

New Zealand Ecological Society (Inc.)

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The New Zealand Ecological Society was formed in 1951 and promotes the study of all aspects of ecology. Membership is open to any person interested in ecology. There are four classes of members who pay:

- (1) \$25 for ordinary members,
- (2) \$15 for student members,
- (3) \$ 5 for introductory members, and
- (4) \$ 5 for retired members.

Ordinary and student members receive the N.Z. Journal of Ecology plus the quarterly newsletter. Introductory and retired members receive only the newsletter.

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NEWSLETTER: The editors welcome correspondence, interim reports of current research, news items, and other articles. Unless specifically indicated otherwise, views expressed in this Newsletter are not necessarily those of the Ecological Society or its Council.

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EDITORIAL

BITING THE BULLET AND FEELING THE PAIN

In this issue of the NEWSLETTER we have 2 articles which discuss, among other things, the relationship between university and government researchers. In one, Neil Mitchell (Botany Department, Auckland University) gives a personal account of his experiences in dealing with contract research, while in the other, we give an account of Graeme Steven's (Geological Survey, DSIR) report on the impact of science policy changes on a major British government science establishment.

As the effects of decreased funding and 'user-pays' bites into the New Zealand scientific community, the largely amiable and non-competitive interactions between university and government researchers are likely to be replaced by something more hostile and wary. The unpalatable fact is, that if the government persists with its policy - which appears to reduce the total amount of government spending on science by 50% - there will be loss of ecological research funds and positions. And in the euphemistic phrase so popular in Wellington at present - who gets to do the bullet-biting?

British experience suggests that there will be losses in both government and university establishments. Non-earning governmental institutions and small, poorly-patronized university departments will be hit hardest. Much ecological research is done in precisely these sorts of places.

If New Zealand does follow the British path, it is vital that ecologists are prepared and well-prepared to argue their case. There is no fat to be pared away; the cuts will sink into the meat and bone. It is absolutely essential that university and government researchers do not bitterly fight for the remaining funds. Such conflict will leave a legacy of lasting damage both to people and institutions. The way New Zealand ecological research is set-up at present, both the universities and governmental researchers have need of one another. We must look for creative solutions to the crisis which ensure that the least damage is done to the long-term future of ecological science.

Matt McGlone

SOCIETY NEWS

FROM THE TREASURER

GST - Not for us, but it was a near thing

We will not be registering as a "taxable trader" for GST.

As explained in the last newsletter, GST will soon cause a 10% increase in your subscriptions whether Ecological Society registers as a taxable trader or not. This is because the tax applies to all spending from postage and printing - including spending by our Society.

Since the tax applies from 1 October this year, the key issue is what will our spending be in the second half of this financial year? If we register as a "taxable trader", we can claim back the GST which will be charged by, say, the Journal printer. Let's say this is \$1,000 (i.e. 10% of a \$10,000 printing cost). If we don't register, we lose this \$1,000.

However, if we do register we are obliged by law to charge 10% GST on subscriptions for the second half of the year. This is 10% of \$12.50 (i.e. \$1.25) per member - and a similar amount for subscribers - totalling about \$580. A sum of \$580 minus \$1000 goes to Inland Revenue. In fact this is -\$420, which constitutes a refund! Nevertheless we lose \$580.

So - if we register, it costs \$580; if we don't it costs \$1000.

Council has decided that for the work involved with coping with GST on all receipts and payments, registration of the Society as a taxable trader is not worthwhile.

Are you confused? I will explain further at the AGM in Lincoln if required, and welcome enquiries from other Treasurers or members who want the mystical powers, rites and incantations of this GST stuff explained.

Missing members

Anyone knowing the whereabouts of:

D.J. Evans, 6 Gladstone Grove, Taupo

or

Mr J.B. Russell, was Water & Soil Division, MWD, Christchurch

please contact John Innes.

Thanks

Thanks to David and Susan Bergin, Victoria Watt and Bruce Burns who helped send out Volume 8 plus invoices to all members recently.

And without Brenda Veale (who came within an ace of balancing Ecol. Soc. books using DECALC and commonsense) and Jeannie Bright (who found the ace) the financial statement would never have been done.

John Innes
COUNCIL NEEDS SOME FEEDBACK!

Are our AGM's democratic enough for you? Do you ever get the feeling that the annual election of officers and councillors is a put-up job? Do you think some people have stayed on the Society Council too long? Is there a case for a maximum term for a councillor? Is our Council too large? These are some of the questions you present Council is addressing and upon which your response and opinion is sought.

When it comes to the annual election of officers and councillors, our AGM fits a very common mould - one in which there is a dislike of the necessity of a ballot. Take the election of councillors as an example: nominations are called for whereupon the secretary leaps up to advise that the following list of serving councillors seek re-election. Their names are then written up on the board. "Any further nominations?" asks the President. "I nominate....." comes the reply. "Seconded" someone yells, and another name is added to the list.

This goes on several times over until someone with limited patience screams "I move that nominations be closed". "Seconded" responds half the audience and a sign of relief descends.

The President then advises that we have no rules that limit the size of the Council, whereupon everyone agrees that all nominees should henceforth be councillors - and let's move on to general business.

This year, council comprises 22 persons, about 5% of our total membership. It meets 5-7 times a year, and there is a considerable expense in administratively servicing such a large number of people meeting as frequently. Although we don't pay travelling costs (that has, for years, been "buried" within some of our employer's budgets) there is also a lot of money being spent bringing the large executive together - and who is to say that in our more "user-pays" world we won't have to meet more of those costs ourselves?

It is not an unreasonable question to ask whether our Society needs such a large Council. Advocates of large Councils sometimes argue that they provide more opportunity for people to become councillors and so do their bit for their Society. But our Society seems to be characterised by some people doing a lot of work; Mike Rudge's recent analysis of Society officer's effort showed that 36% of the mere 123 people who have served the Society since its inception 35 years ago, have served for 3-5 years, and 18% for longer periods (17 years in the case of life member John Gibb). Another argument in favour of large Councils is that the workload can be widely spread.

On the other hand, small Councils I have been associated with in other organisations tend to work harder, faster and with a great esprit than do large bodies. And meeting attendance is usually better with smaller groups in my experience.

No doubt you can think of pros and cons for small and large executive bodies. The important point is what do you think our Society should have?

Mike Rudge, the Doyen of the present Council, has been giving some thought to the issues I have raised and has proposed a damned good idea. He notes that the President and Vice-President are limited by our rules to terms of no more than two years in succession. His suggestion is to apply similar rules to councillors. For example, councillors could be voted on for an initial period of, say 2 years, and they could follow that with a further 2 year term if re-nominated and re-elected. But after that, they have to step aside and are ineligible for re-election for a minimum period of 2 years.

There are of course, many variations on this theme, such as varying the term of the initial election, that of the second election and the duration of ineligibility. But the salient point is that the length of service on Council is limited.

Implicit in Mike's suggestion is that Council should be of a set size. There is no real problem with this, for the constitution of our Society allows Council to co-opt for special tasks, as it has done in the past. Furthermore, there is the possibility for the annual election of half of the Council, thus ensuring there are always a number of "old hands" on Council to ease in the new members.

The point of this communication is to ask you, the members, to give some thought to how you think the Society's executive should be elected, and how many you think a Society of about 450 members should have on its executive. Mike Rudge's suggestion is but one - there is certainly room for more, and Council seeks your suggestion. Please drop a line to the Secretary outlining your views - Council wants to reflect the views of the membership.

Murray Williams
Wildlife, Wellington

LATEST NEWS FROM YOUR FAITHFUL (!!) ROTORUA CORRESPONDENT

A workshop was held at Pureora from November 22-25, 1985, to mark the retirement of John Nicholls and Tony Beveridge, the two "elder statesmen" of the Indigenous Forest Management section, Forest Research Institute, Rotorua. The workshop was entitled "Future Ecological Research on Terrestrial Ecosystems of the Central North Island Volcanic Plateau", and brought together a wide cross-section of managers scientists, and others with interests in the area. The workshop commenced with keynote addresses by the two guests of honour, who present overviews of the ecology and past research in the area. These were followed by brief summaries from specialists in a number of fields describing such aspects as the soils, climate, botany, wildlife and insect fauna. The second day consisted of a field trip looking at some of the better understood aspects of Pureora ecology. Results from previous ecological investigations in the area were presented on the morning of the last day; in the afternoon a discussion on future directions for research was preceded by four speakers who presented personal perspectives. The workshop concluded with a farewell celebration that will remain long in the memories of those present. Proceedings from this workshop are expected to be available by August.

For the curious, John Nicholls' place at Rotorua has been taken by Willie Shaw; Willie did an MSc in resource management at Lincoln and Canterbury, and then spent some time lecturing at Lincoln. After doing some work with private consultants, Willie moved north to the Urewera, where he carried out a botanical survey for Lands and Survey. A further year has been spent working on the Urewera-Ruakumara land-use study, a joint Lands/Forest Service project. Willie will be continuing work on some of the outstanding maps in the Forest Service 1:250 000 forest-class map series, and will also be developing Ecological Area proposals for various regions. His other interests include forest dynamics, and in particular the role of climatic disturbances.

Another new face at IFM is Bruce Burns - Bruce did an MSc (Hons) at Auckland on the population dynamics of mangrove, followed by a Dip.Nat.Res. at Lincoln. His previous experience has included description of Ecological Areas in Coromandel, vegetation survey in Waipoua Sanctuary, and can also lay claim to surviving 12 months paper-shuffling in Head Office! His main areas of interest are rapid inventory in Ecological Areas, and study of vegetation dynamics in native forests.

In the meantime John Nicholls has taken up a contract to complete work on the Taranaki forest-class map, and may follow this up by assisting Willie on some of the other maps. Tony is continuing with various personal projects, including some university study, and has been travelling overseas.

John Leathwick
N.Z. Forest Service, Rotorua

ENVIRONMENT/CONSERVATION NEWS/VIEWS

CO-OPERATION, CO-ORDINATION AND ECOLOGICAL RESEARCH

Much of my research and that of my students has been funded through contract research with government departments. In most cases these funds have been provided in response to the submission of research proposals to departments, rather than a direct approach from the department in question. Thus in a sense we have been in a position of identifying areas of research that we believed would be in the departments' interests, rather than directly fitting in with existing or proposed research. As a seeker of research funding, I appreciate being able to suggest areas of research and then have them funded, however, it can be difficult to be quite sure as to what are 'appropriate areas'. Part of the difficulty seems to lie in the not inconsiderable overlap in research interests and activities between different departments, divisions and sections within my own general area of research. In each case there are separate research budgets, the extent of which is often unknown to an outsider, with an apparent shift from year to year in quantity and application. There has been a trend of late in keeping the universities better informed of research areas and possible funding, a notable recent example being that of Ecology Division. From an outsider's point of view, one is left with some doubts as to how effectively co-ordinated are the research activities of different agencies. Instead the impression persists that agencies are in competition for research funding, resulting in my view, in the duplication of effort, logistics and administration. The research fund monies are in general quite limited and it seems nonsensical that better co-operation and co-ordination does not exist. I am sure that within the existing total research budget, better co-ordination would result in far greater research productivity.

As a user of government research information I am also dismayed at the difficulties that can exist in accessing information. As a general principle, a piece of research is only useful if it is adequately communicated and in many cases that the original data are accessible. Again I have the impression that due to poor long term planning, or perhaps a sudden shift in research interests within an agency, research projects have been terminated abruptly and nothing documented. Similarly there has been a tendency to summarise a project solely as an internal report. Although the trend now appears to be away from solely producing internal reports, I suspect that there are many 'unknown' reports and much data. A good example of this type was the National Forest Survey data collected during the 1950s. The many thousands of record sheets were stored in a library basement, largely ignored. Except for the initial regional estimates of timber and forest type classification, the wealth of national biological data they contain has gone largely unremarked. I understand that some of the information they contain is to be computerised and at long last biologists may be readily able to access this information. It makes one wonder how much more of this type of research information as gone undocumented. I would like to think that better co-ordination of research interests would have resulted in a higher priority being afforded to this work, than it appears to have received.

I have also administered studies on behalf of government agencies, in particular the Northland Forest Inventory for DSIR and, Lands and Survey, and the Rodney Protected Natural Area study for Lands and Survey. In both these cases I was essentially responsible for both the study and its financial organisation. I learnt from these studies the relative balance of costs between salaries, logistics, data collection and report compilation. It still comes as a surprise to note how small a fraction of any budget is spent on the active research component and in particular the large quantity of time and money that needs to be spent on post active research functions, such as data and report compilation. I suspect that it is in these latter areas that too little attention is directed, resulting, in some cases of adequate reporting. From my own experiences I believe that government agencies need to examine more carefully their total funding of research programmes, too great an attention having usually been placed on the active research component, with inadequate funds for the subsequent stages.

Over the past few years I have become familiar with the workings of the government system as it can relate to scientific activities. My membership of the Northland Parks and Reserves Board has made me very aware of the interface between policy level decision making with respect to land use and the need for adequate scientific information from a variety of agencies. At this level the lack of suitable inter-agency co-ordination makes decision making very difficult, since not only is the information that is received usually provided out of sequence, but the bases upon which it was collected may often be incompatible. A recent example arose during our Board's assessment of the information provided with respect to the Te Pahi Farm Park draft management plan. At least five agencies have been involved, each one working quite independently, often providing conflicting advice, even though several of them are trying to promote a similar view. It gave the impression of a poor use of taxpayer money. However, having been closely involved with the Protected Natural Area programme as a provider of land use information, there is nothing more frustrating than trying to provide useful information into an administrative vacuum. In this case we as scientists were trying to provide 'hard' information, but there did not seem to be the appropriate administrative framework to handle it. Thus the administration of the use of scientific information can also be suspect, and again I have the impression that some administrative agencies may collect scientific information without know how to use it. As a working scientist I find this very demoralising and it could be counter-productive for agencies who are reliant on the provisions of external scientific information.

My membership of the Technical Advisory Group for the Protected Natural Area programme has illustrated to me that inter-agency co-operation can occur. However, I also become aware of the pressures faced by representatives of each agency, particularly as each agency wants to retain its own budget and is loth to commit any funds to joint programmes. Again this seems a poor use of taxpayers money when the agencies are all promoting a similar viewpoint. In this context the user-pay principle appears to sometimes apply, e.g. when one department charges another at the consulting rate. It would seem to me that in these cases, different agencies should agree that they have a common goal and both commit funds to the project. It seems illogical that agencies with apparently similar

goals charge each other for use of the taxpayers money. One could take an extreme situation whereby an agency with sought after skills could considerably bolster its annual budget by charging-out to other government agencies. In Britain this situation is quite common and was made very clear to me when I made a recent visit to their Nature Conservancy Council and to Institutes of Terrestrial Ecology. The relationship was very much like that between Lands & Survey/National Parks Authority and DSIR/Wildlife Service. The British government decided that a proportion of the ITE budget should be from outside contract work, for which they would have to tender. Up until that point ITE scientists would carry out research on behalf of NCC as part of their normal budget. With the change, NCC were given a budget to pay for research (including the proportion that went to ITE), NCC found that they could get more for their 'research dollar' by contracting to universities and some other organisations, partly because ITE had a charge-out rate imposed on them by their State Services Commission. The result of this is that the ITE budget has declined such that they are now looking to make scientists redundant. Taken to these lengths, use of the user-pay principle illustrates how to dismantle any otherwise effective research organisation. I very strongly believe that this type of trend is counter-productive to government research and that a better way to make government research more efficient is through effective inter-agency co-operation in the many areas where their interests overlap.

Neil Mitchell
Botany Dept, Auckland University

THE SAD CASE OF THE BRITISH GEOLOGICAL SURVEY

Graeme Stevens, chief palaeontologist Geological Survey, DSIR, was recently in Britain and West Germany. During his time there he visited many geological institutions and saw at first hand the effects that the general decline of funding for basic and long term research is having. Basic, mundane, fact-accumulating science of the sort that is absolutely vital to the long-term health of natural sciences such as geology and ecology, is seriously threatened by diversion of funds to applied/problem solving research. No country seems to be immune from this passion to get out of 'sunset' research.

Britain is, however, a particularly relevant case for New Zealand. Monetarist policies - very like those which are being applied right now - and a major reorganization of science which began in 1965, have now had a few years to bite. Graeme Stevens looked in particular at one institution, the British Geological Survey (BGS). With his permission I give here an rewritten summary of his findings and their implications for New Zealand science. Despite being about a geological organization, the general picture applies to many other scientific organizations in Britain.

British Geological Survey

The BGS is one of the more venerable scientific establishments in Britain, and undertakes research on many aspects of geology. Since 1965 it has been a component body of the Natural Environment Research Council (NERC), the governmental funding body which encourages, plans and implements research into physical and biological sciences related to the environment and resources. The BGS employs one third of all NERC staff.

The Earth Sciences Directorate of NERC, one of three directorates, administers BGS.

Britain adopted wholesale and enthusiastically the Rothschild 'customer-contractor' system for science. It is disastrously effective in reducing basic research. Fundamentally, it is "user-pays" taken to its logical extreme. The idea is seductively simple: if an organization governmental or private, wishes to have research done on its behalf, it contacts an appropriate agency - governmental, university or private. A formal contract system extends right into the heart of the BGS: each section charges at full commercial rates other sections needing work. Services such as information, photographic, computer, palaeontology etc., all charge. A 2-way matrix has been established, which relates to 1. programmes and; 2. subject disciplines. Each scientist will therefore have at least 2 'bosses'; the programme manager and the manager for their subject. Those who are particularly cursed by the gods may have more. As the icing on the cake, BGS has NERC-appointed 'advisory panels' to advise and review their research programme.

What has been the impact on the BGS of these organizational and funding changes?

The fight for funds for the fundamentals

What happens to a middle-aged governmental institution, happily doing basic research in the "National Interest" when it is suddenly exposed to a highly competitive scramble for funds?

The first effect is that it sees its funds for basic and long-term research dry up. No private institution, and precious few governmental agencies, are going to make funds available for such a nebulous concept as the National Interest. They are quite rightly more interested in survival. The BGS is therefore dependent on direct government grants for maintaining its basic programmes. However, it has to face very vigorous university competition for those same funds. Not only that, by and large the universities have a different concept of 'basic' and 'long-term', and one which would relegate governmental science very firmly to the strictly routine and applied. And here the concept of 'basic' proves to be rather complex. Patient geological mapping of an English district is 'basic', but so is geophysical studies of subduction zones in Outer Outlandishia. No prizes for guessing where the money will go; everyone likes to travel. The same applies to field studies and fossil collections versus 'blackbox' geology: geologists like video-games just as much as everyone else.

The BGS thus had to change. Blocked from doing what it felt to be necessary and in the National Interest by diversions of funds to other and more glamorous projects, it has had to reply mainly on applied projects contracted from other government agencies. With budget cuts for science, the often delayed start to the financial year, and the ever-present threat of cancellation of projects, the BGS may have to wait for up to half of a financial year before it knows if it has sufficient money to continue its planned project schedule. The end result is that the BGS has been reduced to the role of a geological consulting agency, and its scientists into entrepreneurs hustling for funds. Not conducive at all to good science.

And there's more - Communication Problems

In the battle for adequate funding, BGS is severely hampered by its loss of access to Government which it has when it was set up more like the DSIR. As part of NERC, it can no longer deal directly with a minister. Submissions from BGS go first to the Earth Sciences Directorate, then to the NERC sector committees, and then to the full Council. At each step biologists dominate proceedings and there is thus a high risk of dilution or negation of a submission. University and private researchers can go directly to the person in Whitehall who will do their case most good.

Internal communication is complex. The matrix management scheme, plus contracts both internal and external, means that priority setting is difficult and that scientists often do not know who to turn to for instructions and advice. Staff frequently find themselves in the middle of a tug-of-war between competing programmes. Internal contracting has also led to an unbelievable increase in paper work.

And the unkindest cut of all - competition with the Universities

As is clear from the foregoing, NERC competes directly, head to head with the universities for funds. Certain aspects of this competitive interaction have led to a souring of relationships.

In this competition BGS has certain disadvantages. NERC review panels are 'stacked' with university and private company staff. They have a very natural tendency to push their own barrows, and the review panels are golden opportunities to do so. There are no university research review panels with a comparable BGS presence.

BGS, given the dominance of NERC by university interests, has found it far easier to obtain funding for joint BGS/university projects than it has for hiring staff. These joint projects have run into problems as the aims of the 2 organizations are not identical by any means, and the ability of the universities to carry out the sorts of research BGS would like to promote has been patchy. As a result, much time has been spent by BGS staff in supervising work which could have been done quicker and better by their more experienced staff. Repeated problems have arisen over the quality of the university research, and it has proved difficult for the university staff to maintain interest and long-term commitment to some of the projects. It is important to note that these are the result of inappropriate research aims grafted on to university programmes, not any inherent lack of ability in the universities.

Implications for New Zealand governmental science

1. A thorough-going contractor-customer system if introduced to New Zealand will have the same drastic effects on science as in Britain. Basic and long-term research, a large proportion of which is presently carried out in Government departments, will wither to a very low level.
2. The setting-up of research councils to competitively distribute funds will inevitably create tensions between government departments and universities. The sort of science done will change, with the emphasis being on short-term 'glamour' projects, and applied contract work.

3. Organizational changes will increasingly distract scientists from science, and into promotional activities, contract-servicing, proposal writing, and paper work.
4. Before changes are made out of some theory-led monetarist desire for ideological purity, the experience of other countries should be studied in some depth. There non-obvious consequences, and often undesirable consequences, which can be only seen by observations made in the field. We should know what we are doing when we make the changes. It's no good saying that things will be different here; they very rarely are.

Matt McGlone
Botany Division, DSIR, Christchurch

BIOLOGICAL CONTROL OF GORSE

The possibility of biological control of gorse is tempting for those wishing to ease the burden of the farming community. This is a complex issue, but I have recently read an argument for the preservation of gorse I want to rebut.

Pro-gorsers claim that gorse leads more rapidly to native broadleaved forest than manuka, and is therefore better. This argument ignores the fact of manuka being a native plant. Manuka therefore has greater value on our landscape than gorse, regardless of the time frame of succession beneath its canopy. It provides nectar for native invertebrates, a home for lizards, etc., and has been happily nursing native forest for thousands of years. The argument also fosters the idea that manuka is of little value because it is not tall forest. A similar value judgement burnt Big Bush at St Arnaud and smoke rises on the Nelson horizon every day now from patches of so-called "useless manuka scrub".

Gorse will be around for a long time because of its seed longevity. Other arguments aside, if gorse could be eliminated, many native plant communities, including young manuka, would no longer be smothered by this nasty weed.

P.A. Williams
Botany Division, Nelson

ECOLOGICAL SOCIETY
ANNUAL CONFERENCE 1986

New Zealand Ecological Society (Inc)

NOTICE OF ANNUAL GENERAL MEETING

Notice is hereby given that the 34th Annual General Meeting of the New Zealand Ecological Society (Inc) will be held at Lincoln College, Lincoln, Canterbury, on Thursday, 4 September 1986, commencing at 8.00 p.m.

The agenda for this meeting is set out below.

AGENDA

- 1) Apologies
- 2) Confirmation of the Minutes of the 33rd Annual General Meeting
- 3) Matters arising from the Minutes
- 4) Receive balance sheet and statement of accounts
- 5) Receive Annual Report
- 6) Election of Officers
- 7) Election of Council
- 8) Appointment of Honorary Auditor
- 9) General Business

Programme of Events of the
New Zealand Ecological Society Conference
Lincoln College 2-5 September 1986

Monday 1st September:

Dr C. Meurk - pre-conference survey of Kowai-Lords bush.

Informal registration as people arrive.

5.30 - 6.30 pm. Dinner in refectory.

7.30 pm. informal social hour in hostel common room.

Tuesday 2nd September: SYMPOSIUM DAY 1 **LECTURE ROOM 13**

8.00 - 8.30 Registration.
Ground floor foyer of lecture room 13.

8.30 - 9.30 Dr G. Caughley C.S.I.R.O.
Introductory review.

Session 1: The history of, and physical effects upon, the N.Z. biota. Chair, Wren Green.

9.30 - 10.00 McGlone - Vegetation and climatic change over the past three millenia.

10.00 - 10.30 Grant - A model for the late Holocene histories and interactions of climate, erosion, alluvial sedimentation, vegetation, polynesians and animals.

10.30 - 11.00 **MORNING TEA IN REFECTORY**

11.00 - 11.30 McFadgen - Depositional episodes in late Holocene coastal deposits in New Zealand.

11.30 - 12.00 McSaveney and Whitehouse - Anthropogenic erosion in the Canterbury Mountain Lands.

12.00 - 12.30 Basher, Tonkin and Daly - Erosion and Plant Succession in a High Rainfall Area of Central Westland.

12.30 - 1.30 **LUNCH IN REFECTORY**

Session 2: Prehistoric biology and ecology of the avifauna.
Chair, John Innes.

- 1.30 - 2.00 Holdaway and Braithwaite - New Zealand's prehuman avian ecology : A Scenario.
- 2.00 - 2.30 Luckens - Habitat preferences of Dinorniformes deduced from gastrolithic evidence.
- 2.30 - 3.00 Atkinson and Greenwood - Moa-plant relationships.
- 3.00 - 3.30 AFTERNOON TEA IN REFECTORY
- 3.30 - 4.00 Duncan and Holdaway - Footprint pressures of Moas and ungulates.
- 4.00 - 4.30 Clout and Hay - The importance of avian herbivores in New Zealand forests.
- 4.30 - 5.00 Braithwaite and Holdaway - A Reconstruction of Harpagornis moorei, top predator in the moa world.
- 5.30 - 6.30 DINNER IN REFECTORY
- 7.30 ---> Wine and cheese evening encompassing a debate.
Topic: To be announced.
to be held in the Fitzgerald Room of the M.A.F./
D.S.I.R. joint complex at Lincoln.

Wednesday 3rd September: SYMPOSIUM; DAY 2 LECTURE ROOM 13

Session 3: Nature of the N.Z. vegetation. Chair, Martin Foggo.

- 8.30 - 9.00 Bathgate - Downturn in rimu (Dacrydium Cupressinum) recruitment and diameter growth between 1700-1900 AD.
- 9.00 - 9.30 Stewart and Rose - Age structure and regeneration dynamics of Libocedrus bidwilli stands, Camp Creek, Westland, New Zealand.
- 9.30 - 10.00 Norton and Ogden - Review of NZ dendrochronology in relation to past climates.
- 10.00 - 10.30 MORNING TEA IN REFECTORY

Session 4: Mammals and management.

- 10.30 - 11.00 Payton - The role of possums in rata-kamihi forest mortality in Westland.

- 11.00 - 11.30 Rose, Harrison and Platt - Composition and distribution of alpine grassland communities of Wapiti Lake, Fiordland, N.Z.
- 11.30 - 12.00 Wardle and Stewart - Modification of pristine Fiordland forests by deer and vegetation recovery following control.
- 12.00 - 12.30 Mark - Vegetation responses under opposing trends of red deer influence in two habitats in S.W. South Island.

12.30 - 1.30 LUNCH IN REFECTORY

1.30 - 2.30 Poster session: lecture theatre foyer.

Blaschke : Victoria University: Vegetation-site relationships in inland Taranaki hill country.

Davis and Bellingham: Auckland University: Mapping of estuarine vegetation in the Hokianga.

Frazer: FRI, Christchurch: Reproductive biology of the rabbit in Central Otago.

Halloy, Keogh and Vides: Otago University and Universidad Nacional, Argentina: "Divaricating Shrubs": an outside perspective.

McEwen: NZBRC, Wellington: BRC's directory of people with knowledge about the biology of various ecological districts.

Mitchell: Auckland University: A new approach to interpreting species-climate interactions.

Montegue: Monash, Australia: Little penguin food studies.

Parkes: FRI, Christchurch: The diet of feral goats from adjacent high and low density herds in the Motu River, Raukumara State Forest Park.

Simpson and Myers: Commission for the Environment Wellington: WERI (Wetlands of Ecological and Representative Importance) - The New Zealand Wetlands Inventory.

Spurr: FRI, Christchurch: Effect of 1080 poisoning of possums on bird populations in Westland National Park.

Thomson: FRI, Christchurch: Diet of feral pigs in Urewera National Park.

Tilley and Moller: Ecol. Division, Nelson:
Honeydew.

Various: FRI, Christchurch: Deer - vegetation -
soils of Fiordland.

Wardle: Botany Division, Lincoln: Divaricating
Shrubs.

Williams: MAF, Lincoln: The dynamics of managed
rabbit populations on pastoral farmland.

2.30 - 3.00 AFTERNOON TEA IN REFECTORY

3.00 - 4.30 Workshops (to be run concurrently).

1. Symposium Workshop: The contribution of science to wild animal management (Peter Logan). Chair, Les Batcheler. LECTURE ROOM 13.
2. Measuring vegetation as animal habitat (John Leathwick). LABORATORY B132.
3. The new high school biology syllabus (Eric Scott). LABORATORY 133.
4. (In)stability of botanical nomenclature (Dave Kelly). LABORATORY B233.

4.45 - 5.15 SYMPOSIUM SYNTHESIS: LECTURE ROOM 13

Prof. K. O'Connor - The impact of herbivory and ecologic adaptations on the New Zealand flora.

7.00 - 8.00 Pre dinner drinks - LCSA lounge.

8.00 - 10.00 Annual Dinner - LINCOLN COLLEGE STUDENTS ASSOCIATION REFECTORY, Waitress served, drinks available for purchase prior to 8.00 pm.

10.00 ---> After dinner social time in LCSA lounge, bar open until 12 midnight.

Thursday 4th September: CONTRIBUTED PAPERS : DAY 1
LECTURE ROOM 13

Session 1 : Chair, Brian Molloy

8.30 - 8.55 McQueen - Browsers and growth form of shrubs.

8.55 - 9.20 Batcheler - Evidence of moa browsing from the distribution of deciduous and toxic woody plants.

9.20 - 9.45 Horn - Moa tracks: an extant legacy from an extinct species.

Session 2 : Chair, Pam Williams

- 9.45 - 10.10 Collins - The relationships between landform, soils and vegetation in south Westland terrace rimu forests.
- 10.10 - 10.40 **MORNING TEA IN REFECTORY**
- 10.40 - 11.05 Merton - The ecology of two south Westland pakihi mires.
- 11.05 - 11.30 Baxter - Secondary succession following logging in West Coast terrace rimu forests.
- 11.30 - 11.55 Bray and Burke - Forest regeneration dynamics in Golden Bay, New Zealand.
- 11.55 - 12.20 Watt - Pine invasion in indigenous forest.
- 12.20 - 12.45 Keenan - The ecology and management of Nothofagus spp. and Libocedrus bidwilli on Banks Peninsula.
- 12.45 - 1.45 **LUNCH IN REFECTORY**
- 1.45 - 4.30 Field Trip to Canterbury Museum for a moa/man presentation hosted by Trotter, McCulloch and Burrows. Arrive back at Lincoln approx. 5.00 pm.
- 5.30 - 6.30 **DINNER IN REFECTORY**
- 8.00 ---> **AGM in LCSA lounge, bar open afterwards.**

Friday 5th September: CONTRIBUTED PAPERS: DAY 2
LECTURE ROOM 13

Session 3 : Chair, Ken Hughey

- 8.30 - 8.55 Dzieciolowski - Wildlife Research Planning and Coordination - A European Perspective
- 8.55 - 9.20 Fraser - Rabbits in Central Otago - what is the real problem?
- 9.20 - 9.45 Challies - Are the white-tailed deer on Stewart Island controllable?
- 9.45 - 10.10 Murphy - The effect of supplementary feeding on mainland and island populations of mice in the Marlborough Sounds.
- 10.10 - 10.40 **MORNING TEA IN REFECTORY**

Session 4 : Chair, Graham Wilson

- 10.40 - 11.05 Mills, Lee and Lavers - Competition and interaction between deer and takahe for food in Fiordland.
- 11.05 - 11.30 Montague - The management of black swan (Cygnus atratus) damage using behavioural models.
- 11.30 - 11.55 Davis - Demography of the N.Z. shore plover population on Rangatira Island.
- 12.00 - 1.00 LUNCH IN REFECTORY

Session 5 : Chair, Pat Devlin

- 1.00 - 1.25 Burrows - Seed trapping in lowland forest.
- 1.25 - 1.50 Moller and Tilley - Honeydew and its use by birds and insects.
- 1.50 - 2.15 Timmins, Ogle and Atkinson - Management of Mana Is., Wellington as a 'nature park'.
- 2.40 Conference ends - Minibuses leave for Christchurch Airport.

If possible please book your return flight after 3.30pm on the Friday, to make airport "drops" more economical and easy to organise.

Annual Report for the year ending 31 March 1986

Overview

The Council's activities during the past year have been rather dominated by discussions and submissions relating to the Government's moves to reorganise the structure of environmental administration in New Zealand. Although only a proportion of ecologists in our Society work for the Government, it is clear that this restructuring will affect the whole future of ecological work in the country. We have major concerns about the adverse effects of the Government's charging policy on both the kind and quality of ecological studies that will be done by or for the new environmental agencies. But this must not blind us to the new opportunities that ecologists will be given, at least in the long-term, to apply their outlook and skills to understanding, maintaining, and sometimes restoring much that is of the highest value in New Zealand's biological environment.

The Council's submission of 14 August 1985 to the Hon. Russell Marshall on the document "Environment 1986" was unequivocal in supporting formation of a new nature conservancy department in which "managers and advocates of the values of the natural biota are grouped more closely together". Because of the far-reaching consequences of the administrative changes Council consulted widely before preparing its submission and working parties of members at Rotorua, Wellington, Palmerston North and Christchurch provided most of the submission's content. The principal points of our submission were:

1. A Ministry for the Environment which had an environmental evaluation and planning role was supported. As well as administering the Town and Country Planning Act, it should also assume some of the planning functions of the Water and Soil Directorate.
2. Managers of and advocates for native biota conservation should all be grouped together. These parts of Lands and Survey and N.Z. Forest Service dealing with native resources should be separated from the development functions of their parent department and merged to form the nucleus of a 'nature conservancy'.
3. Any 'nature conservancy' department should have a large inhouse research capability with a mandate for both basic and applied research. The co-housing of natural resource managers and research staff is seen as essential for wise and scientifically sound management. The research unit should contain staff from a wide range of existing research organisations so that all management functions have a research backup.
4. Natural resource conservation and development conflicts could be greatly reduced if the Government of the day committed itself to an explicit, consistent policy of protecting native biota, and then actively implemented it.

Subsequently (3 December 1985) we wrote to the State Services Commission expressing the pivotal importance of research in the Department of Conservation for both planning and the effective management of those natural resources for which the department will be responsible. Opportunities for our further input into the way ecological research is to be reorganised have not been forthcoming.

A meeting of Society members to discuss the future role of DSIR in ecological and environmental research was requested by Dr J Troughton (see Newsletter No. 44). This highlighted the necessity for New Zealand ecologists to ask more searching questions than we have been asking about the kinds of ecological research that are most needed in New Zealand. This process is now under way. The matter must be answered independently of who does the work and where, and our Society is in a better position to address it objectively than anybody else.

Finally, I thank all Officers and Council members for a great deal of hard work during the year and wish all Society members an ecologically satisfying year for 1986/87.

Ian Atkinson
President

Membership

The Society membership at 31 March 1986 was 454. There were 18 new members (10 full, 6 student, 2 introductory), and 14 resignations during the year. There were 167 subscribers to the Journal (70 in New Zealand and 97 overseas).

Council Activity

The Council met 8 times during the year. All meetings were held in Wellington with the exception of the AGM which was held in Palmerston North. The following appointments were made by Council: Dr Nigel Barlow, Editor; Dr Mike Rudge, representative to the Member Bodies' Committee of the Royal Society; Dr Jonet Ward, representative to the New Zealand Committee for Water Pollution Research; Dr Matt McGlone and Dr Judith Roper-Lindsay as Newsletter Compilers. Convenors of subcommittees were: AGM and Conference Organiser Dr John Skipworth; Awards, Dr Clare Veltman; Conservation, Ms Janet Owen; Education, Mrs Pam Williams; Nuclear Issues, Dr Wren Green; Society Records, Mrs Margaret Leslie.

Editor's Report (Nigel Barlow)

Volume 8 had relatively few papers (8 out of 16 submitted), some of which were quite long, together with 3 Short Communications and a copy of the Society's report on the environmental consequences of nuclear war. There was some delay due to late receipt of papers but the lateness of the Journal's appearance was largely caused by failure of the printers' new computerised typesetting equipment.

The signs for Volume 9 (1986) are more auspicious, with 20 papers received by the beginning of May. Four were rejected but in 3 cases a Short Communication was suggested as an alternative. The rest required revision to varying extents (6 minor, 5 major, the rest still to be processed).

The main problem this year is the perennial one of late submission of papers. Inevitably this means balancing the quality of a paper (likely processing time) against date of submission; it follows that early papers have a better chance of acceptance. One wonders if the autumn flush of papers is related to calendar time or the timing of the deadline. We know an earlier deadline doesn't work but would the situation be any better if we recognised a later publication date and later deadline?

I would like to thank the sub-editors, John Gibb, Peter Johnson and Dave Towns, and the referees, for their essential contributions.

Newsletter Compilers' Report (Matt McGlone, Judith Roper-Lindsay)

There have been few changes in the Newsletter this year. Despite high hopes for a modest remodelling and extension of features offered, we have been hard-pressed even to keep the Newsletter to schedule. As in previous years, unsolicited contributions and articles covering research news have been scarce. Even in the rather more extensively covered field of environmental matters, we have relied on mainly reprinting material directed primarily at other audiences. It is disappointing to note that the upheaval caused by the reorganisation of environmental agencies has been barely reflected in the tranquil pond of the Newsletter. If the Newsletter is to flourish, there must be a greater effort made by members to become involved in sharing information with the Society as a whole. It would be appreciated if Council members would lead the way.

On the credit side, we would like to thank our contributors - and especially Mary McEwen of BRC - for their articles. Many thanks also to the rest of the Newsletter team for their hard work in getting the Newsletter out, often at rather short notice.

Report of the Member Bodies' Committee Representative (Mike Rudge)

The Royal Society continues to be very active in support of science in New Zealand at many levels.

Science Education

Concern has been expressed about science teaching in secondary schools. The Royal Society has set up a standing committee to examine the nature of science teaching and curriculum content. The number of science teachers who majored in physics, maths and chemistry is declining because work in industry is better paid and more attractive in other ways.

Royal Society Library

The library will be removed from Science House, Thorndon, and incorporated with the National Museum Library. The Royal Society will be exploring ways in which the liberated rooms can be used to help member bodies.

Prince & Princess of Wales Award

32 awards have been made in the 3 years since the scheme was inaugurated. 80% of awards have gone to people under 40 years old. This Society originally pressed for technicians to be written into the criteria, and it is therefore gratifying to note that 5 awards have gone to technicians.

Member Bodies have contributed about 10% of the funds, and the rest comes from Government and Business houses. About 1/3 of member bodies do not subscribe at all.

Young Scientists Award

This award, to help young scientists to their first overseas conference, has now been awarded 45 times. Of those, 14 (31%) have gone to females which must be way above the proportion in the scientific workforce.

Public Affairs

During the year the Royal Society published its analysis "The Threat of Nuclear War: a N.Z. Perspective". It also endorsed the Ecological Society 1984 publication on the subject.

BioFed

The Federation of Biological Societies, under the Royal Society umbrella, has produced an analysis for NRAC of the need for basic science in New Zealand. In forthcoming BioCom newsletters, there will be a series of articles on what the Royal Society does for Member Bodies, national science, and in the international scientific community.

Education Report (Pam Williams)

The Christchurch-based subcommittee had a busy 1985 year, adding the finishing touches to four more tape-slide packages for use in Senior High School Biology Courses. These packages were: Stoats on Offshore Islands (R Taylor); Eucalyptus Tortoise Beetle (T Mander and J Wightman); Leiopelma, a terrestrial NZ frog (A Cree); and Rocky Shores (M Leslie).

These are now available to schools from the Science Resource Centre in Dunedin.

Further contributors are needed; an honorarium is available and costs are covered. With the new F6 assessment underway and new Biology programmes in the pipe-line there is a need for New Zealand examples of ecological principles. Any would-be contributors can contact Pam Williams, 92 Church Street, Rangiora.

Nuclear Issues (Wren Green)

The 1985 AGM endorsed the Council's document "The Environmental Consequences to New Zealand of Nuclear Warfare in the Northern Hemisphere", which had previously been endorsed only by the Council. Copies of the second print run are still available for \$1 each (schools 50c each).

In September 1985 Wren Green represented New Zealand at the Sixth General Assembly of SCOPE in Washington DC where a 2-year international study (Environmental Consequences of Nuclear War) was released. The SCOPE study substantiated earlier studies and added the additional spectre of 1-3 billion survivors of direct nuclear effects dying of starvation if global agricultural systems collapsed.

There is a possibility that scientific study may be undertaken which would examine the various environmental, economic, and societal impacts of nuclear war on New Zealand. The Council supports in principle making an appropriate contribution to such a study.

Awards (Clare Veltman)

At the 1985 AGM, Mr J L Nicholls was elected an Honorary Life Member of the Society. A biographical sketch follows this report.

Andrew Read (Otago University) received the Student Award for his paper "Habitat Use by Yellowheads in the Hawdon River Valley, Arthur's Pass National Park", delivered to the 1985 conference in Palmerston North.

As a result of Council's nominations, Wren Green (FRI) and Helen Hughes (Commission for the Environment) were appointed and reappointed respectively to the Royal Society's National Committee for Problems of the Environment.

Conservation Report (Janet Owen)

Tahr Management Policy

Our submission, while still supporting an eradication programme for tahr, acceded that if Recreational Hunting Areas are to be established for sport hunting of tahr, then monitoring programmes for vegetation condition and links between vegetation and animal numbers are required. The proposed RHA which covers almost all of the Armoury and Arrowsmith Ecological Districts is considered unacceptably large.

The policy to exclude tahr from national parks was welcomed, but we also stated a view that Recreational Hunting Areas and other reserves are incompatible and overlaps between the two should not occur. Submissions are still being considered by Forest Service.

Future Use of Maui Gas

A brief submission was made pointing out that insufficient detail had been provided. No consideration at all had been given to the option of leaving the gas in the ground. A summary of key issues and analysis of submissions has since been produced by the Energy Advisory Committee.

Outlying Islands

Lands and Survey released for comment the Auckland Islands Management Plan, a Rodent Contingency Plan for Campbell Island, and announced its intention to prepare a management plan for the Kermadec Islands. Submissions were made on all these issues drawing attention to specific points of concern to the Society and information to be considered or included. Notwithstanding our criticisms it is pleasing to see management planning and policy for these special areas continuing to be developed at a steady pace.

New Zealand Committee for Water Pollution Research and Control (Janet Ward)

There are now 23 member bodies of this Committee.

Two conferences were sponsored in 1985. The combined N.Z. Microbiological Society Conference and 17th N.Z. Biotechnology Conference was held at Massey University in May 1985. A half-day session on water and wastewater microbiology was sponsored by NZCWPRC who also provided funds to assist Dr Gillian Lewis to travel to the conference to present an interesting paper on viruses in water.

The conference of the N.Z. Water Supply and Disposal Association was held at Lincoln College in August 1985 with the theme 'Small Communities'.

Unfortunately the NZCWPRC specialised conference on Water Stabilisation Ponds had to be cancelled.

In 1986 this Committee is sponsoring a workshop on pollution caused by mining activities as part of the conference of the Australasian Institution of Mining and Metallurgy in Rotorua in August.

Comments were submitted by the Committee on the draft Water and Soil Bill in 1985. These are now incorporated into the revised draft which will be introduced to Parliament hopefully early in 1987.

Society Records (Margaret Leslie)

The Society Records are stored in the cupboards belonging to the Ecological Society located in the DSIR Ecology Division offices. They have been sorted into various categories and a card index has been established on all aspects of Society activities since its inauguration. The index is based on matters raised in Council and Annual General Meetings and is augmented by cross reference to relevant files. To date indexing is completed for all minutes to the end of 1985, and all Conservation Sub-Committee and General Correspondence Files up to 1982. Other material yet to be indexed includes Finance, collections of Newsletters, Proceedings and Journals, files of sub-committees other than Conservation; Royal Society Member Bodies material, some miscellaneous literature and papers, and any material still in private hands.

Honorary Life Membership John Nicholls 52

John Nicholls joined New Zealand Forest Service in 1946, graduated from Canterbury University College in 1950 and was posted to FRI Rotorua as a forest ecologist. He held this position until his retirement in 1985.

Between 1960 and 1967 John led the ecological survey of North Island indigenous forests and was responsible for their classification and mapping. Since 1967 he has been a major protagonist for scientific reserves within State Forests throughout New Zealand.

His proposals for representative reservation of forests as Ecological Areas have protected many natural ecosystems explicitly for ecological research. Between 1965 and 1971 John produced a report series for Department of Lands and Survey on the scientific values of Scenic Reserves in many North Island districts, using methods that were both innovative, and many years ahead of their time. He considered under-represented vegetation types and recommended that they be added to the existing network of reserves.

The quintessence of this approach was his concept of ecological districts and regions presented at a Commission for the Environment Workshop in 1978 which has since grown to be the basis of the Protected Natural Area inventory and which may well prove to be the foundation for future ecological planning in New Zealand.

John Nicholls' contribution to ecological thinking and research has been of the highest calibre. With his modest demeanour he has brought to his work integrity and discipline which will have a positive and lasting influence on other ecologists who have known him, worked with him and who will follow him.

Honorary Life Membership of the New Zealand Ecological Society will sit well on his shoulders and is little enough recognition to a man who has done so much to mould the thinking and direction of ecology in New Zealand.

Annual Conference 1985

The 34th Annual Conference was held at Massey University from 20-23 August. There were 108 registrants. Mr Philip Woollaston MP, Under-secretary to the Minister for the Environment, was key speaker at the Tuesday afternoon workshop on Environmental Administration. He outlined the broad plans for the changes proposed by Government to rationalise environmental administration in New Zealand and to make it more effectively protect our dwindling natural resources without stultifying reasonable development. Mr Woollaston fielded some ecologically provocative questions at the end of his speech. The afternoon proved to be a stimulating way to start the Conference and the Society was pleased that Mr Woollaston was able to attend.

The general conference programme was as follows:

Tuesday	Workshops Wine and Cheese evening
Wednesday	Contributed papers Excursion to Aokautere Research Centre Poster Session AGM
Thursday	Presidential Address, Dr Mike Rudge "Science Management and Accountability" Symposium: Managed Ecosystems Annual Dinner
Friday	Contributed papers

Papers presented in the contributed papers sections on Wednesday and Friday were:

D Kelly	Strict and facultative biennials
C West	Populations of <u>Beilschmiedia tawa</u> in logged and virgin stands at Pureora forest
M McEwan	Rimu - Ubiquitous podocarp of New Zealand forests
A Read	Habitat use by yellowheads in the Hawdon River Valley, Arthur's Pass National Park
E Murphy	Comparison of Island and Mainland populations of house mouse in the Marlborough Sounds
R Powlesland <u>et al.</u>	Breeding of kakapo on Stewart Island 1985
G Rogers	The role of fire in New Zealand vegetation patterns
H Chapman	An introduction to the spread of heather (<u>Calluna vulgaris</u>) in Tongariro National Park

- H Madgwick Dry matter and nutrient relationships in stands of
Pinus radiata
- P Williams & R P Buxton
Hawthorn populations in mid Canterbury
- B Wills The Cockayne plots of Central Otago - a 1985
evaluation
- I Payton et al. Vigour in Chionochloa: a question of energy or
nutrition
- J McLennan Home range and denning behaviour of Brown Kiwi in
Hawkes Bay
- D Morgan Behavioural responses in possums (Trichosurus
vulpecula) to baits used in aerial control
operations
- B Reid Kiwi and possums: traps and baits
- M Moffat Bird community structures in part of Tararua State
Forest
- J Craig Coevolution? or the true life story of flax and
its floral violators

Papers presented at the Thursday Symposium, "Managed Ecosystems" were:

- L Rowan A geomorphological analysis of New Zealand's
National Parks
- A Cunningham Mountain land management
- J Innes Kokako and possum control
- R Irving Peatlands for agriculture
- C McKay Peatlands for reservation
- P Moore Lake Wairarapa wetlands
- A Mark & P Johnson Factors in the management of indigenous ecosystems
- A Field The pasture ecosystem
- R East et al. Present pest management in the northern North Is
- G Nugent Changes in the distribution and density of deer in
part of the wapiti area of Fiordland 1969-1984
- G Gleason Sustained yield beech forests
- B Springett Managed Ecosystems - Summary and Overview

Papers in both the contributed sections and the Symposium were of high standard and some, such as the paper given by Ash Cunningham, had a good measure of timely humour.

The poster session, formally held in the hour before the AGM, but available for people to peruse throughout, was again a valuable addition to the Conference. Posters were prepared by:

- | | |
|-----------------------------|--|
| M McEwan | Ecological Regions in New Zealand |
| G Jane | Recognition of patterns in vegetation: Wilberforce Ecological Area |
| C West | <u>Clematis vitalba</u> |
| A Clayton & J Roper-Lindsay | A preliminary methodology for ecological planning in New Zealand |
| B Bulloch | Research topics on native plants for lowland soil conservation plantings |
| H Stengs | Inventory work on ecological areas in Westland |
| P Stanton & D Noda | Habitat use by blue duck <u>Hymenolaimus malocorhynchus</u> |
| P Greenwood & J Skipworth | Keebles Bush |
| A Nixon | Possum fur biology |

The field trip to Aokautere Research Centre on Wednesday afternoon was informative and enjoyable and appropriate to the symposium theme "Managed Ecosystems". Research topics covered by the Centre include land stability, land resources, plant materials, remote sensing and the development of improved soil conservation techniques. We thank the staff at the Research Centre for their hospitality, their time and for sharing their knowledge with us.

The 1985 Conference was organised by John Skipworth with help from many other Palmerston North ecologists. The success of the Conference was due to the hard work put in by all these people, to the people who contributed papers and posters, to Prof Brian Springett for his summing up of the Symposium, to Mr Philip Woollaston for his contribution to the workshop and to Mike Rudge for his stimulating and topical presidential address. We thank them all.

NEW ZEALAND ECOLOGICAL SOCIETY INCORPORATED
STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR
ENDED 31 MARCH 1986

RECEIPTS

Subscriptions arrears	\$408.22
Subscriptions current	8,679.17
Subscriptions advance	145.60
Journal current	-
Journal advance	588.86
Journal arrears	431.48
Journal back copies	236.50
Journal reprints	988.15
Education Fund income	233.18
'Econuke' sales	2,096.55
Sundry	81.94
Commercial dep. repaid	5,500.00
Interest received (Comm. Dep.)	566.00
Conference 1985	7,834.40
Bank Interest	2,300.48
Balances at 1.4.85:	
General Fund	4,437.18
Education Fund	458.46
Conference Fund	1,751.60
Comm. Dep. Fund	6,237.90

\$ 42,975.67

PAYMENTS

Printing - Newsletter	\$1,000.51
Stationery & duplicating	280.49
Address labels	210.47
Postage, freight & tolls	559.25
Sundry	406.50
Membership dues	30.00
Royal Society	217.97
'Econuke' expenses	2,602.25
Conference expenses 1985	7,399.00
Education Fund expenses	384.91
Term deposits	7,780.90
Balances as at 27.3.86	
BNZ Investment A/C	20,887.04
General Fund	838.80
Education Fund	306.73
Conference Fund	70.85
Westpac Term Deposit	2,280.90
Comm. Dep. Fund	-

\$ 42,975.67

INCOME AND EXPENDITURE ACCOUNTS FOR THE YEAR
ENDED 31 MARCH 1986

GENERAL ACCOUNT

EXPENDITURE

Education Fund	\$200.00
Conf. Term Dep.	435.40
Stationery & duplicating	280.49
Address labels	210.47
Postage, freight & tolls	559.25
Sundry	206.50
Printing Newsletter & forms	1,000.51
Membership dues	30.00
Depreciation	49.24
Royal Society	217.97
Nuclear document expenses	2,602.25
Excess income/expenditure	<u>8,062.22</u>
	\$ 13,854.30
	=====

INCOME

Journal nett profit	\$1,543.15
Subscriptions	9,448.57
Interest	248.69
Conference receipts	
	\$7,834.40
Less paymts	<u>7,399.00</u>
	435.40
Nuclear document sales	2,096.55
Sundry receipts	81.94
	=====
	\$ 13,854.30
	=====

EDUCATION FUND

EXPENDITURE

Slide-tape expenses	\$ 284.91
Slide-tape honorarium	100.00
Balance 27 March 1986	306.73
	=====
	\$ 691.64
	=====

INCOME

Balance at 1.4.85	\$ 458.46
Interest received	33.18
Fund boost from General	
A/C	<u>200.00</u>
	=====
	\$ 691.64
	=====

CONFERENCE COMMERCIAL DEPOSIT FUND

EXPENDITURE

Westpac Conf. Term	
Deposit Fund	\$ 1,845.50
Balance 27.3.86	70.85
	=====
	\$ 1,916.35
	=====

INCOME

Balance 1.4.85	\$ 1,751.60
Interest received	164.75
	=====
	\$ 1,916.35
	=====

WESTPAC CONFERENCE TERM DEPOSIT FUND

Balance 27.3.86	\$ 2,280.90	Initial deposit	\$ 2,280.90
		Interest received	-
	<u>\$ 2,280.90</u>		<u>\$ 2,280.90</u>
	=====		=====

BNZ INVESTMENT ACCOUNT (ALL GENERAL FUNDS)

Balance at 27.3.86	\$ 20,887.04	Initial deposit	\$ 19,000.00
		Interest received	1,887.04
	<u>\$ 20,887.04</u>		<u>\$ 20,887.04</u>
	=====		=====

BALANCE SHEET AS AT 27 MARCH 1986

LIABILITIES

Subscriptions in advance	\$ 145.60
Journal in advance	588.86
Balance Westpac Conf.	
Term Dep. Fund	2,280.90
Education Fund	
Balance 27.3.86	306.73
Conf. Comm. Dep. Fund	
Balance 27.3.86	70.85
Accumulated Funds	
Balance 1.4.85	\$11,963.06
plus excess income/	
expenditure	10,515.26
Balance 27.3.86	<u>22,478.32</u>

ASSETS

Westpac Conf.	
Term Dep. A/C	\$ 2,280.90
Westpac General A/C	838.80
Westpac Conf. Comm.	
Dep. Fund	70.85
Westpac Education	
Fund	306.73
BNZ Investment A/C	20,887.04
Subscriptions in	
arrears	718.90
Journal in arrears	174.80
Filing cabinet	\$492.48
less dep'n	49.24
Stock of Journals	<u>150.00</u>

\$ 25,871.26

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\$ 25,871.26

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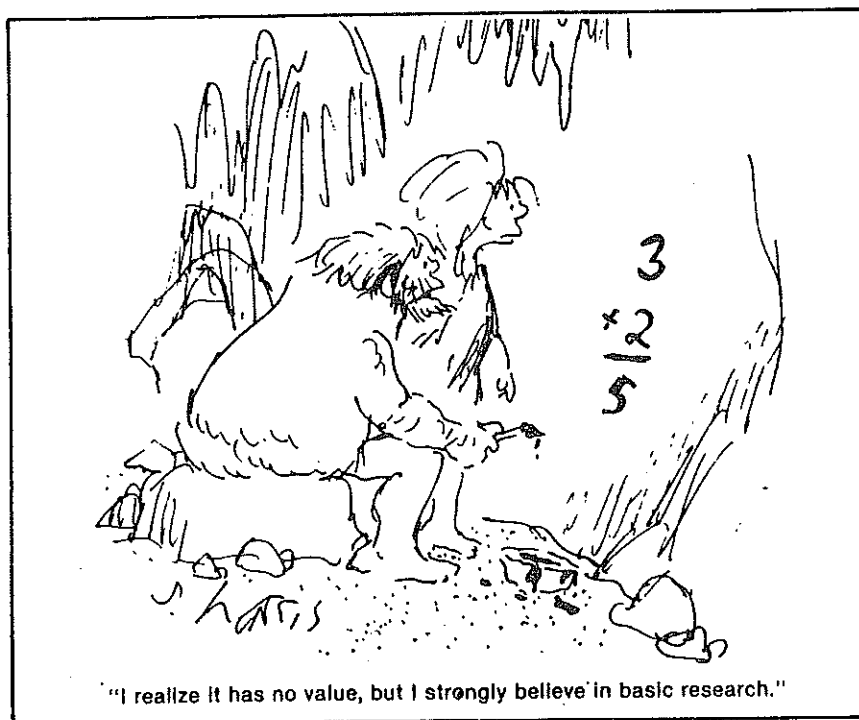
STATEMENT OF ACCOUNTING POLICIES

GENERAL POLICY : These accounts have been prepared according to the NZ Society of Accountants general accounting principles appropriate for the measurement and reporting of earnings and financial position on a historical basis.

PARTICULAR POLICIES:

- (a) Stock of Journals has been valued at an estimated realistic value.
- (b) Subscriptions in arrears and Journal in arrears have been included at the amount it is thought will be collected.
- (c) Depreciation - the filing cabinets have been depreciated at 10% of 31 March 1985 value.
- (d) These accounts are for a one-year period ending 31 March 1986.
- (e) These policies are unchanged compared to previous years.

NOTE THAT : No Journal was paid for in this financial year. Therefore there are no "Journal current" receipts, and the excess of income over expenditure is quite large. The apparent "profit" made this year will be lost since in 1986/87 the Society may pay for two Journal printings.



NOTICES

FLORA OF NEW ZEALAND DESMIDS - VOLUME 1
HANNAH CROASDALE & ELIZABETH FLINT

The Publishing Division of the New Zealand Government Printing Office are pleased to announce that Flora of New Zealand Desmids Volume 1 a further volume in the Flora of New Zealand series, has been published. It is the first of three volumes which will deal with desmids.

The text contains illustrated descriptions and keys to identification of taxa found in New Zealand belonging to the families Mesotaeniaceae, Gonatozygaceae, Peniaceae, Closteriaceae, and up to Micrasterias in suborder Desmidiineae, in all 218 taxa in 14 genera. Geographical distribution and ecological comments are provided.

A feature of this flora is the large number of plates.

The introductory material includes an annotated list of habitats where the Desmids came from and ecological data about some of these. There is also a glossary of relevant terms, a comprehensive bibliography and an index.

The senior author, Dr Croasdale, is Professor Emeritus, Dartmouth College, Hanover, N.H. USA. She is an authority on Desmids of the Northern and Southern Hemispheres including Australasia, and a gifted illustrator. Dr Flint a graduate of the Universities of New Zealand and London has specialised in freshwater algae. She has collated the information about the habitats. Together they have prepared an authoritative first volume of New Zealand Desmids.

Available from: Government Printing Office
 Publishing Warehouse,
 PO Box 14-277
 Kilbirnie
 Wellington
 NEW ZEALAND

BIOCOM - NEWSLETTER OF THE FEDERATION OF N.Z. BIOLOGICAL SOCIETIES

The steering committee is concerned with the increasing costs of printing and distributing BIOCOM. We suspect that many people receive the newsletter who are not concerned/interested in the Federation. Please supply your name, address and Biological Affiliation if you wish to receive BIOCOM. Detach the form below and mail to Janet Bradford.

FEDERATION OF N.Z. BIOLOGICAL SOCIETIES

I wish to receive the Federation Newsletter, BIOCOM.

Name:

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Please return to: -

Dr Janet Bradford
Division of Marine and Freshwater Science
Private Bag
Kilbirnie
WELLINGTON

NEWS FROM ALL OVER

MOST PRETENTIOUS TITLE OF THE YEAR AWARD

Position filled: Director of Natural Science, Head Office, Lands and Survey; 101.106

Person appointed: DINGWALL, P.R.

Position previously held: Scientist, Head Office, 101.106
(Public Service Circular 1986/14)

Can't go into DOC just a humble rank-and-file scientist, can we?

Merger Mooted

Botany Division and Ecology Division DSIR have begun discussions about whether or not to combine their operations. How things have changed! A few years ago you would have needed Court Orders and armed police to even get discussions started. Seasoned observers see problems if there is not a more wide-ranging consideration of DSIR's role in environment/conservation matters, which leads us to our next item...

THE HI-GLOSS STATEMENT

The DSIR Corporate Statement is out. Those skilled in divination are pondering why the front cover is bright and cheerful, and the back cover is an unrelieved black. Some portent for the future?

Insiders say that it was a battle to get the dreaded words "environment" and "conservation" mentioned. We all know that these are simple codewords for creeping preservationism and economic ruin. But the DSIR solved the problem in its own way. We quote without comment from the statement.

Natural resource use and conservation

Increased environmental awareness changes in landuse (particularly farming practices), new opportunities for the use of natural resources recognition of the potential for marine and freshwater resources, and the development of tourism has led to new research opportunities in the area of natural resources management. Resource identification and development are important research areas.

ECOLOGICAL RESEARCH FROM ALL OVER

(Tamai, Sakai Matsushita. Jap. J. Ecol 35: 433-441)

"The probability of death for seedlings was higher in the early growing stages, and dead seedlings reaching to later growing stages were very few".

They are persistent but slow those seedlings.

BIG SPLIT POLITICS

The Forest Service appears to have continued its policy for freezing or delaying appointments to its indigenous forest groups, while stacking the P. rad operation. If the Forestry Corporation is going to be fashionably lean, we should have a plump little Min. of Forests.

Meanwhile, across the way, Lands and Survey have their problems. Some of their planning staff come under the Surveyor-General. Now the Surveyor-General is not a figure to be trifled with: D-Gs of Land and Survey have usually found them independent pains in the butt. So will the SPLIT deprive DOC of its planners? Well, no problem if it does: hire them at \$120/hour from your friendly Surveyor-General. User-pays has lifted us all above consideration of petty details such as where people actually work.

Treasury Sings Town and Country Blues

Seems that all those tiresome social and environmental provisions in the Town and Country Planning Act lack cost-effectiveness. Treasury would like a snappier more up-to-date Act, and after all, in the end, do we use those provisions all that often? Just delay the inevitable mostly.

CONGRATULATIONS

To John Herbert, for starring on the cover of the F.R.I. Annual Report. A charming picture, John, showing the rustic, unhurried nature of ecological research in the Central North Island.

Reply to Correspondent

Dear Nigra,

(1) No, not penicillin. That was Alexander. And not the thermionic valve. Sir Ambrose did that. The correct answer is: The Waikanae Whitebaiter - although some geology was tinkered with in the early days.

(2) Fascinated by your theory. Would have liked to have featured it. Trouble is typist wouldn't touch it. Sorry about that.

Viridis MacUla