that they have occasionally seen small flocks of ducks crash-land on the asphalt runways in rainy weather. It is reasonable then to suppose that storm-weary shorebirds too are duped into landing at airports, and, once there, they are able to adjust themselves to their rather unusual habitat. After rest and forage they continue on their migration.

This explanation seems to account for the occurrence of the above species on this one occasion. Unfortunately it was impossible to check the Atlanta airport on later dates. Probably such occurrences are duplicated there and at similar inland airports in Georgia whenever rainy, adverse, weather coincides with a migratory flight of shorebirds over the region.

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RELATIVE FREQUENCY OF SHORE AND WATER BIRDS AT THE TIFTON EXPERIMENT STATION POND, JANUARY 1932-MARCH 1934

By
ROBERT A. NORRIS

The Experiment Station Pond, approximately a mile northwest of Tifton, Tift County, Georgia, was built during the summer of 1931 and was filled with water during the following January. The pond is roughly 10 acres in extent and is relatively open. It is bordered partly by a road, partly by a grove of longleaf pine, and partly by closely grazed pastureland. One arm of water supports a growth of black-gum and willow, and patches of cattails and other marsh plants are found both here and along the wooded margin. Although the size of the pond has not changed appreciably during the last two decades, its edge vegetation presumably was poorer in aquatic and semi-aquatic plants in 1932-1934 than at the present time.

Birds were promptly attracted to the pond site, even before its complete filling. During the first winter several tame ducks were kept there. Grain was thrown into the water and was shared both by the tame and wild ducks. Hunting was not allowed in the area and the birds were little disturbed.

Between January 30, 1932, and April 4, 1934, Mr. J. L. Stephens of the Experiment Station made daily visits to the pond (on 88% of the total days within this period); on each visit he recorded the species and numbers of shore and water birds seen on or about the pond. Mr. Stephens has kindly placed at the writer's disposal his two-year record upon which the present analysis is based. Only a small amount of time was given to recording birds, and all the pond was not visible from the place at which observations generally were made. On occasion Mr. Stephens walked around the pond or went out in a boat. While the bird notes are necessarily far from a complete record of occurrences on the pond, it is believed that they provide a rather good index to the frequency of the commoner species from season to season. Frequency of occurrence, as here used, means, for each season, the percentage of days on which each species was recorded among the total number of observation days within that season. Numbers of individual birds (generally small) are not considered in the present report.

In the accompanying table, frequency values are given for the 24 species noted on the pond during the two-year period. During the winters ending in 1933 and 1934, for example, the Coot was seen on 81%

Species	FALL (Sept., Oct., Nov.)			WINTER (Dec., Jan., Feb.) (Ending)				SPRING (Mar., Apr., May)			SUMMER (June, July, Aug.)		
	'32	'33	Av.	'32	'33	'34	Av.	'32	'33	Av.	'32	'33	Av.
Coot	9	21	(15)		81	91	(86)	4	37	(21)			
Killdeer	31	48	(39)	61	90	75	(75)	45	35	(40)	32	15	(24)
Pied-billed Grebe	56	12	(39)	70	81	58	(70)	46	30	(38)	2		
Mallard	17	15	(16)		24	72	(48)		1				
Great Blue Heron	51	9	(30)	44	22	25	(30)	20	29	(25)	9	30	(20)
Red-breasted Merganser		1		78	4	5	(29)	10	1	(6)			
Kingfisher	56	29	(43)	39	25	13	(26)	25	77	(51)	29	45	(37)
Scaup	4	8	(6)	65	6	3	(25)	38	4	(21)			
Wilson's Snipe	14	9	(12)		31	5	(18)	13	23	(18)			
Pintail				52									
Blue-winged Teal	31				21				11				
Green Heron	9	1	(5)		2			53	55	(54)	51	44	(48)
Black-crowned Night Heron	3				2				3				
Anhinga	47	21	(34)					9			23	61	(42)
Little Blue Heron	4	50	(27)					17	3	(10)	69	32	(50)
Osprey	2	1	(2)					22	31	(27)	2	2	(2)
American Egret		8						23			8	8	(8)
Hooded Merganser		5											
Florida Gallinule	1												
Black Duck									8				
Green-winged Teal								4					
Greater Yellow-legs								3					
White-fronted Goose								3					
Common Loon								2					

of the total observation days of the first winter, and on 91% of the total of the second winter (the species' frequency averaging 86% for this season). The average values in parentheses probably are not wholly valid from a statistical viewpoint, but they are deemed fair indications of seasonal frequency fluctuations of the more abundant species.

On the basis of these data, the writer herewith submits an interpretation of the seasonal status at the Experiment Pond of several of these shore- and water-bird species:

Winter species: The order of frequency as shown in this group is greatest for the Coot and least for two of the herons. Approximately one-third of the wintering species are permanent residents. Only one bird, the Pintail, occurs solely in this period. Total winter species are 13.

Summer species: The highest frequency is indicated for the Little Blue Heron, closely followed by the Green Heron and the Anhinga. All the summer species arrive in spring and depart in fall; hence none are merely June-to-August visitants. The Pied-billed Grebe, while rare in summer, possibly breeds in the general area. The Osprey appears to be uncommon in summer and reaches its frequency peak in the spring. Total summer species are 9.

Fall and spring species: The higher frequencies at these seasons are of permanent residents (Grebe, Kingfisher) or of late-departing or early-arriving migrants. The frequency values tend to lose meaning for migrants during these periods (arrival and departure times, as well as regularity of occurrence, determining the seasonal frequency). Only two species (Hooded Merganser, Florida Gallinule) are confined to the fall period, while five (Black Duck, Green-winged Teal, Greater Yellow-legs, White-fronted Goose, and Common Loon) are found only in spring. (There were, in addition, numerous records of unidentified sandpipers in spring and fall.) The Red-breasted Merganser and, to a lesser degree, the Scaup and Coot arrive late in fall, depart early in spring. Total species in fall are 18; in spring, 21.

Resident species: The frequencies, as suggested above, are of greater value as regards the permanent residents. The Great Blue Heron and Kingfisher show relatively little variation in frequency throughout the year; the Killdeer is far more evident (and presumably more abundant) in winter. The Pied-billed Grebe is decidedly uncommon in summer, while the Green Heron is rare in the colder months. These 5 are the only resident species.

Annual fluctuations: The data hardly justify a comparison of one year's yield with the next. Indeed, observations covering several years,

together with detailed climatic, pond-management, and other information, are generally needed for that sort of analysis. Suffice it to say that the data here tabulated do show a few notable changes, as the increase in Coots and Mallards, and the decrease or disappearance of Scaup, Red-breasted Merganser, and Pintail. Little Blue Herons reach peak frequency in the summer of 1932 but not until the fall period of 1933.

Total frequency was calculated for each species (simply an adding of all seasonal frequencies for the two-year period). The six species proving most frequent throughout the period (seen on the highest percentage of total observation days) are: Killdeer, 432; Pied-billed Grebe, 355; Kingfisher, 341; Coot, 243; Great Blue Heron, 239; Green Heron, 215. (Total days of observation, 700.)

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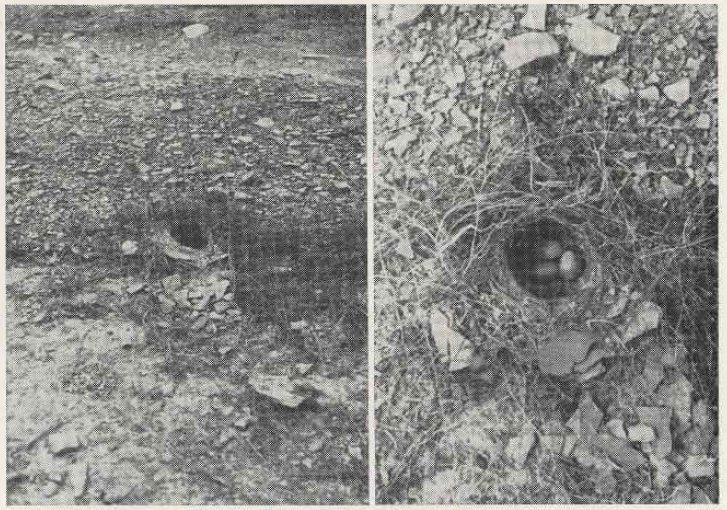
GENERAL NOTES

HORNED LARK NESTING IN GEORGIA. — A few years ago Eugene P. Odum and Thomas D. Burleigh (*Auk,* 63:388-401, 1946) suggested that the Horned Lark (*Eremophila alpestris*) might one day become a breeding bird in Georgia, inasmuch as this species appeared to be extending its range southward and eastward through Tennessee and into Alabama and North Carolina. Early realization of their prediction was indicated when the writer discovered a family group of these birds in August, 1949, at Russell Field, an airport located seven miles north of Rome in Floyd County, Georgia (see Griffin, *Oriole,* 15:10-11, 1950).

It is gratifying, therefore, to report now that the Horned Lark was definitely added to the list of breeding birds of Georgia on April 9, 1950. On that date the writer, accompanied by George W. Sciple, succeeded in finding a nest of this species at Russell Field, the identical spot where the observations of the previous year were made. The nest, consisting of finely woven grasses lining a cup-shaped depression in the ground, contained three well incubated eggs. It was located in a sparse tuft of grasses in the center of a bare clay and gravel area adjoining one of the runways of the airport. The accompanying photographs by John Neumann of the U. S. Weather Bureau meteorological station at Russell Field shows the character of the habitat immediately surrounding. Both nest and eggs



Left, view of nest of Horned Lark from side; right, view from above. Photographs by John Neumann.

were collected and are now deposited in the Museum of Zoology, University of Georgia, in Athens.

During several hours of observation on April 9, and on later dates during the spring and summer of 1950, it was determined that at least two pairs of larks and probably three were occupying the airfield. Approximately 25 acres of open, grassy, fields with a large amount of bare ground interspersed throughout apparently provided ideal conditions for an open-country species such as the Horned Lark. Associated with it in this niche were Killdeer, Nighthawks, Meadowlarks and, in the more grassy portions, Grasshopper Sparrows.

Little opportunity to observe the behavior of adult larks at the nest was afforded. It was noticed, however, that the female always remained in the general vicinity of the nest as long as anyone was near. She would leave the nest before close approach could be made and then feed nonchalantly within several hundred feet of it. As a matter of fact, the nest was discovered by noticing that she refused to leave one particular area and by then conducting a careful, inch by inch, search of the ground within that area.

Away from the nesting area single adult birds were observed feeding, generally in bare spots on the airfield. They occasionally foraged on the asphalt runways and on the walks about the buildings, where they allowed close approach.

It is not unreasonable to suppose that one or more pairs of larks have nested at Russell Field for the past several years, although it is unlikely that the species has occupied the region throughout historic times. Most probably this nest at Rome represents an "invasion" of the region within the last ten years. Since a male specimen collected by the writer at this locality on August 28, 1949, is typical of the Prairie Horned Lark (*E. a. praticola*), it is assumed that this is the invading race. It will be interesting, indeed, to watch for a further extension in the breeding range of this species in Georgia.—WILLIAM W. GRIFFIN, *Eighth Tank Battalion, Fleet Marine Force, Camp Lejeune, North Carolina.*

THE PROBABLE BREEDING OF THE PROTHONOTARY WARBLER IN LINCOLN COUNTY, GEORGIA.—Although the Prothonotary Warbler (*Protonotaria citrea*) breeds about Atlanta (various reports) and possibly at Lake Rutledge, Morgan County (see census in *Oriole* 4:23-26, 1939), it is not known to breed in the eastern part of the State north of Augusta. At Athens Burleigh (*The Birds of Athens,* 1938) recorded it in both spring and fall but states specifically that it is a migrant there. A similar situation exists just across the line in South Carolina where it has been recorded once at Clemson College on May 2, 1931, but has not actually been found nesting north of Graniteville and Aiken (see Chamberlain and Sprunt, *South Carolina Bird Life,* 1949). The apparent breeding of this warbler in northern Lincoln County is accordingly of interest.

On May 23, 1950, while exploring a small swamp located beside State Highway 79 about seven miles north of Lincolnton, I came upon a singing male Prothonotary Warbler. Aware of the possibility of its nesting, I followed it for about 30 minutes during which it patrolled a definite territory but gave no indication of the location of a nest. While following this bird, I examined many of the dead willow stubs in the area for a nest. None was found nor was the female seen until I squeaked when she appeared almost immediately from the left and was joined by the male. Squeaking was stopped and the birds soon shifted their interest from me to each other. The male began to chase the female in what seemed to me an effort to drive her back to the nest. I attempted to follow her but hampered by knee-deep mud in which I was wading soon lost sight of her in the thick vegetation. I did not see her again although I remained in the area for another half hour searching for the nest.

During this time the male continued to patrol around me. Although the nest was not found, I am convinced from the behavior of these birds plus the late date that they were nesting there.—J. FRED DENTON, *1510 Pendleton Road, Augusta, Georgia.*

ADDITIONAL SUBSPECIES FOR GEORGIA FROM CAMDEN COUNTY. — A few years ago Isaac F. Arnow presented a collection of over 400 bird skins, mainly from in and around St. Marys, Camden County, Georgia, to the University of Georgia. Since then Johnston (*Oriole,* 13:33, 1948; 14:13, 1949; *Auk,* 66:81, 1949) has been studying the birds and making interim reports. Noting these publications Hebard requested from Johnston a list of the Arnow specimens with the hope of adding to extant Camden County records. Such a list was prepared, and as a result most of the Arnow specimens were sent to Allen J. Duvall of the U. S. Fish and Wildlife Service at the National Museum in Washington, who has kindly identified them. Not only were a number of forms added to the Camden County list, but the following new subspecies were added to the Georgia list. The comments in quotation are those of Duvall.

Fuertes' Red-tailed Hawk: *Buteo jamaicensis fuertesi.* A male (No. 549, U. of Ga.) collected at Griffin's Neck in Camden County on March 8, 1906, by Arnow has been identified as *fuertesi.* "In the original description, Sutton and Van Tyne point out that adult *fuertesi* is distinguishable from *kriderii* by the darker upper parts and by the lack of white at the base of the tail. The Arnow bird because of its darker upper parts is most like *fuertesi.* It must be pointed out, however, that there is more white (less rufous) in the upper tail coverts of this bird when compared with our series of *fuertesi.* The width of the black subterminal band also is slightly wider than either *fuertesi* or *kriderii* and also has a narrow wavy, broken band anterior to the subterminal band." It is interesting to note that the other western forms of this species, *calurus* and *kriderii,* collected in southeast Georgia were also collected in late winter (Greene, *et al., Birds of Georgia,* 1945).

Western Pigeon Hawk: *Falco columbarius bendirei.* A female (No. 534, U. of Ga.) collected at St. Marys on December 7, 1903, by Arnow "has been so identified. Although it is paler than the eastern bird, I wonder if this condition is normal or whether it has resulted from extreme fading." At the time Duvall showed the specimen to Hebard on July 13, 1949, he expressed no doubt about the race but did say he wondered whether the paleness might in some part have been due to fading. This is the first specimen of the species from Camden County. Hebard's only positive sight records of this species in southeastern Georgia are a bird on a telegraph wire a few miles east of Nahunta in Brantley County,

October 6, 1945, and another flying over the Mill Dam at Coleraine in Camden County on February 19, 1950.

Florida Screech Owl: *Otus asio floridanus*. Four of Arnow's screech owls were sent to Duvall (Nos. 500, 501, 502, 503, U. of Ga.). No. 500, a female, was taken in December, year unknown, while No. 501 was unsexed and undated; both were taken at St. Marys. No. 502, a female, was taken April 4, 1904, at St. Marys, and No. 503, a male, was collected June 6, 1905, at Griffin's Neck. "Screech owls from Camden County are more like the Florida race in color and size than typical *asio*. One of the four examples (No. 503) was intermediate between *asio* and *floridanus*." Bangs (*Auk*, 47:404, 1930) examined two specimens from Broro Neck and Sapelo Island which he considered intermediate in color but larger than *floridanus*. A recent unpublished Georgia record of this race has been called to our attention by Duvall: in the National Museum there is a specimen which was picked up dead by R. J. Fleetwood January 12, 1948, at Camp Cornelia in Charlton County.—FREDERICK V. HEBARD, *1500 Walnut Street Building, Philadelphia, Pennsylvania, and* DAVID W. JOHNSTON, *Department of Biology, University of Georgia, Athens, Georgia.*

THE YELLOW WARBLER BREEDING AT MACON, BIBB COUNTY, GEORGIA. — The Yellow Warbler (*Dendroica petechia*) has been observed at Macon during two summers recently indicating unquestionably that the species breeds there. The first observation was on June 30, 1944, when a singing male was watched for an hour as he patrolled his territory with the hope that he would reveal a nest. No nest or female was seen at this time. The second observation was on June 7, 1947, when I with Thomas D. Burleigh visited the same locality. Soon after arriving a male in breeding condition was collected from one of the willows used as a singing perch by the bird three years before. Further investigation revealed another male and female in the willows nearby.

The region inhabited by the birds is in the Ocmulgee River bottom near the entrance to the Burns Brick Company. At one time the territory was a cultivated field but in recent years has grown up to low bushes, mainly hackberry, and Johnson grass. A large drainage ditch along which willows have grown up bisects the area.

The Yellow Warbler has been reported recently (see Denton, *Oriole*, 10:30-31, 1945) breeding at Augusta. It would be very desirable to know whether the breeding range of this species extends to the Fall Line at Columbus in the western part of the State. It is possible that in this region its range extends even further south as in the case of the Redstart.—J. FRED DENTON, *1510 Pendleton Road, Augusta, Georgia.*