## NEW HOLLAND HONEYEATER BRED IN CAPTIVITY

A report from Metropolitan Fauna Warden, Mr A. R. Marshall, prompted the Editors to visit the aviaries of Mr Alwyn Pepper of Scarborough.

It was indeed a delight to observe birds kept in ideal conditions and cared for with enthusiasm and dedication. Mr Pepper's main aviary is of considerable extent and is a walk-through type. Bottlebrush, Pines, Banksia, Eucalypts, Acacia and Hakea are all well-established, while the ground cover is of Grevillea, Kangaroo Paw and perennial grasses; running water is an added attraction.

Birds sharing the aviary are: one pair of Scarlet Robins, one pair White-naped Honeyeaters, Gouldian and Painted Finches, several Peaceful Doves and three Red-plumed Pigeons.

The smaller aviary is about 14 ft. x 11 ft. x 10 ft. and it was in this aviary that Mr and Mrs Pepper successfully bred the New Holland Honeyeater. It is not known whether this is the first successful breeding of this kind in captivity; but first or not it is a notable achievement requiring considerable time and patience. The aviaries are indeed a model for other aviculturists.

A report by Mr Pepper on the successful breeding was submitted to the Chief Warden of Fauna. This report reads:

"As an aviary inmate the New Holland Honey-eater (Phylidonyris novoehollandioe) is a very handsome bird strikingly coloured black, white and yellow. Given the correct conditions it is apparently quite hardy and will breed successfully in confinement. To be able to observe these lovely birds at close quarters, and study their behaviour is indeed a fascinating and rewarding pastime. They are so vastly different, in all respects, from the usual run of everyday finches, parrots, etc. Please don't think I'm knocking these latter species as I've kept them for forty years and will probably continue to enjoy their company.

Watch them gracefully and effortlessly twist and turn in mid air as they hawk for insects. Watch their fantastic flash of gold as they flit from flower to flower to cling precariously whilst probing their long curved bills deep into colourful blossoms in their never ending search for nectar.

The New Holland's strong territorial instinct demands a roomy aviary to themselves. My wife placed four wild trapped unsexed birds in her 14 ft. x 11 ft. x 10 ft. aviary in January 1971. They were very active and vocal in attempting to gain dominance over each other. With the advent of early spring their aggressiveness increased. The birds were then caught and banded with different

coloured plastic rings, in an effort to determine the sexes by observation of behaviour. A few days later one bird was found dead—cause unknown so we watched the remainder very closely. One large bird continuously chased, with much bill snapping, only one of the inmates. The submissive bird was trapped and removed to a separate enclosure. By now my wife felt sure she had a true As spring progressed the larger bird's plumage became much darker and vivid. Observations proved this bird the male whilst the female remained smaller in stature and duller in colouration. From time to time various species of finches and doves were experimentally introduced. No dice. The honeyeater's territorial aggressiveness forbade other inmates—with one exception. A pair of ground-loving Red-Plumed Pigeons (Spinifex) (Lophophaps ferruginea) were not molested in any way. In fact the pigeons built their typical ground nest, and closely sat on two white eggs, through a week of very unseasonable bitter cold and hail with ice piled around the nest perimeter. Unfortunately the very frigid weather proved fatal to the female pigeon.

To return to our honeyeaters. Close observation showed the female commencing to carry building material into the dense top of a pruned pencil pine tree. The nest site was some eight feet off the ground. The bird always went through the side of the tree and emerged through the top. It was not until two weeks later (29/10/71) that the female commenced sitting. At no time did we inspect the well-hidden nest so we can not say how many eggs were laid. See later notes.

On the 11th November both birds were running a shuttle service to the nest with sugar-water and small insects. I confess my wife and I were as excited as the actual parents. The parent birds were naturally kept very busy until the young were ready to leave the nest. A bucket of freshly picked blossom would immediately attract the female and woe betide the henpecked male if he dared approach the flowers whilst the female was feeding. This aggressive female behaviour seemed strange in view of later events.

On the 21st November, which was three days before the first youngster emerged, the male became the aggressor in no uncertain manner. With snapping bill he swooped at his lady love at every opportunity. Her only refuge was the nesting site.

The eagerly awaited day dawned on the 24th November. Number one baby emerged about four p.m. and fluttered to a low bush. Horrors! We belatedly remembered the killer reputation of the



New Holland Honeyeater feeding the young in the nest

Red-Plumed Pigeon. My wife frantically set a trap and in a few minutes the unfortunate pigeon was under lock and key and transported to the Colonies. In other words transferred to another aviary.

Now commenced a week of apparent ferocity on the part of the male. He drove, bullied and snapped at the unfortunate female until she cowed hidden in a far corner. Any attempt on her part to approach her babies was met with onslaught. Baby number two emerged from the nest two days after number one.

Well, I don't mind admitting as a mere observer I was terribly upset by this seemingly aggressive behaviour and wanted that male out pronto. In fact, if I'd had a say in the matter, it would have been felon No. 2 for the Colonies. But it was not my show. My wife said no! I can't ascertain whether this decision was purely womanly cussedness on her part or perhaps her wifely intuition, from practical experience, told her that this display of male dominance was all bluff.

After a few days of this behaviour we realised there were no feathers flying and the female was uninjured so presumed some type of ritual was involved. However, by the 2nd December peace reigned and the female was permitted to help feed the young.

For the first three weeks the two youngsters continued to perch, side by side, on a low well hidden branch a few inches off the ground. Feeding by the parents was observed to the third week out of nest. It was not until five weeks out of nest that the young lost their inherent shyness and left the lower foliage to gracefully take their place with their parents in the upper region of the aviary. On one occasion, when Grey Butcher Birds (Cracticus torquatus) appeared in the vicinity, the adult male flew to a high vantage point and gave the warning call. One precocious youngster ignored the warning and moved around the food container. The male quickly flew down, chased the errant baby to cover, and then flew back to the vantage branch.

Food: Several varieties of profusely flowering fuchsias were planted in the aviary. The only shelter was obtained from several established cypress trees. Three Eucalyptus torquata were also planted but have not flowered to date. Every few days vases of fresh flowers were placed on the ground, i.e. eucalypt, melaleuca, banksia, leonotus, honeysuckle and hibiscus. Pollen is much sought after and is a valuable protein addition. I have closely observed honeyeaters gather the pollen from hibiscus blossom. A 20% solution of raw sugar (weight by volume) with a few drops of infant strength Pentavite (vitamins) was supplied fresh daily. This is the honeyeater's mainstay food and must never be depleted. We selected the 20% solution because the famous Brazilian ornithologist Dr Ruschi feeds a similar solution to his fantastic old world humming birds.

A 15-watt pilot globe is always left burning at night in the aviary but when nest building commenced this was stepped up to 40-watts. The numerous flying insects attracted by the light make a tasty breakfast. Indeed on occasions the birds will even nocturnally hawk for months etc. around the light. Many moths find their way into the sugar solution and become trapped therein. Strange to say these immobile insects are ignored by the birds.

Our quarter acre is heavily planted with Australian native trees and shrubs and accordingly many insects thrive therein. (No blasted insecticides!) Many of these insects naturally fly through the aviary and are immediately hawked in mid air. Cicadas are a popular repast. Thistles planted thickly are a good source of green aphids.

Copulation: The female invites copulation by crouching low on the perch, her outstretched wings fluttering rapidly to display large areas of yellow. This display continues whilst copulation takes place. The male displayed enlarged areas of white around the head. Excited squeaks emanate from one or both birds.

Bathing: The New Holland bathes several times a day. Communal bathing is a popular pastime. Late afternoon is a particularly happy, carefree bath period. Wet foliage bathing is a picture of delight. The birds sometimes like to sunbathe on the ground with ruffled feathers and wings outstretched in the manner of doves.

Nest: The nest, which was examined some weeks after the young had departed, was the typical cupshape constructed of fine grasses, rootlets and lined with zamia down, cotton wool and hair from our Corgi dog.

After the young had departed the nest we fixed two microphones to trees in the aviary in order to record calls. Over each mike was tightly stretched a white cloth. The birds found these mikes irresistable and continuously pecked the cloth. After one week both white cloths were found to contain a large hole.

Calls: The following calls have been noted in the captive birds:

- (1) The *Territorial Call* of this species is a sustained, loud-ringing melodious call.
- (2) A chattering call in which all birds join in the chorus denotes *Anger*.
- (3) The *Danger Imminent Call* is a sharp "chit", sometimes twice, and all birds dive for cover and remain very still and silent.
- (4) The Warning Call is a loud liquid note repeated with machine gun rapidity usually from a high vantage point.
- (5) We have both listened intently at the nest for any sign of a feeding call but to no avail. Possibly the young have a feeding call beyond our middle-aged hearing range. Even the first week out of nest the babies were very silent and it was not until the seventh day (1/12/71) that I heard a quiet "chuck" as a communication which was answered by its erstwhile nest mate.
- (6) ? Call: At times the male sings a low sweet melodious canary-like call.
- (7) Roosting Call: All birds join in a series of sharp hi-fi squeaks usually a half hour before dark. These calls are apparently to identify their roosting sites.
- (8) "Be-Quick" Call: Several times we have been fooled into mistaking a "Be-quick" call of the New Holland for the familiar call of the Red-tipped Diamond Bird (Pardalotus substriatus). This call was only heard in the spring.
- (9) Excited Call: The sound of running water brings forth an excited melodious repeated call "Cheop".
- (10) Another excited call is loud hi-fi "Chee-ep".



New Holland Honeyeater-male.

- (11) ? Call: A sharp repeated clicking exactly like the "click" of hedge shears—particularly in the early morning and sometimes at night. The birds make this clicking whilst perched.
- (12) Mating Call: See copulation.

These birds were inspected by Mr Bob Marshall, Fisheries and Fauna Department on 25/11/71 and 7/12/71, and by Mr Brian Hutchison, President W.A. Naturalists' Club on 5/12/71.

References: "Birds of Western Australia" by D. L. Serventy and H. M. Whittell; National Geographic Magazine", Jan. 1963. New Holland Honeyeaters bred by Mrs Joan Pepper.