

include permanent water, &c., and the writer's observations fully prove the necessity of enlarging the area. The land is of poor quality, rocky, and unfit for agriculture, and of very little use even for grazing. The two horses kept at the lighthouse have to be fed on chaff. Under these circumstances, the setting aside of a large area will in no way be a great loss to the Government, and, on the other hand, will mean a great national gain, the worth of which can only be rightly gauged by future generations.

Nesting of *Psephotus hæmatonotus* in Captivity.

BY MRS. A. D. HARDY, R.A.O.U., KEW

My aviary consists of an octagon, with a flight and a trap. The octagon has five glass sides, giving shelter from the southerly and westerly winds, with wire-netting on the sides facing north, and opens freely into the flight compartment, which is wire-netted both on roof and sides. Round seven sides of the octagon is a corrugated iron breastwork or skirting about 2 feet 6 inches high, and this continues round the weather side of the flight and trap. The central pole of the octagon aids to support the corrugated iron roof and wood ceiling, and to this and the angles are attached fixed and swinging perches of jarrah—hard wood, which stands a good deal of nibbling. The floor is the natural ground, with the surface well sanded.

Here are domiciled pairs of King Lories (*Aprosmictus cyanopygius*), Pale-headed Rosellas (*Platycercus pallidiceps*), Cockatoo-Parrakeets (*Calopsittacus novæ-hollandiæ*), Red-backed Parrakeets (*Psephotus hæmatonotus*), "Budgerigars" (*Melopsittacus undulatus*), Rosellas (*Platycercus eximius*), and "Blue Bonnets" (*Psephotus xanthorrhous*); but this pair, having set out to murder the others, and having succeeded to the extent of killing one "Bulla-Bulla" (*Barnardius barnardi*) and maiming another, had to be transferred to a refractory ward on the other side of the house, where they seem happy. There are also single birds of the Crimson or Pennant Parrakeet (*Platycercus elegans*), Yellow Parrakeet (*P. flaveolus*), "Port Lincoln" or Yellow-banded Parrakeet (*Barnardius zonarius*), besides a Plum-headed Parrot (*Palæornis cyanocephalus*) and a Rock-Parrot, both from the Indian region.

After the removal of the Blue Bonnets there was comparative peace. The big white house cat clambering up the wire-netted side and lying on the wire roof, which sagged with his weight, disturbed them naught, but occasional visits of a large Brown Hawk sent them in haste to the shelter of the roofed octagon, where a few of the more timid ones dashed about in great terror.

On the ground floor (and, I fear, in contravention of the *Game Act*) were five Brown Quails and two Little Doves (*Geopelia cuneata*). To better shelter the Quail from rough play of the Parrots I placed a wooden candle-box (inverted) on the sanded

floor, with a small arched opening at the ground, which gave ingress to Quail.

Domestic emergencies prevented my giving the aviary its usual weekly cleaning until more than a fortnight had passed, and then, on raising the Quails' box, I disturbed one of the Red-backed Parrakeets from five white eggs lying on the sand in the merest pretence of a hollow. I hastily restored the box to its position after my surprise, not daring to complete the cleaning then. Next day, moving the box slightly, I saw the bird sitting on the eggs. In due time, I take it (being unaware of the date of laying), four young were hatched—tiny things with a little fluff, very thin necks, comparatively large heads, which appeared to be mostly beak, and feet capable of clutching. The parent birds had a busy time. The male had already done his share by feeding the female on the perch and ground, and on the nest also, judging by his frequent visits after feeding; but now both fed the young, while he also continued feeding his wife.

The following extracts are from my diary:—28th November.—The eggs were first noticed. 9th December.—The young hatched. 23rd December.—Wing and tail quills appearing, and traces of colour on head. 26th December.—Iridescent green colour appearing on head of one bird (evidently male), and patch of red distinct on his back. 30th December.—Young birds' plumage increasing rapidly, and the little ones perch well on my finger. The old birds are voracious for sow-thistles. Blue colour on young male's shoulder, like old male.

To protect the little ones from the curiosity of the *Platycerci*, a wire-netting cage was slipped over the box, with a small entrance of about $2\frac{1}{2}$ inches diameter left, which, after considerable survey and much distrust, the mother bird at last accepted as part of the establishment. This protection seemed necessary, as the dead body of one unfeathered young one was found on the floor outside, with a leg eaten off. I attribute the occurrence to a combination of causes—either death was due to accident, followed by ejection, or else mutilation by some of the other birds or by mice.

6th January.—The young male, more venturesome than his sisters, got out of box and cage, and was put back. 7th January.—Cage and box removed for a little while to give the birds an airing. 8th January.—The young male flew to the end of the flight; females not using wings. The male now has, in subdued hues, the colour markings exactly like male parent. They dislike being handled, but cling fearlessly to finger, or perch on my little girl's shoulder or cling to her dress while nestling their heads under her protecting hands. 9th January.—First female Parrot left nest. The young male perching well in aviary. The old male still feeding both young and mate; female feeding young and self. 10th January.—Second female left nest. Both flying freely, but clinging to wire-netting instead of perches. 11th January.—All perching. The parents keeping space clear of all other birds. 15th January.—Young ones self-feeding, but still helped by

parents. Male parent still feeding his mate 1st February — Young feeding independently, and, except a trifle smaller, much like parents. Old male continues feeding mate, but not so frequently. 15th February.—Young ones practically mature. Old male inclined to drive young male away, but is still occasionally feeding mate. Old birds together and young ones by themselves in a group.

A Trip to the Tunnel District, Tasmania.

BY P. C. THOMPSON, LAUNCESTON, TAS.

THE following notes were made during a trip to that district in Northern Tasmania known as "The Tunnel," in the month of October, 1910. It was made in company with Mr. A. L. Adams, a fellow-member of the R.A.O.U., and an ardent bird-observer.

The first thing that struck us was the fact that, while in the Launceston district birds were hatching their young, at "The Tunnel" very few species were even building.

Spotted Owl (*Ninox maculata*).—This species seemed fairly plentiful, for a little after dark one would hear them calling from all sides. Their call-note, which some persons still think is uttered by the Frogmouth (*Podargus*), is between "Mopoke" and "Morepork," but more like the latter.

Pallid Cuckoo (*Cuculus pallidus*).—Not at all plentiful; a few pairs noted on the surrounding hills.

Fan-tailed Cuckoo (*Cacomantis flabelliformis*).—This Cuckoo was far more plentiful than the previous species.

Frogmouth (*Podargus strigoides*).—Could hear their notes coming from all sides of the hut after dark.

Australian Raven (*Corone australis*).—Plentiful.

Black Crow-Shrike (*Strepera fuliginosa*).—Fairly plentiful.

Hill Crow-Shrike (*Strepera arguta*).—Common. This species can easily be distinguished from the Black Crow-Shrike either by its white under tail coverts or by its cry.

"Summer-Bird" (*Graucalus parvirostris*).—Plentiful all along the hills near the station. They seem to prefer the small trees in fairly open country. Frequently they were within 8 or 9 feet of the ground, feeding in the young gums.

Whistling Shrike-Thrush (*Collyriocincla rectirostris*).—Very plentiful. They could be seen clinging on to the side of a large gum, pulling away pieces of bark, from under which they would seize some grub, hit it two or three times against the tree, then swallow it.

Lesser White-backed Magpie (*Gymnorhina hyperleuca*).—Not as plentiful here as in the more open country.

Grey Butcher-Bird (*Cracticus cinereus*).—One or two heard calling, but none seen.

Olive Thickhead (*Pachycephala olivacea*).—Plentiful. From almost any of the tree-fern gullies came their notes, which sounded