

# DATA EXCHANGE

## COMPARATIVE MEASUREMENTS OF THE GRACEFUL AND YELLOW-SPOTTED HONEYEATERS

The Graceful Honeyeater *Meliphaga gracilis* and the Yellow-spotted Honeyeater *M. notata* occupy the same rain-forest habitat. Experienced observers can identify and separate the two species in the field by their calls and distinctively different flight. However, both species are very similar in appearance, though *gracilis* is considerably smaller and it has a more slender and slightly more down-curved bill which appears proportionally longer than *notata*. The following data are provided to assist banders in the separation of these two species and to sex birds in the hand.

The data presented here are derived from the records of the 18 banders who participated in the Australian Bird Study Association's week-long campout at Iron Range, Queensland in November, 1990. A total of 79 Graceful and 142 Yellow-spotted Honeyeaters were captured at the site during the week. Of these, a number were recorded as adult birds in breeding condition and positively sexed by cloacal examination. Their weights and measurements are recorded in the table.

From the small sample analysed here it appears from our data that the only reliable measurements for separating all individuals of the two species are weight and the width of the bill at its base. In the case of the Graceful Honeyeater, the weight range was 12.5 to 17.0 grams for all birds measured ( $n = 66$ ) and for the Yellow-spotted Honeyeater 21.0 to 33.5 grams for all birds measured ( $n = 126$ ). The bill width ranges were 4.0 to 4.9 mm ( $n = 13$ ) and 5.0 to 6.3 mm ( $n = 37$ ) respectively.

Our data shows a small overlap in the various measurements between the sexes in both species. However, the data here should prove useful as a guide to confirming the sex of the larger and smaller individuals within each species.

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	Sex	n	Range	Mean	SD
<b>Graceful Honeyeater</b>					
Weight (g)	M	5	14.0–17.0	15.6	1.1
	F	5	12.5–16.5	14.0	0.6
Head/Bill (mm)	M	5	39.5–40.6	40.0	0.4
	F	5	36.4–39.1	37.2	0.3
Bill Width at base (mm)	M	5	4.5–4.8	4.6	0.1
	F	5	4.0–4.6	4.3	0.2
Wing Span (mm)	M	5	242–248	245.4	2.2
	F	5	225–238	229.4	1.9
Wing Length (mm)	M	5	75–78	76.4	1.3
	F	5	70–72	70.8	1.0
Tail Length (mm)	M	5	61–67	65.2	2.5
	F	5	55–61	58.4	2.2
<b>Yellow-spotted Honeyeater</b>					
Weight (g)	M	14	23.3–33.5	26.9	2.7
	F	14	22.0–26.5	23.4	1.2
Head/Bill (mm)	M	12	40.9–46.3	44.4	1.7
	F	14	39.9–45.2	41.9	1.5
Bill Width at base (mm)	M	12	5.4–6.3	5.6	0.3
	F	13	5.2–6.0	5.5	0.2
Wing Span (mm)	M	14	260–284	274.9	7.9
	F	15	238–276	259.7	8.7
Wing Length (mm)	M	14	80–90	85.6	3.1
	F	15	74–87	81.3	2.9
Tail Length (mm)	M	12	64–79	70.9	3.6
	F	13	63–79	68.8	4.3

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