

Although the Argentine race is technically the "new" one and must be named, it is, of course, the well-known one and well represented in museums. I shall therefore reverse the usual descriptive comparisons and describe the characters by which the Bolivian (nominate) race is distinguishable from the Argentine.

To generalize, the Bolivian specimens are everywhere paler, with lighter brown and rufous colors. Specifically, in the Bolivian birds:

1. The long, anterior crest feathers are more gray-brown, less blackish, with the longest feathers relatively broader. In all specimens of this species, the anterior crest feathers are dark, the posterior rufous; in Bolivian birds there are more long rufous (*i.e.*, fewer dark anterior) feathers in the crest.

2. The upperparts in general (nape, sides of face and neck, back, rump, upper tail coverts) are paler rufous.

3. The tertials are paler, more rufescent (less blackish) brown.

4. The rectrices are paler, the central pair having shafts hardly darker than the webs (in Argentine birds the shafts of the central rectrices are blackish brown).

5. The general tone of the underparts is paler, but this is more subtle than the difference in dorsal coloration; best marked on throat and under tail coverts.

6. The throat and under tail coverts are not only paler rufous, but have the light tips of fresh feathers less whitish, contrasting less with the ground color.

The darker bird, which occupies the range as given by Peters (*loc. cit.*) for the species as a whole, may be called:

Pseudoseisura lophotes argentina, new subspecies.

Type: Carnegie Museum No. 137487; adult male in freshly molted plumage, collected at La Cocha, Tucumán, Argentina, 9 August 1956, by Claes Chr. Olrog.

The type specimen is one of a small collection of Argentine birds obtained by Carnegie Museum through the generosity of Dr. F. W. Preston. Specimens in the American Museum of Natural History were examined through the courtesy of Dr. Dean Amadon.—KENNETH C. PARKES, *Carnegie Museum, Pittsburgh, Pennsylvania*.

A Texas Record of the Black Brant.—The A.O.U. Check-list (5th ed., 1957, p. 64) lists the Black Brant (*Branta nigricans*) as of only casual occurrence in Texas. Wolfe (Check-list of the Birds of Texas, 1956, p. 14) gives only one record of a bird shot in Tom Green County in 1884 and a sight record near Brownsville in 1938. On 28 December 1956, I was goose hunting in Wilbarger County, Texas, about 15 miles south of Vernon. An adjacent hunter, whose name I did not learn, shot a black goose from a flock of Canada Geese (*Branta canadensis*) that had been decoyed to a typical wheat field pit blind. This goose was picked out and shot because it was observed to be entirely different from any of the other geese in the flock. Recognizing that any brant was an unusual species for Texas, I secured the bird as a specimen. It was still warm when it came into my possession. A colored photograph of this bird has been identified by Dr. John W. Aldrich as being *Branta bernicla nigricans*. Unfortunately, neither I nor the taxidermist sexed this specimen. The mounted bird is now in my possession.—J. C. HENDERSON, *Box 5132, Midland, Texas*.

Two Significant Calling Periods of the Screech Owl.—In 25 years of casual and serious studies made on the common Screech Owl, *Otus asio naevius*, in my neighborhood of Kripplebush in Ulster County, New York, I have been able to piece together definite information on the calls of the local population of this little

owl. In checking considerable ornithological literature, I have been unable to find reports of two calling periods relative to the time of year. Bent, in his "Life Histories of North American Birds of Prey," Part 2, has given an interesting account of Screech Owl calls, but no mention is made of seasonal differences in calling habits. For so common a little owl, it seems incredible that these calling periods have escaped the attention of ornithologists and naturalists.

Sometime during middle or late January, the Screech Owl at this latitude begins the spring "mating call," *who-who-who*. Infrequent at first, this "mating call" may become a nightly owl song period by March and through April. I have not noted much variation in this spring "mating call," the mellow-sounding *who-who-who's* remaining about a steady tone, with a slight inflection, lasting a few seconds to die away abruptly and a little later repeated. During May and June, the call is not heard with regularity. By July, the young are fully fledged and are sometimes heard giving their guttural calls. The "mating call" at this time has decreased in frequency and is replaced by the familiar tremulous whistle or so-called "screech" that becomes the regular call from this period until January. That the tremulous whistle is often followed by a *who-who-who* closely resembling the "mating call" is cause for some confusion, but the nature of its delivery as compared with the spring call is sufficiently altered so as to make differentiation possible.

My observations indicate that Screech Owls have two distinct call periods summarized as follows: After a brief period of silence in early January, the "mating call" is started and used throughout the spring months and until mid-summer. No "screech" is used during this time except during the mid-summer change-over when both calls may be heard. As the change-over is completed, the "screech" becomes the regular late summer and fall call, lasting until January when again the calls are switched.—FRED HOUGH, *Accord I, New York*.

Coloration of *Pharomacrus mocino*.—The present note is to put on record some observations made a number of years ago that I am no longer in a position to repeat or confirm. It is my hope that someone with access to an electron microscope and a spectrophotometer will do this. Similarly, I am not able to document properly some observations and references to literature.

The basic facts are that the male quetzal is largely brilliant green above and bright red below and that these two colors are very nearly complementary. The apparent color of the upperparts varies with the angle of view and of incidence of the light from red to deep blue. The relation between angle and color is that proper to interference colors. The underparts show no indication of interference colors. Professor Hans Mueller (Massachusetts Institute of Technology) agreed that the main color of the upperparts was caused by interference but that there might be a trace of diffraction color. The latter source is common in insects but has never been found in birds.

The ventral red feathers contained a pigment whose solubility and color indicated that it was probably a carotenoid.

The barbules of the dorsal feathers viewed by transmitted light under the microscope were "blood" red. No granulation of the pigment was seen. So far as I know the pertinent literature, those feathers that show interference colors are stated to be pigmented with melanin, and this pigment occurs in discrete granules resolvable with the light microscope. I could find no pigment whose solubility suggested carotenoid. A caustic digest yielded a dispersion whose absorption spectrum was nearly the same as that from an appropriately diluted digest of