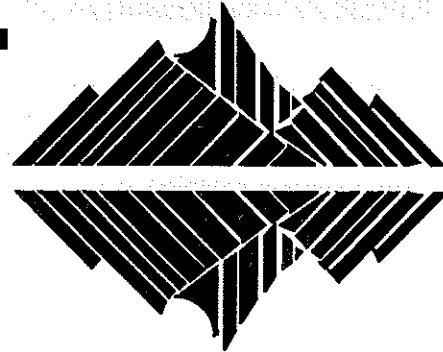


Ecological Society Newsletter



No. 57, April 1990

Published by the New Zealand Ecological Society (Inc.),
P.O. Box 25-178, Christchurch.

EDITORIAL

Urban Reflections

What are the ecological values of the Porirua Stream? or the Leith in Dunedin? or Christchurch's River Avon?

All are highly modified watercourses — their margins dominated by rye-grass, cocksfoot, cress and forget-me-not. Poplars and willows grow on the banks, and blackberry and bindweed scramble over neglected slopes. Their water sources are strongly influenced by runoff from carparks, pavements, houses and gardens, carrying silt and toxins. Only the tolerant invertebrates inhabit the waters; only the most adaptive galaxiids venture upstream. Mallard have ousted the shy grey duck; gulls and white-faced herons feed on the estuarine reaches. Not much of interest to the ecologist whose summers are spent on the Snares, the Wanganui or in Whirinaki?

But these are the areas where our native flora and fauna must be trying to respond to change. The natives are still there, albeit usually in small populations. There, too, are the communities of the future — the fantail feeding amongst willows; the trout feeding on larvae of native insects, English rush growing alongside New Zealand sedge. How do these urban ecosystems function? What will be their paths of development, succession, and growth?

These are also the places where most New Zealanders first "experience ecology". We are an increasingly urban population. For most Kiwis the difference between "native" and "introduced" is neither obvious nor important — their daily contact with nature is a town garden, park, or "waste" land.

It is important that people understand something about their local ecosystems, and develop a caring attitude to them. Only by knowing why starlings and sparrows dominate the places once full of bellbird

and tui, will they really care about takahe and dolphins.

Urban, semi-natural, ecosystems have a range of values — education, recreation, spiritual — as well as being part of the human ecology of towns and cities through their role in flood control, pollution reduction, etc. (The Resource Planning Bill seeks just this sort of approach to town planning.) As ecologists we need to look at all these values as we try to understand the intrinsic ones.

We cannot neglect these systems — they are under as many threats as are the precious natural ones. "Urban ecology", and allied to it, urban conservation, will be important to all New Zealanders in the next decade.

The Ecological Society's Education Group will be preparing a teachers' resource kit on urban ecology this year. The subject will also be covered at our conference through papers and field trips.

I am keen to find out how much we do know about urban ecosystems. If you have an interest in a particular urban area, why not write a brief note for the next Newsletter? Let us make sure that ecologists can provide the basic information to ensure wise management of all ecosystems.

Judith Roper-Lindsay
(President)

INSIDE:

Education	2
Pacific rainforests conservation	2
Conference 1990 symposium	3
Introducing DSIR Land Resources	3
Meetings	4
New editor for newsletter	4
Symposium proceedings—1988	5
Membership renewal	Sep. Form

EDUCATION

The Education Committee, jointly with the Nelson Teaching Resource centre, has produced a "WHAT IS ECOLOGY?" poster for classrooms. The content is aimed at secondary-school level, but we hope it will appeal to a range of people. An accompanying A3-size foldout, written for Form 6 and 7 students, develops the poster idea further and gives some "career" information where formal training in ecology and/or environmental studies would be a valuable asset. The poster, or package deal of poster plus foldouts, will be available for sale shortly. For enquiries contact either the Secretary or myself (see below).

Fran Hyland & Jan Heine have prepared information sets on recent research in forest and soil ecology to assist teachers of Forms 6 and 7.

For part of a possible 1990-91 project, we are looking for material relating to urban (and small town) environments or surroundings, which might be suitable for development and production as source material for secondary teachers. Of particular interest would be:

- case studies (which might include an issue/problem or suitable data sets from real research)
- ideas for practical work — NOTE: good educational material often comes from the intimate (and unpublishable!) background knowledge acquired from working with a particular species/community/environment.

At this stage we are interested in discussing ideas to find content that is relevant to class prescriptions and which can be presented in a way that is useful to teachers, and if substantial (e.g., case study material) could also count as a "popular" publication for the originator.

Contact:

M. McIntyre,
SES, Victoria University.

PACIFIC RAINFORESTS CONSERVATION

The Maruia Society and Royal Forest & Bird Protection Society organised a meeting on Pacific Rainforest Conservation at Auckland University on

March 31st. It was attended by a receptive audience of over 100, including quite a few Ecological Society members.

The meeting was clearly aimed at the societies' Joint Rainforest Campaign objective of building public awareness and support in New Zealand on tropical forest conservation issues, particularly in the South-western Pacific islands. Six speakers and a panel discussed aspects of Pacific tropical forest natural history and biogeography, and strategies for conservation. 'Facts about-the-forest' were presented only as necessary to generate enthusiasm for and understanding of the particular conservation needs in the context of Pacific island cultures and economies. This they did well, particularly through the excellent contributions of Annette Lees and Shane Wright, two biologists just back from an ecological survey and reserve design project on the forests of the Solomon Islands. They made a strong case for the uniqueness of the Melanesian forests, so small and apparently unimportant on the world scene, yet containing an amazing microcosm of species and habitat diversity.

This was the first conservation meeting I have attended which has made such strong links between conservation and development issues. Accepting that some exploitation must take place, and the village-based nature of Pacific societies, the campaign has put strong emphasis on appropriate small-scale village development that will allow reserve designation and conservation to take place at the same time. Maruia Society has apparently placed high priority on lobbying the N.Z. Government to lift its foreign aid from present meagre levels and to target it at environmental and conservation needs. (The Council for International Development, a coalition of N.Z. non-governmental international aid and development groups, is mounting a campaign aimed at making aid spending an election issue). I was heartened that the Ecological Society has recently taken an initiative on this, in its letters to Ministers pointing out N.Z.'s regional environmental research responsibilities (see March newsletter).

It was also heartening to find myself clearly in the oldest third of the meeting's participants, a distinct difference from most scientific meetings I find myself at. In these days of zero recruitment and ageing population structures, I believe that professional ecologists should look carefully at the reasons for the current vitality of the conservation movement, whose aims we have ultimately much in common with.

Paul Blaschke

CONFERENCE 1990 SYMPOSIUM

**N.Z. ECOLOGICAL SOCIETY CONFERENCE,
20-24 AUGUST 1990**

NOW A UNESCO REGIONAL SYMPOSIUM

The Symposium: **Where Land Meets Water: the structure, dynamics and management of land/water ecotones.** (21-22 August) has now been accorded the status of UNESCO Regional Symposium by the UNESCO Division of Ecological Sciences in Paris.

This does not alter the basic format in any way, but the higher profile resulting from UNESCO recognition does make it even more important for the Symposium to cover the five themes thoroughly, and to be as definitive as possible about the current state of our knowledge of New Zealand land/water ecotones.

It is now more likely that there will be a published Proceedings of some sort, and the Organising Committee will therefore be making every effort to balance the content. So please give (your abstracts) generously! Remember that a paper on how an ecotone influences an adjacent ecosystem is just as relevant to our themes as a paper dealing specifically with the ecotone itself.

We also hope for a substantial turnout at the Symposium, to support discussion and workshops.

An Ecotones meeting will also be held at the Yokohama INTECOL Congress this August, and it is anticipated that an opportunity will be made shortly afterwards for a sharing of ideas and the development of a regional action for the Pacific.

If you need further information regarding the UNESCO Ecotones Programme, or the N.Z. Ecological Society Conference and its Ecotones Symposium, contact Keith Thompson, Department of Biological Sciences, University of Waikato, Private Bag 3105, Hamilton. Phone (071)562 889. Fax (071)560 115.

INTRODUCING DSIR LAND RESOURCES

DSIR Land Resources came into being on 1 April 1990, as an amalgamation of Botany Division,

Ecology Division, the Division of Land and Soil Sciences and the Science Mapping Unit.

The Director of DSIR Land Resources is Dr Derek Milne, a soil scientist who was previously Director of the Division of Land and Soil Sciences.

The headquarters of DSIR Land Resources is at Taita, in the Hutt Valley. The Taita Science Centre, on the Eastern Hutt Road, has a long history as a centre of soil research, and has also been home to a small number of ecologists and botanists. Later this year, ecologists from Ecology Division's Lower Hutt office, and DSIR's Science Mapping Unit in Wellington, will be moving to Taita, to make a combined work force of about 100. We'll let you know when the shift happens - in the meantime Lower Hutt ecologists still have the same address and phone number.

The other 140 or so Land Resources staff will stay where they are at present: you will still find botanists and the Botany Division herbarium at Lincoln, ecologists at Nelson and Havelock North, land and soil scientists at Aokautere and Hamilton, and regional botanists and soil scientists scattered from Auckland to Dunedin.

The general aim of DSIR Land Resources is "to provide the community with a scientific basis for the management of land, soils, plants and animals, for the benefit of New Zealand." (By "plants and animals" we mean native plants and animals, and some introduced pest and weed species, rather than agricultural and horticultural animals and plants.) DSIR Land Resources currently has eight botanical and ecological programmes, and the major programmes are plant systematics, vegetation processes, ecological interactions, the ecology of the introduced fauna, and the ecology of the native fauna.

The creation of DSIR Land Resources is part of a complete overhaul of DSIR's image and structure - by 1 July this year there will be only 10 DSIR Divisions (none of which will be called a Division) instead of the previous 23 or so. Already, Entomology Division has joined with Plant Diseases Division to become DSIR Plant Protection (Te Wahanga Manaaki I Nga Tupu), and the Divisions of Horticulture and Processing and Plant Physiology have become DSIR Fruit and Trees.

In the midst of this change, keep an eye out for the new cosmic corporate DSIR image - a blue logo and a grey rectangle on a background of crisp white. Already there are mutterings in the corridors of ecology about priorities for spending science money....

Alison Ballance

MEETINGS

AUSTRALASIAN WILDLIFE MANAGEMENT SOCIETY SCIENTIFIC MEETING AND AGM

Lincoln University, Christchurch, New Zealand,
28-30 November, 1990

ANNOUNCEMENT OF THE THIRD ANNUAL CONFERENCE AND CALL FOR PAPERS

The third annual conference and AGM of the Australasian Wildlife Management Society will be held at Lincoln University from 28 to 30 November, 1990. The conference has been timed to precede the International Ornithological Congress which is to be held at Christchurch from 2 to 9 December so that AWMS members can attend both, if they so desire.

Again, the AWMS conference will follow the successful format of the first two conferences: with symposia, contributed oral and poster papers, a conference dinner, and an optional post-conference field trip.

Conference Symposia:

1. Management of game birds
2. Wildlife survey and population estimation
3. Management of introduced herbivores.

Each symposium will be opened by an invited speaker and followed by oral contributed papers.

Society members or others are invited to contribute papers to these topics or to open sessions on any field of wildlife management. All contributed spoken papers will be 15 minutes long; 10 minutes for presentation and 5 minutes for questions.

Posters will be on display throughout the conference and boards to mount displays will be provided.

Abstracts:

People wishing to contribute oral or poster papers should submit abstracts to the organisers before **10 October 1990**. These should not exceed 150 words and be typed within a space of 13 cm wide by 10 cm deep in the following format. They will be printed for distribution to all conference registrants.

STRATEGIES FOR CONSERVATION OF ENDANGERED TASMANIAN REPTILES

JOHN SMITH, address

Abstract

Accommodation:

Accommodation will be available at Lincoln University Halls of Residence. The daily rate of about NZ\$60 (A\$35) includes three meals, morning and afternoon teas, room cleaning service, and bed linen, blankets and towels. Lincoln is 20 km from Christchurch and has no other accommodation.

Student Award:

Conference registration forms will be circulated to all members in the next AWMS Newsletter. Non-members who submit abstracts should note their status so that registration forms can be sent.

All enquiries and abstracts should be sent to:

John Parkes
AWMS Conference
Forest Research Institute
P.O. Box 31-011
Christchurch
New Zealand

NEWSLETTER EDITOR

Alison Ballance is the new editor of the newsletter, so please send all copy to her. In order to speed up production of the newsletter Alison would like to receive material for inclusion in the newsletter **ON DISK**. IBM-compatible 5.25" disks with files in WORD are best but some translation facilities are available, so please enquire whether the system you have can be used.

The closing date for material for the June newsletter is **18 May 1990**. Please send your disk and hard copy to Alison Ballance

DSIR Land Resources
Private Bag
Lower Hutt

SYMPOSIUM PROCEEDINGS—1988
MANAGEMENT OF NEW ZEALAND'S NATURAL ESTATE

edited by David A. Norton

Proceedings of a Symposium of the New Zealand Ecological Society held 22–25 August 1988

The symposium aimed to answer a number of key questions relating to the conservation management of New Zealand's natural estate through integrating management and scientific viewpoints. It also identified areas in which further research is needed.

The "natural estate" includes both protected and non-protected lands and waters. Some of the management issues discussed include recreation and tourism developments, cultural values, reserve design, co-operation with farmers, pristine areas and marine conservation.

These proceedings provide a valuable record of the papers presented and of the workshop discussions. Produced as a practical A4 124-page publication, they should become a useful handbook for all those involved in conservation research and management.

You can ORDER NOW on the form below

PRICE: In New Zealand NZ\$25 (including postage and packing and GST)
 Overseas NZ\$30 (including airmail postage and packing)
 N.Z. Ecological Soc. members: NZ\$15 (including postage and packing and GST)



To: The Secretary
 N.Z. Ecological Society
 P.O. Box 25-178
 Christchurch

Please send me _____ copies of the Symposium Proceedings.

Name _____

Address _____

I enclose cheque for NZ\$ _____ made payable to N.Z. Ecological Society, and crossed.

Judith Roper-Lindsay*President*

PO Box 13-651,
Christchurch,
phone (03) 799-119: fax (03) 657-539

Peter Williams*Vice President*

DSIR Land Resources
Private Bag, Nelson
phone (054) 81-082: fax (054) 68-590

Ken Hughey*Secretary*

Department of Conservation,
Canterbury Conservancy
Private Bag, Christchurch
phone (03) 799-758: fax (03) 654-508

Nigel McCarter*Treasurer*

MAFFish,
PO Box 6016, Rotorua
phone (073) 463-730: fax (073) 479-380

Nigel Barlow*Editor*

Levin Horticultural Research Centre,
MAF,
Private Bag, Levin
phone (069) 87-059: fax (069) 83-857

Paul Blaschke

DSIR Land Resources
Private Bag, Taita, Lower Hutt
phone (04) 673-119: fax (04) 673-114

Gavin Daly*Education*

Plant Science Department,
Lincoln College,
PO Box 56, Lincoln, Canterbury
phone (03) 252-811

Mark Davis*Antarctica*

Department of Conservation,
Canterbury Conservancy,
Private Bag, Christchurch
phone (03) 799-758: fax (03) 654-508

Kath Dickinson

School of Biological Sciences,
Victoria University,
PO Box 600, Wellington
phone (04) 721-000: fax 712-070

Vicky Froude*Legislation*

Department of Conservation,
Eastern Conservancy,
PO Box 1146, Rotorua
phone (073) 479-179: fax (073) 479-115

Graham Hickling*Awards*

Forest Research Institute,
PO Box 31-011, Christchurch
phone (03) 517-099: fax (03) 517-091

Mary MacIntyre*Convenor, Education*

School of Biological Sciences,
Victoria University,
PO Box 600, Wellington
phone (04) 721-000: fax (04) 712-070

Murray Potter*Membership directory*

Levin Horticultural Research Centre,
MAF,
Private Bag, Levin
phone (060) 87-059: fax (069) 83-857

Susan Timmins

Science and Research Division,
Department of Conservation
PO Box 10-420, Wellington
phone (04) 710-726: fax (04) 713-279

Carol West

DSIR Publishing,
PO Box 9741, Wellington
phone (04) 858-939: fax (04) 850-631

Murray Williams*Royal Society representative*

Science and Research Division,
Department of Conservation,
PO Box 10-420, Wellington.
phone (04) 710-726: fax (04) 713-279

Unless indicated otherwise, the views expressed in this Newsletter are not necessarily those of the New Zealand Ecological Society or its Council.

NEW ZEALAND ECOLOGICAL SOCIETY

MEMBERSHIP QUESTIONNAIRE

Last year replies to a questionnaire similar to this one were used to compile a data base summarising details about the interests and expertise of the New Zealand Ecological Society's membership. This data base has provided Council with details of who you, as a member, are, where you live, what you do, and what you expect from the Society. To be of continuing use the data base must be updated regularly. If you have not yet returned a questionnaire or your circumstances have changed please fill in the form below and return it as soon as possible to:

Murray Potter
Levin HRC
MAF Technology
LEVIN

Surname:

Given name:

Initials and title:

Male/Female:

Contact address:

Phone (Home):

(Work):

Occupation:

Specific ecological interests (to add detail to the general categories of expertise indicated on next page):

Briefly, why do you belong to the New Zealand Ecological Society?

(News-letter / Journal / Annual conference / Contact with other ecologists / ... ?)

Society members possess a wealth of expertise of great potential value in promoting ecological awareness through education and comment on legislative issues.

a) Would you be willing to make your local or regional ecological expertise available to schools or other educational institutes or groups?

b) Would you be willing to be called on to make comment on legislative issues that fall within your realm of expertise?

Please indicate below your fields of expertise.

NB. The categories listed form the basic fields on which computer searches will be conducted. Please fill in this section regardless of your response to the previous two questions. Where two or more categories have been listed on one line you may wish to indicate more precisely (by circling or deleting) where your expertise lies.

- | | |
|---|---|
| 000 _____ Marine/Estuarine/Coastal | 060 _____ Climate |
| 001 _____ Freshwater/Rivers/Lakes/Wetland | 061 _____ Soils/Substrates |
| 002 _____ Duneland/Desertland | 062 _____ Speleology/Hydrology |
| 003 _____ Grassland/Herbfield | 063 _____ Nutrients/Nutrient cycling |
| 004 _____ Forest | 064 _____ Energy flow |
| 005 _____ Scrub/Heath | 065 _____ Major change/Disaster |
| 006 _____ Cultivated land | 066 _____ Glaciology |
| 007 _____ Urban land | |
| 008 _____ Mountain lands | 070 _____ Dynamics/Interactions/Systems |
| | 071 _____ Statistics/Computing/Modelling |
| 010 _____ Plant ecology | 072 _____ Mapping/Remote sensing |
| 011 _____ Micro-organisms | |
| 012 _____ Lower plants (excl. ferns) | 080 _____ Nature Conservation/Parks/Reserves |
| 013 _____ Higher plants (incl. ferns) | 081 _____ Environmental degradation/Pollution |
| | 082 _____ Management |
| 020 _____ Animal ecology | 083 _____ Policy/Planning/Impact |
| 021 _____ Invertebrates | 084 _____ Education/Information |
| 022 _____ Fish | 085 _____ Recreation |
| 023 _____ Amphibia | 086 _____ Ecological restoration |
| 024 _____ Reptiles | |
| 025 _____ Birds | 090 _____ N.Auckland/Auckland/N.Islands |
| 026 _____ Mammals | 091 _____ Waikato/King Country |
| | 092 _____ Rotorua/Taupo/Bay of Plenty |
| 030 _____ Community ecology | 093 _____ Taranaki/Wanganui/National Park |
| 031 _____ Population ecology | 094 _____ Gisborne/Hawkes Bay/East Cape |
| 032 _____ Endangered/Isolated species | 095 _____ Wellington/Manawatu/Wairarapa |
| 033 _____ Biogeography | 096 _____ Nelson/Marlborough |
| 034 _____ Taxonomy | 097 _____ Canterbury/Southern Alps |
| 035 _____ Behaviour | 098 _____ West Coast/Fiordland |
| 036 _____ Physiology | 099 _____ Otago/Southland/S.Islands |
| 037 _____ Agriculture | 100 _____ Chatham Islands |
| 038 _____ Forestry | |
| 039 _____ Fisheries | 110 _____ Whole Country |
| 040 _____ Pests/Parasites | 111 _____ Australia |
| 041 _____ Diseases/Health | 112 _____ Pacific Islands |
| 042 _____ Genetics | 113 _____ Sub-Antarctic Islands |
| 043 _____ Paleocology | 114 _____ Antarctica |
| 044 _____ Philosophy | 115 _____ Global ecology |
| | |
| 050 _____ Human ecology | |
| 051 _____ Maoritanga | |
| 052 _____ History/Archaeology/Palaeontology | |
| 053 _____ Politics | |