

Assuming that the black pigment was melanin, we proceeded to test this hypothesis by applying the standard tests for melanin described by Hirsh (*Physiologia Plantarum*, 7: 72, 1954). A sample of the sheath was heated in ca. 0.5 N NaOH at 100°C for 1 hour. The presumed melanin was hydrolyzed under these conditions. We observed the release of an orange-brown pigment, tissue disintegration, formation of a white precipitate, and release of black granules. Addition of several drops of 30 per cent H₂O₂ to the orange-brown supernatant bleached the solution. No bleaching was observed on addition of concentrated HNO₃. The characteristics of the black pigment found in the underlying layer of bill integument thus conform to the usually recognized properties of melanin: relative insolubility, hydrolysis in hot alkali, and bleaching by concentrated H₂O₂ but not by concentrated HNO₃.

We found that it is possible to bleach the melanins in the black layer of intact sheath by soaking for 10 to 15 minutes in concentrated H₂O₂. Such treatment results in a loss of the blue surface coloration concomitant with bleaching of the black, melanin-containing layer.

These observations indicate that the blue bill color of the Ruddy Duck is caused not by the presence of a blue pigment, but apparently by structural peculiarities and the distribution of melanin in the subsurface layer. This phenomenon is similar to that described for blue feathers, where the color is a consequence of the reflection of blue wavelengths by a colorless superficial layer with absorption of all other wavelengths of incident light by a deeper black layer containing large amounts of melanin. The loss of blue color on surgical removal of the underlying melanin-containing layer, or by chemical bleaching of melanin in the intact sheath, supports the hypothesis that blue bill color is a physical, structural phenomenon and not due to the accumulation of a specific blue pigment.

We wish to thank Robert Nero for collecting and Kenneth Parkes for packing and shipping the birds used in this study. We appreciate the interest and helpful suggestions of Gairdner Moment during these investigations.—HELEN HAYS, 14 East 95th Street, New York, New York 10028 and HELEN M. HABERMANN, Department of Biological Sciences, Goucher College, Towson, Baltimore, Maryland 21204.

Turkey Vultures land on vessel in fog.—On 2 November 1968 the yacht 'Gay-Ted,' a 57-foot, twin-screw diesel cruiser, was crossing Florida Bay, coming from Marathon headed for Cape Sable. The weather was dead calm, the sea was smooth, and a low-lying fog on the water cut visibility to about ½ mile. The vessel was proceeding at a speed of about 19 knots when a flock of about 50 Turkey Vultures (*Cathartes aura*) came out of the fog and attempted to land on the ship. The speed of the ship was too great for them, but one bird did succeed in landing on the roof of the aft deckhouse. It soon fell off, dropped into the wake, and drowned. We then slowed down to about 10 knots, and the whole flock promptly landed all over the ship from stem to stern—we counted 55. The vessel was about 8 miles from the nearest land at this point.

The birds were so exhausted that they would let us come up and actually touch them. Some of them after landing regurgitated partly digested mice and other objects on the deck. The birds showed no interest whatsoever in the passengers, among whom needless to say they caused some apprehension. The vessel certainly did look like a "ship of death" going through the fog with its load of vultures.

The speed of the vessel was then returned to 19 knots, and the Turkey Vultures stayed aboard. In about 20 minutes the fog started thinning a little and the shoreline of Cape Sable became visible approximately 3 miles away. The birds saw the

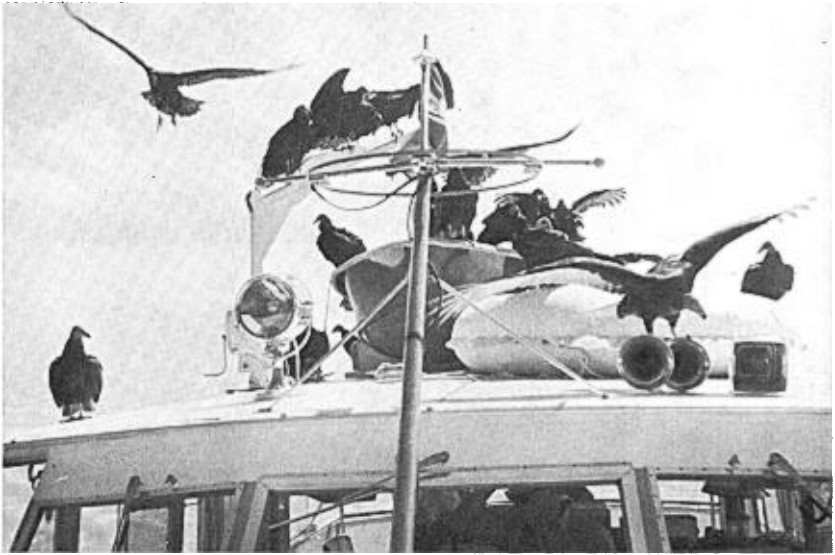


Figure 1. Turkey Vultures on the 'Gay-Ted' in Florida Bay.

shoreline and about half of them took off and headed for Cape Sable. Of the some 25 that took wing, 12 tried to return to the vessel after they had flown out about $\frac{1}{4}$ mile. Three of these dropped into the water exhausted and didn't make it.

At Cape Sable light we changed course eastward toward Flamingo. When the vessel got within a mile of land, the remaining birds started taking off, and they apparently did make it back to the Everglades. After docking at Flamingo we found one vulture still on the vessel under the seat in the dinghy—it soon flew off.

We have discussed the incident with many professional captains and guide-boat operators in the area, and we have yet to hear of a single similar occurrence involving vultures.—WILLIAM R. MOTE, *Mote Marine Laboratory, Sarasota, Florida 33581*.

Black-throated Gray Warbler (*Dendroica nigrescens*) at Madison, Wisconsin.—The morning of 5 December 1968 Charles N. Lloyd, of the Wisconsin Department of Natural Resources, found on the steps of his home a warbler that he submitted to George J. Knudsen of the same department for identification. Mr. Knudsen identified the bird, a female, correctly and gave it to me. The night of 4 December there were strong westerly winds and a low of 28°F. The specimen is UWZM 20061 and constitutes the first record of the species for the state.—A. W. SCHORGER, *Department of Wildlife Ecology, University of Wisconsin, Madison, Wisconsin 53706*.

First specimen of the Lark Bunting from Alabama.—On 3 January 1969, a bird I failed to recognize appeared at the ground feeding station in our backyard. It fed regularly for 3 days before I was able to collect it. The specimen was sent to George H. Lowery, Jr., who identified it as an immature male Lark Bunting (*Calamospiza melanocorys*). It is now on deposit at Louisiana State University Museum of Zoology. Thomas A. Imhof, author of "Alabama Birds," confirmed that the specimen is the first for Alabama.—MERRIAM L. MILES, *Sutton Place, Orrville, Alabama 36767*.