

Project River Recovery Bibliography: 1991 - March 2000

Mark D Sanders
Department of Conservation
Private Bag
Twizel

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

This report was commissioned by Canterbury Conservancy.

ISSN 1171-9834

© 2000 Department of Conservation, P.O. Box 10-420, Wellington, New Zealand

Reference to material in this report should be cited thus:

Sanders, M.D., 2000.

Project River Recovery Bibliography: 1991 - March 2000. *Conservation Advisory Science Notes No. 298*,
Department of Conservation, Wellington.

Keywords: river restoration, Waitaki Basin, hydro-electric power development, weed control, rabbit control, black stilt.

Introduction

Project River Recovery is a habitat restoration programme that aims to mitigate the effects of hydro-electric power development on braided rivers and associated wetlands in the upper Waitaki Basin. Project River Recovery is run by the Department of Conservation and funded by Meridian Energy Ltd. (formerly the Electricity Corporation of New Zealand [ECNZ]) under a compensatory agreement that recognises the adverse effects of hydro-electric power development on river and wetland habitats of the upper Waitaki Basin.

Since its inception in 1991, Project River Recovery has undertaken or funded numerous research projects. The results of these investigations have been reported in various reports, theses, Department of Conservation publications, and scientific papers. Results of all significant research have been published, can be found through literature searches, and are widely available. Internal reports that do not warrant publication are held at the Twizel Area Office and at the main Department of Conservation library in Wellington. All unpublished Project River Recovery reports produced since 1998 have been assigned report numbers. In addition to reports on original research, Project River Recovery has produced magazine articles and newspaper feature articles, various annual reports, progress reports, discussion documents, and plans. It has also commissioned some reports from consultants.

This bibliography lists all reports, theses, diplomas, Department of Conservation publications, and scientific papers that were produced between 1991 and March 2000 and that report work supported by Project River Recovery. It does not list brochures, posters, fact sheets, newsletters, abstracts for conference programmes, or minor magazine or newspaper articles.

Bibliography

Adams, L. K. 1995: Reintroduction of juvenile black stilts to the wild. Unpublished MSc thesis, University of Canterbury, Christchurch, New Zealand.

Anon. 1993: Project River Recovery weed inventory. Unpublished Project River Recovery Report, Department of Conservation, Twizel.

Battley, P E, Sanders, M. D. & Murray, D. P 1997: Survival and movements of black stilts released from captivity in 1996. Unpublished Report, Department of Conservation, Twizel.

Brown, K. & Keedwell, R. 1998: Predator control to mitigate the effects of RCD-induced prey-switching in the Mackenzie Basin. Canterbury Conservancy Technical Report Series No. 8. Christchurch, Department of Conservation.

Brown, K. P 1998: A comparison of rabbit bait-take from ground application and plastic bait stations at the Tekapo Scientific Reserve. Unpublished Project River Recovery Report No. 98/02, Department of Conservation, Twizel.

Brown, K. P 1999a: Ahuriri weed control resource consent monitoring 1993 - 1999. Unpublished Project River Recovery Report No. 99/19, Department of Conservation, Twizel.

- Brown, K. P 1999b: Impacts of willow plantings in the Tekapo riverbed and suggestions for future riverbed management - discussion paper. Unpublished Project River Recovery Report No. 99/17, Department of Conservation, Twizel.
- Brown, K. P 1999c: Project River Recovery weed control plan 1999 - 2004. Unpublished Project River Recovery Report No. 99/11, Department of Conservation, Twizel.
- Brown, K. P 1999d: Upper Waitaki Basin research and management meeting 1999: objectives, presentations and participants. Unpublished Project River Recovery Report No. 99/18, Department of Conservation, Twizel.
- Brown, K. P Submitted: Rabbit bait-take from plastic bait stations at the Tekapo Scientific Reserve, Lake Tekapo, New Zealand. *New Zealand Journal of Ecology*.
- Brown, K. P & Sanders, M. D. 1998a: Project River Recovery annual report. Unpublished Project River Recovery Report No. 98/01, Department of Conservation, Twizel.
- Brown, K. P & Sanders, M. D. 1998b: Review of Project River Recovery's first seven years. Canterbury Conservancy Technical Report Series No. 9. Christchurch, Department of Conservation.
- Brown, K. P & Sanders, M. D. 1999a: Project River Recovery annual report 1 July 1998 - 30 June 1999. Unpublished Project River Recovery Report No. 99/10, Department of Conservation, Twizel.
- Brown, K. P & Sanders, M. D. 1999b: Project River Recovery strategic plan 1998 - 2005. Unpublished Project River Recovery Report No. 99/12, Department of Conservation, Twizel.
- Cook, T. 1999: Working to save the braided rivers. *Timaru Herald*, 4 June 1999: 9.
- Crossland, A. C. & Butcher, S. 1999: Ohau -Tekapo Delta riverbird monitoring 1997/98 season. Unpublished Project River Recovery Report No. 99/14, Department of Conservation, Twizel.
- Fraser, I. 1999a: Operational efficacy and conservation benefit to lizards of the Ruataniwha Wetland predator fence: a pilot study. Unpublished Project River Recovery Report No. 99/02, Department of Conservation, Twizel.
- Fraser, I. 1999b: Robust grasshopper (*Brachaspis robustus*) sightings database and monitoring methods trial. Unpublished Project River Recovery Report No. 99/01, Department of Conservation, Twizel.
- Gormack, E., Wright, N. & Durkin, D. 1999: Turning the tide. *Dominion*, 3 August 1999:17.
- Hall, R. J. 1998: Ahuriri River Delta: sedimentation problems. Unpublished Report to Project River Recovery, R. J. Hall MIPENZ Civil and Environmental Engineering Consultant, Timaru.
- Harvey, I. 1997: Potential of crown-rotting organisms for the biological control of Russell lupin in braided river beds. Unpublished Annual Report No. 3, AgResearch, Lincoln.
- Harvey, I. C., Seyb, A. M., Warren, A. E J. & van den Ende, H. 1996: The biological control of Russell lupin in riverbeds with endemic plant pathogens. Proceedings of the Forty Ninth New Zealand Plant Protection Conference, Nelson (ed O'Callaghan, M.). The New Zealand Plant Protection Society Inc.
- Hepplethwaite, S. 1998: Wind up the willows. *Fish and Game New Zealand*, December 1998: 66-70.
- Hepplethwaite, S. 1999a: Off-road vehicles off the beaten track. *AA Directions*, November 1999: 48-51.
- Hepplethwaite, S. 1999b: Restoring braided rivers. *Forest and Bird*, August 1999: 38-41.
- Hughey, K. & Warren, A. 1997: Habitat restoration for wildlife nesting on degraded braided riverbeds in New Zealand. In: Hale, P & Lamb, D. ed. *Conservation Outside Nature Reserves*. Brisbane, Centre for Conservation Biology, University of Queensland.
- Hume, D. K. 1995: Anti-predator training: an experimental approach in reintroduction biology. Unpublished MSc thesis, University of Canterbury, Christchurch, New Zealand.

- Johns, P M. 1992: Ahuriri River spray test - report on the soil and surface invertebrates. Unpublished Report to Project River Recovery, University of Canterbury, Christchurch.
- Keedwell, R. 1998: Project River Recovery Research and Monitoring 1998/99. Unpublished Project River Recovery Report No. 98/04, Department of Conservation, Twizel.
- Keedwell, R. J. & Brown, K. P submitted: Relative abundance of mammalian predators in the upper Waitaki Basin, South Island, New Zealand. *New Zealand Journal of Zoology*.
- Keedwell, R. J. & Sanders, M. D. 1999: Australian magpie preys on banded dotterel chicks. *Notornis*, 46: 499-501.
- Lee, W , Spiers,A. & Timmins, S. 1997: Russell lupin review team recommendations. Unpublished Report to Project River Recovery.
- Maloney, R. R 1992: Bird Surveys in the Mackenzie Basin: A report on Project River Recovery bird surveys undertaken in the Mackenzie Basin - 1991 & 1992. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. E 1993a: *Brachaspis robustus* surveys in the Mackenzie Basin: a report on Project River Recovery robust grasshopper sightings in the Mackenzie Basin - 1991 and 1992. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. E 1993b: Lower Ohau River Experimental Survey - 1/12/93. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. E 1993c: Project River Recovery Research Outlines and Objectives, 1991 -1993. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. E 1993d: Riverbeds and weeds - how do we keep them apart and keep the wildlife? *Ecological Society Newsletter*, 69: 6+7.
- Maloney, R. R 1994a: Report on the short-term impact of a herbicide on the biota of the Ahuriri River. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. F. 1994b: Wetland Plant Workshop. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. F. 1995a: Effect of the herbicide triclopyr on the abundance and species composition of benthic macro-invertebrates in the Ahuriri River, New Zealand. *New Zealand Journal of Marine and Freshwater Research*, 29: 505-515.
- Maloney, R. F. 1995b: Proceedings from the second Project River Recovery research and monitoring seminar, December 8 - 9, 1994. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. F. 1999: Bird populations in nine braided rivers of the Upper Waitaki Basin, South Island, New Zealand: changes after 30 years. *Notornis*, 46: 243-256.
- Maloney, R. E, Keedwell, R., Wells, N.J., Rebergen, A. L. & Nilsson, R.J. 1999: Effect of willow removal on habitat use by five birds of braided rivers, Mackenzie Basin, New Zealand. *New Zealand Journal of Ecology*, 23: 53-60.
- Maloney, R. F. & Rebergen, A. L. 1995: Assessment of the present and potential wildlife values in wetlands of the Twizel River, Fraser and Dry Stream catchments. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. E, Rebergen, A. L., Nilsson, R. J. & Wells, N. J. 1997: Bird density and diversity in braided river beds in the Upper Waitaki Basin, South Island, New Zealand. *Notornis*, 44: 219-232.
- Maloney, R. E, Rebergen, A. L., Wells, N. W, Nilsson, R. & Todd, K. 1994: Bird Surveys in the Mackenzie Basin 1994: a report on Project River Recovery bird surveys undertaken in the Mackenzie Basin - 1994. Unpublished Project River Recovery Report, Department of Conservation, Twizel.

- Maloney, R. R, Wells, N., Rebergen, A. L. & Nilsson, R. 1993: Bird Surveys in the Mackenzie Basin: A report on Project River Recovery bird surveys undertaken in the Mackenzie Basin - 1993. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Maloney, R. E & Wells, N. J. 1994: The use of glue-on transmitters for black stilts. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Markby, R. 1992: Creating a better environment. *Timaru Herald*, 2 December 1992.
- Moss, K. A. 1999: Diet, nesting behaviour, and home range size of the European hedgehog in the braided rivers of the Mackenzie Basin, New Zealand. Unpublished MSc thesis, University of Canterbury, Christchurch.
- Pascoe, A. 1995: The effects of vegetation removal on rabbits (*Oryctolagus cuniculus*) and small mammalian predators in braided riverbeds in the Mackenzie Basin. Unpublished MSc thesis, University of Otago, Dunedin, New Zealand.
- Pascoe, A., Moller, H., Maloney, R., Borkin, K. & Pierce, R. in prep.: Diet of feral cats (*Felis catus*) in and near shingle riverbeds of Mackenzie Basin, New Zealand. *New Zealand Journal of Zoology*.
- Rawlings, M. 1993: Lupins, willows and river restoration in the upper Waitaki. *Forest & Bird*, November 1993:10-15.
- Rawlings, M. 1994: Riverbed user survey results. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Rebergen, A. 1996: Monitoring nesting waders on braided rivers. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Rebergen, A., Keedwell, R., Moller, H. & Maloney, R. 1998: Breeding success and predation at nests of banded dotterel (*Charadrius bicinctus*) on braided river beds in the Central South Island, New Zealand. *New Zealand Journal of Ecology*, 22: 33-41.
- Rebergen, A. L. 1993: Factors influencing the predation of eggs and young of the banded dotterel (*Charadrius bicinctus*) on some braided rivers in the Mackenzie Basin. Diploma in Wildlife Management. Department of Zoology, University of Otago, Dunedin, New Zealand.
- Rebergen, A. L. 1995: Proposal for a survey of marsh/swamp bird species in the Mackenzie Basin (1995/96 season). Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Rebergen, A. L. submitted: The occurrence of marsh crane (*Porzana pusilla*) in four small Mackenzie Basin wetlands in January and February 1996, with particular reference to survey methods. *Notomis*.
- Sancha, E. & Sanders, M. D. 1998: Video monitoring of braided river bird nests: operating procedures and data sheets. Unpublished Project River Recover Report No. 98/03, Department of Conservation, Twizel.
- Sanders, M. D. 1996a: Effects of fluctuating lake levels and habitat enhancement on black stilts (*Himantopus novaezealandiae* Gould, 1841). Unpublished PhD thesis, University of Canterbury, Christchurch, New Zealand.
- Sanders, M. D. 1996b: Lake levels research: surveys of birds on lake deltas in the Upper Waitaki Basin, May 1993 -April 1996. Data Summary for ECNZ. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Sanders, M. D. 1997a: Creating wetlands for black stilts. In: Smale, M. C. & Meurk, C. D. *ed.* Proceedings of a workshop on scientific issues in ecological restoration, Landcare Research Science Series No. 14. Lincoln, New Zealand, Manaaki Whenua Press.
- Sanders, M. D. 1997b: Evidence for short-term prey switching following winter and spring rabbit control in the Mackenzie Basin. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Sanders, M. D. 1997c: Food supplies at black stilt nest sites. *Science for Conservation* 58: 1-16. Department of Conservation, Wellington.

- Sanders, M. D. 1997d: Storing information from time-lapse video recording. Proceedings of the National Predator Workshop, St. Arnaud, 21- 24 April 1997, (eds Sim, J. & Saunders, A.). *Threatened Species Unit Occasional Publication 10. Department of Conservation*.
- Sanders, M. D. 1997e: Video monitoring of banded dotterel nests in braided rivers. Proceedings of the National Predator Workshop, St. Arnaud, 21- 24 April 1997, (eds Sim, J. & Saunders, A.). *Threatened Species Unit Occasional Publication 10. Department of Conservation*.
- Sanders, M. D. 1998: Bird abundance and nesting success at wetlands: Project River Recovery monitoring programme, maps and data sheets. Unpublished Project River Recovery Report, Department of Conservation, Twizel.
- Sanders, M. D. 1999a: Common aquatic invertebrate taxa vary in their susceptibility to capture by black stilt chicks. *Notornis*, 46: 311-318.
- Sanders, M. D. 1999c: Effect of changes in water level on numbers of black stilts (*Himantopus novaezelandiae*) using deltas of Lake Benmore. *New Zealand Journal of Zoology*, 26: 155-163.
- Sanders, M. D. 1999d: Enhancing food supplies for waders: inconsistent effects of substratum manipulations on aquatic invertebrate biomass. *Journal of Applied Ecology*, 37: 1-12.
- Sanders, M. D. 2000a: An assessment of the variability of repeat counts of river birds in braided rivers. Unpublished Project River Recovery Report No. 99/15, Department of Conservation, Twizel.
- Sanders, M. D. 2000b: Project River Recovery bibliography. Unpublished Project River Recovery Report No. 99/05, Department of Conservation, Twizel.
- Sanders, M. D. & Maloney, R. F. 1994: Enhancement of food supplies for black stilts by manipulating wetland and stream substrata. In: Collier, K. J. ed. *The Restoration of Aquatic Habitats*. Wellington, New Zealand, Department of Conservation.
- Sanders, M. D. & Maloney, R. E 1999: Video monitoring of nesting banded dotterels, black stilts, and black-fronted terns in braided rivers of the Upper Waitaki Basin. Unpublished Project River Recovery Report No. 99/07, Department of Conservation, Twizel.
- Sanders, M. D. & Maloney, R. E 2000: Effect of weed control on nesting success and nest density of braided river birds on the Ahuriri River. Unpublished Project River Recovery Report No. 99/08, Department of Conservation, Twizel.
- Sanders, M. D. & Wells, N. J. 1999: Breeding success and nest density of wetland birds at Ruataniwha Wetland and Lower Ruataniwha Wetland in the 1997 and 1998 breeding seasons. Unpublished Project River Recovery Report No. 99/06, Department of Conservation, Twizel.
- Seyb, A. 1996: An assessment of two fungal pathogens as potential biological control agents for Russell lupins in the Ahuriri River. Unpublished MSc thesis, University of University of Canterbury, Christchurch.
- Seyb, A. & Harvey, I. 1994: Evaluation of pathogens for the biological control of Russell lupins in braided waterways. Unpublished Annual Report No. 1, AgResearch, Lincoln.
- Shutt, P. 1997: How anglers can help preserve native birds. *New Zealand Fishing News*, January 1997: 114-115.
- Sinclair, L. 1995: The detection of biotic changes in the Tekapo riverbed after habitat restoration. Unpublished MSc thesis, University of Canterbury, Christchurch.
- Smith, D., Hughey, K. & Booth, K. 1997: Impacts of recreational users on the wildlife of braided rivers - a preliminary study on the Tekapo River. Unpublished, Department of Resource Management, Lincoln.
- Sobrina, N. 1994: The incidence of aerial predators on the Tekapo and Ohau River Deltas in New Zealand and their possible effect on wading birds. Unpublished MSc thesis, University of Amsterdam.

- van den Ende, H. & Harvey, I. 1995: Development of biological controls for Russell lupins in braided water ways. Unpublished Annual Report No. 2, AgResearch, Lincoln.
- Van Wyngaarden, E 1995: The ecology of the Tekapo ground wets (*Hemiandrus* new sp., Orthoptera: Anostomatidae) and recommendations for the conservation of a threatened close relative. Unpublished MSc thesis, University of Canterbury, Christchurch.
- Warren, A. 1994: Project River Recovery. *In*: West, C. J. *ed.* Wild willows in New Zealand: proceeding of a willow control workshop hosted by Waikato Conservancy, Hamilton, November 1993. Wellington, Department of Conservation.
- Webb, M. & Hughes, G. 1991: Effects of trial herbicide application on Ahuriri River fishlife. Unpublished Report to Project River Recovery, Central South Island Fish and Game Council.
- Wells, N. J. 1999: Instructions for intensive banded dotterel counts in wetlands. Unpublished Project River Recovery Report No. 99/13, Department of Conservation, Twizel.
- Wells, N. J. & Sanders, M. D. 1999: Results of bird counts in the Tekapo and Ahuriri Rivers, 1998. Unpublished Project River Recovery Report No. 99/04, Department of Conservation, Twizel.
- Whitaker, T 1998: Mackenzie Basin lizards: a field key. Unpublished Report, Department of Conservation, Twizel.
- Whiting, M. K. 1999: A survey of recreational users at the Tekapo and Ohau deltas. Unpublished Project River Recovery Report No. 99/03, Department of Conservation, Twizel.
- Wilson, G. H. 2000: Historical changes and the present status of the rivers and adjoining wetlands in the upper Waitaki Basin. Unpublished MSc thesis, University of Waikato, Hamilton.