

## WHITE-EYES

### Family ZOSTEROPIDÆ

THIS family, though very homogeneous, is one of uncertain position, and has variously been united to the *Timaliidæ*, the sunbirds, the flower-peckers and the Australian honey-eaters, or *Meliphagidæ*. It seems best, on the whole, to follow Baker, and to regard it as a distinct family.

The bill is comparatively short, and gently curved downwards, but not serrated at the tip, the nostril hidden by a membrane; the tongue is provided with brush-like appendages at the tip. The wing is rounded, of ten primaries, the first extremely minute or wanting; the tail is short, nearly square; tarsi, fairly long; feet, somewhat feeble.

The sexes are practically identical and the young resemble the adults.

All the members of the family are small, none so large as a sparrow; the plumage is very uniform, being green or greenish yellow above, green, yellow or grey, or some combination of these colours, beneath; nearly all the species have a ring of white feathers round the eye.

The family is a considerable one, of over a hundred species, found throughout the warmer parts of Africa, Asia and Australasia. Most of the species are sedentary, but a few have, more or less, migratory habits.

Owing to their very uniform plumage the species and their races are not easy to discriminate with any exactitude. Three or four forms, all very much alike, occur in Malaya, of which I have described the commonest, but, as the nomenclature of the local races is not yet thoroughly worked out, I have refrained for the present from attaching the subspecific name of the bird described, which is not strictly identical with any race hitherto named.

#### *Zosterops aureiventer*, subsp.

#### The Malayan Coast White-eye

*Zosterops aureiventris aureiventris* (*nec* Hume), Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 364.

**Malay Name.**—Kēlichap kunyet.

**Description.**—*Adult.*—Sexes alike. Above, greenish yellow, rather brighter on the rump; wings, externally, as the back, internally, brownish, the edges

of the inner webs, whitish. Tail feathers, brownish black, slightly edged towards the bases with greenish. Extreme forehead and an ill-defined stripe from the nostrils to the eye, bright yellow, bordered beneath by blackish; a broad ring of silky white feathers round the eye; chin and upper throat, bright yellow; flanks, drab grey, bordered towards the middle of the belly by much paler grey, almost white; rest of under tail coverts and a narrow mesial streak on the belly, reaching almost to the throat, bright yellow; thighs, greyish, tinged with yellow.

*Immature*.—As the adults, but a little darker above; eye-ring not so clear; mesial yellow stripe present.

**Soft Parts**.—Iris, dark or dark hazel; bill, plumbeous, black at the tip; feet, pale slate.

**Dimensions**.—Total length, about 4.1 in.; wing, 1.95 to 2.05; tail, 1.3 to 1.6 in.; tarsus, 0.55 in.; bill from gape, 0.55 in.

**Range in the Malay Peninsula**.—From rather north of Penang, south to Malacca. The islands of Penang and Singapore.

**Extralimital Range**.—So far as is known, the Rhio Archipelago, south of Singapore, only. The form found in Tenasserim is not this race, and that from Patani is also slightly different (*Zosterops a. williamsoni*), originally described from Central Siam (Meklong).

**Nidification**.—Chasen records very young birds from the small islands near Singapore in April, so the bird probably breeds in the vicinity from March onwards. Kellow found a *Zosterops* breeding near Perak (Simpang?) from February to May, but principally in the latter month, but it is uncertain whether his observations relate to this form or to the true *Z. aureiventer*, a much darker coloured bird. The nests which he obtained were in secondary forest in bushes or trees up to thirty feet from the ground, and were very neat little cups of grass, roots and cotton-down felled together with spiders' webs. In localities where *Zosterops* were extremely common I have obtained similar unoccupied nests placed in mangroves within a few inches of high-tide mark, at Batu on the Selangor coast. These were interwoven with strips of the papery bark of a species of *Melaleuca*, locally known as *gēlam*.

Baker describes the eggs as "not distinguishable from those of other species of white-eye"—viz. a pale whitish blue, unspotted. He gives the average dimensions as 0.61 by 0.47 in.

**Habits**.—We have never found the actual form described above at any distance at all from the sea. At times, along the coast of Selangor, it is extremely common, equally in the mangroves and among the she-oaks (*Casuarina*) that back the sandy beaches. It is met with in flocks, often of very considerable size, which are very active and restless in their movements, and not at all shy. In habits they are very like a small tit and adopt very similar attitudes. Though they certainly eat small insects, especially ants, they are, I think, in part vegetarian and pollen feeders, as when certain red-flowered species of mangrove are in bloom they may be seen investigating the interior of the blossoms very much like a true sunbird. The note, so far as my recollection goes, is a very feeble chirp.

*Note.*—Away from the sea, occasionally at quite low altitudes but sometimes at as high an elevation as 5000 ft., this white-eye is replaced by a distinctly different race, much darker green above, without the yellow loreal stripe; the throat, less brilliant yellow, and the under surface much purer, darker grey. This bird has been named *Zosterops tahanensis*, but recent investigations tend to show that it is identical with the *Zosterops aureiventer*, originally described from near Tavoy in Central Tenasserim, which has been found to extend south along the Malay Peninsula as far as the hills of Negri Sembilan.