

# Introduction: the development of reintroduction biology in New Zealand and Australia

*Doug P. Armstrong, Dorian Moro, Matt W. Hayward and Philip J. Seddon*

## Introduction

The term ‘reintroduction biology’ refers to a relatively new field of research designed to improve an aspect of conservation practice – the intentional movement of organisms from one place to another to conserve species and restore ecosystems. Such actions are collectively called ‘conservation translocations’, and include ‘reintroductions’ (re-establishing a species in part of its historic range), ‘conservation introductions’ (establishing a species outside its historic range for conservation purposes), or ‘reinforcements’ (releasing additional organisms to bolster existing populations) (Seddon 2010; IUCN 2013; Seddon *et al.* 2014). Although the establishment of species outside their historic ranges is increasingly being considered as a conservation option (Chapter 9), reintroduction will continue to be the main type of conservation translocation performed for the foreseeable future, so the term ‘reintroduction biology’ continues to be appropriate.

## History of conservation translocation in New Zealand and Australia

Although reintroduction biology is a new field, conservation translocation has a longer history. In New

Zealand, the first recognised conservation translocations were Richard Henry’s efforts from 1895 to 1907 to establish three species of declining flightless birds on islands free of mammalian predators in Fiordland (Miskelly and Powlesland 2013; Chapter 9). In Australia, the first recognised conservation translocations also occurred in the late 19th and early 20th centuries, when declining marsupials were translocated to islands off Victoria and South Australia (Copley 1995; Short 2009). Translocations were also conducted for many other reasons since the arrival of humans, including those by Māori and Aboriginal people, as well as the later raft of translocations after European colonisation (Chapter 19). However, there is no indication that these earlier translocations were done for conservation reasons (Chapter 19).

Translocation started to become a major conservation strategy in the 1960s in New Zealand and 1970s in Australia, and the number conducted has increased in each subsequent decade (Chapter 19). There are more than 1000 documented conservation translocations of New Zealand fauna (McHalick 1998; Sherley *et al.* 2010; Miskelly and Powlesland 2013; <http://www.reintroductions.net>) and more than 350 of Australian fauna (Copley 1995; Short 2009). The majority of these have involved birds in New Zealand and