

oropendolas continued to fly from tree to tree, the male leading the others, in a nearly circular path. As they flew across a large open area I could see that the male oropendola was carrying something in its bill. The male stopped and while manipulating it in the bill dropped a young *Caryothraustes* to the ground. The *Caryothraustes* was fully grown but still in nearly complete juvenal plumage, having just begun the postjuvenal molt. The carcass was bleeding from one leg, probably not a mortal wound, and from a puncture in the parietal region on the righthand side of the skull. The skull had not yet started to ossify and probably was very easy for the oropendola to pierce. It appeared to be this wound that killed the bird.

Very possibly oropendolas, probably of all species, are facultative predators, especially when prey is readily available during the course of regular foraging activities in a fruiting tree coincidentally visited by smaller species of frugivorous birds. A facultative predator of this sort might also have a marked influence on the pattern of utilization of fruiting trees that are such an important part of the exploitation patterns of many tropical frugivores (Land, *Wilson Bull.*, 75:199-200, 1963).

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Blackpoll Warbler on winter quarters in Rio de Janeiro, Brazil.—The Blackpoll Warbler (*Dendroica striata*) is one of the most common North American migrants on the coast of Venezuela (Beebe, 1947). More to the south the records of this species are rare and spotty, probably because of the lack of observers and also because fewer birds may reach so far. From Brazil there seem to exist only two records, both from the northern border of Amazonia: upper Rio Negro and Rio Branco (Pinto, 1944:433). Apparently, no species of migrant North American warbler has hitherto been recorded from eastern Brazil south of the Amazon. The only other records of the Blackpoll known to us from southeastern South America are from the Argentine (1—Misiones, and 1—Buenos Aires); there are records in western South America as far south as Valdivia, Chile (once) (Meyer de Schauensee, 1966:445). Migration from the Venezuelan coast to the region of Rio Negro and the reappearance in the interior of the Argentine could suggest a route used by certain other northern birds, such as the Bobolink (*Dolichonyx oryzivorus*), and apparently also the Connecticut Warbler (*Oporornis agilis*). Such species, however, are not usually found in eastern Brazil (Sick, 1968:268). The Blackpoll Warbler winters also in the Guianas (Snyder, 1966), including Surinam (where taken three times in November, December, and February (Haverschmidt, 1968:371)). According to Meyer de Schauensee (1966) the reported dates from South America run between September and April.

On 28 January 1969, I noted for the first time the presence of a Blackpoll Warbler in Rio de Janeiro. I heard a call unknown to me in that region, coming from a bird in a large tamarind tree (*Tamarindus indicus*) which spreads its crown at the height of our house, situated on a steep slope at Santa Teresa, near the very center of the city of Rio. It was not until 4 February that I was able to see the bird well enough to identify it as a male Blackpoll. The bird was observed again in the leafy branches of that tree, feeding on small insects (probably Diptera), which were swarming around its perch. On 6, 21, 22, and 28 February I recorded the Blackpoll again, in the same or in a neighboring tamarind, usually in the afternoon. The conditions were so similar that I assume it was the same individual. The bird was noted to the beginning of May.

Although the assumption that only one individual was involved is hypothetical, the circumstances are nonetheless interesting, as information about the behavior of northern migrants on their winter quarters in South America (Schwartz, 1964) is scarce. On 4, 5, 7, 8, 10, 11, 13, 16, 18, 23, 25, 26, and 30 March I noted the Blackpoll again. Most of these observations were made, like the former ones, in the late afternoon, perhaps because at that time the bird became restless and noisier, similar to thrushes before roosting. The warbler continued calling well into twilight. In nearly all cases the warbler was detected by its voice.

On 4 March I heard the bird singing for the first time (only one short song). At that time the characteristics of the adult male (contrasting black and white pattern of the plumage and yellow legs and feet) became more distinct. Once, to roost, the bird entered one of the cypress bushes adorning a neighboring garden, possibly attracted by a remembrance of its native conifers in the northern hemisphere.

In April the warbler was recorded on 5, 6, 7, 9-13, 15, 16, 19, 20, 24, 26, 27, and 30. On 12 April the Blackpoll sang frequently for the first time. From that time on, I noted the warbler often both in the morning and in the afternoon. The observations of Blackpolls continued during May, on the 2nd, 3, 13, and 16, although I suspect that 3 May was the last day that the particular individual first noted in January was recorded. On 13 May there were two, or probably three, Blackpolls present in the study area in Santa Teresa, among them one female: the first time I saw that sex. The last definite record for Blackpolls in Rio for that season was on 16 May.

It was on 31 March and on 18 and 24 April that I had realized the presence of more than one individual Blackpoll in Rio. On these days I observed several solitary individuals in Quinta da Boa Vista Park, five km from Santa Teresa, feeding also in dense tamarinds. These noble trees, frequently cultivated in Rio, may be especially attractive for Blackpolls as a habitat niche since their leaves are composed of numerous leaflets, which may to a certain degree suggest the needles of northern coniferous forests. The Blackpolls observed by me were usually in the shaded interior of the upper part of the crown.

A study of several species of warblers on their wintering grounds showed that most of them fed in a manner similar to that used in the nesting region (MacArthur, 1958). Habitat-niche selection may be more important to most warblers than habitat selection (Parnell, 1969). Blackpolls are unable to find a real corresponding habitat on their winter quarters in tropical South America.

In Rio the Blackpolls met on some occasions with intra-Brazilian migrants coming from the cooler south of that country, or from the nearby mountains, Serra do Mar. For example on 20 April the warbler was present in Santa Teresa together with some Swallow-Tanagers (*Tersina viridis*) and on 24 April at Quinta da Boa Vista with a White-crested Tyrannulet (*Serpophaga subcristata*), species not breeding in the city of Rio de Janeiro. On 13 May it was suggestive that some warblers could have arrived in the previous night from the south, as apparently did some Yellow-legged Thrushes (*Platycichla flavipes*) and one Pale-breasted Thrush (*Turdus leucomelas*). On 29 March I recorded two Peregrines (*Falco peregrinus*) flying overhead in Santa Teresa, compatriots of the Blackpoll. Except for some shorebirds, only a few migrants from the north come to Rio.

The continued presence of the Blackpoll in Rio well into May coincides with the very late arrival of that species on its breeding grounds. The Blackpoll is one of the last warblers to return in the northern hemisphere spring.

The Blackpoll must be irregular or very uncommon in Rio. Otherwise I would surely have found the birds previously at Santa Teresa, which is particularly favorable for observations and where I had lived for the past 14 years.

Since writing the above I have learned that a male Blackpoll Warbler was collected at the Ilha Comprida, São Paulo, on 16 March 1969 by H. Misch.

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The humerus of the Early Miocene cracid, *Boreortalis laesslei* Brodkorb.—

While examining the fossil bird collections in the Museum of Comparative Zoology, Harvard University, I found a distal end of a left humerus (MCZ 7068) from lower Miocene deposits, Thomas Farm locality, Gilchrist Co., Florida. This humerus was subsequently identified as that of a cracid. Brodkorb (*Wilson Bull.*, 66:180-183, 1954) has described a new genus and species of cracid, *Boreortalis laesslei*, from the same deposits in which the Harvard humerus was found. The type of *B. laesslei* is a distal right tibiotarsus and cannot be compared directly with the humerus, but both elements are from a cracid of about the same size, and the morphology of both suggests a relationship to the Recent genus *Ortalis*. Hence, it is possible to assign the humerus to *B. laesslei* with some confidence.

The Pierce Brodkorb Collection at the University of Florida contains another humerus from Thomas Farm that also can be assigned to *B. laesslei*. This specimen, a distal end of a right humerus (PB 2061), is very fragmentary and lacks the external condyle. A direct comparison of PB 2061 with MCZ 7068 shows that the humeri are nearly identical.

The humerus of *Boreortalis* is very similar to those of *Ortalis* but differs in the following characters: (1) the external condyle is relatively heavier and slightly more robust, (2) the olecranal fossa is deeper, (3) the entepicondyle projects less distally, and (4) the shaft (just proximal to the condyles) appears slightly broader. The morphology of the distal end of the humerus is relatively uniform within cracid genera, and thus the intergeneric affinities of *Boreortalis* are not easily discernible solely on the basis of this element.