In males, increase in body weight tended to precede increase in size of testes. This is the usual sequence in the breeding season.

In females, the monthly figures for body weight and size of follicles appeared to follow a similar pattern. Unfortunately specimens were few, so the results here were of limited value.

SUMMARY

From nesting records and gonad measurements a study was made of the breeding cycle. It appears that, although breeding occurs throughout the year, it reaches a peak during winter and early spring (June to September).

Wekas' commonly raise more than one brood in a year; up to four have been recorded. The average number of eggs in a clutch is 3-4, although 5 or 6 are not abnormal.

REFERENCE

Westerskov, Kaj, 1956: Productivity of New Zealand pheasant populations. Wildlife Publ. No. 40 B. Dept. of Internal Affairs, Wellington. 144 pp., 4 pls., 16 figs.

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SEXING OF WEKAS

As Wekas are a monomorphic species it was necessary to find a reliable method of sexing the birds.

Length of culmen and weight of body were the two criteria used, and the birds then sexed by dissection. This method proved successful with adult birds, males commonly having greater culmen length and body weight than females. Juvenile birds may be confused with adult females, but are usually easily identified by their dark-coloured eyes and grey legs. Adults have red eyes and their legs are more brown or red-brown than grey.

It is important that measurement of the culmen should be taken from the proximal end of the horny part and not from the feathers, which often mask the true end of the culmen. When this is done, the margin of error in sexing is very small.

Among the 94 birds examined, the culmen length of adult males ranged from 44 mm to 51 mm, with the greatest numbers in the 47-50 mm group (average 47.8 mm). Length of culmen in adult females ranged from 41 mm to 47 mm, with the highest proportion in the 42-44 mm group (average 43.1 mm).

Weights of males ranged from 532 gm to 1053 gm, with 55 per cent. of birds weighing between 900 gm and 1,000 gm (average 912.7 gm). Female weights varied from 382 gm to 1,010 gm (average 698.7 gm), but only two specimens weighed more than 806 gm. Of these, one weighed 950 gm, culmen 46.5 mm; the other 1,010 gm, culmen 44.5 mm. These birds were both exceptionally fat.

The table shows a significant relationship also between length of tarsus and sex of bird. However, it could be difficult to take this measurement successfully on live birds, whereas accurate measurement of the culmen is an easy matter.

The other two measurements, of middle toe and claw (M.t.c.) and of claw only, were too widely variable to be of any value in determining sex, although the average length of each was, as one would expect, less in females than in males.

TABLE: Relationship Between External Measurements and Sex of Wekas

		Tarsus (mm)	M.t.c. (mm)	Claw (mm)	Culmen (mm)	Weight (gm)
Range	♂♂	59 - 68	62 - 72	12.5 - 17	47 - 50	532 - 1053
	♀♀	54 - 58	62 - 65	12 - 15	42 - 44	382 - 1010
Average	♂	62.8	66.4	14.8	37.8	912.7
	♀	57.4	63.1	13.8	43.1	698.7

SUMMARY

Wekas may be sexed with a reasonable degree of accuracy by measuring culmen length and body weight. Culmen lengths in adult males commonly range from 44 mm to 51 mm and in females from 42 mm to 44 mm. Males usually weigh between 900 gm and 1000 gm and females between 670 gm and 806 gm. Juvenile birds may be confused with adult females but are usually distinguishable by the dark colour of their eyes and legs.

REFERENCE

Williams, G. R., and Miers, K. H., 1958: A Field Method of Sexing the Swamp-hen or Pukeko. Emu, 58: 125-127.

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SHORT NOTES

SOME NOTES ON THE BIRDS OF NORFOLK ISLAND

Nine days from 29/9/62 were spent on Norfolk Island and the following notes are the result of this visit. As little has been published recently, these notes may have value when a more complete survey of the natural history of Norfolk Island and its two outliers, Phillip and Nepean, is made.

Norfolk Island to-day is much changed from what it was when discovered by Captain Cook in 1774. Most of the flourishing landbirds belong to introduced species. A few stragglers arrive from Australia. Petrels no longer nest in vast numbers on the main island; but gannets (or boobies), terns and noddies are still plentiful.

Nepean Island is perhaps the least changed; but even there an introduced ice-plant thrives on the top of the island, its pink flowers adding a touch of colour among the white Masked Gannets at their nests. Phillip Island is denuded of forest.

SPECIES LIST

MASKED GANNET *(Sula dactylatra)* — Nepean Island, a mile off the south coast, was visited on October 6. On the flat top among low vegetation three hundred were counted; each of the one hundred and fifty pairs was with a chick ranging from a day old to nearly fully fledged. One pair had two infertile eggs. One chick only is reared. A breeding period from August to December is indicated.

TURNSTONE *(Arenaria interpres)* — On October 3, eight were seen on the beach inside the lagoon, Emily Bay, and later the same birds were feeding in swampy pasture near the Administrator's residence.

EASTERN GOLDEN PLOVER *(Pluvialis dominicus)* — Three birds, almost certainly of this species, were seen on 3rd October associating with Turnstones and Godwits in Emily Bay.