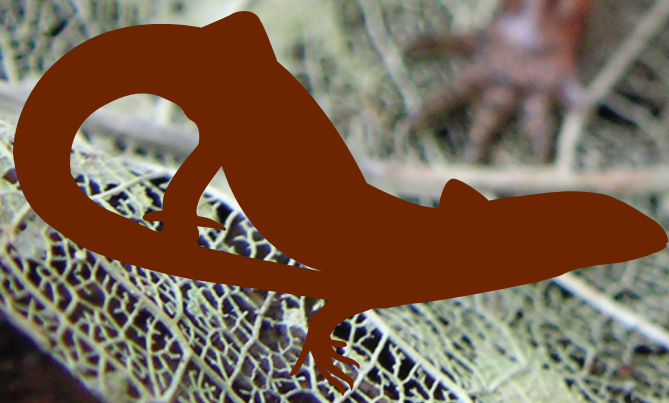


# Guidelines and model for producing management plans for New Zealand lizards

Department of Conservation Lizard Technical Advisory Group



Cover: Ornate skink, *Oligosoma ornatum*. Photo: DOC Image Library.

© Copyright June 2018, New Zealand Department of Conservation

ISBN 978-1-98-851480-2 (web PDF)

This report was prepared for publication by the Creative Services Team; editing and layout by Lynette Clelland. Publication was approved by the Manager, Terrestrial Ecosystems Unit, Department of Conservation, Wellington New Zealand.

Published by the Department of Conservation, PO Box 10420, The Terrace, Wellington 6143, New Zealand.

In the interest of forest conservation, we support paperless electronic publishing.

# CONTENTS

Purpose of this document	1
<hr/>	
1. Introduction to lizard management plans	1
<hr/>	
2. Report model for a lizard management plan	2
<hr/>	
Title: Lizard management plan for [insert]	2
Table of Contents	2
Executive summary	2
1. Background to the proposed modification	2
2. Goals and objectives of this plan	2
3. Lizard populations at the site(s) where modification is proposed	2
4. Lizard habitat	3
4.1 Significance of habitat	3
5. Actual and potential effects of proposed modification	3
5.1 Proposed or consented land development activity	3
5.2 Effects on lizards	3
5.3 Significance of effects	3
6. Opportunities to avoid adverse effects	3
7. Mitigation	3
7.1 Anticipated residual effects	4
7.2 Contingency mitigation	4
8. Wildlife Act Authority	4
9. Incidental discovery	4
10. Reporting	4
10.1 Reporting	4
10.2 Resource consent conditions	4
10.3 Report on outcomes of this plan	4
11. References	4



# Purpose of this document

**This document provides guidelines and a model for writing a lizard management plan. Please read the introduction (section 1), then use the model format in section 2 to produce your plan.**

## 1. Introduction to lizard management plans

Lizard management plans are site-specific plans written to identify and implement the actions required to ensure that lizards and their habitats are protected when disturbance or modification to land (vegetation clearance, earthworks, construction, road building) is proposed (most commonly as a result of land development). These lizard management plans also aim to ensure that any modification potentially affecting lizards complies with environmental legislation (particularly the Resource Management Act (RMA) and the Wildlife Act). While there is no requirement to follow a particular format to produce a lizard management plan, the model provided here is designed to assist in writing and implementing such plans.

The model has been developed by professional herpetologists through the Department of Conservation's (DOC's) Lizard Technical Advisory Group (TAG). While the model reflects the TAG's views of best practice at the time of publication, important points or new information may have been missed. The TAG hopes to receive constructive feedback about this report model and intends to review and continually improve it. It is also acknowledged that different proposals for modification to land will require individually tailored plans.

The model headings should act as prompts to practitioners, highlighting the subject areas that need to be addressed in each lizard management plan and providing a brief explanation of each of them. The Lizard TAG believes that use of this report model will:

- Improve the rigour, objectivity and consistency of lizard management plans across New Zealand.
- Improve the implementation of lizard management objectives through clearer guidance on what is required.
- Support the work of decision makers in assessing lizard management plans.
- Lead to improvements in other species- or site-specific management planning.
- Improve outcomes for lizards and their habitats.

### Reference

Department of Conservation Lizard Technical Advisory Group 2018: Guidelines for conservation-related translocations of New Zealand lizards. Department of Conservation, Wellington. 26 p.

## 2. Report model for a lizard management plan

**Title: Lizard management plan for [insert]**

*Author*

*Date*

### Table of Contents

*[Generate a table of contents automatically if the document is more than six pages long.]*

### Executive summary

*[Provide a summary for the Plan, including description of habitat and lizard populations at the site(s); description of the modification or development activity; quantify and qualify the effects of the modification; describe measures to avoid, remedy, mitigate and/or compensate for the effects; describe monitoring and reporting.]*

### 1. Background to the proposed modification

*[Why is a lizard management plan required; describe the type of disturbance/modification to land (vegetation clearance, road building, etc); location of site(s); relevant ecological values of the site, and its ecological context (e.g. ecological district) – if appropriate, refer to other reports about the site; current stage of the modification (i.e. pre- or post-consent); refer to relevant land use consent, concession and/or Wildlife Act permit conditions.]*

### 2. Goals and objectives of this plan

*[The overall goal of all objectives is to balance the detrimental effects of the modification against mitigation efforts (avoidance is not mitigation) in order to achieve no net loss of lizards at the site. Objectives should be written using the SMART approach (Specific, Measurable, Achievable, Relevant, Time-bound); do not ‘clump’ multiple objectives together.]*

### 3. Lizard populations at the site(s) where modification is proposed

*[Lizards found during site assessment (species list and conservation status) and from desktop literature surveys (including Bioweb Herpetofauna information). Describe survey and search methods, and effort (including personnel used, weather, search hours by night and day, time of year, rationale for habitats targeted.)*

### 4. Lizard habitat

*[Qualify and quantify lizard habitat at the site, including maps and photographs.]*

#### 4.1 Significance of habitat

[Assess habitat at the site against criteria for assessing ecological significance in the local Regional Policy Statement and District Plan, and in the Guidelines for conservation-related translocations of New Zealand lizards (DOC 2016).]

### 5. Actual and potential effects of proposed modification

#### 5.1 Proposed or consented land development activity

*[Provide a description of ALL proposed or consented land development activities, including their extent, effects and duration. Separate out temporary effects from on-going effects. Minimise cross reference to other reports and avoid technical jargon.]*

#### 5.2 Effects on lizards

*[Describe how the modification or land development will affect lizards and lizard habitat – include ALL actual and potential effects as per Section 31 of the Resource Management Act (1991).]*

#### 5.3 Significance of effects

*[Under the Wildlife Act (1953) all indigenous New Zealand lizards are absolutely protected. Therefore, all effects on indigenous lizards and their habitats are significant.]*

### 6. Opportunities to avoid adverse effects

*[Describe measures to be taken to avoid adverse effects of the modification on lizards at the site.]*

### 7. Mitigation

*[Describe measures to be taken to mitigate the adverse effects of the modification to lizards at the site. Examples can include remedial plantings to restore habitat and food supply; removal and control of woody weeds; creation of new rocky habitat; research (to determine if mitigation is successful) and lizard salvage<sup>2</sup> transfer.*

*If lizard salvage and transfer is planned, identify and describe release site(s), the methods for salvage and transfer, and methods for on-going management (including control of animal predators, habitat enhancement, post-release monitoring). Indicate the tenure of sites used for mitigation. Describe how the proposed mitigation relates to a wider mitigation package for the site or activity.]*

---

<sup>1</sup> Section 3 of the RMA (1991) defines effects as:

- (a) Any positive or adverse effect; and
- (b) Any temporary or permanent effect; and
- (c) Any past, present, or future effect; and
- (d) Any cumulative effect which arises over time or in combination with other effects regardless of the scale, intensity, duration, or frequency of the effect, and also includes:
- (e) Any potential effect of high probability; and
- (f) Any potential effect of low probability which has a high potential impact.

<sup>2</sup> A salvage is defined by DOC as the permanent removal of lizards from their habitat to another site in order to protect them from displacement or death caused by negative activities to them or their habitat(s).

### **7.1 Anticipated residual effects**

*[Describe likely effects of the modification on lizards that are not covered by the mitigation described above i.e. the residual effects. If residual effects remain, then additional management is required offsite - describe the proposed management.]*

### **7.2 Contingency mitigation**

*[Describe actions to be undertaken in the event that monitoring of lizards indicates that the mitigation does not achieve its objectives.]*

## **8. Wildlife Act Authority**

*[A Wildlife Act (1953) Authority is required to handle all indigenous New Zealand lizards and a Wildlife Act Authority is required to carry out modification or land developments that impact on indigenous New Zealand lizards.*

*Apply for Wildlife Act Authorities at the Department of Conservation well in advance of requiring these; go to <http://www.doc.govt.nz/Documents/about-doc/concessions-and-permits/wildlife-research-permits/wildlife-act-authority-application-9a.doc>.]*

## **9. Incidental discovery**

*[Describe actions to be taken should lizards not described in Section 3 be encountered during the modification.]*

## **10. Reporting**

### **10.1 Reporting**

*[Describe requirements to report to relevant consent authority, DOC or both. Provide any recommendations for conditions of consent.]*

### **10.2 Resource consent conditions**

*[Make recommendations for conditions of consent.]*

### **10.3 Report on outcomes of this plan**

*[Write a brief evaluation and/or make recommendations regarding the outcomes of this lizard management plan. Submit to DOC decision maker.]*

## **11. References**

*[Include a list of references]*