

Observations on the Habits of Bower-birds in Captivity

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The following observations on various species of bower-birds were made while the writer was employed at Taronga Zoological Park, Sydney, during 1946-47. Unfortunately detailed notes taken at that time are no longer available, so only such information as can be recalled accurately is recorded.

Twelve years or so ago the Park maintained a large collection of bower-birds, comprising the Satin (*Ptilonorhynchus violaceus*), Regent (*Sericulus chrysocephalus*), Spotted (*Chlamydera maculata*) and Great (*Chlamydera nuchalis*). As the birds were housed mainly for exhibition purposes they were not segregated but were mixed with other species. As is to be expected under such conditions, detailed observations were difficult to make. Contrary to the belief of non-aviculturists bower-birds thrive in captivity and have been recorded as having a surprising longevity. Given segregation into species groups, isolation from other birds, and even the most modest encouragement in the way of accommodation and nest-sites, they will breed fairly readily, though successful rearing of young birds is another matter. They can be maintained on a diet of fruit and green foods and will eat a prodigious amount for birds of their size; they will also partake sparingly of minced horse-meat.

1. *Sericulus chrysocephalus*. Regent Bower-bird.

During the period mentioned, ten of these birds were included in the collection. Unfortunately most were in aviaries which also accommodated the Satin and Spotted species; accordingly their bower-building habits could not be accurately recorded. However, two adult pairs were kept in one aviary. These birds constructed and were using a bower in December 1946, but they abandoned it during the autumn and winter months. In the spring of 1947 the bower was reconstructed on the same site. Information from members of the bird-keeping staff of the Zoo confirmed that these birds, which had been together for several successive years, had constructed a bower each year. This would seem to support the view that the Regent Bower-bird regularly constructs a bower.

The bowers were rather poor structures, being smaller replicas of the Satin-bird's bower and with a rudimentary platform. Though the lack of suitable materials could have been the reason for the poor construction, inquiries revealed that the Regent-birds at Taronga Park habitually constructed bowers of inferior workmanship to those of the Satin-bird. The decorative materials used at the bower were

restricted by limited availability, and mainly comprised the yellow leaves of an ornamental privet growing in the aviary.

The two adult males seemed very tolerant of each other, and I often observed both at the bower within a few minutes of each other. This was in sharp contrast to the Satin-birds, which attempted to demolish each other's bower, remove the materials and build elsewhere.

A pair of the Regent-birds nested and, in January, 1947, the female was sitting on two eggs. The nest was constructed three feet from the ground in a privet bush, the only shrub growing in the aviary, and was exposed to the gaze of the public. The nest, despite the absence of suitable materials in the aviary, appeared to be no different from a normal nest constructed by wild birds. The female in this case deserted the clutch. In another aviary where one adult male and two brown birds were confined with a mixed collection of birds, including Satin-birds and Cat-birds, a nest was constructed late in 1947 in a similar site to the previous nest. Two eggs were laid and the female sat for 12 days, but unfortunately the eggs were broken, which was not surprising in view of the crowded condition of the aviary.

This pair (or what was believed to be the actual pair) were segregated and removed to the large and well-known lyrebird aviary in the Australian Section in the hope that they might breed again. However, some weeks after the transfer, the 'female' showed obvious signs of being a young male. An interesting sequel was the appearance of a fully-coloured male Regent-bird in the trees overlooking the aviary. It remained for some days and was definitely not a Zoo escapee, and as far as could be ascertained was not one of the few birds kept privately in Sydney. Presumably it was a genuine wild bird, probably a straggler from the Gosford district, 30 miles or so north of Sydney, where the species is not uncommon.

2. *Ptilonorhynchus violaceus*. Satin Bower-bird.

This species also attempted to breed, one pair constructing a nest in the shelter-shed of a crowded aviary. The nest was demolished, presumably by the other inmates of the cage. The only unusual observation noted was the predatory tendencies of this species in raiding nests of the other birds and taking the nestlings. One adult pair was included in an aviary containing a very large and successful breeding colony of the New Guinea White-breasted Pigeon (*Gallinolumba jobiensis*). Several small nestlings of these birds had disappeared with no evidence of the presence of rats. The mystery was solved when I observed a female Satin-bird kill and commence to eat a newly-hatched chick.

The foregoing observation could indicate that the species will, in the wild, eat larger 'game' than insects. In my

opinion the tendency of insectivorous birds to devour the young of other species is usually under-estimated, although, admittedly, the tendency of the Grey Shrike-Thrush in such respect is well known. While the habits of captive birds could be the result of diet deficiency, one other such occurrence is quoted. Mr. E. Hargreaves, Head Bird-keeper at Taronga Park, has verified in a personal communication, the eating of newly-hatched Californian Quail (*Lophortyx californica*) chicks by a pair of captive Yellow Robins (*Eopsaltria australis*) which had at that time access to insect food! Other similar instances which I have heard about concern such species as the American Robin (*Turdus migratorius*) and the Pekin Robin (*Leiothrix luteus*) which were said to have eaten the young of finches and quail.

With regard to the diet of the Satin-bird, its partiality for green foods is well publicized in avicultural circles, and I observed that one bird would, if given the quantity, eat a small lettuce in one day. At each feeding involving fruit (the staple diet), minced horse-meat and green foods, the birds would devour the green foods first. This raises the question as to what similar food, if at all, the bird consumes under natural conditions.

3. *Chlamydera nuchalis*. Great Bower-bird.

Only one bird of this species was in the collection during the period of study; it was an adult female and the survivor of a pair received some years previously. This bird was housed in the same aviary as a pair of Satin-birds, which had a bower then in use. Despite the fact that normally this bird was highly secretive, not even venturing to the food tray whilst humans were present, it was often observed at the Satin-birds' bower, on two occasions with the shell of a land-snail in its bill.

4. *Ailuroedus crassirostris*. Green Cat-bird.

This was also a species which tried to nest, though unsuccessfully (no doubt due to unsuitable conditions). The most unusual feeding habit of this species was its partiality for dead mice, which were placed in the aviary for a horn-bill. A Cat-bird was also observed to attack the nestling of the Bronzewing Pigeon (*Phaps chalcoptera*), and I suspected, though did not verify, that it was also responsible for the destruction of the egg of a nesting Wonga Pigeon (*Leucosarcia melanoleuca*) in the same aviary. As I have observed nesting pairs of Black-faced Flycatchers (*Monarcha melanopsis*) and Rufous Fantails (*Rhipidura rufifrons*) in the Royal National Park, New South Wales, and at Lamington National Park, Queensland, drive off Green Cat-birds from the precincts of their nests, it may be that the Cat-bird has cannibalistic tendencies.