Miss Ella Pratt of Reserve Creek, near Murwillumbah, N.S.W., has written to me that during the 1976/1977 summer she located only one breeding pair of Olive-backed Orioles. An examination of both birds showed them as identical in colour. 'Each had an olive green back and wing coverts; both had those beautiful coral pink bills they have for the breeding season.'

## Conclusions

Young Olive-backed Orioles indicate the stage of their youthfulness primarily by the extent of rufous in their plumage.

Fledglings show much rufous, this being in various areas of the head, in addition to broad rufous edging of the wing quills and their coverts. All this rufous is lost progressively with age, the wing covert edgings being the last to retain their rufous.

Dark brown eyes and dark horn coloured bill also indicate youth.

Apparently only sub-adult birds show a clearly discernible cream eyebrow.

Mature birds show orange bills, red eyes, green olive backs and wing coverts with grey margins and white tips; they show no eyebrow.

No sex indicators were found to be readily discernible.

Breeding birds show bills variously called orange red to coral pink with bright plumage which normally lacks any rufous.

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# Shearwater Hazard on Breeding Island

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While banding Little Penguins Eudyptula minor and shearwaters Puffinus spp. on Big Island, Five Islands, New South Wales on 18 December 1977, some 30 Wedge-tailed Shearwaters P. pacificus were found dead in burrows or at burrow entrances. These birds had become entangled in the runners of Kikuyu Grass Peniosetum clandestinum which now grows extensively on the island.

In the wet summer of 1975/1976, the Kikuyu Grass flourished and spread rapidly (Gibson 1976). It formed deep carpets over large areas of the island and walking through these areas is difficult. Although providing cover for whatever soil remained after the erosion following the dry years prior to 1975/1976, it also creates a problem for the burrowing shearwaters.

During the 1976/1977 breeding season a few shearwaters, probably less than ten, were found dead in this manner. Five or six were similarly found dead during the first visit of the 1977/ 1978 season on 19 November 1977.

Little Penguins, however, do not appear to be troubled to the same extent and undoubtedly are able to extricate their flippers from the grass and force their way out of the burrow. On the other hand, the shearwaters' wings become badly tangled as the grass runners catch around the shoulder joint and the struggles of the bird often worsens the situation.

In one case, after removing a very badly tangled bird, a second dead bird was found in the burrow. Apparently it had been unable to escape past its tangled mate.

The natural grass, Prickly Couch Zoisia macrantha, does not create this hazard for the breeding birds as its runners are much thinner than those of the Kikuyu and in similar circumstances apparently are broken by the birds.

### Reference

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