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Reintroduction biology of Australian and New Zealand fauna: progress, emerging themes and future directions

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Introduction

With an increasing number of conservation translocations undertaken across Australia and New Zealand, and a growing volume of research that accompanies these programs, reintroduction biology is no longer in the infancy it was two decades ago (Serena and Williams 1995). The challenge now for reintroduction practitioners is how best to apply the vast amount of available knowledge in support of their translocation practices. Additionally, practitioners must be conscious of the array of new analytical tools and approaches available to them to enable evaluation of translocation outcomes. Here we summarise our progress in reintroduction biology of Australian and New Zealand fauna over the last 20 years, identify emerging themes, and suggest future directions.

Progress

In the final chapter of *Reintroduction Biology of Australian and New Zealand Fauna* (Serena 1995), Serena and Williams (1995) identified future directions that would be useful for reintroduction biologists to pursue. Our book illustrates considerable progress in these areas, namely:

- increased use of trials and experiments to optimise reintroduction strategies (Chapters 2 and 7)
- improved methods for managing disease risks in translocations (Chapter 5)
- development of frameworks for evaluating proposals to conduct conservation introductions, including what are now called 'assisted colonisations' (Chapter 9)
- increased genetic knowledge and management to improve the probability of long-term persistence for reintroduced populations (Chapter 10)
- widespread opportunities for reintroduction created by public interest in ecological restoration projects (Chapter 14)
- improved zoo–wild integration in reintroduction programs (Chapter 15)
- development of formal methods for assessing the relative importance of taxa for reintroductions (Chapters 16 and 10)