

In 1933-1935 G. F. de Witte¹ collected twenty-one specimens of *percivali* among and near the Kivu Volcanoes, at localities between 6,200 and 7,000 feet. At Mbwahi, on the mountains southwest of Lake Kivu, Guy Babault secured only *percivali*, as reported by Berlioz.² Still more recently, R. E. Moreau³ states that *percivali* was the only oriole obtained in the Kungwe-Mahare mountain forests, on the eastern side of Lake Tanganyika. It should therefore be clear that not only on Kenya and Elgon, but on the Kivu Volcanoes and on forested highlands on both sides of the Albertine Rift, *Oriolus monacha percivali* is found to the exclusion of any green-tailed form.

My own experience with this oriole in the highlands of the eastern Congo goes back to 1926-1927. Although *percivali* had been obtained in the Mpanga Forest, I never saw it or any other form of the species up on Ruwenzori. I did collect *rolleti* at the Lubilia River, not far from Kasindi. It was not until I had crossed the Semliki Valley and reached Mt. Nyemilima, northwest of Lake Edward, that I found the black-tailed *percivali* again in heavy forest at 8,100 feet. That was on the western scarp of the Albertine Rift, where we may be sure that it ranges southward for a distance of at least 260 miles to the vicinity of Uvira.

Within the Albertine Rift rise the Kivu Volcanoes, with plenty of mountain forest above 6,000 feet. There I found *percivali* common on Mt. Mikenno and Mt. Niragongo, from 6,000 to 8,000 feet, with never a sign of a green-tailed bird.

On the eastern scarp of the Albertine Rift, Grauer and I both collected *percivali* in forests just east of the Rutshuru Plain, at about 5,300 feet. Jackson and Sclater report it from Kigezi, and although there is no record from the Rugege Forest, southeast of Lake Kivu, the black-tailed race certainly extends southward to Kungwe-Mahare. But the Ufipa highland may have only *rolleti*, and we know that to be the only form in Marungu, across the lake.

It has sometimes been suggested that *percivali* might be a highland race of *O. nigripennis*. But there is no suggestion of any such intergradation between these two forms as we know to exist between *percivali* and *O. monacha rolleti*. Many authors have regarded *brachyrhynchus* and *laetior* as races of *O. monacha*. With this I disagree because the juvenal plumages are very different; and I find scant evidence of any intergradation in western Uganda, where *laetior* is a common bird in the heavy forests, and *rolleti* rather uncommon in the savannas.

As for *percivali*, the correct conclusion is perfectly clear. It is a valid race of *Oriolus monacha*, or of *O. larvatus* if Professor Neumann's opinion is correct, and lives in forested highlands above 5,000 feet from Mt. Kenya and Mt. Elgon westward to the Kivu Volcanoes, the highlands west of Lake Edward and Lake Kivu, southward to the vicinity of Uvira and to the Kungwe-Mahare highland east of Lake Tanganyika.—JAMES P. CHAPIN, *American Museum of Natural History, New York, N. Y.*

Description of a new hybrid warbler.—On August 30, 1938, I was on Cat Island, Mississippi, nine miles offshore from Gulfport, engaged at the time in a study of the fall migration along the Mississippi gulf coast. Certain specimens of taxonomic interest were taken that day, among them a warbler that I found I was unable to identify. Superficially it resembled a female Redstart, but on closer examination differences were noted that showed clearly that this bird could not be referred to

¹ Schouteden, Expl. Parc. Nat. Albert, Inst. Parcs Nat. Congo Belge, Brussels, fasc. 9: 136, 1938.

² Bull. Mus. Paris (2) 8: 492, 1936.

³ Ibis, 85: 394, 1943.

the genus *Setophaga*. When opportunity offered, this specimen was compared with material in the U. S. National Museum, and the conclusion was finally reached that it was beyond any question a hybrid between the Redstart (*Setophaga ruticilla*) and the Parula Warbler (*Compsothlypis americana*). Hybrids between these two widely separated genera might, at first glance, seem highly improbable, but it should be remembered that other apparent examples of this nature have been reported in past years. Furthermore these two species are known to nest throughout much of their range in the same wooded swamp, or stretch of bottom land, where there is continual contact between the individuals occupying any given area. It is reasonable to suppose, then, that under certain conditions, interbreeding might occur, even though evidence of such hybridization has not been recorded heretofore.

As stated above, this specimen bears a superficial resemblance to the female Redstart but close scrutiny reveals marked differences. The bill is not broadly wedge-shaped as in the Redstart, and the rictal bristles are developed only to the same degree as in the Parula Warbler, in this respect differing markedly from the genus *Setophaga*. The wings have the middle and greater wing-coverts broadly tipped with dull white, forming two distinct bands, and there is a complete absence of the speculum on the inner remiges. The tail, although noticeably longer than in the genus *Compsothlypis*, lacks the yellow characteristic of *Setophaga*; this basal portion of the outer rectrices is dull white instead. The color pattern of the upper parts is distinctly that of the Parula Warbler, and white duller in hue, the olive green of the mantle is in contrast to the color of the lower back. On the other hand, the under parts suggest the Redstart, the throat being dull white rather than yellow, with the median portion of the breast tinged with light salmon. Actually this specimen has an odd mixture of the characters ascribed to these two genera, and this is probably best shown by the tail pattern. The tail is shaped like that of the Redstart, although the individual feathers are acute and relatively broad. The pale areas reach nearer the tips of the feathers than in the Redstart, but not as near the tips as the terminal edges of the white spots on the tail of the Parula Warbler. In appearance they seem as long as in the Redstart but since the dark tips are shorter the proportion is different. A close examination shows, too, that they do not reach quite so distinctly to the bases of the rectrices as in the Redstart.

Description.—Pileum and hindneck plain mouse gray; back, scapulars and rump dull olive green; upper tail-coverts dusky; wings dusky, with dark olive edgings; middle and greater wing-coverts dusky, washed with dull olive green and broadly tipped with dull white, forming two distinct bands; basal portion of two outer rectrices, for two thirds of their length, dull white, with the inner edge tinged with yellow; the inner third rectrix with a small white spot near the center; terminal portion and other rectrices dusky; sides of head paler gray than pileum; malar region, chin, and throat dull white; chest washed with a broad band of yellow and light salmon; rest of under parts largely dull white but the sides and flanks gray with a tinge of yellow; wing, 57.1 mm.; tail, 46.2; culmen, 9; tarsus, 15.8.

In connection with the measurements, it is interesting to note that this unusual warbler is smaller than the Redstart but larger than the Parula Warbler. Ridgway ('Birds of North and Middle America,' U. S. Nat. Mus. Bull. 50, part 2: 481 and 724, 1902) gives the average measurements for these two species as follows:

Redstart	wing, 61.1	tail, 54.1	culmen, 8.8	tarsus, 17.1
Parula Warbler	wing, 54.7	tail, 39.6	culmen, 10.1	tarsus, 16.1

I wish to acknowledge to Dr. Alexander Wetmore and to Dr. John T. Zimmer my appreciation for their critical examination of this specimen, and for their able diagnosis of the characters demonstrated, and to George H. Lowery, Jr., for his criticism and comments in connection with the preparation of this paper.—THOS. D. BURLEIGH, *Fish and Wildlife Service, Baton Rouge, Louisiana.*

The wing-formula in *Empidonax trailli*.—Current literature places the Alder Flycatcher and its geographic representatives among those species of *Empidonax* that have the outer (tenth) primary longer than the fifth. This is only partially correct. It is true that, in *E. t. trailli*, the outer primary is normally a little longer than, or equal to, the fifth; but in *E. t. brewsteri* it is almost invariably shorter than the fifth. The difference, though slight, is so constant that I find it very important in the determination of specimens, together with the less olivaceous coloring of *brewsteri*. Size of bill does not seem important to me. It is interesting to note here the close parallel to the differences between *E. flaviventris* and the northern races of *E. difficilis*.

The taxonomy used herein is that of the 1931 A. O. U. Check-List. I do not wish to enter into a discussion of geographic variation or distribution at this time, when my notes are not available to me. It may be well to emphasize, however, that immatures are browner than spring adults and must not be compared with them. Some of the confusion which has occurred (especially in Oklahoma) is due to such comparison.—ALLAN R. PHILLIPS, *Museum of Northern Arizona, Flagstaff, Arizona.*

Some differences between the Wright's and Gray Flycatchers.—During the long history of confusion of Wright's Flycatcher (*Empidonax "oberholseri"*)¹ and the Gray Flycatcher (*Empidonax "wrighti"*)², the impression has arisen that the two species are extremely difficult to distinguish in the hand, and impossible in the field. The former species is likewise thought to be closely similar to Hammond's Flycatcher (*Empidonax hammondi*). The writer's studies of the genus *Empidonax* in Arizona, both afield and in the museums, have brought out some previously neglected criteria to help distinguish these species.

In the field, I have repeatedly observed that the Gray Flycatcher wags its tail in the manner of a *Phoebe*, though less vigorously. This is in contrast to the tail-jerking motion that generally characterizes the genus *Empidonax*. On the few occasions on which I have shot a tail-wagging *Empidonax* from a distance, it has proved to be a Gray Flycatcher. I believe that this is a constant character; I have never seen a Gray Flycatcher jerk its tail, nor have I seen any other *Empidonax* wag its tail. Collectors should give this matter the very closest attention. If I am correct, the Gray Flycatcher, far from being among our most difficult species, is the easiest *Empidonax* to identify afield. There are other points that I find helpful, too. A fresh-plumaged Gray Flycatcher, especially a fall immature, is such a clear, clean, pale gray and white (devoid of olive tones), with rather conspicuously white-edged tail, as to be fairly distinctive, and the yellow base (in life) of the lower mandible is a reliable character at close range. Then, too, the Gray Flycatcher at all seasons frequents more open country than is favored by other *Empidonaces*, being found characteristically in open brush instead of dense bushes or trees. I do not mean to imply that any member of this genus is easy to identify

¹ *Empidonax wrighti* of the A. O. U. Check-list, fourth edition, 1931.—Ed.

² *Empidonax griseus* of the Check-List.—Ed.