

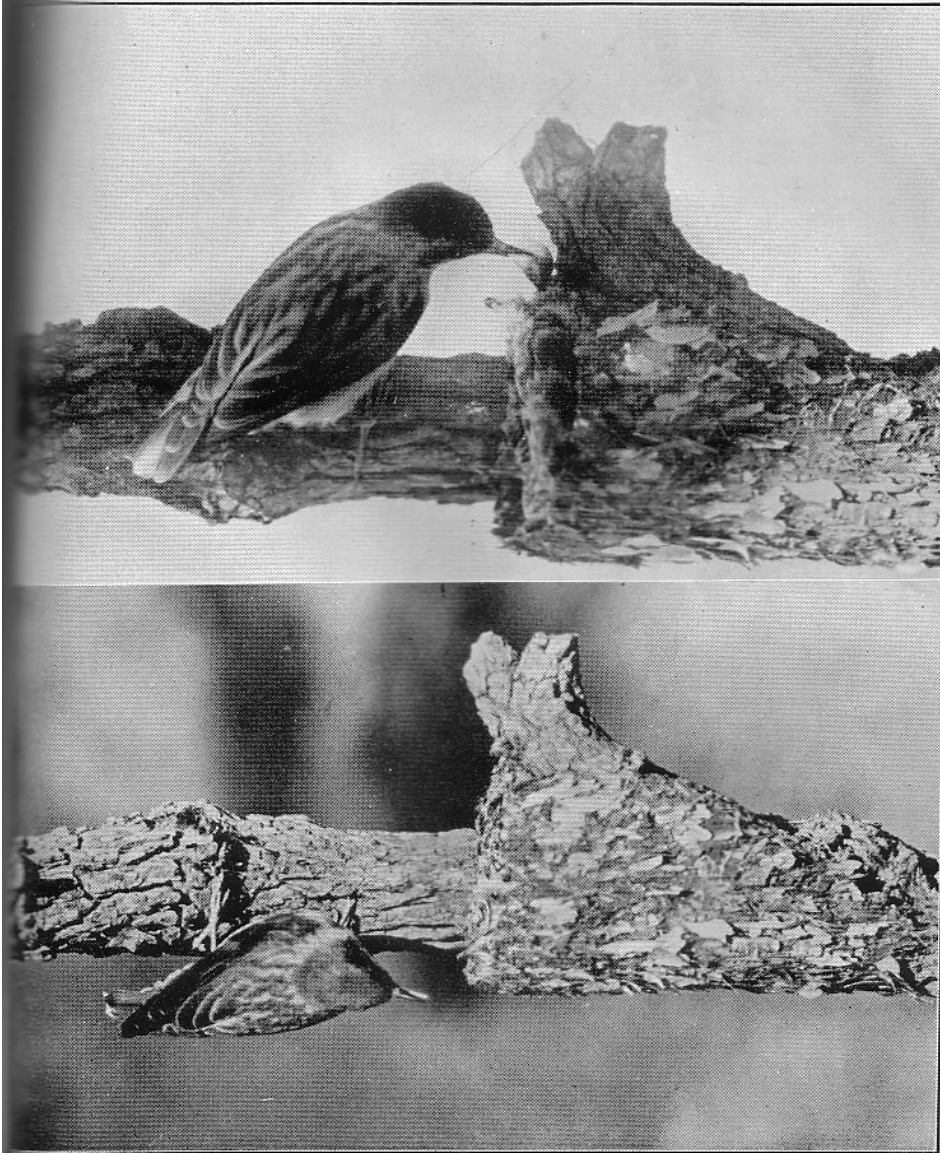
The Orange-Winged Tree-Runner (*Neositta chrysoptera*)

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For several years, in a certain locality, two pairs of Orange-winged Tree-runners have been under observation, bringing forth their successive broods. This place, which was once a secluded nook clothed with typical Australian brush, scrub, and trees, and frequented by numerous forms of bird life, is however, now shorn of its verdant beauty, to make way for the habitations of man, whose advance into Nature's solitudes is characterised by a cold disregard for all life, animal or vegetable, unless, perhaps, it adds to his wants and desires.

Notwithstanding this rather saddening concomitant of man's urban progress, an ineffaceable mental picture was obtained of a bird whose life history is made up of the inconceivably minute detail of Nature, the adequate portrayal of which baffles the art either of poet or painter. Recourse must be had, therefore, to a more pedestrian muse, in describing this bird and its habits, in such a way as to render intelligible the accompanying photographs.

The length of this bird is between four and five inches. The crown of the head is dark brown; while the rest of the dorsal feathering is more or less a duller brown, with darker streaks. The wings are dark brown with a rufous patch of a rich tone about the centre of the outspread wing, which shows up to ad-



Left—Feeding Young.
Photo, by R. A. Gilbert, R.A.O.U.

The Orange-winged Tree-Runner.

Right—Removing excreta.



The Orange-winged Tree-Runner (*Neositta chrysoptera*) catching small black ants at Nest.

Photo. by R. A. Gilbert, R.A.O.U.

vantage when the bird is flying. The tail feathers are blackish-brown, some of which are tipped with white. The under surface generally is a dull white streaked with light brown; the under tail coverts are barred with blackish brown; and the head of the female is slightly darker than that of the male.

The nest is a neat structure closely resembling the branch on which it is built, enabling it to escape the notice of all but those acquainted with the nesting habits of this bird. It is composed of flakes and scale-like pieces of tea-tree bark, or shreds of stringy bark and turpentine bark. An abundance of spiders' web is used to hold the materials together, such is the skill of this avian architect; while fragments of lichen loosely laid in the bottom of the receptacle, or worked in with spiders' web, make the only lining. A rare specimen has ornamentations of lichen around the rim, and on the outside, giving it a handsome appearance. August to December is the usual breeding period.

Two or, more often, three eggs are laid for a sitting. The ground colour is bluish-white, over which spots, speckles and blotches of glossy black and umber are spread. Many faint underlying markings of grey appear beneath the prominent surface markings. The coloration is thickest at the larger end, where it gathers together to form a conspicuous zone. The eggs take twelve or thirteen days to incubate. Cold weather hinders incubation, while warm weather hastens it. The young remain in the nest for thirteen or fourteen days. Oak (*Casuarina*), Tea or Paper-bark (*Melaleuca*), Ironbark (*Eucalyptus*), and Apple (*Angophora*) trees are most frequently selected to build in.

As the young grow from day to day, the parent birds are enabled to leave them for considerable lengths of time. Nature, in her many experiments, has taught the young the necessity of relaxing and exercising their wings before undertaking the risky move of leaving their nest. Many imitations of the flying movements of the wings are fulfilled by the young, which toughen and tighten their sinews, and develop their wing and body muscles. From all appearances, it is a time of great anxiety for the parent birds in keeping their young together once they quit the nest. Long after they have left the nest, they are waited on by the parents, who are tireless in their efforts to meet the appeals for food expressed by gapes and vibrating wings of their ravenous young. All kinds of insects in various stages of development are devoured by this species.

One day while leisurely rambling through the bush, two Orange-winged Tree-runners were met with, busily tearing and tugging at some loose Tea-tree bark. As soon as they had torn a piece of the requisite size, they hurriedly flew to another Tea-tree near by. It was ascertained that a nest was in the course of construction. They were so absorbed in preparing a home for their potential offspring, that one was able to approach quite closely and watch their movements without disturbing them. The energy with which they uttered their call was ample evidence that they had warmed to their work. While one placed the

material in position, the other stood close by pouring out its sweet notes, "tzir, zit-zit, tzir-zit-zit, tzir,-zit-zat-zat." For the time being, further observations were informally interrupted. Several keen-witted bush boys appeared on the scene, who know this bird by the name of "Bark-tit" or "Bark-pecker." They were not long in finding out the cause of the observer's interest. A compact was entered into, that they should leave the nest intact, and neither disturb nor interfere with the birds or eggs. They did not touch the nest, but the smoothness of the trunk bore evidence as to the frequency with which it was reached. The birds deserted the nest when almost completed, owing, no doubt, to continual hindrance by the youthful observers. Later, this pair was found high up in a Stringy-bark tree building a nest. This time they were operating well out of the way of boy marauders, and eventually they brought forth a family of two. This bird will build in the same tree, spring after spring, until molested, when it abandons that tree, and selects one of a different species.

At East Hills, N.S.W., on the 9/9/1917, Mr. H. Kean, R.A.O.C., and the writer saw seven of these birds engaged in building a nest in a swamp-oak tree. Two of the seven had a nest seventy-five yards away, which, later on, was occupied by three young. While photographing these birds, four have been observed bringing in food for the young. As each bird fed a young one, it flew to a tree in the vicinity, where all four gathered, and then flew off to collect food for the young in a second nest one hundred yards away. Often two birds have been detected feeding one sitting on a nest. This procedure is misleading, for, on climbing to inspect the nest, one expects to see young, but in their place there are fresh eggs.

If we follow up the various stages of development in the Orange-winged Tree-runner's life, we shall see that each stage suits its immediate environment—first, the adult bird upon the branch or trunk of the tree, on which it toils for the means of its existence; then the nest, which resembles the butt of a broken dead branch; the eggs, that harmonise with the velvety lichen whereon they lie; the young birds when fledged that agree with the nest wherein they crouch. All this wonderful unconscious mimicry suggests that the Orange-winged Tree-runner was evolved in an age when birds of prey and tree-climbing predaceous were abundant, in consequence of which, every variation that occurred in the direction of protective coloration, or adaptation, conducive to greater security, was preserved.

Lastly, the peculiar methods this bird adopts when searching for insects may be referred to. As it hops down the branch, it throws itself from one side to the other, so that its downward inspection of the chinks in the bark, on both sides of the branch, is achieved in one descent. As soon as one branch has been examined, it either continues its search in the larger crevices of the trunk, or flies to the top of another branch, in its endeavours to make its arboreal host yield up its stores of lurking insects.