

Order Passeriformes, Family Sylviidæ, Genus *Acanthiza*, *Acanthiza Chrysorrhoa* (Yellow-rumped Tit).

—By S. A. WHITE, C.M.B.O.U., C.F.A.O.U.—

In the original R.A.O.U. Check List this bird was listed as above. Mr. Gregory M. Mathews, in his 1913 List, gave it Cabanis's generic name of *Geobasileus*, but in the new R.A.O.U. List this bird will be back under *Acanthiza*. Mr. Mathews made seven *sub-sp.*, taking Quoy and Gaimaid's N.S.W. bird as the dominant species. It may be difficult to hold to so many as seven *sub-sp.* Yet several of the forms differ remarkably from each other. The interior birds, as would be expected, are much lighter throughout and the yellow on the rump brighter. The Yellow-rumped Tit was once a very common bird on the Adelaide plains, but is seldom seen now, due no doubt to its quiet, confiding nature, making it an easy prey to the domestic cat, gone wild or otherwise.

Description—Upper surface, greyish brown, with a shade of olive all through it; wing coverts, same shade; primaries, dark brown; secondaries, dark brown, edged with olive brown; forehead, from black to blackish brown, each feather having a white spot at the extreme end, giving the forehead a spotted appearance; feathers of the cheeks often edged with buff; throat and under-surface, buffy white, becoming darker on the flanks; under-tail coverts, yellow; line over the eye to the bill, white; upper tail coverts, bright yellow; tail, dark, blackish brown, narrow external margin of grey, each feather tipped with greyish white; face of feathers, whitish, tinged with yellow; bill, black; feet, black; iris, dull white.

Measurements—Length, 110 m.m.; spread of wings, 192 m.m.; bill, 10 m.m.; tarsus, 16 m.m. The northern form is lighter than the above. There is little or no difference in colouration between the sexes.

Distribution—Over the greater part of Australia, including Tasmania and other islands. The writer has recorded it from Queensland, Tasmania, New South Wales, Victoria, South Australia, and Western Australia.

Habitat—They are to be found in varied situations, for they extend from the coastline right through the interior, inhabiting open forest country, low scrub with prickly acacia, on the edge of the mangroves along tidal creeks, on the plains, and in the rocky ranges, and in the interior they are often met with amidst the dense mulga-scrubs. The writer has often met with this bird amidst the low vegetation along the coastline.

Habits—A lively little bird, moving about in small parties from three or four to a dozen, and become very confiding. They spend much of their time hopping about on the ground in search of food, but they also search the twigs, leaves, and limbs of trees and shrubs for insect life. This is a very familiar bird to us grown-up Australians, for it was so common in our childhood days, and was commonly called the "Tom-Tit," and there are few of us who have not seen their strange nests and probably robbed them.

Flight—Not long or sustained, merely flitting from bush to bush or to the ground, and when in flight they show the yellow upper tail-coverts most conspicuously.

Call—It could almost be called a song, it is so sweetly pretty, and when one or two are twittering at the same time it is most pleasing. The notes are low, but very sweet.

Food—Consists almost entirely of insect life; stomach contents reveal many coleopterous insects, a few winged flies, many scale insects and plant bugs, and in one instance a few small seeds.

Nesting Season—These birds are rather erratic breeders, beginning as a rule early and keeping on till late in the season, and an odd nest at times will be found quite out of season. August to November seem about the general range of their nesting season, and they very often bring out the third brood in the season.

Nest—Is one of the most curious of Australian birds' nests, being at times comparatively large and consisting of several compartments, hardly ever less than two. The use of the extra compartment, or compartments, has been the subject of much speculation amongst field workers. The writer favours the

idea of it being a resting place and shelter for the male bird, and at times occupied by the female, for he has more than once flushed a bird from the compartment other than the one containing the eggs.

The nest is a large structure, composed of many materials, such as dry grass, leaves, flower heads, wool, strips of bark, and many other substances, and is placed as a rule in thick foliage, the bough of a tree, thick shrub, hedge, or the like. Very often the nest of this bird is found underneath and placed in amongst the sticks of large birds, such as the Wedge-tailed Eagles, Whistling Eagles, Magpies, Crows, etc. The nest proper is covered in and often has a spout-like entrance; the interior is warmly lined with feathers or fur, and sometimes with flower heads, such as thistle-down.

Eggs—Three to five in number, usually pure white, but occasionally spotted faintly at one end with brown specks.

—By J. Neil McGilp.—

The most remarkable habit of this species is that of its nest construction. It is really a two-storied nest. An open cup-shape nest is first constructed, and then underneath this the nest proper is attached. Why this method of nidification is resorted to seems hard to solve, for the entrance to the lower compartment, in which the female incubates the eggs, is so cunningly concealed that further deception seems unnecessary. That it is not used as a roosting place for the male bird I proved to my satisfaction years ago, when living at Bungaree, Clare. I visited the nest dozens of times just as darkness set in and the birds had gone to roost, but failed to find the open cup nest inhabited. The usual place for roosting was in the lower nest with the female, but I found that a few times the male had roosted in a thick clump of mistletoe close to nest. If the open nest is made to deceive cuckoos, it is not a success, for though I have often found eggs of the Bronze and the Narrow-bill Bronze Cuckoo with the Tits' eggs in lower compartment, I have not yet found them in the top nest. The only theory I can advance is that it is built to accommodate the young birds when they are at the early flying stage. The entrance to the nest proper is difficult to enter for the young birds, and I have noted the young in the open nest during the mid-day hours. I have previously pointed out that the Black-banded Whiteface practically demolishes the long, narrow tunnel to its nest when the young are just at the flying stage. Is it not possible that the Yellow-rumped Tit has this reason for the top nest?

The entrance to their nest proper is by far the hardest to find of any species I know, and I would advance this theory in the hope that observations may lead to a solution of the why and wherefore of the upper nest.

Both birds share in the carrying of material to the nest and, so far as my observations go, in the actual building of their home. Both also assist in the feeding of their young. The food is insect life, secured principally from the ground.

Though in form the nest found is typical of the species, a great variation is noted in the materials used and in the site chosen for the nest. Possibly slight preference is shown for a drooping, leafy branch in which to hang the nest, but dense hedges and parasitic growths in prickly shrubs are as frequently resorted to. I once observed an authentic nest, with upper nest also, built in the crevice between a large piece of bark and a gum-tree trunk, and have often noted the nest built under the large stick nest of Hawks and Eagles; and once at least found young of both species in such a position.

The usual clutch of eggs seems to be three, though four eggs are frequently found. The color of eggs is typically pure white, but occasional eggs in a set are spotted with reddish brown at larger end. I can recall to mind a full set of three eggs that were all finely freckled, but this is of rare occurrence.

The young have the adult plumage when leaving the nest.

An average northern nest measures externally 8 inches in depth by $4\frac{1}{2}$ inches wide. The cup nest measures $2\frac{1}{2}$ inches in diameter by barely $1\frac{1}{2}$ inches in depth. Externally it is made of short, small twigs, grass, flower stems, flower pods and heads, grass seeds, burrs, wool, and spiders' cocoons, the whole of which are matted together with cobweb. The cup nest is not lined, but the lower nest is snugly lined with grass, fur and feathers. It is noticeable that highly colored feathers seem to be preferred as lining.

These Tits often add a new nest to an old one, but in this case no open nest is constructed, even should the previous cup nest be demolished by weather conditions and age. At Yallingup, Western Australia, members of the R.A.O.U. Camp-out examined a wonderful cluster of these nests; at least four nests had been added to the original.