



Science Publications 2003



Department of Conservation
Te Papa Atawhai

Science Publications 2003

Published by
Department of Conservation
PO Box 10-420
Wellington, New Zealand

© Copyright January 2004, New Zealand Department of Conservation

ISBN 0-478-22530-X

In the interest of forest conservation, DOC Science Publishing supports paperless electronic publishing. Recycled paper is used for printing wherever possible.

This catalogue was prepared for publication by DOC Science Publishing, Science & Research Unit; editing and layout by Sue Wilkins. Publication was approved by the Manager, Science & Research Unit, Science Technology and Information Services, Department of Conservation, Wellington.

Contents

Introduction	5
DOC Science Internal Series	6
DOC Technical Series	13
Miscellaneous	13
Science for Conservation	14
Science Posters	17
Threatened Species Recovery Plans	17
Index	18
Order form	23

Department of Conservation science publications

DOC science publications record the output of science investigations undertaken by departmental staff and consultants. We publish stand-alone books, science posters, pamphlets, and reports in several series.

Current series:

- *DOC Science Internal Series* is a published record of scientific research carried out, or advice given, by Department of Conservation staff or external contractors funded by DOC. It comprises reports and short communications that are peer-reviewed.
- *Department of Conservation Technical Series* presents instructional guide books and data sets, aimed at the conservation officer in the field. Publications in this series are reviewed to ensure they represent standards of current best practice in the subject area.
- *Science for Conservation* is a scientific monograph series presenting research funded by New Zealand Department of Conservation. Manuscripts are internally and externally peer-reviewed; resulting publications are considered part of the formal international scientific literature.
- *Science Posters* have usually been presented at conferences by staff of DOC's Science and Research Unit.

DOC Science Publishing also produces monthly updates of new publications. These are free of charge. If you would like to receive this please ask to be put on our mailing list.

Sales catalogue

This catalogue lists the items that were released by DOC Science Publishing during 2003. Also included are a limited selection of other DOC publications, such as those from the Biodiversity Recovery Unit.

Publications released in previous years are listed in separate catalogues. The cumulative listing from 1987 to 2003 (inclusive) can be found on the internet. Check out *Science and Research* at <http://www.doc.govt.nz> under *Publications*.

The form provided on page 23 can be used to order any of our publications.

DOC science staff also publish research in professional journals and other external publications: these are NOT available from DOC Science Publishing.

Contact details

DOC Science Publishing
Science & Research Unit
Department of Conservation
PO Box 10 420
Wellington, New Zealand

Phone: +64 4 471 0726 Fax: +64 4 496 1929

Email: science.publications@doc.govt.nz

Web address: *Science and Research* at <http://www.doc.govt.nz> under *Publications*

Introduction

This was a landmark year for DOC Science Publishing, as we completed a significant development which has considerably improved the service we can offer to all our customers. From 1 July 2003, we were able to make electronic copies of our regular publications available free of charge from the Department of Conservation website.

Although we were not able to offer them publicly, we had been creating pdf files of our publications for several years. This meant that in July we were able to include not just new publications, but a considerable number of our back issues as well. We are also working to create pdf files of many of our older works.

In conjunction with the move to open access to our electronic publications, we are now able to offer *free* hard-copies of all our series, on a first-come-first-served basis. This has proved to be of particular interest to libraries and other research institutions, both in New Zealand and internationally.

For a while now many people have chosen to receive details of our newly published titles by monthly email. We revamped this service so that everyone can now choose to receive, in addition, a message about each individual report (containing the abstract) before the hard-copy is ready. All emails, whether monthly summaries, or notifications of individual reports, contain links to the relevant pdf file on our website.

Another important development can be seen on the Science and Research publications pages on the DOC website. They now contain a dedicated 'search' facility which accesses a complete database of our science publications. This has made it much easier to track down reports written about particular topics, or written by particular authors. The results of a given search automatically include a link to the pdf file (where one exists) reducing the need to scroll through pages of listings.

Also of note is the fact that we now regularly supply these details of publications, to 'The Knowledge Basket', a web-based electronic research facility concentrating on collecting New Zealand publication data. A search in 'Superindex' on their site will quickly turn up full references and links to the pdf files of our science publications.

If you would like any more information about any of our services, we can be contacted by email on science.publications@doc.govt.nz, or by phone on 04 471 3285.

DOC Science Internal Series

91. **Population assessment of the Chatham mollymawk at The Pyramid, December 2001.**
C. J. R. Robertson; D. Bell; P. Scofield 2002. 17 p.
92. **Fisheries bycatch mortalities of sooty shearwaters (*Puffinus griseus*) and short-tailed shearwaters (*P. tenuirostris*).**
S. Uhlmann. 52 p.
93. **Distribution and abundance of Maui's dolphins (*Cephalorhynchus hectori maui*) along the North Island west coast, New Zealand.**
S. M. Ferreira; C. C. Roberts. 19 p.
94. **Morphological and molecular analysis of the carabid genus *Oregus*, with identification of two new species.**
S.M. Pawson; R.M. Emberson; K.F. Armstrong; A.M. Paterson. 11 p.
95. **Birds of the braided riverbeds of southern Marlborough, New Zealand.**
S.E.A. Hallas. 18 p.
96. **Autopsy report for seabirds killed and returned from New Zealand fisheries, 1 October 2000 to 30 September 2001.**
C.J.R. Robertson; E.A. Bell; P. Scofield. 36 p. and a data supplement of 75 p.
97. **Unsuccessful transfer of captive-bred *Placostylus* land snails to a cage at Te Paki Farm Park, North Auckland.**
I.A.N. Stringer; E. Grant. 10 p.
98. **Landscape indices as measures of the effects of fragmentation: can pattern reflect process?**
D. Rutledge. 27 p.

99. **New Zealand northern tuna fleet: report of advisory officer — seabird/fisheries interactions 2001/02.**
D. Kellian. 22 p.
100. **Paired trial of fresh and long-life stoat baits in a warm coastal environment.**
N. Miller. 11 p.
101. **Karaka (*Corynocarpus laevigatus* J.R. et G. Forst.) in Wellington Conservancy (excluding Chatham Islands).**
J.W.D. Sawyer; B.G. McFadgen; P. Hughes. 27 p.
102. **Behavioural vulnerability of juvenile brown kiwi: habitat use and overlap with predators.**
S.J. Gibbs; M.N. Clout. 17 p.
103. **Rata litterfall and canopy condition, Whirinaki Forest Park, New Zealand.**
G.P. Hosking. 12 p.
104. **Disease investigations in stranded marine mammals, 1999–2002.**
P.J. Duignan. 32 p.
105. **Diagnostic morphometrics of the skink species, *Oligosoma maccanni* and *O. nigriplantare polychroma*, from South Island, New Zealand.**
J.T. Reardon; M.D. Tocher. 21 p.
106. **Status of New Zealand indigenous aphids, 2002.**
D.A.J. Teulon; M.A.W. Stufkens; C.D. von Dohlen; J. Kean. 31 p.
107. **Movement, diet and relative abundance of stoats in an alpine habitat.**
D. Smith; I.G. Jamieson. 16 p.
108. **Western weka (*Gallirallus australis*) monitored before and after an aerial application of 1080 baits in the Copland Valley, Westland National Park.**
P. Van Klink; A.J.S. Tansell. 12 p.

- 109. Genetic diversity in tussock hawkweed (*Hieracium lepidulum*) and use of allele frequencies for identifying patterns of spread.**
H. Chapman; M.L. Pearson; B. Robson. 19 p.
- 110. Statistical review of the draft national pateke monitoring guidelines.**
D. Fletcher; D. MacKenzie. 14 p.
- 111. Possible impacts of marine farming of mussels (*Perna canaliculus*) on king shags (*Leucocarbo carunculatus*).**
D.J. Butler. 29 p.
- 112. Conservation, management and research directions for giant kokopu (*Galaxias argenteus*) in Otago.**
B. David. 26 p.
- 113. Ecological impacts of sea couch and saltwater paspalum in Bay of Plenty estuaries.**
W.B. Shaw; R.B. Allen. 18 p.
- 114. Detection of sooty shearwater chicks (*Puffinus griseus*) by response to sound.**
H. Moller; M. Charteris; B. Russell; J. Newman. 13 p.
- 115. Broad-scale genetic population structure in blue duck *Hymenolaimus malacorhynchos* – pilot study of mitochondrial genetic variation.**
B.C. Robertson; R. Paley; N.J. Gemmell. 12 p.
- 116. Significance of peatlands in Southland Plains ecological district, New Zealand.**
B.R. Clarkson. 20 p.
- 117. Threatened plant survey in Kaimanawa Forest Park and Tongariro National Park.**
A.S. Lund. 14 p.

- 118. Autopsy of pinnipeds incidentally caught in fishing operations 1997/98, 1999/2000, and 200/01.**
P.J. Duignan; N. Gibbs; G.W. Jones. 106 p.
- 119. Autopsy of cetaceans incidentally caught in fishing operations 1997/98, 1999/2000, and 2000/01.**
P.J. Duignan; N. Gibbs; G.W. Jones. 66 p.
- 120. Artificial cover objects for leiopelmatid frogs.**
M. Wakelin; C. Smuts-Kennedy; T. Thurley; N. Webster. 17 p.
- 121. Do weeds respond to pest animal control?**
S. Timmins; J. Gerizlehner. 27 p.
- 122. An inventory of New Zealand redoubts, stockades, and blockhouses, 1840–1848**
A. Walton. 15 p.
- 123. Sink rate of baited hooks on New Zealand pelagic tuna vessels.**
C. Keith. 9 p.
- 124. An annotated bibliography for Hector’s dolphin *Cephalorhynchus hectori*.**
E. Martinez; E. Slooten. 40 p.
- 125. Weed awareness in New Zealand.**
S.M. Timmins; K. Blood. 16 p.
- 126. Vegetation monitoring on Moutohora (Whale Island) 1990–2002 using photopoints.**
W.B. Shaw; D.S. Gosling; L. Canham. 57 p.
- 127. Hydrological implications of a lake control weir on the Upper Dead Arm, Lake Wainono.**
R.J. Hall. 13 p.
- 128. Development of a research sampling design for rock lobsters in Te Tapuwai o Rongokako marine reserve.**
J.D. Booth. 25 p.

- 129. Automated system for measuring breeding burrows entry and exit by sooty shearwaters (*Puffinus griseus*).**
H. Moller; C. Hunter; M. Howard; P. McSweeney; P. Scofield; D. Scott; S. Uren. 25 p.
- 130. How long should marine reserves be monitored for — and why?**
R.G. Cole. 20 p.
- 131. Autopsy of pinnipeds incidentally caught in commercial fisheries, 2001/02.**
P.J. Duignan; N. Gibbs; G.W. Jones. 41 p.
- 132. Evaluation of the effectiveness of the Waddington backcracker trap for killing stoats.**
N. Poutu; B. Warburton. 9 p.
- 133. Age determination and establishment of reproductive condition from marine mammal biopsy sampling.**
A.M. Smit. 13 p.
- 134. Survey and monitoring of black petrels on Great Barrier Island 2001/02.**
E.A. Bell; J.L. Sim. 24 p.
- 135. Survey and monitoring of black petrels on Great Barrier Island 2002/03.**
E.A. Bell; J.L. Sim. 28 p.
- 136. Feasibility investigation of remote surveillance systems operating within a marine environment.**
O. Mooney; S. Fairweather; G. Kessels; B. Christensen. 12 p.
- 137. Identifying long-term cost-effective approaches to stoat control. A review of sixteen sites in 2002.**
K. Brown. 26 p.
- 138. Adaptive monitoring: an overview.**
A-M. Smit. 16 p.

- 139. Persistence of four anticoagulant rodenticides in the livers of laboratory rats.**
P. Fisher; C. O'Connor; G. Wright; C.T. Eason. 19 p.
- 140. Conservation status of the giant endemic landsnail *Placostylus bollonsi* on Three Kings Islands.**
F.J. Brook. 20 p.
- 141. Genetic affinities of Hochstetter's frog (*Leiopelma hochstetteri*) populations in the Bay of Plenty.**
N.J. Gemmell; J.H. Bowsher; K.P. Gomas. 19 p.
- 142. Effects of Poor Knights Islands Marine Reserve on demersal fish populations.**
C.M. Denny; T.J. Wills; R.C. Babcock. 34 p.
- 143. Toxicity and residues of brodifacoum in snails and earthworms.**
L.H. Booth; P. Fisher; V. Heppelthwaite; C.T. Eason. 14 p.
- 144. Royal albatross (*Diomedea epomophora*) on Enderby Island, Auckland Islands.**
S. Childerhouse; C. Robertson; W. Hockly; N. Gibbs. 19 p. + 25 p. data supplement.
- 145. Assessing site occupancy modelling as a tool for monitoring Mahoenui giant weta populations.**
D. MacKenzie. 18 p.
- 146. Is the New Zealand gall mite *Aceria clianthi* endangered?**
N. Martin. 12 p.
- 147. Aspects of the reproductive biology and behaviour of scoliid wasps.**
B.I.P. Barratt. 11 p.
- 148. Consumption and efficacy of rodent baits to Norway rats.**
A.T. Airey; C.E. O'Connor. 9 p.

- 149. Earthquake uplift and erosion of archaeological site L26/1 at the mouth of the Heaphy River.**
B.G. McFadgen; J. Goff. 19 p.
- 150. Chick translocation as a method of establishing new surface-nesting seabird colonies: a review.**
H. Gummer. 40 p.
- 151. Variation in inter-territory reproductive success of takahe introduced to predator-free islands.**
I. G. Jamieson; G. C. Wilson. 12 p.
- 152. Whangamarino Wetland vegetation map methodology.**
P. Reeves; R. Haskew. 15 p.
- 153. Effects of tourism on behavioural ecology of bottlenose dolphins of northeastern New Zealand.**
R. Constantine; D. H. Brunton; C. S. Baker. 26 p.
- 154. Campbell Island teal re-introduction plan.**
P.J. Seddon; R.F. Maloney. 30 p.

DOC Technical Series

27. **Methods for monitoring the condition of historic places.**
T. Walton. 41 p.
28. **Mark-recapture analysis for monitoring threatened species: introduction and case study.**
M. Lettink; D.P. Armstrong. 63 p.

Miscellaneous

Managing invasive freshwater fish in New Zealand. Proceedings of a workshop hosted by Department of Conservation, 10–12 May 2001, Hamilton. 188 p.

Our Picturesque Heritage: 100 years of scenery preservation in New Zealand.

T. Nightingale; P.R. Dingwall. 68 p. \$29.95.

Potential effects of mussel farming on New Zealand's marine mammals and seabirds: a discussion paper.

B.D. Lloyd. 35 p.

What's happening with stoat research? Fifth report.

E. Murphy; L. Fechney. 44 p.

Wild city neighbours: a guide to native bird rehabilitation.

C. Mander; L. Adams; A. Riley. 56 p.

Science for Conservation

- 210. Responses of fish communities to sustained removals of perch (*Perca fluviatilis*).**
B. G. Ludgate; G. Closs. 38 p.
- 211. Rotenone—a review of its toxicity and use for fisheries management.**
N. Ling. 40 p.
- 212. Management of new deer populations in Northland and Taranaki.**
K. W. Fraser; J. P. Parkes; C. Thomson. 30 p.
- 213. Framework for assessing the susceptibility of management areas to deer impacts.**
D. M. Forsyth; D. Coomes; G. Nugent. 39 p.
- 214. Conservation applications of measuring energy expenditure of New Zealand birds: assessing habitat quality and costs of carrying transmitters.**
M. Williams (Comp.). 95 p. Contains:
Potential use of energy expenditure of individual birds to assess quality of their habitats. J.D. Godfrey. 14 p.
Energy expenditures of North Island robins in habitats with differing predator densities. J.D. Godfrey. 10 p.
Energetics of blue ducks in rivers of differing physical and biological characteristics. J.D. Godfrey; D.M. Bryant; M.J. Williams. 30 p.
Effect of radio transmitters on energy expenditure of takahe. J.D. Godfrey; D.M. Bryant. 14 p.
Effects of radio transmitters: review of recent radio-tracking studies. J.D. Godfrey; D.M. Bryant. 12 p.
- 215. Waituna Lagoon: summary of existing knowledge and identification of knowledge gaps.**
R.M. Thompson; G.R. Ryder. 37 p.

- 216. Forest biodiversity assessment for reporting conservation performance.**
R.B. Allen; P.J. Bellingham; S.K. Wisser. 49 p.
- 217. Social impacts of marine reserves in New Zealand.**
C.N. Taylor; B. Buckenham. 58 p.
- 218. Aerial spraying of pampas grass in difficult conservation sites.**
I. Popay; S.M. Timmins; T. McCluggage. 18 p.
- 219. Sperm whale watching off Kaikoura, New Zealand: effects of current activities on surfacing and vocalisation patterns.**
C.F. Richter; S.M. Dawson; E. Slooten. 78 p.
- 220. Predicting vegetation condition and weed distributions for conservation management: a case study in the central South Island, New Zealand.**
J. Overton; A. Lehmann. 57 p.
- 221. Habitat use by non-migratory Otago galaxiids and implications for water management.**
C.F. Baker; I.G. Jowett; R.M. Allibone. 34 p.
- 222. Early landuse patterns in the Lake Taupo area**
A. Williams; A. Walton. 28 p.
- 223. Assessing the benefits for conservation of volunteer involvement in conservation activities.**
K. Bell. 56 p.
- 224. Power to detect trends in abundance of long-tailed bats (*Chalinolobus tuberculatus*) using counts on line transects.**
C.F.J. O'Donnell; S. Langton. 19 p.
- 225. Sightings of southern right whales around mainland New Zealand.**
N.J. Patenaude. 43 p.

226. **Woody vegetation of Central Otago, New Zealand: its present and past distribution and future restoration needs.**
S. Walker; W.G. Lee; G.M. Rogers. 99 p.
227. **Post-pastoral succession in intermontane basins and valleys of eastern South Island, New Zealand.**
S. Walker; W.G. Lee; G.M. Rogers. 75 p.
228. **Establishing long-term changes in takahe winter feeding grounds in Fiordland using pollen analysis.**
J. Wilmshurst. 25 p.
229. **Growth and habitat of *Sebaea ovata* (Gentianaceae) in New Zealand and Australia.**
P.D. Champion; D.E. Hofstra; M.E. Auger; C.E.C. Gemmill. 32 p.
230. **Ephemeral wetlands and their turfs in New Zealand.**
P.N. Johnson; G. Rogers. 109 p.
231. **A critique of IFIM — instream habitat simulation in the New Zealand context.**
H.R. Hudson; A. Byrom; W.L. Chadderton. 69 p.
232. **Potential invertebrate antifeedants for toxic baits used for vertebrate pest control.**
E.B. Spurr; P.G. McGregor. 36 p.
233. **Distribution of seabirds from New Zealand that overlap with fisheries worldwide**
C.J.R. Robertson; E.A. Bell; N. Sinclair; B.D. Bell. 102 p.
234. **Climbing spindle berry (*Celastrus orbiculatus* Thunb.) biology, ecology, and impacts in New Zealand.**
P. A. Williams; S. M. Timmins. 28 p.

Science Posters

56. **The effect of fire on bone-seed and gorse germination.**
K. McAlpine; S.M. Timmins.
57. **Understanding small mammal impacts on endemic invertebrates.**
E. Murphy; F. Maddigan.
59. **Successful translocation of Middle Island tusked weta.**
I.A.N. Stringer; R. Chappell.
60. **Invertebrate conservation with computer-based tools.**
L. Sinclair; I.A.N. Stringer.

Threatened Species Publications

49. **Recovery plans for *Powelliphanta* land snails 2003–2013.**
K. Walker. *Threatened Species Recovery Plan 49*. 208 p. + 64 plates.
50. **Kiwi (*Apteryx* spp.) recovery plan 1996–2006.**
H.A. Robertson. 26 p.
51. **New Zealand mudfish (*Neochanna* spp.) recovery plan 2003–13.** 25 p.

Index

1080 7

A

Aceria clianthi 11
Adams, L. 13
Airey, A.T. 11
albatross
 royal 11
Allen, R.B. 8, 15
Allibone, R.M. 15
antifeedant 16
aphid 7
Apteryx spp. 17
Armstrong, D.P. 13
Auckland Islands 11
Auger, M.E. 16

B

Babcock, R.C. 11
bait 7, 11, 16
Baker, C.F. 15
Baker, C.S. 12
Barratt, B.I.P. 11
bat
 long-tailed 15
Bay of Plenty 8, 11
Bell, B.D. 16
Bell, D. 6
Bell, E.A. 6, 10, 16
Bell, K. 15
Bellingham, P.J. 15
biodiversity 15
bird rehabilitation 13
blockhouse 9
Blood, K. 9
blue duck 8, 14
bone-seed 17
Booth, J.D. 9

Booth, L.H. 11
Bowsher, J.H. 11
braided riverbeds 6
brodifacoum 11
Brook, F.J. 11
Brown, K. 10
Brunton, D.H. 12
Bryant, D.M. 14
Buckenham, B. 15
Butler, D.J. 8
Byrom, A. 16

C

Canham, L. 9
carabid 6
Celastrus orbiculatus 16
Central Otago 16
Cephalorhynchus bectori
 6, 9
cetacean 9
Chadderton, W.L. 16
Chalinobius tuberculatus
 15
Champion, P.D. 16
Chapman, H. 8
Chappell, R. 17
Charteris, M. 8
Childerhouse, S. 11
Christensen, B. 10
Clarkson, B.R. 8
climbing spindle berry 16
Closs, G. 14
Clout, M.N. 7
Cole, R.G. 10
Constantine, R. 12
Coomes, D. 14
Copland Valley 7
Corynocarpus laevigatus 7

D

David, B. 8

Dawson, S.M. 15
deer 14
demersal fish 11
Denny, C.M. 11
Dingwall, P.R. 13
Diomedea epomophora 11
Dohlen, C.D. von 7
dolphin
 bottlenose 12
 Hector's 9
 Maui's 6
Duignan, P.J. 7, 9, 10

E

earthworm 11
Eason, C.T. 11
Emberson, R.M. 6
Enderby Island 11
energy expenditure 14
erosion 12

F

Fairweather, S. 10
Fechney, L. 13
Ferreira, S.M. 6
Fiordland 16
fish 14
 freshwater 13
Fisher, P. 11
fisheries 14, 16
Fletcher, D. 8
Forsyth, D.M. 14
Fraser, K.W. 14
frog

 Hochstetter's 11
 leiopelmatid 9

G

Galaxias argenteus 8
galaxiid 15
gall mite 11

Gallirallus australis 7
Gemmell, N.J. 8, 11
Gemmill, C.E.C. 16
Gerizlehner, J. 9
Gibbs, N. 9, 10, 11
Gibbs, S.J. 7
Godfrey, J.D. 14
Goff, J. 12
Gomas, K.P. 11
gorse 17
Gosling, D.S. 9
Grant, E. 6
Great Barrier Island 10
Gummer, H. 12

H

Hall, R.J. 9
Hallas, S.E.A. 6
Haskew, R. 12
hawkweed 8
Heaphy River 12
Heppelthwaite, V. 11
Hieracium lepidulum 8
historic places 13
Hockly, W. 11
Hofstra, D.E. 16
Hosking, G.P. 7
Hudson, H.R. 16
Hughes, P. 7
Hunter, C. 10
Hymenolaimus
 malacorhynchos 8

I

instream habitat simulation
 16
intermontane basins 16

J

Jamieson, I.G. 7, 12
Johnson, P.N. 16

Jones, G.W. 9, 10

Jowett, I.G. 15

K

Kaikoura 15

Kaimanawa Forest Park 8

karaka 7

Kean, J. 7

Keith, C. 9

Kellian, D. 7

Kessels, G. 10

kiwi 17

 brown 7

kokopu

 giant 8

L

Lake Taupo 15

Lake Wainono 9

landsnail 6, 11, 17

Langton, S. 15

Lee, W.G. 16

Lehmann, T. 15

Leiopelma hochstetteri 11

Lettink, M. 13

Leucocarbo carunculatus 8

Ling, N. 14

Lloyd, B.D. 13

Ludgate, B.G. 14

Lund, A.S. 8

M

MacKenzie, D. 8, 11

Maddigan, F. 17

Maloney, R.F. 12

Mander, C. 13

marine

 reserve 9, 10, 11, 15

marine mammal 7, 10

mark-recapture 13

Marlborough 6

Martin, N. 11

Martinez, E. 9

McAlpine, K. 17

McCluggage, T. 15

McFadgen, B.G. 7, 12

McGregor, P.G. 16

McSweeney, P. 10

Middle Island tusked weta 17

Miller, N. 7

Moller, H. 8, 10

mollymawk 6

monitoring 10

Mooney, O. 10

Moutohora 9

mudfish 17

Murphy, E. 13, 17

mussel farming 13

mussels 8

N

Neochanna spp. 17

Newman, J. 8

Nightingale, T. 13

Northland 14

Nugent, G. 14

O

O'Connor, C. 11

O'Donnell, C.F.J. 15

Oligosoma maccanni 7

Oligosoma nigriplantare
 polychroma 7

Oregus 6

Otago 8

Overton, J. 15

P

Paley, R. 8

pampas grass 15

Parkes, J.P. 14
paspalum
 saltwater 8
Patenaude, N.J. 15
Paterson, A.M. 6
Pawson, S.M. 6
Pearson, M.L. 8
peatland 8
Perca fluviatilis 14
perch 14
Perna canaliculus 8
pest
 animal 9
 control 16
petrel
 black 10
photopoints 9
pinniped 9, 10
Placostylus 6, 11
pollen analysis 16
Poor Knights Islands 11
Popay, I. 15
Poutu, N. 10
Powelliphanta 17
Puffinus griseus
 6, 8, 10
Puffinus tenuirostris 6

R

rat 11
Rata 7
Reardon, J.T. 7
redoubt 9
Reeves, P. 12
Richter, C.F. 15
Riley, A. 13
Roberts, C.C. 6
Robertson, B.C. 8
Robertson, C. 11
Robertson, C.J.R. 6, 16

Robertson, H.A. 17
robin
 North Island 14
Robson, B. 8
rock lobsters 9
rodenticides 11
Rogers, G. 16
rotenone 14
Russell, B. 8
Rutledge, D. 6
Ryder, G.R. 14

S

sampling 9
Sawyer, J.W.D. 7
Scofield, P. 6, 10
Scott, D. 10
sea couch 8
seabird 6, 7, 16
Sebaea ovata 16
Seddon, P.J. 12
shag
 king 8
Shaw, W.B. 8, 9
shearwater
 short-tailed 6
 sooty 6, 8
Sim, J.L. 10
Sinclair, L. 17
Sinclair, N. 16
sink rate 9
skink 7
Slooten, E. 9, 15
Smit, A.M. 10
Smith, D. 7
Smuts-Kennedy, C. 9
snail 11
South Island
 central 15
 eastern 16
Southland Plains 8

spray 15
Spurr, E.B. 16
stoat 7, 13
 bait 7
 control 10
 trap 10
stockade 9
Stringer, I.A.N. 6, 17
Stufkens, M.A.W. 7
surveillance 10

T

takahe 12, 14, 16
Tansell, A.J.S. 7
Taranaki 14
Taylor, C.N. 15
Te Paki Farm Park 6
Te Tapuwai o Rongokako
 marine reserve 9
teal
 Campbell Island 12
Teulon, D.A.J. 7
Thompson, R.M. 14
Thomson, C. 14
Three Kings Islands 11
Thurley, T. 9
Timmins, S. 9, 15, 16, 17
Tocher, M.D. 7
Tongariro National Park 8
translocation
 chick 12
 tusked weta 17
transmitter 14
trap 10
tuna 7, 9
turf 16

U

Uhlmann, S. 6
Uren, S. 10

V

Van Klink, P. 7
volunteer 15

W

Waituna Lagoon 14
Wakelin, M. 9
Walker, K. 17
Walker, S. 16
Walton, A. 9, 15
Walton, T. 13
Warburton, B. 10
wasps
 scoliid 11
Webster, N. 9
weed 9, 15
weir 9
weka
 western 7
weta 11
wetland 16
whale
 southern right 15
 sperm 15
Whale Island 9
Whangamarino wetland 12
Whirinaki Forest Park 7
Williams, A. 15
Williams, M. 14
Williams, M. 14
Williams, P.A. 16
Wills, T.J. 11
Wilmshurst, J. 16
Wilson, G.C. 12
Wiser, S.K. 15
Wright, G. 11



Order form

Most DOC science publications are now available free of charge. However, where a title has a price listed, payment must accompany the order. There is a **postage and packaging** charge of \$2.00 for one such publication, or \$4.00 for two or more. Outside of NZ please contact us for postage and packaging charge before placing order. **This does not apply to free orders.**

Send your order to DOC Science Publishing, Department of Conservation, PO Box 10 420, Wellington, New Zealand, or fax us on +64 4 496 1929. Email us on science.publications@doc.govt.nz.

Science Posters are available in the following sizes: A0 (\$50), A1 (\$20), A2 (\$10), A3 (\$5.00).

Name: _____

Delivery address: _____

Phone: _____ Fax: _____

Email: _____

Your Ref: _____

Please send me the following publications:

Title & Series	Quantity	Price

Payment Options

P&P: \$ _____

Total: \$ _____

- I have enclosed a cheque for \$ _____
(Make cheques payable to Department of Conservation, in NZ dollars.)

- Please charge \$ _____ to my credit card (MasterCard or Visa only).

Card number:

Expiry date:

Name:

Signature:

