



A review of
Department of Conservation
mainland restoration projects and
recommendations for further action

MAY 2000



Department of Conservation
Te Papa Atawhai

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recommendations for further action

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EXECUTIVE SUMMARY

Six mainland restoration projects were initiated during 1995 and 1996 using funds specifically allocated for this purpose. In late 1996 it was determined that no further projects would be established pending an evaluation of their performance.

The precise reasons for the support by the Department of Conservation (DOC) for the initiation of these projects are unclear. Recent successes in recovering species and rehabilitating habitats, coupled with calls to focus conservation management on ecosystems as well as on species, and on the New Zealand mainland as well as on offshore islands probably had an important influence.

Selection criteria were developed and a process for evaluating Conservancy bids established. While ecosystem-related criteria were included, greatest weighting was given to the potential to recover threatened species. Projects were not primarily chosen for their experimental attributes or for their capacity building potential, although most project plans include research and development objectives.

In total approximately 11,500 hectares of land are being intensively managed at these sites, with a further 8,000 hectares being monitored as reference areas. Operational areas have already expanded at two projects. Most sites involve native forests although some native grasslands are included in the South Island projects.

Four features, in combination, set these projects apart: they have ecological restoration goals, they involve intensive, multi-pest control programmes, detailed monitoring is being undertaken, and there are relatively high costs and risks, as well as high returns associated with these projects.

Progress towards pest control objectives has been recorded at all projects with significant reductions in population indices for some pests. Reported pest control results are important in that very low population densities have been achieved for different suites of plant and animal pests, and maintained for longer periods than is normally the case in pest control projects elsewhere. Outcome monitoring suggests that significant changes have occurred in measured parameters such as vegetation condition and survival rates of some vulnerable birds.

In addition to results and outcomes related to intensive pest control, management techniques have been developed and refined, field trials undertaken and research supported to develop capacity to more effectively and efficiently manage biodiversity. While social outcomes have not been measured, changes in attitudes of some stakeholders have been reported as a result of advocacy activities.

Project administration and support procedures vary considerably between projects. While a large amount of information has been generated, the lack of consistent application of planning procedures and terms, and comprehensive and current reports (for most projects) was a major impediment to this review.

The total expected costs of these projects in the 1999/2000 financial year is \$3,110,995. No comparisons were undertaken with other projects as part of this review. It is clear, however, that the intensive and on-going management

regimes in place mean that operational costs are higher than at projects involving less intensive and frequent management.

It is suggested that there are two primary features of ecological restoration projects: a focus on ecosystems and ecological processes rather than on species alone, and goals to improve the condition of a suite of biodiversity attributes rather than to limit further loss, or to maintain the *status quo*. Secondary features relate to the selection of restoration areas and the nature of management undertaken. Further consideration of a working definition of ecological restoration in a New Zealand context will be required as departmental policies are developed.

These projects indicate that two key paradigm shifts are required if ecological restoration goals are to be achieved. Firstly, a shift is required from a focus on species alone, to one encompassing ecosystem processes. Secondly, a more science-based approach to conservation management is required involving the declaration and testing of hypotheses, rather than more traditional intuitive approaches alone.

It is concluded that these mainland restoration projects are important for four main reasons:

- They indicate that further losses of native biodiversity on the New Zealand mainland are not necessarily inevitable.
- Their ecological restoration goals constitute an important step towards meeting international obligations, statutory provisions and declared strategic goals.
- They represent a more integrated and potentially more cost effective approach to achieving conservation goals.
- Preliminary reported outcomes have been linked to specific management actions.

Thirteen recommendations are presented for approval by the department's Mainland Islands programme sponsor. Some of these relate to improving the way existing projects are managed and supported, while others concern moving in new directions. It is suggested that a key to further advances in conserving native biodiversity will be the more rigorous application of science as part of management programmes. Improved understanding can be expected to lead to enhanced capacity to restore the dawn chorus at sites on the New Zealand mainland.

P R E F A C E

Six mainland restoration projects were initiated in 1995 and 1996 following the allocation of funds by the Department of Conservation for this purpose. In December 1996 it was determined that no further projects would be funded until an evaluation had been undertaken of the success of these projects. Following the appointment of a Technical Coordinator in July 1997 a review was initiated. The objectives of this review were to outline the background to these projects and to summarise activities and progress in relation to restoration goals.

Apart from visits to talk to project staff, technical specialists and departmental managers, information was also gathered from project plans and reports where these were available. A questionnaire designed to obtain detailed descriptions of project activities and results was completed by project managers in July 1998. A draft report summarising the results of this review was circulated for wider comment (Saunders 1999). That report was used as a basis for discussions with departmental managers in early 1999 concerning the future direction of departmental mainland restoration activities.

Soon after the Department's Southern Regional General Manager assumed the role of Mainland Islands programme sponsor in May 1999, he asked the Technical Coordinator to revise the draft document based on submissions received. He also requested a position paper including specific recommendations for future action. The process of refining the draft review document involved an evaluation of about 30 submissions and discussions with a number of specialists. A second questionnaire was circulated in June 1999 in order to gather more detailed and current information about each project. A workshop involving mainly departmental restoration practitioners and planning staff was then held in October 1999 to discuss and refine recommendations contained in the draft position paper. Following some further refinements to the review document based on comments from project managers, this second draft, incorporating a review of current departmental restoration projects and recommendations for further action (the position paper), was submitted to the programme sponsor in November 1999.

The review was confined to the six departmental projects specifically funded for mainland restoration. A number of other projects are funded by the Department and other agencies which also have ecosystem-focused goals, and are achieving important conservation outcomes. Decisions about the strategic direction and departmental support for mainland restoration in the future will need to include consideration of these projects. Information presented in the review represents the most current and comprehensive available. It is clear, however, that there are gaps in the analysis and reporting of activities, results and outcomes at all of these projects. Despite the efforts of project managers to respond to requests for specific information, the lack of detailed reports covering the full term of these projects to date was a major impediment to undertaking a comprehensive review. The information presented here should be seen as a reflection of information available at the time this review was undertaken, rather than a comprehensive and current depiction of activities, results and outcomes.

This document is presented in four parts; Part A provides a background to the initiation of mainland restoration projects, Part B summarises activities, results and preliminary outcomes from the six projects funded by DOC for mainland restoration, Part C discusses features which set these projects apart from other approaches, and which make them important and Part D contains a list of recommendations for future action.

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DEDICATION

This review is dedicated to all those people who have demonstrated their commitment to the vision of restoring the dawn chorus through their initiative and plain hard work at mainland restoration projects.

VISION

'And let us go beyond mere salvage to begin the restoration of natural environments, in order to enlarge wild populations and staunch the hemorrhaging of biological wealth. There can be no purpose more enspiriting than to begin the age of restoration, re-weaving the wondrous diversity of life that surrounds us.'

E.O. Wilson 1992. The Diversity of Life.

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