

# THE ORIOLE

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



VOL. 38

MARCH, 1973

NO. 1

# THE ORIOLE

## EDITOR

Leslie B. Davenport, Jr., Biology Department, Armstrong State College, Savannah, Ga. 31406

## EDITORIAL COMMITTEE

J. Fred Denton; George A. Dorsey; Milton N. Hopkins, Jr.; Harold C. Jones; Richard H. Peake, Jr.

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

Regular .....	\$5.00	Library .....	\$3.00	Life .....	\$ 80.00
Family .....	\$8.00	Sustaining .....	\$8.00	Patron .....	\$100.00
Student .....	\$3.00	Garden Club .....	\$8.00		

Inquiries concerning back issues of THE ORIOLE or OCCASIONAL PAPERS OF THE G. O. S. should be directed to the Business Manager.

All dues should be remitted to the Treasurer of the Society: T. F. Collum, 7 Baltimore Place, N.W., Atlanta, Ga. 30308

## CONTENTS

A HUDSONIAN GODWIT AT SAPELO ISLAND, GEORGIA T. M. Rial.....	1
THE HUDSONIAN GODWIT SIGHTING AT SAPELO ISLAND, GEORGIA James W. Reinig .....	4
WINTERING NORTHERN ORIOLES IN THOMASVILLE, GEORGIA Robert L. Crawford.....	6
GENERAL NOTES.....	10

## GEORGIA ORNITHOLOGICAL SOCIETY

Founded December 13, 1936

T. M. Rial, President	Mrs. S. J. Carswell, Secretary
Louis W. Schweizer, 1st Vice President	T. F. Collum, Treasurer
Mrs. Norene Boring, 2nd Vice President	W. P. Kellam, Librarian

Business Manager: T. McRae Williams, 755 Ellsworth Drive, N. W. Atlanta, Georgia 30318.

# THE ORIOLE

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

VOL. 38

MARCH, 1973

NO. 1

## A HUDSONIAN GODWIT AT SAPELO ISLAND, GEORGIA

T. M. Rial

The Hudsonian Godwit (*Limosa haemastica*) may now be added to the official state list of Georgia. This is an account of the observations of this rare bird, made and confirmed by four competent birders.

On December 30, 1972, during the annual Christmas Bird Count on Sapelo Island, Georgia, (35°25'N, 81°17'W), Jack L. Cooper and I were one of four two-man teams making the count. In mid-afternoon we drove to the small sub-island of Cabretta, located on the east central portion of Sapelo. We parked our vehicle in a grove behind high dunes and cautiously walked across the dunes toward the open beach. From the top of the dune we could see that the incoming tide was still well out, exposing sandbars and a wide, gently sloping beach. A slight breeze was blowing and the sky was partially covered by high clouds. The light was good, although we had more direct sun in the late afternoon. The day was unseasonably mild. The temperature at the time was approximately 60-65°F.

As we stopped to survey the area, we saw literally thousands of shore birds on the outer beaches in addition to hundreds of birds feeding along the edges of large tidal pools near the berm. We continued cautiously toward the open beach, using low dunes and sea oats for cover. Finding a good spot for observation, with the light at our backs, Jack set up his 15x-60x scope to check the birds on the outer beach. I was checking the birds at the tidal pools with 7x42B Trinovid binoculars.

About 150 yards to the left and in front of me, I noted nine Marbled Godwits (*Limosa fedoa*) feeding in the shallows on the ocean side of the tidal pool. Several Willets (*Catoptrophorus semipalmatus*) were feeding nearby. Among the Marbled Godwits was a smaller bird that I did not examine closely, assuming it was one of the Willets. After scanning the birds for perhaps a minute, some inner alarm flashed — "It's different."



I swung my binoculars back to the group of Marbled Godwits to examine the smaller bird. I could see clearly that the bill was slightly upcurved and longer than that of a Willet. The appearance and general shape gave the image of a smaller but similarly proportioned Marbled Godwit. At this instant, the group flushed. I lowered my binoculars and watched the group fly low in front of us.

The Marbled Godwits flew no more than a yard or two above the sand in a loose V at a distance of about 50 to 75 yards. They flew leisurely to my right, matching wing-beat for wing-beat, glide for glide, much in the manner of Pelicans. The V was unbalanced with two birds in one leg and six birds in the other. About four birds from the leader on the longer leg, I saw 'the bird.'

The mental alarm flashed again. "Like Willet, but not Willet." I could see the white wing stripe, but not the flashy Willet pattern. The white tail coverts with the wide black band on the tail were very distinctive in contrast to the Marbled Godwits in the same flight.

The outstanding impression I had is that the behavior of this slightly smaller and distinctly marked bird conformed most precisely to that of the larger Marbled Godwits during the short flight. It was obvious to me that he was accepted as one of the group, yet, just as obviously, he was of a different species. I assumed the "lock and key" fit of the behavior pattern of the two closely related species was near enough to permit the outsider to become an insider.

The group lighted on the edge of the same tidal pool, approximately 100 yards to my right. I alerted Cooper and pointed to where the group was now feeding. All the while I was frantically trying to find the plate of large shore birds in Robbins' *Birds of North America* (1).

Jack picked up the different bird immediately and after observing it for a minute or so, began to check field marks in Peterson's *A Field Guide to the Birds* (2). At that moment I gasped, "Hudsonian Godwit," and Jack said, "Right!" For a minute or two we studied the bird, our field guides in hand, comparing the Hudsonian Godwit with the Marbled Godwit and the inevitable nearby Willets. We were convinced we were seeing a Hudsonian Godwit. The birds flushed again and flew south along the beach. At that moment I don't believe either of us realized the rarity of our observation, although we both felt it would be new to the count.

We continued counting other birds and, after a short time, about 4:00 p.m., we saw a second two-man team of our count birders appear on the top of the tallest dune. We waved wildly and motioned for them to join us. When they arrived, we told Dr. L. B. Davenport, Jr. (Head, Dept. of Biology, Armstrong State College) and James W. Reinig (Life Science student, Harvard University) of our sighting of the Hudsonian Godwit.

As they were planning to bird along the south beach of Cabretta, we asked them to inspect all the Godwits they saw, since we would like to have independent confirmation of this rare bird. They agreed and the teams parted. (Mr. Reinig's report on the observations he and Dr. Davenport made follow this article).

Upon returning to our quarters and a subsequent search of literature, we became aware of the true rarity of our bird and recognized that this probably would be the first documented observation for the state of Georgia: A once in a lifetime event.

In *Georgia Birds* (5) Burleigh places the Hudsonian Godwit on the hypothetical list for the state, with a reference to John LeConte's list of the birds of Georgia [White 1849] and the fact that no specimen has been taken in the state. Burleigh does write that it would not be surprising if this species occurred occasionally.

Sprunt and Chamberlain in *South Carolina Bird Life* (6) record one visual observation. E. Von S. Dingle saw one bird in the coastal region near Charleston in May, 1941. Based on this single sighting, they include the Hudsonian Godwit on the state list because of the unusually reliable reputation and skill of the observer. In reference to behavior of the Hudsonian Godwit they state, "In general habits and probably in choice of food it does not differ materially from other Godwits."

Normally, the Hudsonian Godwit would winter in the area of extreme southern South America (1), (2), (3), (4), (7), and winter sightings are extremely rare. But Sprunt and Chamberlain quote Dr. Coues (1868) in stating that the species does occur in winter in South Carolina.

We have no reason to believe this bird was a European Black-tailed Godwit, which would be highly unlikely in any case.



Considering the circumstances and the numbers of observers, the witnesses are convinced that the Hudsonian Godwit can safely be added to the state list of Georgia as an "Accidental."

791 Boardman Road, Aiken, South Carolina 29801

#### REFERENCES

1. Robbins, et al. 1966. Birds of North America, a Guide to Field Identification. Golden Press, Inc., New York, N. Y.
2. Peterson, Roger T. 1947. A Field Guide to the Birds. Houghton Mifflin Co., Boston, Mass.
3. Peterson, Roger T. 1969. A Field Guide to the Western Birds. Houghton Mifflin Co., Boston, Mass.
4. Pough, Richard H. 1951. Audubon Water Bird Guide. Doubleday and Co., Inc., Garden City, N. Y.
5. Burleigh, Thomas D. 1958. Georgia Birds. University of Oklahoma Press, Norman, Okla.
6. Sprunt and Chamberlain (with supplement by E. Milby Burton). 1970. South Carolina Bird Life. University of South Carolina Press, Columbia, S. C.
7. Bent, Arthur C. 1927. Life Histories of North American Shore Birds — Part I. Reissued by Dover Press, Inc., New York, N. Y.
8. Hamilton, R. E. 1969. Summary of Christmas Bird Counts on Sapelo Island, 1958-68. *The Oriole*, 34(3): September, 1969.

#### THE HUDSONIAN GODWIT SIGHTING ON SAPELO ISLAND, GEORGIA

James W. Reinig

At approximately 4:05 p.m. on December 30, 1972, Dr. Leslie B. Davenport, Jr., and I met T. M. Rial and Jack L. Cooper on the beach in the middle of Cabretta Island, off Sapelo Island, Georgia.

Rial and Cooper informed us they believed one member of a flock of Godwits that had just flown down the beach was a Hudsonian Godwit (*Limosa haemastica*). At that time, the Godwits were about 100 yards south of us down the beach. Les Davenport and I then agreed to inspect the group in an attempt to confirm or disallow the sighting. On that afternoon, we counted a total of 60 Marbled Godwits (*Limosa fedoa*) on that beach.

Dr. Davenport and I circled out of sight of the Godwits in the area behind the dunes next to the shore in order that we might be able to

get a look at the Godwits in better lighting. We circled around to the beach 300 yards down from our original position, and from that spot we noticed no Hudsonian Godwit among the flock of Marbled Godwits. Then we walked on down the beach and inspected 40 more Marbled Godwits.

We continued down the beach toward the southernmost tip of Cabretta, turned around, and again inspected the flock of 40 Marbled Godwits while Les Davenport took a few photos. We came back up the beach looking closely at all the flocks of Godwits in the area. Finally, at 5:15, we arrived at the last flock of Godwits on the beach. It contained four Marbled Godwits, two Willets (*Catoptrophorus semipalmatus*) and one bird that turned out to be the Hudsonian Godwit. The mixed flock allowed a detailed comparison of the Hudsonian Godwit with the other accompanying species.

The bill length of the Hudsonian Godwit was at least three-fourths the length of the Marbled Godwit's bill. The bill was also noticeably curved upward, and was much longer than that of the Willets next to it, whose bills were much straighter.

The two Willets then flew off and a moment later two Marbled Godwits. This left the two remaining Marbled Godwits and the Hudsonian Godwit. The last two Marbled Godwits left a minute later, leaving just the Hudsonian Godwit.

We approached within 20 yards of the bird on the ground under quite good lighting conditions. The bird then flew within 45 feet of our position. We observed the definite difference in the black-white wing pattern as compared with a Willet as it flew by us. The black on the tail with the white tip was definitely distinctive.

We did not pursue the bird further, as by flying down the beach it was again in bad lighting. With the lens on Dr. Davenport's camera (50mm) only a poor quality picture could have been obtained in the deepening dusk and we were both very positive of the accuracy of our sighting under such good conditions.

Upon my return to Harvard College, where I am a student, I investigated the differences in the fall plumages between the Willet and the Hudsonian Godwit. Using specimens from Harvard's Museum of Comparative Zoology, I found that all the field marks recorded in my notes corresponded exactly with those of the museum birds.

1014 Stanton Drive, North Augusta, S. C. 29841.



### WINTERING NORTHERN ORIOLES IN THOMASVILLE, GEORGIA

Robert L. Crawford

Erickson (1969) has reviewed the great increase in numbers of wintering Northern Orioles (*Icterus galbula*) of the "Baltimore" form that has occurred in the southeastern United States within the last 25 years. This species' change in status in south Georgia during this time has followed closely the patterns noted by Erickson for the Southeast as a whole. Greene et al. (1945, p. 63) listed only one winter record for the entire state of Georgia. However, beginning in the late 1940's, wintering "Baltimore" Orioles began to appear in Georgia, particularly in the southern portion, with increasing regularity and abundance (Stoddard, 1951; Burleigh, 1958, pp. 586-587; Denton and Hopkins, 1969, p. 49). By the early 1970's, the winter occurrence of "Baltimore" Orioles in south Georgia was, with one qualification, considered common (Crawford and Dozier, 1973). They are found commonly, however, only in association with feeding stations and are rarely seen any appreciable distance from urban or suburban areas. Erickson (op. cit.) found this condition to be widespread.

Thomasville, in southwestern Georgia, has a considerable number of persons feeding "Baltimore" Orioles each winter. In fact, in some years, the coverage of just two or three of these feeders on the day of the annual Christmas Bird Count has given the Thomasville count the national high for "Baltimore" Orioles. However, due to the feeding behavior of these birds, which move in roving flocks from feeder to feeder, it was never possible to obtain any estimate of the species' winter population in the Thomasville area. Consequently, in the fall of 1971, I determined to organize a synchronized watch of the feeders in Thomasville, using as many of the feeding stations as possible.

Twenty-five persons volunteered to participate in the project which was organized as follows: "Baltimore" Orioles were to be counted on the feeders during two 10-minute periods per day. The "watch times" were to be from 0845 to 0855 and from 1230 to 1240 EDT. By synchronizing the watchers' clocks with a local time check, it was hoped that all would be watching at exactly the same time and would thus reduce the possibility of duplicated counts. In addition to a simple total of orioles seen, the watchers were asked to break the count down into two categories: "males" (adult male-type plumage) and "females, etc." (females and immature males). A preliminary trial

count was taken on Sunday, 19 December 1971. Counts were then taken on eight consecutive Sundays beginning 9 January and ending 27 February 1972.

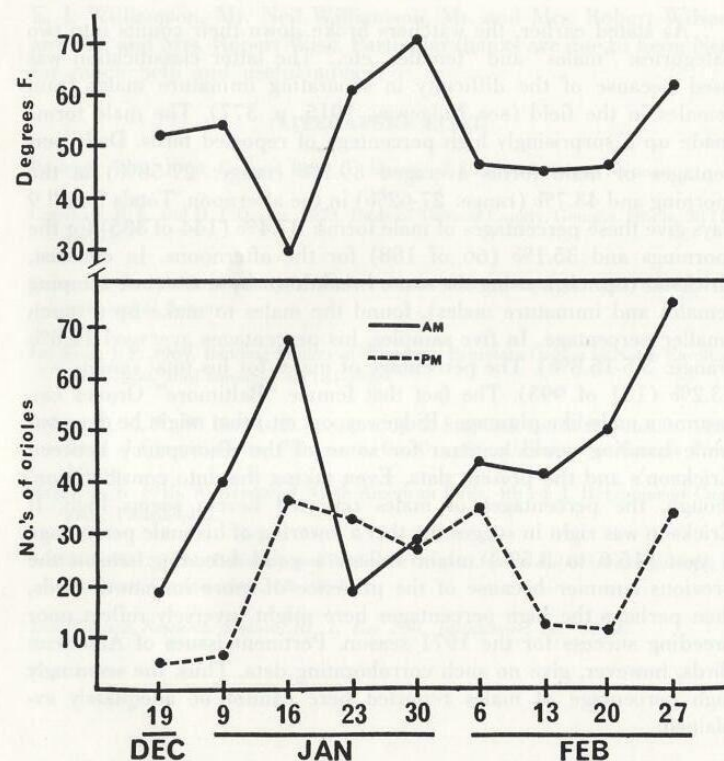


Fig. 1. Numbers of feeding "Baltimore" Orioles seen in 10-minute watches at 25 feeders in December, 1971 and January, February, 1972 with mean daily temperatures for the watch days plotted above.

The results, shown in Figure 1, show three peaks of high counts: 68 on 16 January, 44 on 6 February, and 75 on 27 February. Some of the fluctuations in numbers can be correlated with the rise and fall of the mean daily temperature for these days, also shown in Figure 1. Drops in temperature usually show a corresponding rise in the number of feeding birds, especially with extremes. However, it will be noted



that the high peak reached on 27 February was accompanied by a rise in the mean temperature, indicating that perhaps factors other than temperature were influencing the birds' feeding habits.

As stated earlier, the watchers broke down their counts into two categories: "males" and "females, etc." The latter classification was used because of the difficulty in separating immature males from females in the field (see Ridgeway, 1915, p. 377). The male forms made up a surprisingly high percentage of reported birds. Daily percentages of male forms averaged 39.7% (range: 27-58%) in the morning and 43.7% (range: 27-62%) in the afternoon. Totals for all 9 days give these percentages of male forms: 37.4% (144 of 385) for the mornings and 35.1% (66 of 188) for the afternoons. In contrast, Erickson (op. cit.), using the same breakdown by sexes (i.e., lumping females and immature males), found the males to make up a much smaller percentage. In five samples, his percentages averaged 12.8% (range: 3.5-15.8%). The percentage of males for his total sample was 13.2% (131 of 993). The fact that female "Baltimore" Orioles can assume a male-like plumage (Ridgeway, op. cit.) that might be detected while banding could account for some of the discrepancy between Erickson's and the present data. Even taking this into consideration, though, the percentages of males reported herein seems high. If Erickson was right in suggesting that a lowering of his male percentage 1 year (15.6 to 3.5%) might reflect a good breeding season the previous summer because of the presence of more immature birds, then perhaps the high percentages here might inversely reflect poor breeding success for the 1971 season. Pertinent issues of American Birds, however, give no such corroborating data. Thus, the seemingly high percentage of males reported here cannot be adequately explained.

From the results obtained in this study, it is still not possible to estimate the number of "Baltimore" Orioles wintering in the Thomasville area since less than half of the known feeders in Thomasville were involved. The fact, though, that over 70 presumably different orioles were seen in one 10-minute period suggests quite a large population of these birds in the Thomasville area, perhaps as large as any in the Southeast.

I would like to thank the following who generously gave their time and help to this project: Mrs. Green Alday, Miss Agness Ball, Mr. and Mrs. Chris CoCroft, Mr. W. C. Crawford, Dr. Everett Christensen, Mr.

E. H. Driver, Miss Helen Fennema, Mrs. Rachel French, Mrs. Randolph Malone, Mrs. James McCollum, Mrs. William McCollum, Mrs. Fred Murphy, Mr. and Mrs. James Neil, Mrs. Fred Scott, Mr. Lloyd Watson, Dr. and Mrs. Charles Watt, Mr. B. H. Williams, Mr. and Mrs. E. J. Williamson, Mr. Neil Williamson, Mr. and Mrs. Robert Wilson, and Mr. and Mrs. Robert Wise. Particular thanks are due to Leon Neel for much help and useful advice.

#### LITERATURE CITED

- Burleigh, T. D. 1958. Georgia Birds. University of Oklahoma Press, Norman.
- Crawford, R. L. and D. J. Dozier. 1973. Birds of Thomas County, Georgia. Oriole, 38 (In press).
- Denton, J. F. and M. Hopkins, Jr. 1969. Pocket Checklist: Georgia Birds. Georgia Ornithological Society.
- Erickson, J. E. 1969. Banding Studies of Wintering Baltimore Orioles in North Carolina, 1963-1966. Bird-banding, 40:181-198.
- Greene, E. R., W. W. Griffen, E. P. Odum, H. L. Stoddard, and I. R. Tomkins. 1945. Birds of Georgia. Occas. Pub. no. 2, Ga. Orn. Soc. University of Georgia Press, Athens.
- Ridgeway, R. 1915. A Manual of North American Birds. 4th ed. J. B. Lippincott Company, Philadelphia.
- Stoddard, H. L. 1951. Bullock's and Baltimore Orioles, *Icterus bullockii* and *galbula*, in Southeast Georgia. Auk, 68:108-110.
- Tall Timbers Research Station, Rt. 1, Box 160, Tallahassee, Fla. 32303.



## GENERAL NOTES

**ROUGH-LEGGED HAWK IN NEWTON COUNTY**—On November 28, 1972, Wes Hester, a student at Georgia State University, spotted a large hawk hovering over a grassy area on I-20 at the Hazelbrand exit near Covington, Newton County, Georgia. The hawk was hovering low and allowed Wes to observe it at fairly close range. The prominent black patches at the bend of the wing, the streaked breast, the black band near the end of the tail and the black border along the tips of the primaries and secondaries led Wes to identify the bird as a Rough-legged Hawk, *Buteo lagopus*.

The next day I accompanied Wes to the area and found the bird about one fourth mile north of the interstate in a large field. We observed the hawk sailing and hovering over the field for about twenty minutes. The hawk then spotted something in the field and hovered for fifteen or twenty seconds before it dove. From one hundred feet up the hawk folded its wings and began a near vertical dive. About halfway down it partially opened its wings and slowed its speed, then folded its wings again and did not check its speed until it was four feet from the ground. The hawk remained on the ground with its kill for three minutes before it flew over a hill and out of sight.

On November 31 Mike Einhorn visited the area and saw the bird briefly. Mike was fortunate enough, however, to see the hawk land on a utility pole and to observe the white extending from the rump well down the tail feathers which is another characteristic of this species. The area was visited on several occasions after November 31 but the hawk was not seen again.

The Rough-legged Hawk has been recorded from at least four other locations in the state including Charlton, Chatham, and Thomas Counties (Burleigh, T. D. 1958, Georgia Birds, U. of Okla. Press, Norman). The only other record in the piedmont seems to be a bird seen on the 1970 Atlanta Christmas Bird Count at the Fulton County airport.

The appearance of the Newton County bird followed shortly after a period of severe storms with high winds moved out of the Plains and the Midwest.

Tom W. French, 2540 Sharondale Drive, Atlanta, Georgia 30305

**MONK PARAKEET IN ATLANTA** — On February 28, 1973, I saw a Monk Parakeet (*Myiopsitta monachus*) in the southwest section of Atlanta. Identification was confirmed on March 3rd by Don Cohrs, Dan Hans, Bob Manns, and Terry Moore. In addition, the bird was observed on March 11th by Lou Fink, Earle Greene, Sara Hans, and Carlton and Mary Anne Neville. Several definitive pictures were taken of the bird by Dan Hans. I believe this is the first verified sighting of the Monk Parakeet in Georgia, although many recent reports from non-birders in the Atlanta area of "large green birds" may well be of the same species.

This particular bird built a nest in the back yard of Mr. and Mrs. Charles Graham in April, 1972. The nest is a somewhat globular mass of twigs and sticks, about two feet in diameter, 35-40 feet above the ground in a pine tree. The Grahams say the bird used the nest as an overnight roost until August of 1972. Since that time its roosting site is unknown to them. However, it continues to return to their feeding station several times each day and feeds on commercial wild bird seed.

The parakeet is about the same size and shape as a Mourning Dove, but colored quite differently. Its back is green; the belly and thighs are bright yellow; the forehead, cheeks, throat, and breast are light gray with darker feather edging giving a slightly barred effect; the tail is bluish-green; the primaries are dark blue; the bill is flesh colored, showing some yellow in bright light; the legs and feet are gray. This bird is not banded. In very strong light, Mr. Greene and I noted a gray wash effect over the green in the scapular region. This description matches quite closely the only picture I was able to find of the Monk, Quaker, Grey-breasted, or Gray-headed Parakeet (Steinbacher, 1959.)

According to Bump (1971) some 12,000 of these birds were imported into the United States in 1968. Since that time some of these parakeets have been released, have escaped, or were inadvertently freed and have managed to spread through several northeastern states and Florida (*American Birds*, 1972). Recently, there have been additional first sightings in western New York and the Appalachian, middlewestern prairie, and southern Great Plains regions (Able, 1973).

At present, there seems to be some concern over the rather rapid spread of this introduced bird because it is considered an agricultural pest in its native South America, feeding on fruits and grain. Obviously, this is one of the risks of importing "exotics" as pointed out by Bump (1971) and Ryan (1972). Many would have the bird put on the "wanted" list and eradicated if possible. However, Roger Tory Peterson



has been quoted as saying, "That's being an alarmist. The parrot is just a bird that comes to people's feeding stations." No doubt Mr. Peterson's attitude would be more widely accepted by birders. The bird would certainly be more attractive than our numerous introduced Starlings and House Sparrows! Pest or esthetic addition to the avifauna of Georgia, at least one Monk Parakeet has arrived.

#### ACKNOWLEDGEMENTS

I would like to thank Lou Fink and Earle Greene for their helpful suggestions on the preparation of this article.

#### LITERATURE CITED

- Able, K., 1973, The Changing Seasons, *American Birds*, 27: 23.  
*American Birds*, 1972, 26: 830, 836, 839, 848.  
 Bump, G., 1971, The South American Monk, Quaker, or Gray-headed Parakeet, United States Department of the Interior Wildlife Leaflet 496.  
 Ryan, R., 1972, The Problem of Exotics, *American Birds*, 26: 934-935.  
 Steinbacher, G., 1959, Cage and Garden Birds, B. T. Batsford Ltd., London.

Doris Cohrs, P. O. Box 90817, East Point, Georgia 30344

**HAWK FLIGHT IN RABUN COUNTY** — On September 22, 1972, we observed a flight of 63 Broad-winged Hawks over Eastman Mountain. The weather was sunny and mild, temperature 74, time 10:35 to 11:30. Winds were light and variable, mostly northwesterly. The hawks came in small groups of 10 to 15, each group lazily circling, but gradually moving southward. On September 23 on Black Rock Mountain we observed 25 more Broad-wings. Weather was cool and cloudy, and there was no flight until the weather cleared about 11 A.M. Observers were E. O. and Marie B. Mellinger, Caroline G. Newhall.

E. O. Mellinger, Route 1, Tiger, Georgia 30576

#### A Statement of Policy

Application for membership may be made to the Treasurer, *THE ORIOLE* is sent without charge to all classes of members not in arrears for dues. Send changes of address, claims for undelivered or defective copies and requests for information relative to advertising, subscriptions and back numbers to the business manager.

All articles and notes submitted for publication and all books and publications intended for review should be sent to the editor.

Original papers in the field of Ornithology are published in *THE ORIOLE*. Papers are judged on their contribution of original data, ideas, or interpretations and on their conciseness, scientific accuracy, and clarity.

**COPY**—Type manuscripts *double spaced* throughout. Underscore scientific names only. Number pages in the upper right hand corner. Arrange contents in sequence: title page, text, reference, tables, figure legends, and figures. Type your complete address and date of submitting manuscript.

**STYLE**—The guide for preparation of copy is the **STYLE MANUAL FOR BIOLOGICAL JOURNALS** available from American Institute of Biological Sciences, 2000 P Street NW, Washington 6, D.C., \$3.00. A copy of this manual is held by the editor for use by contributing authors. A postal card request and return postage by you is required for its use.

**TITLE**—The title should be concise, descriptive, and not more than 10 words in length. Avoid use of scientific names in titles if possible.

**FOOTNOTES**—Avoid footnotes by incorporating such material in the text.

**NOMENCLATURE**—Vernacular names should be capitalized in text. They are to be accompanied by appropriate scientific names the first time each species is mentioned. Show reference for long lists of scientific names (i.e., A.O.U. Checklist, 5th ed., 1957).

**REFERENCES**—When there are fewer than 3 references insert them in parentheses where needed in the text by author, journal, volume, pagination, and year of publication. Three or more references are grouped alphabetically by authors' last names under "literature cited."

**TABLES**—Prepare tables in keeping with size of *THE ORIOLE*. A good table should be understandable without reference to the text.

**ILLUSTRATIONS**—Illustrations should be suitable for photographic reproduction without retouching. Colored plates will be charged to the author.

**REPRINTS**—Request for reprints must be sent with original manuscript and are to be paid for by the author.

The *author* is responsible for putting his manuscript in final form for production. Authors should consult colleagues and specialists for review of papers before submission, and check all literature available to them that might have a bearing on their papers.