

The Weights of Some Australian Birds.

—By A. M. Morgan, M.B., B.Ch.—

During a holiday in the South-East of this State last October, I took the opportunity to weigh each of the birds I collected, and also their brains, with the object of finding the percentage of the latter to the body weight. I also weighed all the eggs I collected. As regards the relative weights of the brains my results are so uneven that I think it would be well to obtain many more observations before publishing the results. Many factors may upset the balance in a small bird, such as much loss of blood, containing several shot, or being in poor condition; all of which would increase the relative proportion of brain to body. The weights of birds' bodies and eggs may, however, be of interest to some of our members, and I am therefore publishing them.

All weights are given in grammes, and the names are those in Mr. Mathews's 1913 list:—

Name of Bird.	Weight.
♂ . <i>Hypotaenidia phillipensis</i> .—Buff-banded Rail	237.4
♀ . <i>Laporina pusilla palustris</i> .—Little Crane	22.2
♂ . <i>Leucopolius ruficapillus</i> .—Red-capped Dotterel	39.3.

Name of Bird.	Weight
♂. <i>Charadrius cucullatus</i> .—Hooded Dotterel	101.9
♂. <i>Actitis hypoleucos auritus</i> .—Common Sandpiper	49.0
♀. <i>Trichoglossus novaehollandiae</i> .—Blue-bellied Lorikeet	112.9
♀. <i>Glossopsitta concinna</i> .—Musk Lorikeet	70.9
♀. <i>Platycercus eximius</i> .—Rosella	116.1
♂. <i>Neonanodes chrysogaster</i> .—Orange-bellied Parrot	51.2
♂. <i>Alcyon azurea victoriae</i> .—Blue Kingfisher	37.4
♀. <i>Cosmaerops ornatus</i> .—Bee-eater	25.8
♂. <i>Cacomantis rubicatus</i> .—Fan-tailed Cuckoo	50.3
♀. <i>Pachycephala pectoralis fuliginosa</i> .—White-throated Thickhead	23.2
♂. <i>Lewinornis rufiventris</i> .—Rufous-breasted Thickhead	25.6
♂. <i>Eopsaltria australis gularis</i> .—Grey-breasted Shrike Robin	39.3
♀. <i>Pomatostomus temporalis</i> .—Babbler	97.4
♂. <i>Acanthiza pusilla</i> .—Brown Tit	7.0
♀. <i>Acanthiza lineata</i> .—Striped Tit	7.7
♂. <i>Acanthiza pusilla hamiltoni</i> .—Red-rumped Tit	6.1
♂. <i>Eopsaltria australis viridior</i> .—Green-rumped Shrike Robin	23.8
♂. <i>Sericornis longirostris</i> .—Scrub Wren	13.8
♂. <i>Sericornis longirostris</i> .—Juv.	12.5
♂. <i>Sericornis maculatus mellori</i> .—Spotted Scrub Wren	12.7
♂. <i>Malurus cyaneus leggei</i> .—Blue Wren	10.1
♂. <i>Stipiturus malachurus tregellasi</i> .—Emu Wren	8.1
♀. <i>Sphenura broadbenti</i> .—Bristle Bird	55.1
♀. <i>Campbellornis personatus</i> .—Masked Wood-Swallow	36.1
♂. <i>Aphelocephala leucopsis</i> .—White-face	12.3
♂. <i>Zosterops lateralis westernensis</i> .—Silver eye	8.9
♂. <i>Pardalotinus striatus substriatus</i> .—Striped Diamond Bird	11.2

Name of Bird.	Weight
♂. <i>Gliciphila melanops</i> .—Fulvous-fronted Honey-eater, <i>Juv.</i>	14.9
♂. <i>Meliornis novaehollandiae</i> .—Bearded Honey-eater	24.8
♀. <i>Meliornis novaehollandiae</i> .—Bearded Honey-eater	16.5
♀. <i>Myzantha melanocephala whitei</i> .—Noisy Minah	95.4
♂. <i>Myzantha melanocephala whitei</i> .—Noisy Minah	81.0
♂. <i>Coleia carunculata</i> .—Red Wattle Bird	144.0
♂. <i>Coleia carunculata</i> .—Red Wattle Bird	129.6
♀. <i>Authochoera chrysoptera intermedia</i> .—Brush Wattle Bird	95.4
♀. <i>Acanthagenys rufogularis cygnus</i> .—Spiny-cheeked Honey-eater	45.8
♀. <i>Zonaeginthus bellus</i> .—Fire-tailed Finch	14.1

The greater number of these birds are from the South-Eastern district, but a few are from Port Lincoln.

A number of clutches of eggs were weighed, and the relation to the weight of the bird estimated when the latter was known. The bird weighed was, in most cases, not the parent of the eggs.

Name.	Weight of eggs.	Weight of clutch	Per cent. of clutch to body weight	Per cent. of heaviest egg to body weight
<i>Porzana fluminea</i> (Spotted Crake)	1.7.4			
	2.8.7			
	3.8.5	41.0		
	4.8.3			
	5.8.1			
<i>Haematopus ostralegus longirostris</i> (Pied Oyster Catcher)	1.50.3			
<i>Leucopoliu8 ruficapillus</i> (Red Capped Dotterel)	1.8.3			
	2.8.3	16.6	42.4	21.2
Ditto.	1.6.7			
Ditto.	2.6.7	13.4	34.1	17.05
Ditto.	1.7.9			
Ditto.	2.7.7	15.6	39.7	20.1

Name.	Weight of eggs.	Weight of clutch	per cent. of clutch to body weight	per cent. of heavi- est egg to body weight
<i>Charadrius cucullatus</i> (Hooded Dotterel				
	1.13.5			
	2.12.9	39.3	38.5	13.2
	3.12.9			
Ditto.	1.12.5			
Ditto.	2.12.5	37.5	36.8	12.3
Ditto.	3.12.5			
<i>Circus approximans gouldi</i> (Swamp Hawk)				
	1.36.7			
<i>Platycercus eximius</i> (Rosella Parrot)				
	1.5.5			
	2.5.5			
	3.5.6	22.5	18.4	4.8
	4.5.5			
	5.5.4			
<i>Coracina novaehollandiae</i> <i>melanops</i> (Black-faced Cuckoo- shrike)				
	1.8.5			
	2.8.7	25.8		
	3.8.6			
<i>Colluricincla harmonica vic-</i> <i>toriae</i> (Grey Shrike Thrush) . .				
	1.6.1			
	2.6.5	19.1		
	3.6.5			
<i>Acanthiza lineata</i> (Striped tit)				
	1.0.8			
	2.0.7	1.5	19.4	10.3
<i>Geobasileus chrysorrhous sand-</i> <i>landi</i> (Yellow-rumped Tit) . . .				
	1.1.09			
<i>Lamprocöcycx plagosus</i> (Bronze Cuckoo)				
	1.1.3			
<i>Anthochaera chrysoptera inter-</i> <i>media</i> (Brush Wattle Bird) . . .				
	1.5.8	11.8	12.3	6.2
	2.6.0			
Ditto.	1.47			
Ditto.	2.4.9	10.9	10.0	5.1

Name.	Weight of eggs.	Weight of clutch	per cent. of clutch to body weight	per cent. of heavi- est egg to body weight
<i>Acanthogenys rufogularis cygnus</i> (Spiney-cheeked Honey-eater) ..	1.5.8			
	2.5.1	10.9	23.27	12.6
<i>Zonaeginthus bellus</i> (Fire-tailed Finch)	1.0.9			
	2.1.0			
	3.1.0	4.7	33.3	7.0
	4.0.9			
	5.0.9			
Ditto.	1.1.4			
	2.1.2			
	3.1.2			
	4.1.2	9.2	65.3	9.9
	5.1.4			
	6.1.4			
	7.1.4			

I found during my investigations that birds lose weight fairly rapidly after death, but in varying degree. I should think the temperature of the air would have some influence on this loss, and also the manner in which the bird had been killed; birds with large, open wounds would lose weight more rapidly than those dead from other causes. This cause probably accounts for the small weight of the Little Crane, noted above, the bird having been caught by a dog, and considerably mauled the day before it was weighed. A New-holland Honey-eater lost one gr. in weight between 7 p.m. and 9 a.m. the next morning, whereas a second bird lost only 0.1 gramme in the same period; a rufous-breasted Thickhead lost no weight; a Blue Wren lost 0.3 gramme; a Bee-eater lost 1 gramme; a Scrub Wren lost 0.2 gramme in 14 hours after death. The great relative weight of the clutch of the Fire-tailed Finch is very remarkable, especially as this bird lays an egg on each day until the clutch is complete; four of this clutch of seven are known to have been so laid. This means that the female loses nearly 10 per cent. of her body weight on each day, for seven days in succession—a really terrific strain upon her economy.