

obliqua on the Tongue Point track. This latter area of sclerophyll forest is the summer breeding habitat of the Satin Flycatcher. The altitude is approximately 400 feet.

On January 8, 1972, the Satin Flycatcher was found nesting in a stand of large *Banksia integrifolia* trees, growing on a hillside gully near Darby River, at an altitude of some 100-150 feet. The feeding behaviour of these nesting birds was similar to that of the birds that I have seen in the Oberon area, on the Blue Mountains, in New South Wales.

From these records it is clear that the nesting pattern of both these *Myiagra* species varies with locality and habitat.

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Notes on the Albert Lyrebird

By GORDON R. BERULDSSEN, Kenmore, Queensland

On July 11, 1972, the author and two companions were at Dalrymple Creek, an area where the Mistake and Little Liverpool Ranges meet, a short distance north of Cunninghams Gap, south-east Queensland. At the point visited the creek runs roughly west out of the Dividing Range, and the hillside faces south. The side of the spur from the main range is steeply sloped, capped in what is locally known as vine-scrub, or rain-forest with dense shrub and vine understory. A short distance down the side from the top of the spur, the understory ceases and the habitat is rain-forest with clear ground strewn with rocks and boulders, leaves and bark, fallen trees and branches and, in parts, dried Bangalow Palm, *Archontophoenix cunninghamiana*, fronds and the like.

On the lower parts of the slopes, low undergrowth becomes prominent, consisting largely of ferns and other low ground cover, seldom higher than half to one metre. Patches of Tree Ferns, *Cyathea* sp., occur in isolated spots on the lower slopes, while the forest consisting mainly of rain-forest type trees, is studded with immense Hoop Pine, *Araucaria cunninghamii*, Brush Box, *Tristania conferta*, and Rose (Flooded) Gum, *Eucalyptus grandis*, the latter mainly on the valley floor and on the lower slopes. The side of the

range is steeply sloped, in a few areas breaking away into ledges and small cliffs, generally 10 to 20 metres high, and in the other areas levelling out into small areas of gently sloping ground mainly on the floors of the side gullies. Fern is the dominant ground cover on the gently sloping areas and Bird's Nest Ferns, *Asplenium nidus*, are prolific on the cliffs.

Eight hours were spent in the area during which time we ranged over several miles of the spur-side, mainly along the middle and lower sections. Virtually the whole of this time was spent searching for nests and singing platforms of the Albert Lyrebird, *Menura alberti*. Three occupied nests, two recently constructed nest platforms, several old nests, one being of particular interest, and one singing platform were located, and a male bird was observed displaying on the singing platform.

The first platform was located at approximately 10.15 a.m. It consisted of short dry sticks, built up either side to form partial walls. No effort had been made to construct the dome on the platform. It is believed by Lloyd Nielsen and others (*pers. comm.*) that these platforms are constructed by non-breeding, young females. They are usually discovered in newly occupied territories. The platform was on a rock-ledge, approximately four metres up a cliff-face of bare rock, free of birds-nest ferns.

The first nest was found at 10.45 a.m. A solid platform of short dry sticks built up either side to form partial walls. A neat rounded dome had been built within this frame-work, constructed from blackish fern-rootlets, some plant-fibre and a little bark. It was beautifully smoothed down inside with no loose ends left protruding. Dry twigs, some with dry leaves still attached, had been carefully laid over the small triangular ledge seven metres up a rock-face, bare, except for a few scattered birds-nest ferns. Entrance faced south-east. The measurements of this nest were:

	Front	Depth	Width	Height
		cm	cm	cm
Rock Ledge	1 m	60	—	—
Platform	—	52.5	67.5	2.5
Dome (outside)	—	35	35	35
(inside)	—	30	25	26.25
Entrance	—	—	15	11.25
Platform (before entrance)	32.5 cm	—	—	—

The nest contained one egg, without gloss and therefore probably fresh, as the eggs become polished and partially glossy as incubation proceeds. It was deposited among 68 *Menura alberti* feathers, loosely laid in the nest cavity, which is another indication of incubation, as up to 150 or more feathers may be in the nest if the egg is well incubated. The egg could not be seen as it was hidden among the feathers. These feathers clearly showed the rufous tinge towards the tips, which is typical of this species. The egg was dull darkish grey, sparsely and more or less evenly spotted with dull blackish grey. Female absent, probably feeding. Egg cold.

The second nest was located at approximately 12.15 p.m. It was almost identical in construction and size to the preceding nest, except that the platform was much higher, probably because of its location on the ground. Nest placed on bare ground, against the base, on the down slope side of a Bangalow Palm, that was growing among a small grove of tree ferns on a very steep slope, almost free of rocks, within the grove of ferns, approximately 35 metres up from the floor of the gully. The otherwise bare ground was littered with fallen dried bark and fern and palm fronds. Entrance faced south-east. The nest contained one egg, again apparently fresh, lying among 27 feathers. Again the egg was invisible from outside the nest, being well hidden among the loose feathers. Egg dull darkish grey with a slight brownish tinge, sparsely spotted, but with a cap over the larger end of a very dark shade of the ground colour. Female absent, probably feeding. Egg cold. This nest was the most exposed nest that I have seen.

The first singing platform was located at 3.15 p.m., and the male was singing and dancing for at least 20 minutes prior to locating it. A careful approach was made under cover of a strong wind that was roaring through the tree-tops, and the male bird was observed dancing for a short while, partially screened by ferns, from a distance of approximately 10 metres. The bird suddenly ceased and fled when a closer approach was attempted in order to get an uninterrupted view. The platform was merely a small, roughly circular clearing among the ferns where the ground had been swept clean of leaves and other debris. Several roots from nearby trees had been exposed. No attempt had been made to construct a mound. Other than the ferns, there was no undergrowth in the immediate vicinity. The dance sequence of the male, although observed only briefly and then through ferns, did not appear to differ from that of *Menura superba*, except that the tail did not appear to droop quite as low in front of the head. The call was particularly strong and the mimicry was excellent. Unfortunately, initial excitement at our find caused us to omit to list the calls imitated. The platform was on the floor of a small side gully on gently sloping ground. It would appear that it was in distinct contrast to the platforms described by Curtis (*Emu*, 72 : 81-84), for it was not beneath any vegetation, except the lofty forest canopy, and an abundance of light filtered down through the canopy despite the late hour of the day, and that the sun had already fallen well below the ridge of the spur. Three males could be heard calling in the near vicinity, and two others at a distance.

The third nest was located at approximately 3.45 p.m. The female flushed from almost under my companion's feet and he felt the rush of air as she flew out past his face. She gave a loud piercing single note scream as she flushed. She flew to a tree some 30 metres distant, perched for a moment, then flew on down the gully and disappeared. The nest was almost identical to nest 1, except that, as in nest 2, the platform was higher. In addition, the roof came forward further and formed a deeper verandah over the entrance. The nest was very well concealed and placed on the ground in dense



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Nest No. 3 was very well concealed on the ground among the ferns.

The second nest was placed at the base of a Bangalow Palm.



ground cover, consisting of ferns and other low growth, on steeply sloping ground a short distance below a line of low cliffs and rock ledges. Entrance faced south-west. The nest contained one egg, apparently partially incubated as it was slightly glossy. Again it was invisible from outside the nest, concealed among feathers. Egg darkish grey with a purplish tinge and well spotted with blackish grey, more or less evenly over most of the egg. Female brooding, approximately one and a half hours before darkness. Egg warm.

Platform 2 was located about 4.00 p.m., and it was almost identical to the first platform, and in a similar situation. The two platforms were new, and quite different from several old nests located during the day.

The last nest was found at approximately 4.10 p.m. It was a previous year's nest and of particular interest for the following reasons.

1. The nest was constructed in the centre of a Bird's-nest Fern, actually between the fronds, and the fern was growing in an upright fork of a tree some seven metres above the ground. The tree stood on a steep slope a short distance below a small cliff, and the nest entrance faced the cliff.

2. It did not have the usual base and sides of sticks, simply a very rudimentary flat platform of sticks. Otherwise the dome was like that of the other nests.

3. The entrance faced north and up the slope of the hillside.

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Rainbowbirds taking Tadpoles. In the *Australian Bird Watcher*, Vol. 3, No. 5, T. H. Guthrie describes Rainbowbirds, *Merops ornatus*, dipping for food in the Mulgrave River in north Queensland. He said that the birds were moving over the river, about 12 feet above the water, with a slow hovering flight, and on locating their prey they would flop onto the water's surface and drive their heads under to a depth of up to 3 inches. After taking their prey from the water they flew to a nearby tree, gave a sort of desultory tap on the branch and then swallowed their prey. Then back to the centre of the river to repeat the performance. Guthrie said the prey was small and compactly shaped, and he suggested that they could be a species of a crustacea or mollusca in the early stages of development.

John Ipsen, of Bendigo, Victoria, early in 1972, mentioned how, while staying at his holiday home at Redesdale, about 23 miles south-east of Bendigo, he watched several Rainbowbirds diving into a dam near the house and taking food from just under the surface. Like the birds mentioned by Guthrie they flew to a branch on a tree near the dam, gave the desultory tap and then swallowed their prey. Ipsen examined the dam after the birds had left and found that young tadpoles were in numbers just below the surface of the water. Perhaps Guthrie's birds were also taking tadpoles!

Roy Wheeler, Windsor, Victoria, 19/8/72