

SEXUAL DIMORPHISM IN THE PROVIDENCE PETREL *Pterodroma solandri* USING DNA ANALYSIS

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The Providence Petrel *Pterodroma solandri* was studied on Lord Howe Island during the 2000 breeding season. Molecular sexing was conducted on feather samples taken from 18 pairs of breeding birds. Morphological measurements taken from these sexed birds indicate that males were significantly heavier than females (mean mass of males 507.2 ± 415.9 ; females 476.6 ± 447.9) and had a significantly longer culmen (males 36.5 ± 1.1 mm; females 35.5 ± 1.3 mm). This study confirms earlier evidence, based on small sample sizes, that Providence Petrels are indeed sexually dimorphic. Sexual dimorphism has only been positively identified in two other *Pterodroma*. The ability to sex individual Providence Petrels using this DNA analysis provides a means to investigate sex-specific differences in foraging and breeding behaviour.