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## The Australian Museum Lord Howe Island Expedition 2017—Birds and Mammals

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**ABSTRACT.** The Australian Museum Research Institute Terrestrial Vertebrates team was on Lord Howe Island from 12–24 March 2017. Our aims were to improve the Museum’s specimen and tissue collection of birds and mammals from the Island, to collect base-line samples of the two introduced rodent species before their planned eradication, and to exhume the skeletal remains of three beaked whales which were buried on the Island in 2011. Samples were collected from 96 individuals of 10 species of birds on Lord Howe Island. Blood samples were collected from 30 individuals that were subsequently released, including representatives of three of the four extant endemic taxa. Feather samples were collected from a further 17 living individuals, while 47 specimens that had been found dead on the island by residents were transported back to the Museum for curation as skins, skeletons and tissues. Twenty-seven Lord Howe Woodhen, *Hypotaenidia sylvestris* specimens were included in this collection. These samples will be used in future research projects on the conservation ecology of the Woodhen, and microevolution of island avifauna. Fifteen genetic samples (4 specimens and 11 wing biopsy samples) were obtained from the Island’s only extant native mammal, the Large Forest Bat, *Vespadelus darlingtoni*. Preliminary analysis indicated that the Lord Howe Island population was most similar to the northeast New South Wales population, but variation across the species’ range in calls, morphology and genetics warrants further investigation. Specimens and tissue samples were also collected from populations of the Island’s introduced House Mouse, *Mus musculus* (n = 38) and Black Rat, *Rattus rattus* (n = 12). These samples will provide a valuable record of the pre-eradication rodent population of Lord Howe Island. Three Dense-beaked Whale, *Mesoplodon densirostris* skeletons, two females and a sub-adult male, were successfully recovered. Overall, these new specimens and tissue samples will significantly enhance the Australian Museum’s collection, provide documentation of the contemporary bird and mammal fauna of Lord Howe Island, as well as support current and future research projects.

**KEYWORDS.** Vespertilionidae; Ziphiidae; Muridae; Passeriformes; Rallidae

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