25° 19′ S and approximately 70° 09′ W, at an altitude of 553 m. This section of the railway runs through a region that may be described as absolute and super desert. Close to the *Piranga* was a mummified goatsucker (*Caprimulgus longirostris*), which suggests that both birds flew into the lights of the train.

In July 1968, at the request of Philippi, William R. Millie forwarded the mummified specimen to me for identification. After comparing the specimen with *Piranga rubra* skins in the collection of the American Museum of Natural History, New York, I asked Eugene Eisenmann to give me his critical analysis of the specimen. In December 1968 he wrote me that he considered the bird a Summer Tanager, of the eastern form, *P. r. rubra*, on the basis of wing formula and known status as a long-distance migrant, and presumably a female. He found the color and other characteristics, notably the more pointed wing, to fit *P. r. rubra* rather than any race of the Hepatic Tanager, *P. flava* (an essentially sedentary species unknown in Chile but found in neighboring countries).

Although Philippi had informed me that he intended to prepare a note on this record for the Auk, he had not done so, and his widow, Ruth R. Philippi informed me that to the best of her knowledge these data had not been published. The credit for this record is due, of course, to Philippi, Millie, and the unknown station master who found the bird. I am indebted to Eisenmann for his careful diagnostic identification of the specimen which was returned in 1968 to Philippi.—KENNETH W. PRESCOTT, *15 Timberlane Drive, Pennington, New Jersey 08534.* Accepted 15 Jun: 73.

Incomplete wing molt and erythrism in Red-tailed Hawks.—While banding raptors on Martha's Vineyard Island, Massachusetts, I captured six adult Red-tailed Hawks (*Buteo jamaicensis*) between 28 March and 31 March 1973. All the birds were year-round residents; when caught they were hunting with or near their mates. One bird was a recapture from 30 March 1972, caught 500 yards from the spot where it was taken the year before.

The bird that was recaptured was an extremely light individual, with a pure white breast and an almost pure white head. The wing feathers molted in 1972 showed a very striking "red" (similar to the tail) color, which was not present in the previous year's plumage. When Brown and Amadon (1968, Eagles, hawks and falcons of the world, New York, McGraw-Hill Book Co., p. 41) stated that erythrism is known in Red-tailed Hawks, they were referring to the reddish phase of the western subspecies, *B. j. calurus*, not to the unusual situation developed in this individual. The bird showed the erythrism in the wing feathers only, particularly the primaries and secondaries, but also in the upper wing coverts and alulas.

The melanoblasts, a migratory element from the neural crest in early embryonic development, are secondarily located at each feather follicle, where they produce the color and perhaps the pattern of each feather. The melanoblasts normally act in one manner for the immature plumage and then in a different manner for the adult plumages. The recapture of this individual demonstrates that they can act in a third fashion. The fact that each greater covert of an erythristic remige is erythristic itself suggests that the migrating melanoblasts for each remige and its covert form a unit.

While processing the birds, I noticed that five of the six had not completed the wing molt from the year before. Body and tail molts were complete. Both primaries and secondaries that were a year older than adjacent feathers were

TABLE 1
IRREGULAR AND INCOMPLETE WING MOLT IN FIVE OF SIX RED-TAILED HAWKS

Band no.	Capture date		Primary										Secondary									
			1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
877–12704	30 March 72	R:	All new										N	N	O	O	N	N	O	O	O	O
		L:	All new										N	N	O	N	N	N	O	O	O	N
	31 March 73	R:	N	N	N	N	N	N	O	O	N	N	O	O	N	O	O	N	N	N	N	N
		L:	N	N	N	N	N	N	O	O	N	N	O	O	N	N	N	O	N	N	N	O
877–12713	28 March 73	R:	N	N	O	N	N	O	O	N	O	N	O	O	N	N	O	O	O	N	N	N
		L:	N	N	O	N	N	O	O	N	O	N	N	O	N	N	O	O	O	N	N	N
877–12714	28 March 73		All new										All new									
877–12716	28 March 73	R:	N	N	N	N	O	O	N	O	N	O	O	O	O	O	N	N	N	N	N	N
		L:	N	O	N	O	N	O	N	N	N	N	O	O	O	O	N	N	N	N	N	N
877–12717	29 March 73	R:	N	N	N	N	O	N	N	O	N	N	N	N	N	O	N	N	N	O	N	N
		L:	N	N	N	N	O	N	N	O	N	N	N	N	N	O	N	N	N	O	N	N
877–12718	31 March 73	R:	O	N	O	N	N	O	O	N	N	N	O	N	O	O	O	O	O	N	N	N
		L:	O	N	O	N	N	O	O	N	N	N	O	O	O	N	O	N	O	N	N	N

[1] N = feather grown in during the last molt, O = feather not molted in the last molt.

readily apparent from the pronounced bleaching and wear of the vanes. The pattern of the previous molt was not sequential in four of the five (see Table 1).

Irregular molting of the primaries and secondaries has been reported (Stresemann and Stresemann 1960, J. Ornithol. 101: 373–403) for certain genera, including *Buteo*, of all Accipitridae subfamilies except Circinae, Milvinae, Perninae, and Elaninae. The Stresemanns suggested that this molt pattern evolved from the primitive pattern of molting primaries 1 through 10 in sequence in order to reduce the stress on ingrowing feathers and to minimize the loss of flight efficiency.

Certain large eagles are reported to take more than a year to complete a wing molt (Spofford 1946, Auk 63: 85), but I have seen no account of this phenomenon in *Buteo*. Presumably these birds stop molting sometime in the fall in order that no feathers will be growing in during times of food shortage. Several factors suggest that prey is abundant year-round on this island; these include the mild climate (snow cover rarely lasts more than a few days), the fact that the entire Red-tail population (between 10 and 20 pairs) appears to be nonmigratory, the large number of migratory raptors that winter on the island, and my own snap-trapping data. I would be very interested to compare data with anyone who has similar observations of resident or wintering raptors showing incomplete molts.

I thank Dean Amadon and Walter Spofford for their comments and suggestions on the manuscript. These observations were made while conducting a research project supported by the Harris Foundation.—RICHARD O. BIERREGAARD, JR., *c/o Felix Neck Wildlife Sanctuary, Box 1055, Oak Bluffs, Massachusetts 02577.* Accepted 15 Jun. 73.

Copulatory and vocal behavior of a pair of Whiskered Owls.—Many aspects of owl behavior are poorly known because of the birds' noctural habits. This is particularly true of Whiskered Owls (*Otus trichopsis*), which occur in the United States only in southeastern Arizona (A.O.U. 1957). Marshall (1957, 1967)