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Department of Zoology, Clemson University, Clemson, S.C. 29631, 20 September 1976.



... with Louis C. Fink

Memorial for Tom Rial

The Georgia Ornithological Society is accepting contributions for a memorial to honor Tom Rial. Checks should be sent to John Swiderski, P.O. Box 38214, Atlanta, Georgia 30334. Tom's family will be notified of each contribution.

Plagiarism Among the Naturalists

Dr. and Mrs. Marcus B. Simpson Jr. published an article in the *North Carolina Historical Review*, Winter 1977 issue. Entitled, "The Reverend John Clayton's Letters to the Royal Society of London, 1693-1694: An Important Source for Dr. John Brickell's *Natural History of North Carolina*, 1737," the article cites many cases in which Brickell copied Clayton's descriptions, without giving credit. The Rev. Mr. Clayton made his original observations in Virginia, but Dr. Brickell set them down as pertaining to North Carolina. The article makes for fascinating reading. I had the privilege of recording it on tape for the N.C. Library for the Blind.

Request for Information

As regional reporter for region 4 (Florida, Georgia, and South Carolina) of the Colonial Waterbird Group, I am compiling a list of individuals researching any aspect of the biology of colonial water birds (gulls, terns, shorebirds, herons, ibis, etc.). Investigators are asked to send their names, addresses, and a short detailed description of past, current, or future research to James A. Rodgers Jr., Department of Biology, University of South Florida, Tampa, Florida 33620.

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South Carolina Checklist

A new checklist of South Carolina birds, prepared by Perry E. Nugent, is available to Carolina Bird Club members through the Charleston Natural History Society. The lists are sold by mail with a minimum order of \$1.00 for 10 copies. Send orders to Pete Laurie, 1153 Cottage Road, Charleston, S.C. 29412, enclosing check payable to the Charleston Natural History Society.

Incidentally, staff members at the North Carolina State Museum of Natural History are working on a similar checklist for the birds of North Carolina.

Survival of Birds Without Food

In a previous column, I asked the question, "How long can a wild bird live without food?" The problem was put to me at a garden club meeting and assumed a hard freeze, with no insects and plants covered with ice. Robert Lochmiller, who is with the School of Forest Resources at the University of Georgia in Athens, has kindly summarized the results of three studies with caged birds. His sources are P.L. Errington in the Wilson Bulletin 51:22-37, 1939; Richard Gerstell, Pennsylvania Game Commission, Res. Bul. 3:1-121, 1942; and S. Charles Kendeigh, Journal of Wildlife Management, 9:217-226, 1945.

Game birds are considered first. Bobwhite in a cage without food at a constant temperature of -18°C. survived 60 hours. Under similar conditions, Hungarian Partridge survived 168 hours at -18°C.; Chukar survived 270 hours at -18°C.; Ruffed Grouse survived 185 hours at -18°C.; Ring-necked Pheasant survived 336 hours at -9°C.; Wild Turkey survived 324 hours at -18°C.; and Mallard survived 225 hours at -18°C.

The survival time for non-game birds (generally smaller species) was shorter. White-throated Sparrow survived 16 hours at -17°C.; White-crowned Sparrow survived 19 hours at -18°C.; House Sparrow survived 19 hours at -14°C.; Tree Sparrow survived 31 hours at -13°C.; Dark-eyed Junco survived 37 hours at -14°C.; Starling survived 64 hours at -1°C.; Red-shouldered Hawk survived 260 hours at -18°C.; Great Horned Owl survived 305 hours at -18°C.

Mr. Lochmiller points out that the ability of birds to tolerate low temperatures and periods of low food availability is usually controlled by behavioral modifications such as migrating southward. Because many birds do winter in extremely cold weather, however, the availability of food is a real problem. Under conditions of a hard freeze, Mr. Lochmiller observes, metabolism will be increased while maintaining a constant body temperature. Foraging actively increases the use of stored fat. Differences in activity will cause variation in metabolic rates.

Reviewing the study of caged birds, Mr. Lochmiller points out that heavier birds tend to live longer because of increased insulation and a decreased percentage of surface area per volume of larger birds.

The results cited may be high, Mr. Lochmiller feels, because a bird in the wild would be subject to more severe conditions (such as wind) and probably would be more active burning energy stores in search of food. Also, caged birds may portray abnormal behavior. Examples are Bobwhite quail (which huddle in a circular pattern), Ruffed Grouse (which spend nights in a snow shelter), and pigeons (which might seek the warmth of urban buildings.)

While a hard freeze is a potential hazard, many birds have evolved migrational, distributional, and behavioral adaptations to cope with such an environment. On occasion, severely cold temperatures may cause death by freezing before a bird starves.

I am grateful to Mr. Lochmiller for his detailed reply to my question.

Comment on Identification of Bachman's Warblers

It was with considerable interest that I read "Three Recent Sight Records of Bachman's Warbler" in the General Field Notes (Jay Shuler, *Chat* 41:11-12). Mention of this species immediately brings to my mind the most pleasant day of my bird-watch-

ing experience. It was a beautiful morning—19 May 1951—when Tom Uzzell, one of the "re-discoverors" of the Bachman's Warbler in South Carolina, showed me a singing male of this species in the vicinity of Mayrant's reserve. I shall always enjoy being reminded of that thrill.

The above mentioned report also reminds me of a point that does not receive much comment in print. It is that the male Bachman's Warbler depicted on Plate 50 of A Field Guide to the Birds by Roger Tory Peterson (undoubtedly one of "the two field guides" referred to in the report of Andrew and Marion Uterhart) is inaccurately represented. It shows the bird with its entire bib, including the throat, as black. This is incorrect. The bird's throat is yellow [or partly yellow-Ed.], a feature that those who seek the Bachman's Warbler in the Carolina low country should be made clearly aware of. The black is more of a large patch on its upper breast. Perhaps the "black throat and cap" referred to in John Lamey's observation simply represents an inexactness of description rather than an error in identification. Perhaps the Uterhart observation "it ought to be a hooded, but it lacks a hood" was not meant to be literal, for the face, chin and throat of the Bachman's male and the male Hooded Warbler are quite different, A Field Guide to the Birds not withstanding. I do not wish to belabor the point further but will continue to entertain some question in my own mind regarding sight records of the male Bachman's Warbler which do not include comment upon the bird's yellow throat.—ROBERT P. HOLMES III, 5003 Trentwoods Drive, New Bern, N.C. 28560.

Further Comment on the Variable Bachman's Warbler

Robert P. Holmes III (see above) asserted that Roger Troy Peterson incorrectly represented Bachman's Warbler in *A Field Guide to the Birds*, showing the throat of the male as black, whereas actually it is yellow.

In this regard, however, Peterson may have represented accurately the specific skin he used in preparing his drawing. William Brewster (Notes on Bachman's Warbler, Auk 8:149-157) wrote of 36 males collected along the Suwanee River that "... the black in some cases appears over the entire throat and jugulum; in others is restricted to a small central space on the latter, leaving the whole throat as well as the chin, yellow." For a full appreciation of the variability of Bachman's, even in so small a series as 36, one should review the Brewster article.

A second objection to Peterson's portrayal, and one that applies equally to those of Don Eckelberry and Arthur Singer in "other" field guides, is failure to show the yellow shoulder patch, a feature useful in identification and esthetically pleasing.

Another Peterson product sowing confusion in the ranks of Bachman's Warbler searchers is his record album of bird songs for the Eastern and Central States. The Bachman's song in that collection was taken in Virginia in 1954, and may be aberrant. This spring (1977) John Trochet and I were in the interior of I'On Swamp and heard two birds singing so nearly like the Virginia recording that we could not distinguish among the songs, even when we played the tape immediately following "live" performances. We were chagrined, after hours of peering into the dense canopy, to discover that the singers actually were Parulas. Other searchers report similar experiences. —JAY SHULER, P.O. Box 288, McClellanville, S.C. 29458.

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