

## MIGRATION

THE problem of migration as it affects the bird population of the Malay Peninsula is as yet almost undealt with. In a broad sense, of course, we know that certain birds are permanent residents throughout the year, that others spend shorter or longer periods with us, and that others, again, are merely casual visitors or stay with us for a few days on their way to distant climes. But beyond this, at present, our knowledge hardly goes, even in respect of the commonest winter visitors.

We know, for instance, that the Straits of Malacca are a great migration highway during the autumn months, and again, to a less extent, in the spring, and that very many birds regularly arrive and depart by this route. We know, too, that a smaller number of species do not apparently travel by sea, but seem to reach us by flight over and along the central mountain areas of the Peninsula. But almost every detail remains to be filled in. Taking one case out of many. How and from where does the golden oriole, *O. chinensis indicus*, arrive and when does it depart? As in other forms do the males arrive and depart after or before the females? This is a problem that might very well be taken up by someone interested in birds living in the north of Perak, where this oriole is at times very numerous. Other birds, equally common, whose movements demand study, are the black and grey short-tailed drongos (*Dicrurus* subspp.), which are exceedingly abundant in the north of the Peninsula. Similar instances can be multiplied almost indefinitely. Evidence, such as it is, points to the possibility that the Malacca Straits migration channel for birds coming from the north stops short at some point not far north of Malacca, and that migrants arriving in the Peninsula south of that point, and in Singapore, reach their destination by another route. But what that route is, exactly, no one knows. Observers on the coasts of Malacca, Muar, Batu Pahat, and especially at a place like Cocob, on the coast of Johore, might do much to elucidate matters.

Over the whole eastern coast of the Peninsula, from Senggora southwards, our knowledge of migration movements is practically a blank. It is probable, indeed almost certain, that many migrant birds from China, which are known to visit Borneo *en route*, land on the east coast of the Peninsula, probably in October or in early November, at the breaking of the north-east monsoon. Observation and collecting at this period is, of course, difficult and unpleasant, but the results would be invaluable. Still more interesting would

be information as to what birds visit the islands of the Tioman group, more especially the outermost, Pulau Aor, during the winter months. Unfortunately at this period the islands are accessible only with difficulty.

There is another kind of movement, not strictly a migratory one, about which our knowledge is very incomplete. Many birds which do not breed in the temperate zone appear in a district for some months in the year, and disappear completely at other times. Where do they go, and why? For instance, certain pigeons normally resident in the higher mountains visit the mangroves at certain seasons; the Malayan paroquet disappears from a district for months and as suddenly reappears. The little black-and-white cuckoo-shrike, common in Perak for months at a time, may suddenly vanish, and be absent for long periods.

To multiply further instances would be wearisome, but I have said enough to show there is ample work for the ornithologist of the future, in the Malay States, in the study of migration movements alone.

## BIBLIOGRAPHY

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