

SCIENCE AND RESEARCH INTERNAL REPORT NO.46

**DEPARTMENT OF CONSERVATION
SCIENCE PROJECT SUMMARIES**

PART 2: TRANSFER FUNDED AGENCIES

Compiled by

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PREFACE

This report summarises science activities carried out by the transfer funded agencies for the Department of Conservation in the 1988/89 financial year. The work done by the Science Research Directorate of the department is described in Science and Research Internal Report No.46 Part 1.

These summaries are designed to describe the reasons for the work, highlight the important scientific findings and draw out the matters of interest to managers. Subject, location (by DOC regions and districts 1988), corporate objective and agency indexes assist in locating topics.

A considerable amount of information is provided: I hope conservation managers will find time to themselves with projects relevant to their areas of interest and consider how the results maybe used to advance conservation management.

Please contact the project leader for further information if necessary and particularly note that detailed reports are available in most cases.

This report is designed to transfer information on activities in the transfer funded agencies to conservation managers at all levels. I welcome constructive feedback from all who use it.

Richard Sadleir
Director (Science & Research)

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Introduction.

This report is a collection of projects summaries from transfer funded agencies which cover all work carried out in 1988-89.

This section describes how the information in this report is arranged.

Project Number.

Each project has a unique project number.

e.g. S9029/11^

S = approved science and research investigation number

90 = programme number

29 = subprogramme number

11 = accession number

^ = more detailed report is available from your regional library or Science & Research Directorate.

Accession Number.

This number is assigned in sequential order to project proposals when they are first received.

Corporate Objective.

This number is the main corporate objective supported by the project. The corporate objectives are those used in the Department of Conservation 1989/90 Corporate Plan.

Programme/subprogramme

These are the science programme/subprogramme under which each programme is classified.

Summaries order.

This report is in programme order: Programme 10 to Programme 90 : within each programme, in subprogramme order; and then accession number.

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Indexes by subject, locality (by DOC regions and districts as at January 1989), agency and corporate objective are provided to assist in locating topics.

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Objective 1: To identify terrestrial, marine and freshwater natural resources of special significance and to implement appropriate protective measures.

1.3. Marine Protected Area surveys to identify terrestrial areas meriting protection.

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1.4. Protected Natural Areas Programme surveys to identify terrestrial areas meriting protection.

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1.6 Public information and education

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1.7. Monitoring the ecological quality of the protected estate.

Computer software development of forest & grassland survey analysis package	S1020/264
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Objective 2: To maintain, enhance or restore the natural character and qualities of the conservation estate.

2.A. Coastal and Marine Component

2.A.2. Marine environment protection.

Benthic macrofauna of Rangaunu & Doubtless Bays, Northland
Channel stability in tidal waterways
Littoral and infralittoral ecology of NZ Southern Island
Nutrient availability & cycling in green lipped mussel farming
Sedimentation in estuaries

2.B. Terrestrial Component Outputs

2.B.1. Suppression of fire which threatens the conservation estate.

Awarua bog: effects of fire
<i>Chionochloa rigida</i> composition & effect of spring and autumn fires
Nothofagus regeneration after fire at Mt Thomas Forest

2.B.2. Containment of animal pest populations and the prevention of their further dispersal.

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2.B.3. Containment of plant pests and their eradication where practicable.

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2.B.4. Maintenance of conservation values of pastoral leases and licences.

<i>Chionochloa</i> species: seed features, seedling requirements, ecology	S3010/457
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Vegetation/environment studies of grassland	S3010/433

2.B.6. The restoration or revegetation of the conservation estate where it has been degraded through fires, pests or other threats.

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2.C. Freshwater Component Outputs

2.C.1. Action initiated by Department to protect water values.

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Objective 3: To ensure the survival of endangered, vulnerable, rare and other protected plants and animals and their habitats.

3.3. Information gathering (research and survey)

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Objective 5: To foster public recreation and to manage commercial recreation and tourism in areas administered by the Department

5.7. Controlling the impacts of visitors on the estate

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Objective 6: To manage, and where possible sustain, the sensitive use of natural resources including minerals, plants and animals and those traditionally used by Maori.

6.1. Processing of applications for consent to mining privileges over the conservation estate and the monitoring of issued licences.

Restoration of streams after mining diversion S3040/340

6.3 Provision of materials and products from the conservation estate.

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Kiekie sustainable harvesting for weaving S6020

Pingao cultivation & provenance trial S6020/458

Totara provenance trial S4010/506

6.4 Administration and management of indigenous freshwater fisheries.

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6.5 Administration and management of freshwater sport fisheries and game.

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Sockeye salmon biology S7050/335

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6.6 Issues of licences for the taking of other commodities from the conservation estate and the monitoring of these grants and commodities.

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