THE MIGRANT

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DEVOTED TO TENNESSEE BIRDS

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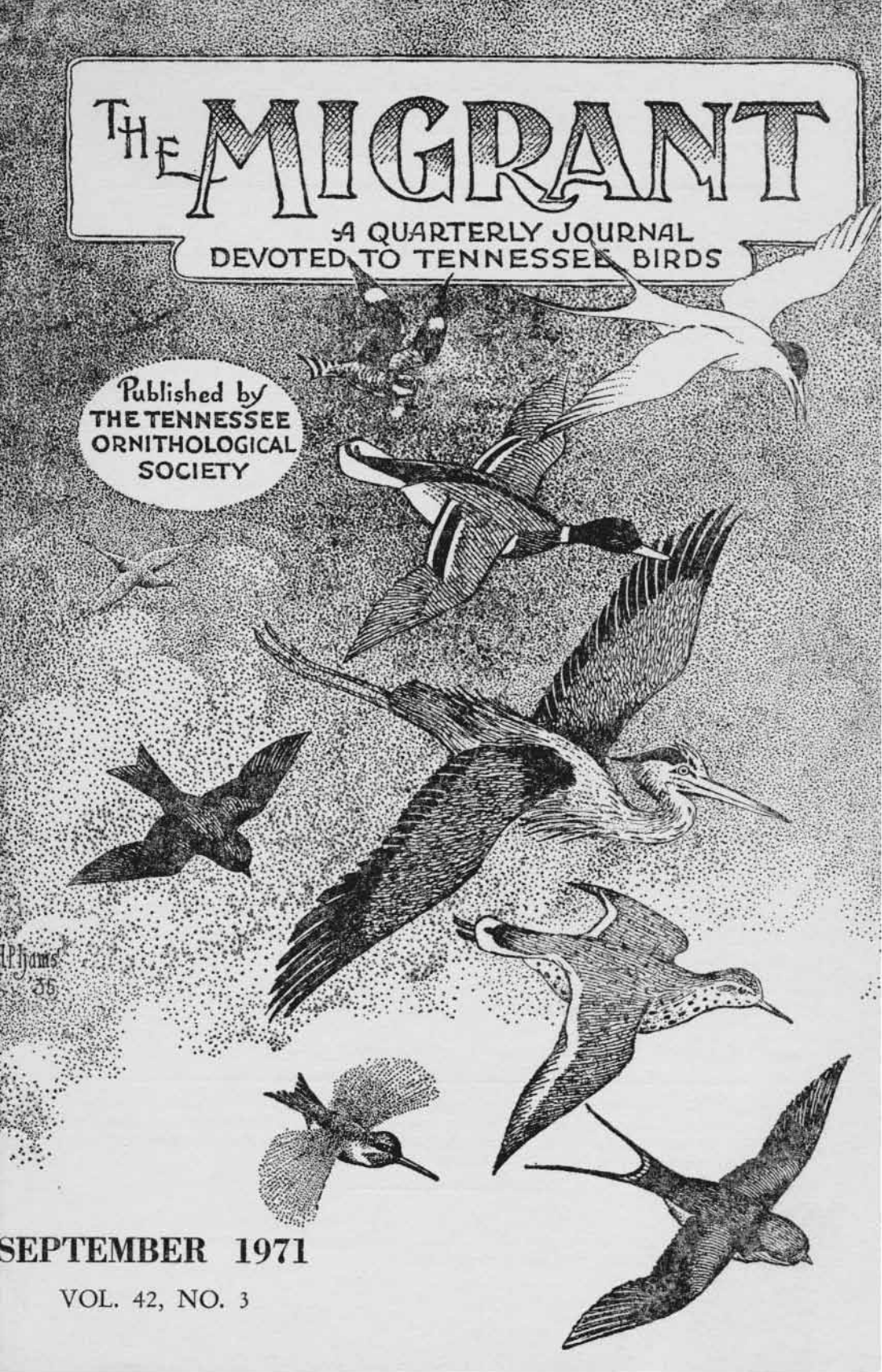

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FOOD, FEEDING BEHAVIOR AND EXTENSION OF RANGE OF THE CATTLE EGRET

EARL L. HANEBRINK

INTRODUCTION

The Cattle Egret (*Bubulcus ibis*) occupies an extensive world range and is a wide wanderer. There are two subspecies: the Indian Cattle Egret(*B. i. coromandus* Boddaert), and the African Cattle Egret (*B. i. ibis* Linnaeus). The former is the Asian subspecies and has not been recorded in the Western Hemisphere but is found in southern and eastern Asia and among the islands stretching out to New Guinea and Australia (Barnes, 1955). The subspecies which has become established in the United States and the New World is the African Cattle Egret (Heverschmidt, 1953). The African Cattle Egret is a comparative newcomer to the Western Hemisphere. It is a native to Mediterranean Europe, southern Spain, Portugal, and Africa (Peterson, 1954; Sprunt, 1955; Heatwole, 1963). Although reportedly seen as early as 1882 and later in 1911 in British Guiana (Palmer, 1962), it was not until 1937 that the first specimen was collected in this hemisphere. This species was collected in Venezuela (Phelps, 1944) in 1943 and in Dutch Guiana (Haverschmidt, 1950) in 1947.

In the United States the earliest-known occurrence is of two birds recorded at Clewiston, Florida, in the summer of 1941 (Sprunt, 1954). Drury et al (1953) officially established the presence of the Cattle Egret in the United States by collecting the first specimen at Wayland, Massachusetts. The Coffey's (Stuart, 1965) discovered five nests of the Cattle Egret in the Luxora Heronry in Mississippi County, Arkansas, which was the first nesting record for Arkansas. Cattle Egrets are now nesting in all of the states of the Central Southern Region which includes Florida, Alabama, Mississippi, Louisiana, Tennessee, and Arkansas. After the 1969 nesting season the Luxora Heronry was abandoned in all species of egrets and herons. These birds have remained in the area occupying smaller lowland deciduous woods; one location being only a few miles from the Luxora Heronry. Some have relocated on the Arkansas-Missouri border and perhaps others have gone to the heronries in southeastern Missouri. The heronry at Dyersburg at the edge of the industrial park is no longer active. This

heronry was active in 1969 but with fewer birds than in the prior year (Leggett, 1970). Both the Dyersburg Heronry and the Luxora Heronry which are across the river from each other became inactive after the 1969 breeding season.

Possible reasons why the Luxora Heronry was abandoned were changes in vegetation and a lowering of the water table by farming operations. During the past few years there was no longer any standing water in the nearby drainage ditches which were used extensively by the young herons and egrets before they could fly to the more distant barrow pits and sloughs of the Mississippi River. In the Luxora Heronry the trees were becoming larger and with less sunshine the weeds and under brush died out causing much of the area to be bare of plant growth. It seemed that the herons and egrets preferred the smaller trees with entanglements of vines and dense undergrowth to the taller trees. One new location near Burdette consists of a triangular lowland deciduous woods of approximately three acres with a drainage ditch on one side with available water during the entire breeding season. The trees are a mixture of lowland deciduous species similar in composition to the Luxora Heronry but are smaller and with a much more dense undergrowth. Vines cover many of the trees and consist mainly of *Lonocera*, *Vitis*, and *Campsis*. Nest density is very high at this location with approximately 80 per cent Little Blue Herons (*Florida caerulea*), 15 per cent Cattle Egrets; four per cent Common Egrets (*Casmerodius albus*) and one per cent Black-crowned Night Herons (*Nycticoray nycticorax*). The Luxora Heronry was active for nearly 20 years before it was abandoned.

Cattle Egrets are wandering farther from their nesting location in northeastern Arkansas. This species was observed by the writer at the Nettleton Sewage Ponds on 30 August, 1970 and on the Arkansas State University farm among the buffaloe on 6 May, 1971. This distance is more than 60 miles from the heronry locations. Cattle Egrets have been observed also 50 miles north of Little Rock by the writer on 16 August, 1971. Other sightings are becoming more numerous after the nesting season in northeastern Arkansas.

The Cattle Egret is extending its breeding range beyond Arkansas being well established in southeastern Missouri and other northern states (Peterson, 1971; Soulen, 1971). It is also increasing its range in Africa (Vincent, 1947; Skead, 1952; Siegfried, 1966) and throughout the world (Sprunt, 1955; Palmer, 1962).

Food of the Cattle Egret

The food of the Cattle Egret in Africa has been reported (Vincent, 1947; Skead, 1956; Reynolds, 1965 and others). Kosugi (1960) published on the food of the Indian Cattle Egret. In this hemisphere Palmer (1962) reported the contents of the stomachs of 20 birds from Puerto Rico. The contents of a stomach collected in Surinam was reported by Haverschmidt (1947).

In the United States, Valentine (1958) analyzed seven pellets from Cattle Egrets in Virginia, Jenni (1961) analyzed 50 pellets from young Cattle Egrets in Florida, and Summerous (1964) reported the contents of 20 pellets from Alabama Cattle Egrets. The existing knowledge of feeding techniques of the Cattle Egret has been summarized by Meyerriecks (1960) and observed by Hanebrink and Denton (1969).

The food of the Cattle Egret in Europe, Asia, and Africa is largely made up of insects, especially grasshoppers (Palmer, 1962). Grasshoppers are a major food item in India for the Cattle Egret (Witherby et al, 1939; Whistler, 1949). Frogs, lizards, and fish are also eaten by Cattle Egrets in the Old World.

In Africa, Skead (1956) examined many Cattle Egret stomachs and found only grasshoppers. He kept pet birds and found these would eat beef squares, crickets, centipedes, wasp, flies, spiders, dragonflies, and mice. He supplied the beef squares while the birds captured the other items. His Cattle Egrets would not eat bread or vegetable matter when offered. Kirkpatrick (1925) examined 139 stomachs of Cattle Egrets from Cairo, Egypt, and found mice, houseflies, spiders, crickets, centipedes, and earthworms. An individual Cattle Egret collected in Arabia had eaten 68 ticks (*Hyaloma aegyptium*) that had dropped from resting camels (Palmer, 1962). Kosugi (1960) examined six stomachs of Indian Cattle Egrets and he found reptiles, frogs, spiders, and insects as the most common food items.

In Florida, Jenni (1961) found short-horned grasshoppers (Locustidae) to be the most important prey of Cattle Egrets. Crickets, long-horned grasshoppers (Tettigoniidae) and spiders were other important food items. Valentine (1958) found the food of the Cattle Egret in Virginia to consist mainly of terrestrial insects, spiders, and amphibians. Summerour (1964) reported the contents of 10 pellets of Alabama Cattle Egrets to consist of 90 per cent insects, mostly grasshoppers and crickets. The remaining 10 per cent of the diet consisted of spiders, frogs, toads, small snakes, and skinks. Hanebrink and Denton (1969) found grasshoppers to be the most important food item collected from regurgitated pellets of Cattle Egrets from the Luxora Heronry. Other food items encountered were spiders, crickets, ground beetles, click beetles, stink bugs, moth larvae, froghoppers, crane flies, diptera larvae, blowflies, horse flies, deer flies, frogs, toads and lizards.

Feeding Behavior

Cattle Egrets take a variety of food items in a number of ways. Priest (1933) reported an unusual method of food finding by Cattle Egrets in Africa. He stated that the egrets are attracted to grass fires where they catch insects in scores. Riddell (1944) reported these birds following the plow in winter and associating with cattle in all seasons in Spain. Chapin (1956) observed one eating a seven-inch lizard in the Belgian Congo. Dawn (1959) and Hanebrink and Denton (1969) noted the Cattle Egret picking flies from the head and neck of cattle. Reynolds (1965) observed Cattle Egrets following a Land Rover to capture disturbed insects, with the bolder individuals coming to within a foot of the wheels of the vehicle. He also found Cattle Egrets feeding on flesh left on fish bones filleted by natives along the Wembere River in Tanzania.

There are occasional reports of Cattle Egrets eating other birds. Skead (1956) received a report of a bird (*Zosterops* spp.) eaten by a Cattle Egret in Africa. In Florida an adult male Blackpoll Warbler (*Dendroica striata*) was swallowed by a Cattle Egret (Cunningham, 1965).

The association of Cattle Egrets with grazing animals is well known. Rice (1956) noted that there is a remarkable symbiosis between Cattle Egrets and larger hoofed mammals. He considers them obligate commensals and states that he has never seen them feeding alone. Heatwole (1963) studied the association of Cattle Egrets with cattle and found they only occasionally took prey from the body of a cow. Summerour (1964) believes the relationship is one in which both species profit but are not forced to associate to survive.

At the Luxora Heronry feeding areas, the well known symbiotic association of the Cattle Egret with cattle and horses on the Mississippi levee was observed constantly during the months of May, June, July, and August. Although the egrets sometimes fed away from cattle catching insects in the pasture and other prey along shallow mudholes and sloughs, they were seldom seen feeding over 100 yards from cattle or horses. Notable exceptions were observed in early June when eight Cattle Egrets were found following two tractors plowing a wheat field. They fed from 5 to 100 yards behind the tractors, searching the freshly turned soil for earthworms and insects, much in the same manner as species of blackbirds do. The Cattle Egrets feeding at the edge of the Nettleton Sewage Ponds in late August were not near any hoofed animals.

When feeding with cattle, the egrets were usually quite active. They constantly made short runs, changed positions, and flew short distances from animal to animal in their search for food. Cattle Egrets were most often found at the sides or near the heads of the cattle. The individual egret carefully watched for insects disturbed by the cattle. These individuals often examined the legs, flanks, and heads of cattle for flies or ectoparasites. In addition, they often alighted on the backs of the cattle. This seemed to be more for a perch rather than to feed on flies or ectoparasites. On more than one occasion an egret rode a cow across a water filled area of the pasture.

In the heat of the day, the cattle moved into the shade or into nearby water filled sloughs along the Mississippi River levee. The Cattle Egrets would not, however, follow a cow into water that was more than a few inches in depth. They notably preferred animals which were grazing or moving about and quickly abandoned an inactive or reclining cow to hurriedly run or fly to a feeding animal. Cattle Egrets also examined weeds and grass very carefully for insects. Although these birds usually caught their prey when it became disturbed and moved, they sometimes caught prey by slowly stalking it or by remaining very still then suddenly catching it with a quick jab.

The association with cattle is rather close and sometimes the egrets were almost stepped on as they searched for food. The cattle were very tolerant and did not seem annoyed when the egrets were perched on their backs. Only when a fly was picked from the head or face did the cattle seem bothered and even then the reaction was usually only a shaking of the head.

Association with other Herons and Egrets in Heronries

Cattle Egrets commonly nest among other species of herons and egrets in Mississippi County heronries. However they usually isolate themselves to a particular part of the heronry. Common Egrets most always nest at the tops

of the larger trees while Little Blue Herons and Cattle Egrets nest from the tops of the smaller trees to lower positions some no more than six feet from the ground. It is common for Little Blue Herons and Cattle Egrets to nest in the same tree but after careful inspection the Cattle Egret nests seem to be mainly clustered in certain areas of the heronries.

Observations at the feeding areas indicate very little competition for food among the various species. Each species occupies its own niche and does not interfere with its allied species in food competition (Hanebrink, 1968; Hanebrink and Denton, 1969). A comparison of regurgitated food items collected from both the Little Blue Heron and Cattle Egret have been previously compared by Hanebrink and Denton (1969).

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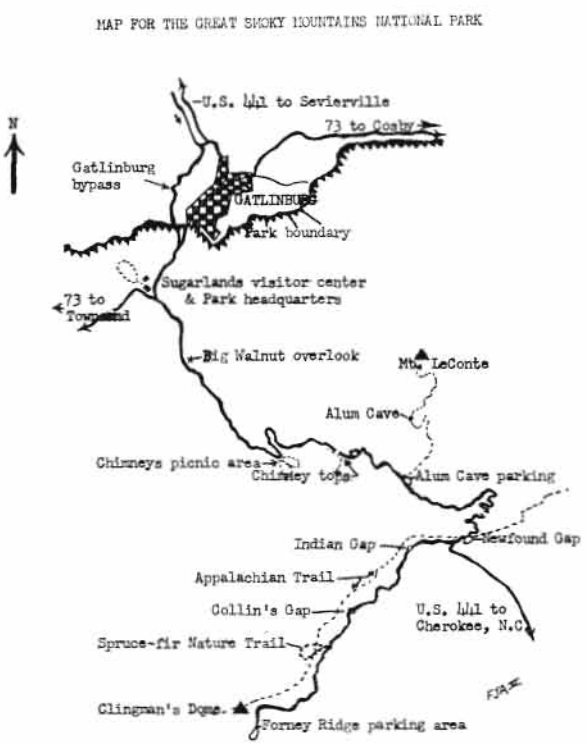
BIRD FINDING IN TENNESSEE

FRED J. ALSOP, III

In an effort to make *The Migrant* more useful to its readers we are establishing "Bird Finding in Tennessee" as a regular feature. Each article will give details on where, when, and how to find birds in selected areas of our state. Each will be written by a local expert on his favorite birding area and eventually all the best birding spots in Tennessee will be covered. Of course not every species in an area can be listed due to limited printed space, but characteristic birds, the ones you are most likely to see, as well as local "rarities" will be noted using maps, comments on habitats, seasonal information, special techniques, local checklists, birders, bird guides, etc. But, don't just read the information and put it aside, get out with binoculars and books and try each one out. Good birding!

GREAT SMOKY MOUNTAINS NATIONAL PARK

PART I, BIRDING FROM THE LOWLANDS TO "CANADA."



More than 200 species of birds have been recorded within the boundaries of the Park. In the high elevations of these mountains many birds common in northern forests reach the southern limits of their breeding range in the Eastern United States. Spring migration and the summer nesting season are the best times to see the birds, but many winters bring northern finches in numbers not found elsewhere in the state.

Begin at Sugarlands Visitor Center 1.5 miles south of Gatlinburg on U.S. 441. Here you will find excellent displays of the plant and animal life, maps of the park, field guides by Peterson and Robbins, et al, *Birds of the Great Smoky Mountains Field Checklist* by Alsop, and the definitive *Notes on Birds of the Great Smoky Mountains* by Stupka. In winter search the grounds of Park headquarters just a few hundred yards north of the center for Purple Finches, Pine Siskins, and Evening Gros-

beaks. Walk the self-guiding Sugarlands nature trail in spring and summer for Golden-winged, Black-and-white, and Hooded Warblers, Ovenbirds, Louisiana Waterthrush, and many other songbirds. Barn Swallows usually nest under the eaves of the visitor center. Go back to 441 and turn right (south) towards Cherokee. Stop at Big Walnut overlook, approximately 2 miles from the visitor center on left, for an open view of Mt. LeConte. This can be a very good place to observe spring migrants. Proceed south to Chimneys Picnic Area. A walk through these grounds in the nesting season should produce American Redstarts, Wood Thrush, Black-throated Blue Warblers, Solitary Vireos, and many others. Go on to Chimney Tops parking area, 7.2 miles south of the visitors center and walk down to the heath bald on the right. Rose-breasted Grosbeaks and Scarlet Tanagers nest in the hardwood forest and Chestnut-sided Warblers nest in the rhododendron on the bald which should be in flower in mid-June. Continue on south on 441 to Alum Cave parking area on the left about 9 miles from the visitor center. The Alum Cave trail is moderate to moderately steep but well worth the effort. It is 2½ miles by trail to Alum Cave Bluffs through northern hardwood forests inhabited in summer by Red-eyed and Solitary Vireos, Wood Thrush and Veery, Carolina and Winter Wren, Olive-sided Flycatchers, Blackburnian and Canada Warblers. Before you reach the bluffs you will climb through heath balds where Chestnut-sided warblers abound. The ridge opposite the bluff is the former nesting site for the Peregrine Falcon, a species now extripated from the Park, but a current nesting place of the Raven. Another 2.9 miles up the trail will bring you to the top of Mt. LeConte where there is a lodge (reservations should be made well in advance through Park headquarters). Back at your car continue south to Newfound Gap, 13.5 miles from the visitor center. You have now entered the Canadian Life Zone characterized by the dominant forests of spruce and fir. Temperatures here are much lower than at Sugarlands, about 15-20°'s, and showers are much more frequent so be prepared. Cedar Waxwings, Red Crossbills, and Pine Siskins are often seen in and around the parking area. Birds seen from here upward to Forney Ridge parking area, 21 miles from the visitor center, via stops at Indian Gap (watch for the right turn ¼ mile from Newfound Gap) Collin's Gap, and a walk along the Spruce-fir Nature Trail (all along your route) will include these summer residents: the 5 high-altitude warblers, Canada, Blackburnian, Black-throated Blue, Black-throated Green, and Chestnut-sided; plus Veerys and Solitary Vireos. Permanent residents are: Raven, Golden-crowned Kinglet, Red Crossbill, Red-breasted Nuthatch, Brown Creeper, Black-capped Chickadee, and the most abundant resident of the spruce-fir, the Slate-colored Junco. Ruffed Grouse occur at all elevations in the Park and many are seen early in the morning and late in the evenings along the road shoulders—they have been recorded drumming during every month of the year with the highest number of records in October. From the Forney Ridge parking area a paved trail ½ mile in length takes you to an observation tower atop the highest mountain in the Park, Clingman's Dome, elevation 6642'. Stopping at all the pull-offs between Forney Ridge and Morton Overlook (just below Newfound Gap on the Tennessee side) in the spring and summer after dark may produce Barred Owls and the uncommon Saw-whet Owl. Best nights for the Saw-whet are nights of little wind and some moonlight. Most singing is recorded from March through June, but the owls have been seen at other times of the year. Whistled imitations, tape recordings,

and "squeaking" on your hand have all been tried with varying success to lure these dwarfs of the forest out to be counted. An evenings foray has produced Saw-whets in numbers from 11 to 0 along this route.

Birdwalks are conducted daily during the Annual Wildflower Pilgrimage in April by members of the Knoxville Chapter T.O.S. whose members also conduct an Audubon Christmas Count there. For local information contact members of the Knoxville Chapter, Tennessee Ornithological Society through the membership list published in *The Migrant* and through the Knoxville Chamber of Commerce.

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ROUND TABLE NOTES

POSSIBLE ALBINO RED-TAILED HAWK IN COFFEE COUNTY—On Sunday, 13 December, 1970, Gene and I drove from Chattanooga to Woods Hole Reservoir (AEDC property) to observe waterbirds. Enroute I-24, we came to the point at the foot of the Cumberland Plateau where I-24 now ends and U.S. Hwy. 41 takes over. Here, to our left was a bright, white spot which I hoped might be a Snowy Owl (*Nyctea scandiaca*). It was perched in a tree on the side of a ridge about .3 mile distance. A turnout at this point made it possible for us to park.

The 7 x 35 Bushnell binocular showed that it was a large white bird with a small head—therefore not an owl—and that it was facing us. The 20 x B&L telescope indicated that all of the bird within our view was white, including all the head and sides of the face.

We decided to walk as close as the topography would permit. After crossing the interstate, the shoulder, and over the boundary fence, we looked through the telescope again. Then it was possible to tell that the underside of the tail was not completely white but had grayish markings. There was so sign of rufous or of any tail bands.

In about half a minute the bird flew and perched partly behind tree branches but not much farther away. During this very brief flight, we saw that the primaries and the lower half of the tail were somewhat grayish, mixed with white. Some of the secondary wing feathers were marked with gray but the white dominated. The back of the head and neck was pure white.

Basically, it was a white bird with only touches of light gray; however, the day was dark and the gray might have taken on a different hue in very good light.

In an attempt to ascribe a species name to this bird, we considered all buteos, but there was nothing of sufficient distinction about the bird to make this possible. However, we are of the opinion that it was an albino adult Red-tailed Hawk (*Bueto jamaicensis*), primarily because that species is commonly found along our interstate highways in the winter months.

In our three-hour drive of the same date, we saw nine. On a trip from Chattanooga to Birmingham three or four years ago, we counted 25 Red-tails. Most of these were seen in the middle half of the distance of 150 miles (in north Alabama). We have made this trip 8 to 10 times yearly since 1952 and only since the completion of sections of interstate highway, have we seen more than two or three Redtails on a drive between Chattanooga and Birmingham.

On our return trip about 14:30 we attempted to locate the white bird again, and rode back and forth for several miles on a road that parallels the interstate. However, we were not successful in seeing it again.

MRS. E. M. WEST, Rossville, Georgia 30741.

EDITOR'S NOTE: On the following date, 14 December 1970, Mr. and Mrs. Kenneth H. Dubke report having observed the same bird and saw the red tail. The Lee Shafer family also saw the bird. The last date of observation was 11 January 1971.

WHITE IBIS IN GILES COUNTY—On 8 July 1970 an immature White Ibis (*Eudocimus albus*) was found feeding in a small pond in southwestern Giles County. Research in *The Migrant* revealed that this species was rather uncommon in Tennessee. It has been recorded six times previously at four different localities. This present record represents the first sighting of this bird in the central part of the state.

The bird was found on every visit to the pond until its departure three weeks later. Eleven trips were made in all. On the first seven trips the White Ibis was found in very close association with a Common Egret (*Casmerodius albus*). They fed near each other and when one flushed the other followed close by. Several times they were flushed late in the afternoon after sunset. In those instances both birds flew to the wooded hillsides which bordered a creek about one-half mile away. The egret was not seen after 19 July.

By moving slowly and cautiously, the ibis could be approached quite closely. On one occasion while photographing the bird, I came within 20 feet of where it was perched in a small willow.

The pond was located in a pasture and was the source of water for several cows. Great Blue Herons (*Ardea herodias*), Green Herons (*Butorides virescens*), Wood Ducks (*Aix sponsa*), and a variety of shore birds visited the pond and its muddy shores. Several species of fish and reptiles, including the Cottonmouth (*Agkistrodon piscivorus*) were seen in the water.

The ibis was invariably found wading in shallow water probing in the mud. It was last seen on 30 July.

Morris D. Williams, Box 25, Five Points 38457.

HUDSONIAN GODWIT AT REELFOOT LAKE—Gina and I were birding in the Reelfoot Lake area on 8 May 1971. The night before a squall line had moved through the state spawning several devastating tornadoes. Temperature was in the 60's. The wind was moderate and there was light overcast with the sun breaking through the clouds periodically.

At 13:10 we were scanning an open slough area located on the northwest side of the Reelfoot Lake National Wildlife Refuge. One Lesser Yellowlegs (*Totanus flavipes*) was feeding approximately 25 feet from the car in which we were seated. As we were observing the area a large shorebird flew over the car from the southeast and alighted near the Lesser Yellowlegs. The bird

showed almost as much white in the wings and on the tail as a Willet. (*Catoptrophorus semipalmatus*). A broad black band was obvious over approximately the bottom half of the tail as the bird landed. We both have observed Willets on Kentucky Lake and on the Florida coast, and we realized that even though there was a resemblance from the top back, this bird was not a Willet.

As soon as the bird landed we immediately observed it with 7 x 35 and 7 x 50 binoculars from approximately 30 feet. Notes made while observing the bird include: extremely long slightly upturned bill; appeared twice the size of the Lesser Yellowlegs nearby; wide black band across tail visible with narrow band of white at extreme end of tail; throat, belly, and underparts were reddish cast over brown horizontal striping; eye prominent; slow and deliberate in actions. We compared the bird to pictures in both Peterson and Robbins. It did not feed and it issued no call. After two or three minutes the bird took wing and headed in a northwesterly direction and was gaining altitude when last seen. The white stripe across the middle top of the wing with dark border along the rear or trailing edge of the wing was visible as was the white rump or upper tail and the distinctive black band across the lower portion of the tail as the bird flew away. The white in the wing did not extend across the primaries as in the Willet.

Comparing the bird to the illustrations in both field guides and ruling out every possibility that occurred to us, we arrived at the inescapable conclusion that the bird was a Hudsonian Godwit (*Limosa haemastica*). Mr. John DeLime, Refuge Manager for the Reelfoot National Wildlife Refuge was notified of the sighting on 8 May. As of this writing the bird has not been observed by Mr. DeLime. The actions of the bird left us with the definite impression that it was passing through. No other competent observers were at hand and we had no camera. Mr. Henry Parmer and Mr. Michael Bierly of the Nashville chapter of TOS, Dr. Clell Peterson, KOS member of Murray, Kentucky, Mr. Ben Coffey of Memphis, and Mr. Fred Alsop III of Knoxville were consulted on the identification. There appears to be no record of a Hudsonian Godwit in the state of Tennessee, which is surprising in view of the migration route as shown in Robbins and the statement in Peterson's that the birds use the Mississippi Flyway in the spring.

DON AND GINA MANNING, Route 1, McKenzie 38201.

(*addendum on page 66*)

WILSON'S PHALAROPE IN KNOX COUNTY—Several members of the Knoxville Chapter of T.O.S. made almost daily visits to a newly created bit of shorebird habitat on the University of Tennessee Plant Science Farm (Alsop, F. J. III. 1967. *The Migrant:* 38(1):1-3) that was very attractive to migrants in the fall of 1970. Members of the U. T. Agriculture College by moving fill dirt from one of the fields adjacent to a small marsh on the farm in order to build a levee to aid in draining the marsh accidently created a slight basin that filled with rain water in August and started attracting shorebirds (and subsequently birdwatchers).

On 1 September 1970, at 15:30 p.m., E.D.T. I observed two Killdeer (*Charadrius vociferus*), a Solitary Sandpiper (*Tringa solitaria*), a Pectoral

Sandpiper (*Erolia melanotos*), and a Wilson's Phalarope (*Steganopus tricolor*) feeding in the standing water. The phalarope was in winter or basic plumage. The black bill was longer than the head, straight, and thin. The "phalarope patch" through the eye was dark, but not heavy. The gray upperparts were unstreaked and contrasted slightly with the white underparts. The yellowish legs were easily seen as the bird foraged in the shallow water and in the grass at the water's edge. The phalarope was slightly larger than the Solitary and Pectoral sandpipers (they are listed as 7 and 7½ inches respectfully compared to 7½ inches for Wilson's Phalarope in Robins, C., B. Bruun, and Zim. 1966. *Birds of North America.* Golden Press. N. Y., which was referred to in the field). In flight no wingstripe could be seen and the white rump and tail was very conspicuous.

Observations were made as close as 100 feet using 7 x 35 binoculars and a 15-60 x 60 spotting scope over a period of 45 minutes during which time I was joined by J. B. Owen who also observed the bird. During the remainder of the afternoon Joshua and Gilbert Banner, Bill Searl, Jim Campbell, and others of the Knoxville Chapter also saw the phalarope.

The bird was not present the following day or thereafter. This constitutes the first record for this species in Knox County, Tennessee.

FRED J. ALSOP, III, Dept. of Zoology and Entomology, University of Tennessee, Knoxville 37916.

A RINGED TURTLE DOVE IN KNOXVILLE—During the first week of June 1970, a Ringed Turtle Dove (*Streptopelia risoria*) appeared at the home of C. M. Campbell, 204 Tall Oaks Drive, Knoxville, Tennessee. Dorsally, the bird had a sandy plumage, but underneath it was white. There was a narrow, black crescent on the back of its neck. It was about the same size as the Mourning Dove (*Zenaidura macroura*), but had a rounded tail, horizontal.

Mr. Campbell scattered food on the ground each day for a large number of Mourning Doves and other birds in the area. With this abundance of food available the Ringed Turtle Dove remained in the area until the last week in August. When last seen by Mr. Campbell the bird appeared sick and may have died.

The bird appeared to be attracted to the Mourning Doves. It would frequently approach other doves until they would fly away. The relationship the Ringed Turtle Dove was trying to establish appeared more like a pair bond rather than a belligerent attitude as reported by Darnell (*The Migrant*, 37: 73-74). The call was given frequently. It sounded like a cross between the Rock Dove (*Columba livia*) and Mourning Dove. It was a soft call with a decrease in pitch at the end. The call is written as *hoo-hrrooo* in *BIRDS OF NORTH AMERICA* by C. S. Robbins, B. Bruun, and H. S. Zim.

The Ringed Turtle Dove normally lives wild in this country in only downtown Los Angeles, St. Petersburg, Tampa, and Miami. It was introduced into the United States as a domesticated bird. The wild individuals in this country depend largely on people visiting city parks to supply them with food.

The Ringed Turtle Dove is a common cage bird, so Mr. Campbell's bird may be an escaped individual. A Ringed Turtle Dove was reported in Greeneville, Tennessee by Mrs. Chester B. Darnell (*The Migrant*, 37:73-74). An escaped pair of Ringed Turtle Doves reared one young in Vernon, British Columbia (*Audubon Field Notes*, 24:72). This same pair may have nested for two or three years (*Audubon Field Notes*, 24:700).

GARY O. WALLACE, Biology Department, Milligan College, Milligan College, Tennessee 37682.

BREWSTER'S WARBLER IN KNOX COUNTY—Sharp's Ridge within the city of Knoxville is one of the best, if not the best, places in Knox County to observe passerine birds in their spring and fall migrations. It is especially productive for the bird watcher in April and early May. During this period it is not uncommon to list 20 plus species of warblers in a morning. On the morning of 2 May 1970, Jim Campbell and I had already listed 20 different warblers by 09:00 when I spotted what I thought to be our 21st, a Golden-winged Warbler (*Vermivora chrysoptera*). The bird was perched on some wild grape vines in an oak tree about 25 feet from the ground approximately 80 feet away and downhill from our elevated position on a road. The tree was on the edge of a small break in the deciduous woodland and there was, therefore, no vegetation high enough to obstruct our view. We first observed the bird from behind. From this angle we noted its yellow crown which blended into the gray of the upperparts at the occiput and two broad, yellow wingbars. It was not until the bird turned to face us that we realized it was not a Golden-winged Warbler, but a hybrid, the Brewster's Warbler (*Vermivora leucobronchialis*), instead. The underparts were completely white. The only black marking was a line extending from the bill through the lores and on beyond the eye similar to that of a Blue-winged Warbler (*V. pinus*). We both observed the warbler from one to two minutes using 7 x 35 binoculars until it disappeared into denser vegetation. During the period of observation the bird gave no song or call notes. Though we remained at the place where we last saw the warbler and other members of the Knoxville chapter of TOS joined us the bird was not seen again.

References used in confirming the identification in the field were Peterson, R. T. 1947. *A Field Guide to the Birds*. Houghton Miffin Co. Boston, and Robbins, C. S., B. Bruun, and H. S. Zim. 1966. *A Guide to Field Identification Birds of North America*. Golden Press, N. Y.

For those further interested in Golden-winged X Blue-winged Warbler hybrids may I recommend the following: 1) Pough, R H. 1949. *Audobon Land Bird Guide*. Doubleday & Co., Inc. N. Y. p. 152-155. 2) Chapman, F. M. 1939. *Handbook of Birds of Eastern North America*. 1966. Dover Publications. N. Y. p. 449-450. 3) Ficken, M. S. and R. W. Ficken, 1968: *Wilson Bull.* 80:161-172, 442-451.

FRED J. ALSOP, III, Dept. of Zoology and Entomology, University of Tennessee Knoxville 37916.

WINTER ROSE-BREASTED GROSBEAK AT GALLATIN—On 18 December 1970, Mrs. Herschel Willmore called to tell me that she had a bird

in her yard that she was unable to identify. She had previously called Mrs. Carol Knauth, the "Bird Lady" of the Nashville Banner and Mrs. Knauth suggested that she call me and see if I could help in identifying the bird.

I immediately hurried to Mrs. Willmore's home, hoping the bird would stay long enough for me to see it.

The bird was still feeding when I arrived and was, unmistakably, a Rose-breasted Grosbeak (*Pheucticus ludovicianus*). The heavy grosbeak bill, large sparrow-like appearance, two well-defined wing bars, pale line over the eye, pale line through the crown, dark cheek patch, streaked breast and flanks, and a faint pinkish wash on the breast positively identified the bird as a female or immature male Rose-breasted Grosbeak.

The bird was feeding on the ground and appeared to have a lame or injured left leg or foot since it leaned to the left. I kept my 7 x 50 binoculars focused on the bird for slightly less than 15 minutes. The bird then flew up into a nearby tree and out of sight. Flight was strong and even with no apparent injury.

Henry E. Parmer's book, *"Birds of the Nashville Area"*, lists only one previous winter record of Rose-breasted Grosbeak in the Nashville area. This was at the home of Mrs. Jack L. Clarke from 31 December 1966 through 7 January 1967.

The Willmore home is situated on a heavily wooded lot fronting on the Sinking Creek embayment of Old Hickory Lake approximately 5 miles southeast of Gallatin. The yard contains a number of well-stocked feeders and, in addition, there is always a generous amount of sunflower seeds, corn chops, and other food on the ground.

A Christmas vacation prevented my keeping in touch with the Willmores for several days. However, when we returned, we found that Mrs. Willmore had seen the bird every day since 18 December.

On 4 January 1971, Mrs. Crawford and I again visited the Willmores. And again, we were able to observe the bird closely from a distance of approximately 18 to 20 feet with 7 x 50 binoculars. At this time the pinkish wash on the breast seemed slightly more pronounced, possibly due to stronger light. We kept the bird under observation from 10:45 to 11:05. During this period, it fed almost continuously from a hanging, hopper-type feeder filled with sunflower seeds. Also, there was no indication of any injury or lameness.

The Rose-breasted Grosbeak fed in the Willmore's yard the last time on 5 January 1971. On that date, a cold front moved through Middle Tennessee and the temperature dropped to 13° F. that night. The following night the low was 10° F. Perhaps an abundance of food was not as attractive as a warmer climate.

PAUL CRAWFORD, Route #4, Gallatin 37066.

LAPLAND LONGSPURS IN KNOX COUNTY—On 7 November 1970 two Lapland Longspurs (*Calcarius lapponicus*) were observed on the University

of Tennessee's Plant Science Farm. This was the first record of this species for Knox County and the second record for East Tennessee.

Around 16:00 a rather large sparrow-like bird with white outer tail feathers was flushed from a grassy roadside. This bird might have been dismissed as a Vesper Sparrow had it not been for the loud rasping, rattling notes which it gave forth in flight. The bird was pursued to where it dropped down about 100 feet away. At extremely close range (about ten feet) the bird was identified as a Lapland Longspur. The following characteristics were noted: two narrow white wingbars on chestnut wings; the secondaries and primaries were black with chestnut on the lateral edges; the back was heavily streaked; a buffy patch surrounded the eye and covered most of the auriculars; a black crescent covered the lower part of the auriculars; there was a band of dark markings across the breast and extending up the sides of the throat; the throat was clear of markings; the tail showed white edges in flight, but not when the bird perched; the tail was deeply forked, more so than any of the popular field guides indicate; the bill was short and conical, sparrow-like.

The voice brought to mind the rasping notes given by some shorebirds, much as the Pectoral Sandpipers (*Erolia melanotes*) when they are flushed. Of course, the longspur was not as loud as a shorebird. After gaining altitude it occasionally gave a short musical whistle.

The bird was stalked at a range of six to eight feet. It ran in a crouched manner occasionally taking long hops without opening the wings. The bird was forced to fly many times. Each time it gave the rasping notes.

The bird was followed to an old tomato patch where a flock of Horned Larks (*Eremophila alpestris*) and several Savanah Sparrows (*Passerculus sandwichensis*) were feeding. Suddenly there were two longspurs. The plumages of the two were indistinguishable. The two birds were pursued and flushed many times. They never flew until approached extremely close. When it occurred that they alighted near flocks of sparrows or larks, they never flew when the other birds flushed as most birds do.

The two longspurs were partial to an old corn field where the stalks had been knocked down by a disk harrow. One bird was observed to strip a grass stalk of seeds.

They were left feeding quietly at sunset. At sunrise the next morning a party of T.O.S. members failed to find the birds. They were not seen thereafter.

Study skins of longspurs, which were collected by Mr. Alfred Clebtch in the early 1940's near Clarksville, were examined in the University of Tennessee collection. The plumages of some of these birds were almost identical to those of the Knox County birds. All the study skins had deeply forked tails. The two skins most resembling the Knox County birds were labelled "female" and probably male". I do not feel safe in speculating on the sex of the Knox County birds.

Morris D. Williams, Box 25, Five Points 38457.

A SNOW BUNTING IN THE ROAN MOUNTAIN AREA—After an interval of several years, the Snow Bunting (*Plectrophenax nivalis*), a small ground bird that breeds in the arctic, has again been observed in an area of the "balds" of Roan Mountain on the Tennessee-North Carolina border.

In mid-afternoon of Thanksgiving Day, 26 Nov., 1970, I was on the return from wind-swept Grassy Ridge Bald (elevation 6,189 feet) to Carvers Gap when I noticed a small brownish-backed bird some 30 feet ahead of me in the rocky, partly grass-covered, alder-lined narrow jeep road at about 6,000 feet altitude. As it kept on the ground, running ahead of me constantly at a distance of from 30 to 50 feet, once in a while turning to pick momentarily on grasses on the side of the road, I had ample opportunity to assure myself of the identity of the bird as that of a Snow Bunting. In about ten minutes of following the bird in the downward-tending road, I noted the white in its tail feathers, on the wing, on its underparts, and the russet of its nape, crown, and breast band. It was a familiar sight since in prior years the Snow Bunting had been seen by me at close range on a good many occasions on Roan and other area balds.

When I finally advanced to within about 25 feet, the bunting flew, reversing toward the open spaces of Grassy Ridge Bald. The circumstance of it being encountered in a narrow road, struck me as rather unusual, having previously observed the species in no other surroundings than the spacious expanses of the grass balds. Although it is perhaps the hardiest cold- or rough-weather small land bird, it may be possible that for easier feeding on the seeds of grasses in or on the sides of the jeep road, it happened to alight in this more sheltered condition, with the alders serving as windbreak. A strong wind estimated at 25 mph whipped grasses and other plant growth in open situations. Even though the temperature was around 40 degrees, the penetrating wind made it uncomfortable for man at least if not for beast.

The writer's last previous observation of the Snow Bunting was on 14 March, 1965, on Hump Mountain, approximately eight miles northeast of Roan Mountain. A check for the species on the Hump and others of the balds of the area is planned for the winter. On a trip to Big Bald Mountain in Unicoi County on 11 Nov. no Snow Buntings were found.

FRED W. BEHREND, 607 Range St., Elizabethton 37643.

SNOW BUNTING IN UPPER EAST TENNESSEE—More or less for the purpose of looking for, and hopefully finding, this small ground bird of the arctic, Thomas W. Finucane, Kingsport, and the writer, went on 24 Feb. 1971, to Big Bald Mountain on the Unicoi, Tenn., and Yancey, N. C., counties border.

We started in the morning of 24 Feb., in weather not as favorable as forecast, on the hike to Big Bald along a woodland trail that trends steadily upward along the east fork of Higgins Creek from about 3,500 feet to the point of its connection with the Appalachian Trail at near 5,000 feet. Fog that shrouded the forest dispersed as we approached the lower, southern, part of the bald at about 5,200-5,300 ft., and the sun broke through the clouds.

Tom and I spread out, scanning the treeless grassy surface, whitened by rime that covered practically every blade of grass, and paying particular attention to an area of moss hummocks, spaced closely together, a characteristic of the summit of Big Bald Mountain, as pictured in the photograph, taken on a previous occasion. A little ahead of Tom in reaching the very top of the mountain, I noticed moving a short distance in front of me near a rock a small bird. I recognized it as a Snow Bunting (*Plectrophenax nivalis*). Keeping an eye on the bird, and the bird standing still and watching me, I called to Tom who was out of sight. He watched the Snow Bunting for approximately 10 minutes, and a photo (creditable without use of a telephoto lens) was taken. Upon approach to about 30 ft. with the intent of obtaining a larger image, the bird emitted an apparent alarm call sounding like the trilling "*tir-r-ip*" described in Desmond Nethersole-Thompson's book "*The Snow Bunting*." The bunting then flew. We flushed and heard its call again some four hours later when we returned to the summit of Big Bald after checking on birds in the woodland fringes below at from 5,300 to 5,000 ft. with observation of the following species: Slate-colored Junco (*Junco hyemalis*) singing, Black-capped Chickadee (*Parus atricapillus*), White-breasted Nuthatch (*Sitta carolinensis*), Eastern Bluebird (*Sialia sialis*), Rufous-sided Towhee (*Pipilo erythrophthalmus*), and Brown Creeper (*Certhia familiaris*).

We were not qualified and do not pretend to know if the Snow Bunting seen was a male or female. A 20-25 m.p.h. estimated NW wind that swept the bald in 23 degree temperature made scrutiny of the bird difficult.

This was the writer's thirteenth observation of the Snow Bunting on Big Bald Mountain. Specific dates and numbers are listed as follows: 21 Nov 1948, 1; 29 Nov 1953, 1; 1 Jan. 1954, 1; 14 Feb. 1954, 1; 7 Nov. 1954, 3; 2 Jan. 1955, 1; 20 Feb. 1955, 1; 17 Nov. 1956, 2; 2 Dec. 1956, 2; 1 Jan. 1957, 1; 17 Feb. 1957, 1; 22 Dec. 1957, 2; 24 Feb. 1971, 1—There were numbers of trips over the years on which the species was not found.

Fred W. Behrend, 607 Range Street, Elizabethton, Tenn.

BROCKWAY CROUCH, 1896-1971

Brockway Crouch played an important role in the history of bird study in the Knoxville area. He was a member of the East Tennessee Ornithological Society which preceded the organization of the Knoxville Chapter of the T.O.S. When the Knoxville Chapter was revitalized after the end of World War II, its first meetings were held in Brockway's florist shop. He was an active participant in field days in this area and in the Christmas counts held in the Great Smoky Mountains. He was not well known to the state-wide society because annual meetings of the T.O.S. were almost always held on the first weekend in May, which usually included Mother's Day, a time when his florist business was so active that he could not get away.

In his younger days Brockway was a great hiker and he explored many parts of the Great Smoky Mountains before this area was made a national park. Some of his trips and adventures have become almost legendary. In the early 1930's he was investigating a Peregrine Falcon's nest on Mt. LeConte and had lowered himself over a cliff to reach the nest. Things went wrong, to say the least, and he fell 25 feet and rolled further down the rocky slope. Despite his injuries, he was able to walk out with the help of his companion, W. W. Stanley, but he spent a week in the hospital after that.

His knowledge of the Smokies made him a valuable member of two other organizations in this area. One was the Knoxville Hiking Club of which he was president for two years, and the other was the Great Smoky Mountains Conservation Association of which he was a vice president at the time of his death.

Eight years ago he retired from his florist business and went to live with his daughter, Mrs. James B. Bell, near the village of Seymour. As throughout his life, he kept an interest in birds and maintained bird feeders at his new home. He died on 6 August 1971, two weeks after suffering two broken hips.—JAMES T. TANNER

Addendum to "Hudsonian Godwit at Reelfoot Lake" (page 59)—Since submitting the report on a Hudsonian Godwit sighting in the Reelfoot Lake area, the observers have acquired the U.S.C. & G.S. Bondurant, Ky-Mo-Tenn Quadrangle map of the area. The area where the bird landed and was identified is approximately twenty-five hundred (2500) feet north of the Tennessee-Kentucky state line. One of the observers sighted the bird flying in from the southeast over a line of trees which is in Tennessee.

DON AND GINA MANNING

THE SEASON

FRED J. ALSOP, III, *Editor*

NESTING PERIOD: 1 MAY-31 JULY

Temperatures and precipitation officially recorded in the Knoxville area reflect the season's weather across the state. May averaged 3.8 degrees less than the normal, June 0.2 degree higher, and July 3.0 degrees below the normal. The season was a wet one with excesses of rainfall above the usual of 0.28 and 0.4 inches for May and June respectfully and a heavy 3.94 for July. In connection with the many wet areas provided the reports of waterfowl, waders, and shorebirds provide a high percentage of all the species observed across Tennessee.

Traill's Flycatchers were reported from *all* regions with the first nesting record of this bird in Middle Tennessee. The Hudsonian Godwit in the Western Coastal Plain is the first state record. Red-cockaded Woodpeckers were discovered in a new location in the Eastern Ridge and Valley. A pair of Osprey's successfully fledged one young and Spotted Sandpipers nested in this region as well. A Goshawk was observed in mid June in the spruce-fir forests of the Great Smoky Mountains National Park. This observation, with the two on the North Carolina side of the Park in the summer of 1970 (Pratt, H. D. 1971. *The Chat*, March 35(1):2-3.), raises some interesting speculations as to the status of this elusive species in our eastern mountains. These are but a few of the many noteworthy observations reported in this nesting issue of The Season.

WESTERN COASTAL PLAIN REGION—Temperatures were lower than usual throughout the season, and rains were unusually frequent in July. A number of active birders reported a truly astonishing list of observations this season; some, if adequately documented, would be state records. Excepting Bell's Vireo all of the more remarkable records are of shorebirds or birds of water habitat. In addition to the species listed in boldface, which would be exceptional at any date, there are many migrants or summer wanderers of the more common migrants. WHITE PELICAN: 9 and 10 May (1) island 700 yards off Pace Point BS (DGM, WC). Common Egret: 26 June, 3 and 10 July (3) DR (DGM, FA). Snowy Egret: 3 July (1) DR (DGM). Cattle Egret: 9 and 16 May (6) and 26 June (2 adult and 1 immature) DR, 11 July (94) R (DGM, FA). LOUISIANA HERON: 15 May (1) M (Jim Maenders). Yellow-crowned Night Heron: 18 April to 27 June (at least 3 pairs nesting, 4 young in one nest) M (BLC). Least Bittern: 28 June (16 nests under construction, 11 nests with 1 to 5 eggs each, 3 adults not at nests, 15 adults at or on nests) Samburg area R (FA). GLOSSY IBIS: 25 to 30 April (2) 1 mile NE of Walnut Log R (DGM, John DeLime). Blue-winged Teal: 26 June (1 flight-

less), 10 July (1 female) DR (DGM, FA). Mississippi Kite: 9 May (26) levee at Miss. line M (Mr. and Mrs. Quenten B. Dowdy), 22 May (2) Barr, Lauderdale County (BLC), 24 May (1) Walnut Log R (FA, DGM). American Coot: 26 June (1 adult and 3 young) C (DGM, FA). HUDSONIAN GODWITS 8 May (1) R at state line (DGM, 30 feet, all marks noted). Spotted Sandpiper: 18 July (1) BS, 24 July (2) C (DGM), 24 July (2) S (DMP). Solitary Sandpiper: 3 to 24 July (1 to 12) DR (DGM). Greater Yellowlegs: 18 July (6), 24 July (25) DR (DGM). Lesser Yellowlegs: 17 July (6) BS, 18 and 24 July (3) DR (DGM). Pectoral Sandpiper: 17 July (4) BS, 18 July (38) and 24 July (11) DR (DGM). White-rumped Sandpiper: 24 May (3) (FA, DGM), 31 May (3) DR (DGM). BAIRD'S SANDPIPER: 24 May (1) R (FA, DGM), 6 June (1) BS (DGM). Least Sandpiper: 26 June (1) BS (DGM, FA), 10 to 24 July (5 to 75) DR and R (DGM). Dunlin: 31 May (3) DR (DGM). Dowitcher Sp: 24 May (4) R (FA, DGM), 3 July (1), 24 July (2) DR, 24 July (7) C (DGM). Long-billed Dowitcher: 23 July (20) S (MP). STILT SANDPIPER: 8 May (9) R (DGM), 24 May (2) R (FA, DGM), 18 July (16) and 24 July (2) DR (DGM). Semipalmated Sandpiper: 31 May (8), 18 July (31) and 24 July (45) DR (DGM). AVOCET: 9 May (5) and 10 May (2) Pace Point BS (DGM, WC). WILSON'S PHALAROPE: 8 May (1 male) R (DGM). Ring-billed Gull: 26 June, 3 and 18 July (1 adult, 1 second year) BS (DGM, FA). Forster's Tern: 2 May (6) Stanton Exit of Interstate 40, Haywood County (BLC). LEAST TERN: 22 May (3) BS (FA, BS), 13 June (4) BS (DGM). CASPIAN TERN: 18 July (5) BS (DGM). Black Tern: 24 July (2) S (DMP). Black-billed Cuckoo: 31 May (1) Humboldt (BLC). TRAILL'S FLYCATCHER: 23 May (2) BS, 24 May (2) R (FA, DGM). Least Flycatcher: 16, 25 and 27 May (1) M, 3 locations (BLC, FA). Tree Swallow: 11 July (estimated 200 in flock of 2,000 mixed swallows) R (DGM). Swainson's Thrush: 30 May (1) S (BC, George Hervey). BELL'S VIREO: 27 June (1, singing) Mud Island M (BC). Swainson's Warbler: 22 May (3) 3 locations Lauderdale County, 27 and 28 May (1) Overton Park M (BLC), 24 May (3) Walnut Log R (FA, DGM). Mourning Warbler: 31 May (1, singing) M (BLC). Canada Warbler: 23 to 29 May (1) 2 locations M (BC, FA). White-crowned Sparrow: 14 May (4) and 16 May (1) M (Ella Ragland, Nellie Moore, Jim Maenders).

Locations: BS—Big Sandy Wildlife Refuge, C—Camden, DR—Duck River Wildlife Refuge, M—Memphis area, R—Reelfoot Lake, S—Savannah area.

Observers: FA—Fred J. Alsop, BC—Ben B. Coffey, Jr., BLC—Ben and Lula Coffey, WC—Wendel Crews, DGM—Don and Gina Manning, DMP—David and Mike Patterson, MP—Mike Patterson, BS—Bill Sexton.

DAVID E. PATTERSON, Harbert Hills Academy, Savannah 38372.

CENTRAL PLATEAU AND BASIN REGION—May was cool and damp, June above normal in both temperature and rainfall, July was the coldest in 21 years NA, and 3rd coldest in 100 years. Migration being late, probably 90% of our transients passed thru in May. Shorebird records NA were remarkable with a new species; 2 latest ever for spring; at least six earliest ever for fall; and about three too rare to classify.

Loons-Ducks: Common Loon: 16 May (2) PPL (MLB, ROH)*. Pied-billed Grebe: 3 thru 15 June (1-3) GSP (PDC), 18 July (2) adults with (3) immatures BV (KAG, WMS, LJ). Double-crested Cormorant: 12 June (1) GSP (PDC), 1st. June record NA. Little Blue Heron: 24 July (11) ACM (JHR, KM), peak for period. Cattle Egret: a belated report, 18 April (2) GSP (PDC), 3rd. NA record. Least Bittern: 18 May nest, no eggs, GP (KLD, FJA), 22 May (1) CCNWR (FJA), 20 June (5) (KLD, LSF), GP, 20 May (1) HP (FJA, MLB), 16 July (1) (KAG, HCM), 18 July (1) (KAG, WMS, LJ) both BV. American Bittern: 18 May (1) GP (KLD, FJA), 19 May (1) MCr (FJA, MLB). Canada Goose: 13 May (4) pair with young OHL (PDC), apparently raised without benefit of tubs. Black Duck: 25 June (1) LD (RTH). Shoveler: late were (3) RL 5 May (AT). Wood Duck: 30 June (72) in nine groups RL (MLB). Ring-necked Duck: 9 May thru 2 June (1) on pond near Gallatin (PDC). Ruddy Duck: late, 6 May (1) RL (MLB). Common Merganser: 15, 24 May (5) LD (RTH).

Hawks-Terns: Cooper's Hawk: 2 May and 13 June (1) BT (RH)*. Red-shouldered Hawk: 4 July (1) ACM (JNR) only report NA, (1) BT in May (RH). Marsh Hawk: late, 1 May (1) BT (RH). King Rail: 22 May (1) nest w/11 eggs, CCNWR (FJA) 19 May (1) (FJA, MLB), 13 June (1) Mel Garland, 18 June (1) (KAG, MLB) all BV. Sora Rail: 20 May (2) HP (FJA, MLB)*. American Coot: several until 13 June (1) GSP (PDC), then 26 July (1) OHL (MLM). Black-bellied Plover: 23 May (1) GSP (PDC). American Woodcock: 10 and 11 May (1) flushed H (JNR). WHIMBREL: 24 July (1) in flight ACM (JHR), later in day (2), both feeding and in flight BV (JNR), 2nd state record (details to be published). Spotted Sandpiper: 1 June (1) GBBC (KLD), early was one 4 July ACM (JNR). Solitary Sandpiper: 3 July (1) BV (MLB). Lesser Yellowlegs: 14 July (1) BV (MLB), 2 days earliest NA. Pectoral Sandpiper: 8 July (1) BV (MLB), 4 days earliest NA. BAIRD'S SANDPIPER: 24 July (1) BV (JHR, HEP). Least Sandpiper: 14 July (7) BV (MLB), 2 days earliest NA. Dunlin: 12 June (1) spring plumaged bird GSP (PDC), only 3rd. and latest spring record NA. Dowitcher (sp.): 25 July (3), 27th. (1) BV (MLB), 11 days earliest NA. Stilt Sandpiper: 20 May (1) HP (FJA, MLB), 2nd spring record NA; then 8 July (2) BV (MLB), 18 days earliest NA. Semi-palmated Sandpiper: 2 June (51) to 15 June (1) GSP (PDC), 11 days latest NA. Then 14 July (1) BV (MLB), 2 days earliest for fall NA. Western Sandpiper: probably most ever NA 22 July (2) BV (MLB), 24 July (2) ACM (JHR), 25 July (7) BV (MLB) peak for period. NA had its first spring record with (3) 27 May GSP (PDC). Common Tern: 24 July (5) RR (JHR)*. Black Tern: 2 May (1) PPL (MLB, RE); then 27 July (1) RR (JHR).

Cuckoos-Waxwings: Black-billed Cuckoo: 8 May (1) BT (RH), 8 and 9 May (2) CW (JHR), 1 June (1) GBBC (KLD), then 14 June (2) JBBC (KLD). RED-COCKADED WOODPECKER: 6 June new nesting hole found Pickett State Park (RDH). TRAILL'S FLYCATCHER: 19 May (2) on territory BV (FJA, MLB), mid June 1st nest for Middle Tenn. found there (KAG) (details to be published). Least Flycatcher: 2 May (1) banded CW (JHR), 14 May (2) calling both H and CW (MLB). Rough-winged Swallow: 3 May (200 plus) GSP (PDC). Cliff Swallow: 4 July (84) nests found RR to ACM (JNR).

Purple Martin: 13 July (1000) migrating birds H (MLM). Hermit Thrush: late, 1 May (2) CW (JHR). Swainson's Thrush: last, 24 May (1) H (AT). Gray-cheeked Thrush: last, 22 May (1) banded CW (MLB). Veery: last, 8 May (2) banded CW (JHR). Ruby-crowned Kinglet: last, 9 May (1) banded CW (JHR). Cedar Waxwing: 19 May (140) RR to ACM (MLB, FJA), 9 June (1) near HP (KAG), 28 June (2) to 29 July (4) LD where they nested successfully (RTH).

Warblers: Tennessee: last, 16 May (1) H (AT). Nashville: last, 14 May (1) banded H (MLB). Magnolia: last NA 16 May (1) CW (MLB), most unusual was (1) 16 May thru 30 June LD (RTH). Black-throated Blue: 4 May (1) Vanderbilt (Louis Farrell, Jr.). Myrtle: late, 17 May (1) RL (MLB). Blackburnian: 15 May thru 5 June (4) (LSF), 21 July (2) (MCW), both Fall Creek Falls Park. Chestnut-sided: last, 15 May (1) H (AT). Bay-breasted: last, 15 May (1) banded CW (JHR). Blackpoll: late, 20 May (1) H (AT). Northern Waterthrush: last, 9 May (1) CW (JHR). Connecticut: 22 May (1) banded CW (MLB). Mourning: 23 May (1) banded CW (JHR). Yellow-breasted Chat: 2 July (40) along 4 miles of road CC (MCW). Wilson's: 22 May (1) singing CW (MLB). Canada: 28 May (1) H (AT) ties latest spring NA.

Bobolinks-Sparrows: Bobolink: 6 May (6) WB (FB), 18 May (20) GSP (FJA, MLB). Dickcissel: wintering bird continued H WB thru 16 May (MCW), 1 June (25) GBBC (KLD). SHARP-TAILED SPARROW: 19 May (1) BV (FJA, MLB). White-crowned Sparrow: last, 12 May (3) H (PDC). White-throated Sparrow: 11 May (3) H (JHR). Lincoln's Sparrow: late, 18 May (1) H (AT). Swamp Sparrow: late was (3) 4 May TJ (KAG). SONG SPARROW: 14 June (10) at 7 stops JBBC (KLD), nested again NA at Ellington Center (MLB, LJ), (3) pair McMinnville all summer (MCW), 6 May thru 9 July (1-2) LD (RTH).

Note: the asterisk (*) is used to denote that this is the only report of a species received by the writer.

Locations: ACM—Ashland City Marsh, BV—Buena Vista Marsh, BT—Byrdstown, CC—Cannon County, CCNWR—Cross Creeks Nat'l Wildlife Refuge, CW—Cheekwood Botanical Gardens, GSP—Gallatin Steam Plant, GBBC—Glen Breeding Bird Count, GP—Goose Pond, Coffee County, H—home area, HP—Hunters Point, upper OHL, JBBC—Jasper Breeding Bird Count, LD—Lilydale, MCr—Marrabone Creek, NA—a 25 mile radius of Nashville, OHL—Old Hickory Lake, PPL—Percy Priest Lake, RL—Radnor Lake, RR—River Road, NA, WB—Woodbury, TJ—Two Jays Sanc.

Observers: FJA—Fred J. Alsop, MLB—Mike L. Bierly, FB—Frances Bryson, PDC—Paul and Dot Crawford, KLD—Ken and Lil Dubke, RE—Roy Elliott, KAG—Katherine A. Goodpasture, ROH—Roger O. Harshaw, RDH—Robbie and Dave Hassler, RH—Robbie Hassler, RTH—Roy T. Hinds, LJ—Louise Jackson, MLM—Margaret L. Mann, KM—Kathey Meyer, HCM—Harry C. Monk, HEP—Henry E. Parmer, JHR—John and Heather Riggins, JNR—John N. Riggins, LSF—Lee Shafer Family, WMS—Winslow M. Shaugnessy, AT—Ann Tarbell, MCW—Mary C. Wood.

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EASTERN RIDGE AND VALLEY REGION—The weather during the period was relatively cool and July was extremely wet. The Chattanooga and Knoxville areas were blessed with an usually heavy spring shorebird migration. Traill's Flycatchers continue to spread in the area as breeding birds.

Loon-Goldeneye: Common Loon: 18 May (1) K (PP), 2-14 June (2) then one through period NL (LS). Double-crested Cormorant: 8 May (1) K (PP). Little Blue Heron: 1-12 July (3) HRA (KD, LD). Common Egret: 1-7 May (1) AS (PGR). SNOWY EGRET: 29 May (1 dead adult) CL (FA, EM). Least Bittern: 10 May (1 nest, 2 eggs) A (FJA), 16 May (3 nests, with 4, 1 and 2 eggs) A (FJA), 1 June (1 nest, with 5 eggs) A (FJA, Morris Williams), 18 June (1 nest, one adult, 2 young 10-14 days old) AM (KD, LD). American Bittern: 7 May (1) K (FJA) 8, 10 May (1) A (FJA, JA, CM, EM), 9 May (2) AM (KD, LD), 11 May (1) AS (GE, PGR). GLOSSY IBIS: 25 May (1) Ph (PP, JBO). This was observed at close range and did not appear to have the broad white facial marking of the White-faced Ibis in breeding plumage. Common Goldeneye: 1-15 June (1) SW (PP). This bird may have been injured and unable to migrate north.

Bald Eagle-Sandpipers: Bald Eagle: 8 May (1 adult) BL (GE, PGR). OSPREY: through period (nest, 2 adults, one young) HRA (Wilford Caraway, Greer Mathews). King Rail: 10 May (3 fresh nests, no eggs) A (FJA), 16 May (4 nests, 11, 6, 4, 9 eggs) A (FJA, CM, EM, BW, IW). Virginia Rail: 8 May (2) AS (GE, PGR), 8, 10, 11 May (2 to 5) A (FJA, CM, EM), 18 May (1) Ath (PP). Black-bellied Plover: 7 May (4) K (FJA, JMC, CM, EM). American Woodcock: 3 May (1) A (FJA, CM, EM), 11 May (1) AM (KD, LD), 1 June (1) K (PP). SPOTTED SANDPIPER: 29 June (nest, 2 adults, 2 young) AS (Lee R. Herndon, PGR), this is the first Washington County nesting record. White-rumped Sandpiper: 3-6 May (1) K (FJA, EM), 6, 7 May (1), 2-7 June (1-7) AM (KD, LD), 8 May (8) KSP (FJA, JA, JMC), 14 May (1) AS (Mrs. George Dove, Mrs. Harold Dillenbeck). BAIRD'S SANDPIPER: 8 June (1) AM (KD, LD), Leisurely study through 35 x B&L scope at 40 feet with excellent light. All field marks, including scaly appearance were noted. First Chattanooga area record. Dowitcher (Sp.) 31 July (1) K (JMC, JCH). Western Sandpiper: 13 May (1) K (FJA, JMC) 25-27 May (1-8) AM (KD, LD).

Gull-Sparrows: Bonaparte's Gull: 7 May (immature) K (FJA, JMC, CM, EM). Caspian Tern: 2 May (2) KSP (FJA, Benton and Jeff Basham, JMC, James A. Tucker). Black Tern: 6 May (1) K (FJA, JMC), from 26 July through period (2-17) HRA, SB, ChL, NL (JD, KD, LD, LS). Black-billed Cuckoo: 2 June (1) nest with (2) week old young, CC (FJA, CM, GRA), 27 July (1) LHS (KD, LD). Barn Owl: through period (1) AM (JD, KD, LD). RED-COCKADED WOODPECKER: 13 June (2) CC (JCH). Trail's Flycatcher: through period (one pair) AS (PGR), 16 May (2) A (FJA, JA, CM, EM, BW, IW), 28 May (4) HRA (KD, LD), 8-29 June (1) AM (KD, LD), 25 May, 21 June (1) MB (KD, LD). Least Flycatcher: 24 May (1) K (PP). Cliff Swallow: 8 May (4 nests under construction) K (FJA). Long-billed Marsh Wren: 8, 10 May (1, 2) A (FJA, CM), 9 May (2) AM

(KD). Short-billed Marsh Wren: 8 May (1) K (FJA, CM), 9, 14 May (1) AM (KD). Swainson's Warbler: 26 June (2), 10 July (8) CC (JMC, JCH). Northern Waterthrush: 10, 11 May (2, 1) A (FJA). Dickcissel: 3 to 25 May (3-15) HRA (KD, LD), through 31 May (5) D (LS), 6 May (2) K (FJA, JMC). Lincoln's Sparrow: 7 May (1) K (FJA). Henslow's Sparrow: 3 May (1) K (FJA), first Knox County record except for one in a TV tower kill, 2, 3 May (1) A (FJA, JMC, CM, Debbie Massey, BW, IW).

Locations: A—Alcoa, AM—Amnicola Marsh, AS—Austin Springs, Ath—Athens, BL—Boone Lake, CC—Campbell County, ChL—Chicamauga Lake, CL—Cove Lake State Park, D—Dunlap, HRA—Hiwassee River Area, K—Knoxville, KSP—Kingston Steam Plant, LHS—Long Hollow Swamp, MB—Moccasin Bend, NL—Nickajack Lake, Ph—Philadelphia, SB—Savannah Bay, SW—Sweetwater.

Observers: FJA—Fred J. Alsop, III, JA—Jean (Mrs. Fred) Alsop, GRA—G. Ron Austing, JD—Jon DeVore, KD—Kenneth Dubke, LD—Lil (Mrs. Kenneth) Dubke, GE—Glen Eller, JCH—J. C. Howell, CM—Chester Massey, EM—Eleanor (Mrs. Chester) Massey, PP—Paul Pardue, PGR—Peter G. Range, LS—Lee Shafer, BW—Bill Williams, IW—Irene (Mrs. Bill) Williams.

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EASTERN MOUNTAIN REGION—*Egret-Flycatchers:* Common Egret: 30 July (1) E (LRH). WHITE IBIS: 30 July (1) E (LRH, ED, FWB). Bufflehead: throughout period (2) WiL (LRH, PGR, GE). GOSHAWK: 18 June (1) IG (GRA). Red-tailed Hawk: throughout period (2 adults; 2 young around nest site) En (PGR). GOLDEN EAGLE: 1 June (1) Adult; IG (FA). Semipalmated Plover: 8 May (1) CF (LRH). Pectoral Sandpiper: 30 July (2) E (LRH). Ring-billed Gull: 5 June (1) WaL (PGR). Whip-poor-will: 6 June (45—survey total) HoM (WC, BR). Great-crested Flycatcher: 11 June (1) RM—5512 ft. elev. (CRS, PGR, BR). TRAILL'S FLYCATCHER: 10 May (1) CF (LRH).

Swallow-Crossbill: Bank Swallow: 7 May (9) WR (PGR). Common Raven: 11-13 June (5—max.) RM (CRS, PGR, BR). Black-capped Chickadee: 4 May (1) HM (FWB). Long-billed Marsh Wren: 8 May (1) RM (FWB). Cedar Waxwing: 11 June (6) RM (CRS, PGR, BR). Solitary Vireo: 15 June (1) MR (KD, LD). Black-throated Blue Warbler: 1 May (1) RM (FWB). Wilson's Warbler: 10 May (1) EA (LRH). Red Crossbill: 11-13 June (3—max.) RM (CRS, PGR, BR).

Locations: CF—County Farm, Carter Co. near Elizabethton, E—Elizabethton, EA—Elizabethton Airport, En—Erwin, HM—Hump Mountain, HoM—Holston Mountain, Sullivan Co., IG—Indian Gap Great Smoky Mt. Nat'l Park, MR—McFarland Route, Polk Co., RM—Roan Mountain, WaL—Watauga Lake, WiL—Wilber Lake—WR—Watauga River.

Observers: FA—Fred J. Alsop, III, GRA—G. Ronald Austing, FWB—Fred W. Behrend, WC—Wallace Coffey, ED—Ed Davidson, KD—Ken Dubke, LD—Lil Dubke, GE—Glen Eller, LRH—Lee R. Herndon, PGR—Peter G. Range, BR—Brent Rowell, CRS—Charles R. Smith.

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