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## A NOTE ON THE FIRETHROAT AND THE BLACKTHROATED ROBIN

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While on a visit to the U.S.S.R. recently, I had the opportunity of examining two specimens of the small chat, the Blackthroated Robin, collected by Berezowsky and Bianchi and described by them in 1891 as "*Larvivora*" obscura. Both are adult males in fully adult plumage and are in the Zoological Museum in Leningrad.

Also in the Leningrad collection is an adult male specimen of "Calliope" pectardens David. Due to the kindness of Dr. A. Ivanov, I was able to examine these specimens closely. Later in London I examined the series of pectardens and the single male obscura which have already been reported on by Goodwin (1956, Bull. Brit. Orn. Cl. 76: 74-75). Mr. H. G. Deignan has also kindly supplied me with information on the fine series of pectardens in the U. S. National Museum.

Goodwin and Vaurie (1956, Bull. Brit. Orn. Cl. 76: 141-143), have published their comments on these two species, bringing forward the opinion that both were color phases of a single species. In connection with studies on the subfamily of the thrushes for the Peters' "Checklist," I was anxious to determine this matter to my own satisfaction.

The principal problem as to the identity or discreteness of these two populations is lack of specimens showing stages of plumage. In the British Museum and the U. S. National Museum collections there are fine series of *pectardens* from Yunnan, southeast Sikang and southeast Tibet. A single male adult *pectardens*, perhaps a post-breeding season bird has been taken in southwest Shensi. There are many immature males, two presumed females (so identified), and a young male in the spotted plumage of the nestling. The specimens of *obscura*, however, are confined to adult males, so that the differences or resemblances between the two populations must be considered only as between the adult male plumages. These males of *obscura* come from southeast Kansu, and southwest Shensi in west China.

The obvious difference between the adult males is that the throat and breast are black in *obscura*, while in *pectardens* an approximately similar area is orange, and in addition whereas both species have the sides of the neck black, there is a white patch on the side of the neck in *pectardens*. Goodwin and Vaurie's thesis (1956, *tom. cit.*) is that this color difference is not a difference in pattern, that, therefore, it is a simple genetic replacement, and that the species has a dimorphic breeding plumage, as has been noted in some species of wheat-ears (*Oenanthe*).

Examination of the specimens in Leningrad and other museums has inclined me to disagree. While extremely close the patterns are different as the following sketch shows.



When examined closely it can be seen that the black edging to the upper parts is more extensive in *pectardens*, extending onto the bristle-like forehead feathers, over the eye, and more broadly and in a different pattern along the sides of the neck.

#### Sept. 15, 1957 Firethroat and Blackthroated Robin

The physical measurements of these birds do not appear to differ significantly. My measurements, while not agreeing exactly with those of the authors cited, are roughly similar;

	wing	tail	culmen (in mm.)
obscura 3ර ර	65 - 71.5	$50,\!50,\!54$	15-17
pectardens 10 ් ්	64 - 71	52.5-58(mean 55.7)	14.5-17

There appears to be a slight tendency towards a longer tail in *pectardens* which may be a function of its habits. However, comparing the wings of the specimens, there is a difference. In *obscura* the primaries in freshly moulted birds are of a broader, more rounded appearance, the 4th and 5th tending to be equally long, the third tending to be shorter. In *pectardens* on the other hand the primaries in freshly moulted birds are individually more pointed in shape. In these birds the 4th primary tends to be longest, the 3rd and 5th more equal, with a slight tendency for the 5th to be the longer of the two.

In juvenal *pectardens* the 4th and 5th primaries are equally long, as in the adult of *obscura*. But a young  $\delta$  *pectardens* taken in January in northern Burma (B.M.coll.) on winter grounds, already has the more pointed wing of the adult. This would indicate that in this species there is a complete post-juvenal moult, involving the wing feathers, even though the assumption of full adult plumage only comes gradually in successive later moults.

From the above it appears to me that these populations represent two distinct species, whose ranges may or may not be partly overlapping in northwest China. The northernmost species, obscura, is apparently more sedentary as indicated by the shape of the wing and indeed the paucity of specimens in collections. The more southern species, pectardens, indicates by the appearance of the wing and the occasional records of winter birds in Sikkim, Assam and northern Burma to the south of its usual range, that it is a more migratory species. In addition the minor differences of distribution of black on head, neck and sides of upper breast, serve to reinforce the more obvious, but more questionable from a genetic point of view, differences between orange and black throat patch and presence or absence of white neck spot. I believe that eventual examination of females and young of obscura will substantiate the distinctness of these two species.