## SHORT COMMUNICATIONS

## THE NESTING OF GYMNODERUS FOETIDUS

Having been interested for many years in the biology, food and behaviour in captivity of three families of birds inhabiting the great forests of tropical America, the Cotingidae, Pipridae and Trogonidae, I have had occasion to search for the nests of several species with a view to obtaining young birds for hand-rearing. I thus succeeded in finding two nests of *Gymnoderus foetidus* in the forests of the northern part of the State of Mato Grosso, Brazil. These birds are fairly common in the region but the nests are extremely hard to find because they are invisible from the ground.

The nest, which is placed on a thick horizontal branch (of about 15 cm diameter) at a height of 6-10 m, is very small for a bird of the size of *Gymnoderus*. Its diameter does not exceed 10 cm and its height 3 cm, and it is in the form of a loose cup, the bottom of the nest being formed by the branch itself. It is entirely composed of lichens and the fine tendrils of some climbing plant which is white, probably because of a fungal growth. But what is most interesting is that the nest could not possibly hold more than a single chick, and it seems impossible for the female to cover her egg with her feet inside the nest. She must place them at either side. When she is incubating she appears to be perched on the branch, and the nest is invisible.

I do not know the colour of the egg, but from one of the two nests I obtained a chick known from constant watching to be four days old. It is probable that these birds nest more than once in the year because I found the first nest being built at the end of January 1963 and the second with a chick which hatched on 2 December 1968. I never noted the presence of a male near the nest.

The nestling is most remarkable, as it is invisible in the nest, and appears to be made of lichens. The skin is a violaceous grey-black, but as early as the fourth day it is covered with very short tufts of pale grey-green curly down which exactly resemble lichen. Its growth is slow, and it reaches independence in about two and a half months. Up to the age of three months its general colour is greyish white with pale grey wings and tail; later the dark blue-grey plumage gradually appears. Now, at seven months old, its body plumage is dark blue-grey, with pale grey edges to the feathers, and its head is nearly black with a little bare skin beneath the ear on each side which shows signs of becoming blue; which makes me suppose that it is a male.

It is worth noting that another much smaller species of Cotingid, *Phibalura flavirostris*, which inhabits the mountains near Rio de Janeiro at elevations above 700 m, has nesting habits analogous to those of *Gymnoderus* (see also Goeldi 1894, 'Ibis' (6) 6 : 484-494). It usually builds its nest on horizontal lichen-covered branches of large Araucaria trees, of about the same size as the branches used by *Gymnoderus*. Its clutch is of two or three eggs. The nestlings—among the prettiest that I have ever seen—appear to be covered with lichen. Their very short down is speckled with pale grey, yellow-green and white, and they are invisible in the nest which is itself invisible on the branch when seen from above. The inside of the beak, when they gape for food, is violaceous pink with a spot of sky-blue on each side. Their voice is extremely soft and musical. Their development is more rapid than that of *Gymnoderus* and they have no intermediate plumage but moult into a plumage like the adult's but duller with a shorter tail. The colour of the adults resembles the lichens that grow on Araucaria trees, and it is probable that, seen from above, the incubating female is hard to see on her nest.

64, Rua Gold Club, Rio de Janeiro, Brazil. 14 July 1969.

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