

The following day the three male blackbirds were by the beech. Later No. 1 chased No. 2, No. 1 with the usual leaves. Then came a change in tactics. No. 2 picked up a leaf (he did not know the art—it dangled out of his mouth at one end, like a pipe) and hopped after No. 1. Several times he changed his leaf, eventually holding a crisp one like No. 1, who did not swap leaves, except for dropping one at a time and adding. No. 1 and also No. 2, flew up into a tree with their leaves. It was merely a stately game. Next week, the female was seen hopping round after one of the male birds.

The four-month "war" stopped—No. 2 had played the game. Probably nesting had begun, as a week before I had seen a male blackbird flying with a worm. I do not know which of the three males the female won, but all appeared satisfied.

REVIEWS.

Secondary Song: A Tentative Classification. M. D. Lister, 1953, *Brit. Birds* 46.4 : 139-143.

All those of us who speak glibly of "whisper song" and "sub-song" should read this. The author prefers to describe a bird's normal loud specific song, which is most in evidence in spring but is given by some species at other seasons as well, as "primary song." "Secondary song" can include "whispering song" ("the very quiet, inward rendering of the primary song," audible not more than about 20 yards); "sub-song" ("the very quiet inward rendering of song which is intrinsically different from the primary song . . . It is not always easy to distinguish between the whispering songs and sub-songs of those birds such as blackbirds. . ."); "rehearsed song" (imperfect versions of the primary song); and "female song."

In New Zealand the "rehearsed song" is usually known as "part song," and the tui has a true "whisper song." It is not generally realised that such birds as the chaffinch and greenfinch have extremely quiet and sweet warbling songs which certainly are "sub-songs," and the song of the silver-eye, described by Miss N. Macdonald (*Notornis* 4.4 : 127) also falls into this category.—J.M.C.

On the Hour of Laying and Hatching of Birds Eggs. A. F. Skutch, *Ibis* 94 (1) : 49-61.

This interesting paper analyses many records of the time of laying and hatching of eggs of Costa Rican birds. Many birds lay soon after dawn and each species has its own time of laying. These show less variation in the hour of laying than those laying later in the day. Some birds lay successive eggs at 24-hourly intervals and others at 25 or 26-hourly intervals. Hatching in some species takes place a fixed time after incubation commences but in many others there is a far higher percentage that hatch in the morning whatever the time of laying (and if hatching is delayed, the eggs may fail to hatch until the following morning, a day late). It is suggested that there is a diurnal rhythm in the birdlings' efforts to break through and escape from the shell, probably due to constant warming during the night when a parent is on the nest without a break for many hours.—J.M.C.

The Antarctic Today. Edited by Frank A. Simpson, M.A., *Dip. Jour.* Publishers: A. H. & A. W. Reed, in conjunction with N.Z. Antarctic Society. Price, 47/6

New Zealand's interest in the Antarctic is important, especially in the Ross Dependency. Explorers, since the time of Sir James Clark Ross, over 100 years ago, have proved that the Ross Sea, almost ice-free in the summer months, and leading well into the heart of the land mass, is the best one for outside approach. Because the hinterland is a New Zealand dependency and the Dominion the closest base to serve it, the view has been expressed frequently that the Ross Sea-New Zealand summer air and sea routes are