

WHITE-EYES

Family ZOSTEROPIDÆ

Vol. I., p. 315; Vol. II., p. 283.

ONLY two forms of the tiny birds composing this family are native to the Malay Peninsula, and neither is well distributed in the lowlands. Both forms can, I think, be regarded as subspecies of the same bird, one being almost entirely coastal in distribution and the other, normally, a bird of the hills. In addition to these, a species commonly imported into Singapore as a cage-bird can sometimes be seen in the low trees in the Botanic Gardens in that city. This is *Zosterops japonica simplex* of China. In appearance it is rather like *Z. p. williamsoni* described below, but it is slightly larger, the upper parts are much greener and less yellow, and there is no conspicuous median yellow stripe on the under parts.

The systematic position of the white-eyes is still uncertain, and at various times they have been grouped with the babblers (*Timaliidae*); the sunbirds (*Nectariniidae*); the flower-peckers (*Dicaeidae*) and the Australian honey-eaters (*Meliphagidae*). They are, by most authors, now regarded as a distinct family. In my opinion they are loosely connected with the sunbirds through the ruby-cheek (*Chalcoparia*).

The white-eyes are all small birds, not exceeding a sparrow in size, and most of them, including the two local birds, are much smaller. The plumage is very uniform throughout the family, and normally the upper parts are olive-yellow or green, and the under parts somewhat similar, grey or whitish. Most of the species have a narrow but conspicuous ring of silky white feathers round the eye. The sexes are much alike in plumage, and the young birds are also very similar.

The family includes almost two hundred "forms," which can be grouped into far fewer species, the great majority belonging to the typical genus *Zosterops*, distributed in the warmer areas of Asia, Africa and Australasia. A few have limited migratory habits, but the birds are more usually resident wherever they are found. The two local white-eyes are tiny squat little birds, with a short squarish tail and short, rather rounded wings with ten primaries, of which the first is so small that it needs good eyes to pick it out. The bill is short and slightly curved, the edges are not serrated, but it is notched near the tip.

The tip of the tongue often has brush-like appendages, and is sometimes an elaborate structure split at the tip and curled at the edges.

KEY TO THE MALAYAN WHITE-EYES

I	{	Breast and abdomen, whitish . . .	<i>Zosterops palpebroso williamsoni</i> ,
			p. 419
		Breast and abdomen, dark grey . . .	<i>Zosterops palpebroso aureiventer</i> ,
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*Zosterops palpebroso williamsoni***The Malayan Coast White-eye**

Zosterops aureiventer, subsp., Vol. I., p. 315.

Upper parts, greenish yellow, distinctly brighter on the rump. Tail feathers, blackish. A white ring round the eye. Chin and throat, bright yellow; remaining under parts, whitish, tinged with buffy grey on the flanks. Centre of abdomen, narrowly, and under tail coverts, yellow.

Total length, about 4 in.; wing, about 1.45 in.

This white-eye is usually found in small flocks in mangroves and she-oaks (*Casuarina*) on the coast. It is found throughout the whole length of the Peninsula from Peninsular Siam to Singapore Island. Since the publication of the first volume of this work Mr A. T. Edgar has described the nesting habits in *Bulletin of the Raffles Museum*, 8, 1933, p. 161. He reports that on or near the coast of Lower Perak, where the bird nests commonly, the season extends at least from December to August, and that the tiny, neat, cup-shaped nest, composed mostly of fine grass and fibre, hangs like a cradle in the horizontal fork of a twig, part of the rim being secured to each arm of the fork. The nests were placed in trees of the mangrove association, from five to fifteen feet from the ground, and also high in rubber-trees. The average size of the pale blue eggs is given as 0.6 by 0.43 in., and the local clutch is two eggs.

*Zosterops palpebroso aureiventer***Hume's White-eye**

Vol. II., p. 283.

In appearance this form is very similar to that described above, but the breast and abdomen are dark grey with a pronounced yellow mesial streak. Unlike its relative it is found in heavy jungle, and most of our specimens come from the hills and mountains. At times, however, it is found almost at sea-level, although, in the Malay Peninsula at least, not near the coast or in open country. Robinson has made the reasonable suggestion that it changes its altitude with the season, and in accordance with the flowering of certain trees. Authenticated nests are not known to me.