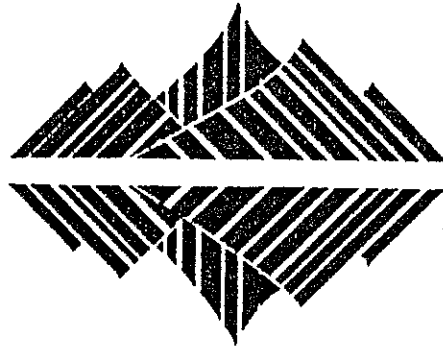


Ecological Society Newsletter



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FROM THE PRESIDENTIAL PERCH

Colleagues:

You'll have noticed that the format of this Newsletter is a little different from those of the past. The change reflects your Council's desire to see our publications become more effective vehicles for achieving the objectives of the Society, viz. promoting the study of ecology and the application of ecology to natural resource management issues.

Last year, Councillors Nigel Barlow, Carol West and John Parkes reviewed our publications and made several important suggestions for their future.

They were:

- (i) increase the frequency with which we publish the Journal of Ecology;
- (ii) upgrade the Newsletter so as to provide for feature articles, especially those highlighting the application of ecological knowledge; and
- (iii) produce occasional special publications on topics of particular research or management importance.

The Council has accepted these recommendations. Two issues of the Journal of Ecology will be published each year, thus providing for faster publication and more opportunity for publication. Two special publications are in train: the Moa Symposium from our 1986 Conference (due out any day), and the proceedings of our very successful Symposium on Management of the Natural Estate. Our Newsletter has obviously changed. Its presentation and content will, no doubt, change further over the next year or two as members respond to its new emphases and contribute to it. Just as our membership has changed in recent years, from predominantly researchers to now include a large percentage of "ecological managers", so our Newsletter needs to reflect that change. The Newsletter is our main vehicle for communication amongst the membership

and we have to ensure a forum available equally to all members and a content that truly reflects the interests of members. Please contribute and assist its evolution.

These publication initiatives will cost us more — but we have a pretty healthy reserve fund, and we shall not be slow to seek outside funding for special ventures. In this context, I gratefully acknowledge the corporate support of Ecology Division DSIR in helping with changes and publication of our Newsletter.

Murray Williams, President

A word from the Editor

Here it is finally! For the next year or so the Newsletter will be published by a group of us at Ecology Division. I will coordinate the material, and Tony Pritchard and I will be responsible for producing four issues per year.

We intend the Newsletter to serve the dual purpose of informing members about Society activities and providing news and articles with an ecological flavour. In order to capture your enthusiasm for providing interesting news, we are looking for volunteers who will gather material from their regions.

Don't wait to be asked for articles, though. There are lots of issues for which an ecological perspective is needed. For example, the voice of ecology has been comparatively quiet during the resource management law reform exercise. Decisions of great importance are now being taken as the law is drafted. Keep an eye on them and comment where you can.

Looking forward to hearing from you!

Rod Hay, Editor

ROADING AND NATIONAL PARKS

— a problem for ecological planning

State Highway 73, between Christchurch and the West Coast, crosses the Southern Alps at Arthur's Pass, 920 m above sea level. After leaving the Canterbury Plains at Porters Pass, the road passes through the rolling tussock covered foothills, past the Castle Hill limestone formations and into the Waimakiriri River valley. Turning north, into the mountain beech forests, the route follows the Bealey Valley, leading to Arthur's Pass Village and the open tussocks and screes at the Pass. Beyond this point it drops steeply down the famous "Zig-Zag" into the Otira Gorge. Here the vegetation takes on wetter, western characteristics — northern rata dominates the steep valley sides, and moving westwards, red beech and kamahi become more frequent. Following the Taramakau River, the road passes through a mosaic of improved farmlands, native forests (ex-State Forests) and gorse-covered scrublands towards Kumara.

For about 60 km then, the road is in a truly montane environment, and for about 20 km of this it winds through Arthur's Pass National Park.

Since its early development as a coaching route, the road has been a problem for those responsible for maintaining it. High rainfall, unstable rock and scree surfaces, riverbank erosion and icing all lead to slips and collapses, as well as contributing to occasional accidents. A particular concern in recent years has been the stability of the scree slope at the top of the Zig-Zag and the safety of the White's Bridge approaches.

In 1986, the Christchurch District staff of MWD on behalf of the National Roads Board started investigations to assess the problems along the road, and look at options for solving them. A multi-disciplinary team (including roading engineers and designers, a planner, a social planner, geologists and hydrologists, landscape architects, and an ecologist) was set up to study the area. The study area was a corridor around the whole of the road in the National Park up to the ridgelines on either side.

The work essentially comprised an environmental impact assessment. Early "scoping" work reduced the open-ended nature of the task in some ways. The main problem areas from an engineering and maintenance point of view were identified, and these brought the focus of the study to the area between Arthur's Pass Village and Starvation Point; the possibilities of building virtually new roads over

Harper or Amuri Passes were ruled out on economic and environmental grounds, and the options of using tunnels to avoid problem areas were so expensive that they would only be considered further if the environmental costs of other options were high.

So, the main work carried out during 1987 was an evaluation of a series of roading change options for the problem areas. Including the "do nothing" possibility at each problem location, 31 options were evaluated.

THE STUDY

Each of the specialists evaluated both the construction and operation of these options according to their own criteria. These included:

- assessment of natural hazards, such as debris flows, flooding, scouring and avalanche;
- impacts on rare plant or animal species;
- impacts on habitats, and habitat significance;
- habitat sensitivity including regenerative ability;
- visual impacts and opportunities for better enjoyment of the landscape;
- impacts on historical and cultural values of the route;
- effects on road safety, and pedestrian safety;
- effects on travel experience for residents, tourists and travellers;
- effects on enjoyment of the National Park;
- effects on residents and bach owners;
- effects on travel times.

Public meetings and road-user interviews were used to elicit public opinions, and all interested parties were contacted for comment and information.

At the same time, the capital costs of each option were calculated. Traditionally, evaluation of roading projects submitted to the National Roads Board is based on a cost-benefit analysis, with additional consideration of 'intangibles'. The "best" option is thus a combination of the most favourable ratio between construction costs, and benefits in decreased travel time, lower fuel costs, lower accident potential, etc., and assessment of costs and benefits which cannot be assigned dollar values.

In this case, however, we did not feel that the cost-benefit approach could be applied so simply, and that the Board was likely to place greater emphasis on the 'intangibles'. Some way of evaluating these non-economic values of the road was needed — particularly its significance for access to and through the National Park. In addition, the studies confirmed its importance for pedestrians moving between the Village and tracks or Park

features, and for people on the West Coast as the quickest route to Christchurch.

INTEGRATION METHOD

It was of great concern to the project team that there should be an opportunity to weigh all factors against each other. While it was true that some would be more important in decisions about routes than others, we felt that we didn't want to discard options or factors until the later stages of planning. To do this, and to avoid placing monetary values on ecological features, we decided to look at an "objectives achievement matrix".

The technique of "goals achievement matrices" is not new in planning. It is a method for examining a number of alternative ways of doing something, and assessing the extent to which each achieves the goals of the project.

In this case we had a number of clear objectives rather than goals, based on the stated responsibilities of the National Roads Board and on the National Parks Act. These objectives for the route in general were expanded to provide project objectives, and more specific problem area objectives. This latter group was the one against which the roading options could be measured.

Route: Keep route open (from NRB)

Specific area: Replace White's Bridge; minimise risk of closure at Zig-Zag, etc.

Route: Provide a basic level of service (from NRB)

Specific area: Provide adequate width for pedestrians and traffic; improve visibility; minimise length of steep grade, etc.

Route: Maintain safety standards (from NRB)

Specific area: Provide footway; improve viewpoint safety; minimise danger from rockfalls, etc.

Route: Respect the environment (from NRB)

Specific area: Maintain habitats, species and landscapes; minimise traffic noise in the Village; maintain National Park recreation values; maintain travellers' experience of scenic values, etc. (most from National Parks Act).

Route: Be economically effective

Specific area: Acceptable cost/benefit ratio if constructed now; acceptable cost/benefit ratio if constructed in future; provide user benefits, etc. (These thus assessed the

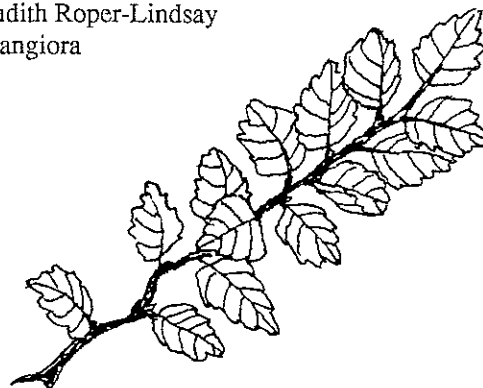
option of carrying out some of the work in the future.)

The degree to which each of the options met the objectives was assessed through discussions. Some options could be clearly discounted as being both expensive to construct and damaging to Park values. Others were clearly attractive because of their minimal impact and low cost — however, many of these did not improve road safety. A set of final "preferred options" covering each problem area was finally reached through careful discussion amongst team members — we felt that we could only balance economic, engineering and environmental aspects by detailed consideration of sites and characteristics. The matrix provided the basis for discussion, but could not be used alone to make decisions. Neither would it allow the fine tuning of options which could take place around the table or in the field, to minimise environmental impact or make use of opportunities by making small engineering changes.

This method relied on long periods of discussion and interactions between the engineering and environmental design staff of MWD. We believe that it produced a set of roading proposals which can be carried out over the next 20 years to improve people's enjoyment and safety in the National Park, without compromising environmental quality. It can also be applied to other areas, since it relates general principles to specific areas.

Footnote: The team prepared a draft environmental assessment document for the NRB approval. When this is obtained, it will be released for public comment in the usual way. It is hoped that the draft management plan for Arthur's Pass National Park will be available at the same time, so that people can consider the relationships between the two plans.

Judith Roper-Lindsay
Rangiora



FISHERMEN VERSUS THE DOLPHINS

We haven't quite got to the stage seen in Japan, where fishermen round up dolphins and kill them in a misguided attempt to preserve fish stocks.

Nevertheless, in an already hot Canterbury summer, the gazetting of New Zealand's first marine mammal sanctuary around Banks Peninsula has raised the level of heat somewhat. The sanctuary is designed to protect a significant part of the population of our only endemic dolphin from a potentially major hazard.

According to PhD studies by Steve Dawson and Liz Sooten (they won the prize for best student paper at last year's conference), the species is sedentary, small in number, and suffering unsustainable losses through by-catch in setnets. The Banks Peninsula population, at least, seemed to be at considerable risk, and the establishment of a sanctuary was deemed the only way of preventing the losses.

These extracts from the Society's submission on the proposal to set up the Sanctuary provide a bit of background to the issue. The submission was prepared by Graham Wilson and Gavin Daly:

The population estimates and demographic figures given in the discussion paper give us great cause for alarm. In 1984 the population between Motunau and Timaru is stated to be 740 dolphins. In the subsequent four years at least 223 were reported drowned in setnets. Assuming an even sex ratio, there would have been about 370 females in 1984. The maximum longevity is stated to be 18 years, and they are said to first breed at 7-9 years of age, thus giving about 185 females of breeding age. Females give birth to calves at two or three yearly intervals so, based on the figures given in the discussion paper, there would have been between 60 and 90 calves born in 1984. That season at least 63 dolphins were drowned in setnets, about equal to the projected increment for the year.

This calculation is crude; we assume all females live to the maximum longevity of 18 years, which plainly they do not. Thus the actual productivity is less than that calculated here.

A species that produces only one calf every two to three years, whose age of first breeding is so long delayed, is limited in its ability to respond to man-induced losses. Thus it is crucial to reduce setnet mortality by as much as possible.

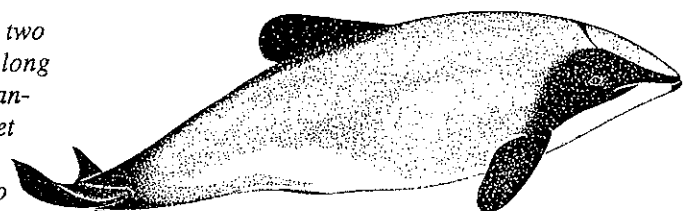
The Banks Peninsula population is stated to have declined from 526 in to 300 in 1986 — an alarming decline.

Figure 3 of the discussion paper shows that the dolphins are usually found within 5 nautical miles of the shore, and Table 2 reworks these data to show the likely reduction in dolphin deaths with setnet exclusion from various distances from shore. The figures show that dolphin deaths are decreased with each increment in setnet exclusion out to 5 nautical miles offshore, rather than the 4 nautical miles suggested.

The proposed marine mammal reserve will give incidental protection to the equally threatened yellow-eyed penguin. Only about 10-15 pairs of yellow-eyed penguins nest on Banks Peninsula, yet each year three or four setnet-drowned penguins are handed to Canterbury Museum (G. Tunnicliffe, pers. comm.).

Hector's dolphin and yellow-eyed penguins are not the only interesting marine animals around Banks Peninsula. Fur seals breed on headlands on the outer coast of the Peninsula, white-flipped penguins and spotted shags nest right around the Peninsula. In addition, close inshore, especially near Akaroa Harbour, a variety of mollymawks, petrels and other seabirds can frequently be seen. The proposed marine mammal reserve will provide an opportunity for marine mammals and birds to be promoted as a feature of Banks Peninsula generally, but Akaroa specifically.

The proposal, and the responses to it from a variety of quarters (fish catchers, conservationists, enforcers, politicians and bureaucrats), illustrate the difficulties inherent in obtaining the facts and figures which are demanded when measuring the effects of an impact which is hard to quantify on a species which is difficult to observe. It is best to gazette the sanctuary before it is too late, then measure the effects. Full marks to DOC and the Minister for a bold initiative. We look forward to the results of monitoring studies that have been promised. Black marks to those people who have threatened violence against the dolphin defenders, but a golden halo to Liz Sooten and Steve Dawson for promoting so well the cause of their study species.



WHAT HAPPENED AT THE KOKAKO WORKSHOP?

About 60 people attended the Kokako Workshop at the Forest Research Institute, Rotorua, in June last year for two days of navel-gazing about management of kokako. Enthusiastic support for further expeditions to find the elusive South Island kokako was given, but inevitably most discussion was about North Island kokako. Today, North Island kokako are found in 50 or 60 scattered populations north of a line between East Cape and New Plymouth: a total of about 1500 individuals. The biggest populations are in North Block, Pureora (300), northwest Mamaku Plateau (150), northeast Mamaku Plateau (150), Rotoehu (150), Puketi (100), Urewera (80), Mapara (70) and Kaharoa ("Aislabies") (50).

Agreed remits from the workshop were that the management of kokako must be integrated at national level, that the North Island kokako recovery plan should be completed as a matter of urgency (by March 1989), and that there must be a major commitment to finding out where, and how many kokako are on Stewart Island and to developing a management strategy for this South Island subspecies.

Since the workshop, the Recovery Plan has been completed — compiled by Gretchen Rasch. Now it is with the Protected Ecosystems and Species Directorate at DOC Central Office, awaiting action. The plan encapsulates agreed priorities and action from researchers and managers all around the country, and should result in efficient movement towards kokako conservation objectives, and probably in the saving of tens of thousands of dollars by the coordinated national approach it takes.

In November/December 1988, a further expedition to Stewart Island — co-funded by Royal Forest and Bird Protection Society and DOC — searched for South Island kokako. Unfortunately the hoped-for breakthrough of a good sighting, a photograph or a capture did not come. Effort needs to be continued.

Such controversy as there was at the workshop came from discussion on national coordination of kokako conservation action. Protected Ecosystems and Species Directorate staff considered that the role of completing and implementing the Recovery Plan was clearly theirs. Other participants agreed that the necessary expertise and liaison (e.g. to conservation groups such as the Royal Forest and Bird Protection Society) would be best harnessed by

compiling a Task Force of sorts, even if only for a year or two. In the event, the latter is what happened to get the Recovery Plan finished, under the initiative of Dick Veitch. The ball is now back in Protected Ecosystems and Species Directorate court. But there was unanimous acceptance that conservation action for a widespread endangered species like the kokako must be nationally coordinated to be efficient and effective.

Priority research objectives were largely resolved. These are to find whether predators or browsers are primarily responsible for kokako decline in intact forest areas, and to identify priority kokako populations which could be managed to best achieve species conservation objectives. These tasks in no way lessen the need for ongoing habitat protection (e.g. no logging!), especially in key areas such as the Mamaku Plateau, as championed at the workshop by Mark Bellingham.

A brief resume of all papers and discussion was sent to participants in July 1988. (I would be happy to issue other copies if any are requested.) A formal, refereed proceedings is currently being compiled at FRI.

John Innes
Indigenous Forest Management Section
Forest Research Institute
Private Bag 3020
ROTORUA

LEGISLATION WORKING GROUP

The function of this group is to monitor proposed legislation of relevance to ecology, and ensure that submissions are prepared as required. Current examples include the Resource Management Law Reform, protected Areas Legislation Review and the Maori Fisheries Bill.

Vicky Froude (DOC, Rotorua) is the group's coordinator and Mark Davis (DOC, Christchurch) the contact in the core council. It is unreasonable to expect Vicky to undertake all submissions herself and there will no doubt be occasions when she will ask other people to contribute.

Please note that Vicky would like a contact person in Wellington who could ensure that she obtains draft statutes quickly, as the Government Printing Office in Rotorua has closed. Anyone who can help, please contact Vicky.

CONFERENCE 1988

New Zealand Ecological Society 1988 Symposium

At the 1988 annual conference in Dunedin, the Society ran a three-day symposium on the management of New Zealand's natural estate. The symposium was attended by over 200 people, including 50 non-Society participants. The large attendance of non-members was one of the outstanding features of the meeting, and provided the opportunity to bring together scientists and managers interested in a wide variety of ecological and conservation issues.

The symposium was divided into four sections, each consisting of an overview paper, case-study papers and workshops. The symposium was introduced with a paper by David Norton. In this, he suggested that nature conservation needs to develop in three directions as we move towards the 21st century: identification and protection of the remaining natural areas, management of the multitude of areas already protected to ensure their values are not lost, and restoration and re-creation of modified or lost natural ecosystems in the more developed parts of New Zealand.

In the first session of the symposium, Colin Ogle overviewed the design and location of protected natural areas in New Zealand and included an appraisal of the PNA programme. This was followed by four case studies looking at different aspects of protected natural area design and location. Ken Hughey talked about reserve establishment in a braided riverbed, making good use of a riverbed stone for a prop. Murray Potter told us about kiwis and bush remnants. Kath Dickinson and Alan Mark talked about tussock grassland reserves in the deep south, and finally Peter Espie did a hard sell on computer databases as an aid for interpreting PNA surveys.

In the second session Ron Tindall provided the overview by using Stewart Island to illustrate many of the issues relevant to the management of largely intact natural areas. This was followed by case studies discussing management of subantarctic islands (Andrew Cox), options for controlling wild animals (using thar as an example: John Parkes), Stewart Island as a case study for a marine protected natural area (Katherine Walls), and some of the management problems faced in Mt Aspiring National Park (Bill Hislop).

In the third session, we moved on to look at the management of semi-natural areas, or as Brian

Molloy called them in his overview, 'crumbs'. Brian provide one of the highlights of the conference (for me) in presenting a wide-ranging and thoughtful discussion on the factors we need to consider our semi-natural areas. The five case studies that followed took several of Brian's points further with specific examples. Dick Veitch talked about the successful management of Cuvier Island, including animal control, re-vegetation and bird re-introductions. Colin Meurk followed, talking about the effect of removing grazing pressure from grassland reserves on the highly modified Canterbury Plains, while Hugh Wilson, in his usual highly entertaining manner, presented a very interesting discussion on the management of a private conservation reserve on Banks Peninsula. In what must be the greatest injustice of the symposium, Kelly Duncan had only 15 minutes to talk about conservation management of the most abundant group of organisms on this planet, invertebrates. Our thanks to Kelly for opening our eyes to the many problems that are faced in managing this sadly neglected group. Finally, David Given discussed some of the recent ideas on critical minimum population sizes and causes of extinction — another topic that required far more than a quarter of an hour.

In the final session, we looked at the integration of ecological management with other land and water uses. This session started with three overviews: Tatene Wesley presented a Maori perspective on conservation, Sir Peter Elworthy talked about the integration of farming and conservation, and finally Alan Rackham gave a very interesting presentation on integrating recreation and tourism with conservation objectives. These were followed by two case studies, one by Liz Slooten on the conservation of Hector's dolphin, and the other on tourism and the albatross colony at Taiaroa Head (Chris Stewart).

Each session was followed by four concurrent workshops which provided the opportunity to talk about many of the issues raised in the papers in lot more detail. These were very successful, and provided the opportunity for some wide-ranging discussions. Finally, on the last day of the symposium, reports from each workshop were presented. This was followed by a general discussion on the symposium, chaired by Murray Williams, with able assistance from Ian Atkinson and Neil Simpson. Murray used the three directions identified by David Norton at the start of the symposium to guide discussion. Four resolutions were passed during this session and listed below.

We are now working on the symposium proceedings, and hope to have this out early this

year, although this is dependent on the arrival of some late manuscripts. We hope to keep the cost of the proceedings to between \$10 and \$20, but it is difficult to say precisely how much it will cost at this stage.

Symposium resolutions

1. "This conference recommends that Protected Natural Areas (PNA) survey and report publications of the remaining ecological districts of key importance for nature conservation be accelerated. For each district the survey should be completed within a one-year period and publication expedited without delay. Appointment of permanent PNA programme core staff is essential to achieve this urgent objective with efficiency and to maintain required standards."

2. "This conference urges a greater allocation of resources to implementing both existing proposals for key natural areas and those arising from PNA surveys. The appointment of permanent core staff is seen as essential for rapid implementation to occur."

3. "This conference wishes to emphasise to the Government the necessity of maintaining a high level of state-funded research and management activity in order to maintain and enhance the essential values of New Zealand's natural heritage."

4. "This conference recommends that the Department of Conservation should give greater emphasis to its advocacy function, with the purpose of promoting and servicing community involvement in all aspects of natural resource management."

the old paradigm that man is apart from or above nature? Surely people are a part of nature and part of the natural environment. Perhaps we need a distinction between natural modification of the environment by people to assist their survival and enhance their quality of life, and unnatural modification or destruction of the environment for money and power.

I was amazed to hear of the confrontation that apparently arose over preserving the hoiho habitat on the coastal shore of the Otago Peninsula. Why did such antagonism arise? Why did it take so long before conservationists and landowners could actually meet and talk? Were they more interested in the future of the hoiho or their own power and face-saving? Such adversarial attitudes seem to be the basis of problems in most conservation issues. Indeed such attitudes probably cause local conflicts of interest to develop into major "issues", as adversaries fire shots at each other through the press, radio and television rather than meet to discuss the situation and work out a compromise.

For me the most positive paper given to the symposium was Ken Hughey's about the Ashley River. Here a whole community has been involved in caring for a stretch of river and the birds who live there, so that the people of that community are able to feel some sense of belonging, and some pride in and concern for their piece of river. Appropriate use of the river bed has been negotiated and agreed to on the basis of understanding of the system, e.g. trail bikers agreeing to keep off bird-nesting areas during the nesting season, gravel-extraction and flow-regime limits agreed to. Recently an excellent item about the project was screened on Wildtrack (TV2, Tuesday, 18 October 1988), publicising the cooperative effort.

Since the conference I have heard comments, in derogatory tones, that Ken couldn't have carried out this project without a lot of active support from teachers at the local high school, particularly one woman teacher. Let us be positive about the support Ken received. Let us be thankful that there were individuals who had the time and energy to commit to the project, whose efforts have shown a whole community what they can achieve if they work together, and who have produced a cohort of students at Rangiora High School who have learned about practical ecology, conservation and community involvement.

I have also heard comments that such a community way of working for conservation would not work for other areas such as national parks, and that it's all part of the government's way of trying to

Thoughts after the 1988 Conference

What a good conference it was, interesting and varied and with very good accommodation and facilities. The organisers are to be congratulated.

However, throughout the week I felt an unease at the dominance of men and white male attitudes. The dominance of men was physical: 137 men and 55 women are listed as having officially attended the conference, and of those who addressed or gave papers to the symposium and conference, 31 were men and 4 were women.

White male attitudes showed through in many places. I shall give just a couple of examples. During a workshop discussion about the definition of "natural", everyone who spoke seemed to define natural as meaning unmodified by "man". Are the majority of ecologists in this country still stuck in

devolve responsibility and put the onus on the people. However, it was never suggested that this exact conservation method should be applicable to national parks, etc.

Each and every piece of our land Aotearoa needs to be looked after, used and lived with in the least destructive way possible, in a manner that is appropriate to the situation and circumstances. We all live in this country, and we should all be involved. We must let go of the welfare-state mentality that allows most of the population to sit back and let a few people make decisions and take action for them. Every person who lives in this land has an equal responsibility towards it. As ecologists, we are the experts about the ways of our environment. We have a responsibility to share our extra knowledge and to encourage others to take their share of responsibility for the environment in which we all live.

Fran Hyland

More thoughts from the Conference

The following proposition was put by Colin Meurk to about 100 Society members immediately after the closure of the 1988 Conference. The Council has discussed the submission and elected not to take a stand on behalf of all Society members, or all ecologists! Individual members are nevertheless encouraged to respond as they see fit. You may wish to communicate directly with Colin, c/- Botany Division, DSIR, Lincoln.

His text is as follows:

1. *Given the current economic crisis;*
2. *Given the inevitability of a global, ecological steady state that can either be planned or catastrophically forced upon us;*
3. *Given that, in the West, generally we live beyond our sustainable means;*
4. *Given the Government's current pursuit of reduction in the Public Service and spending;*
5. *Given the distressing, morale-sapping and socially divisive prospect of many of our colleagues being thrown out of work or being unable to find work;*
6. *Given the intolerable waste of human resources — educated, experienced, dedicated people — who*

are either being tipped on the scrap-heap or who now spend much of their working lives pursuing an illusion of commercial respectability which a biased market place cannot deliver;

7. *Given that arguments of recruitment and retention are mere excuses for a path to material elitism;*
8. *Given that, particularly in the case of environmental matters and land management, the whole state is the user and therefore should be the payer;*
9. *Given the urgent need we have identified for more state-funded scientists, managers, educators and reserve purchase to deal with the mounting conservation problems in New Zealand*

I call on the NZ Ecological Society Council to investigate advocacy of:

1. *Across-the-board, percentage reductions in state salaries as an alternative to redundancy in areas where the need is great.*
2. *The State underwriting the work of environmental scientists, managers and educators so that they can pursue their work with all speed in an effective and efficient manner.*

The motivation for this proposal is largely self-evident, but clearly there was a contradiction in the resolutions passed at the end of the Conference symposium and the economic reality. Drastic times require drastic measures. There is an urgent need to combat the rising tide of rampant material consumption, philistinism, anti-intellectualism and simplistic solutions which are ecologically unsustainable. Greater rather than less taxation would help to dampen consumption, but promotion of other values has to go hand in hand with reduced material expectations. Sectors such as ours can provide a moral and pragmatic lead in exerting a downward pressure. It is recognised that the stand will be short-lived if the rest of the nation does not follow suit, but can we afford not to try and achieve a new social contract?

Some members pointed out that they would prefer to accept payment for four instead of five days rather than accepting a lower pay rate - which would be interpreted as an admission that ecologists were worth less than, say, economists! The fifth day could be worked on a voluntary basis. But the whole point of the exercise is that it would be linked to increased staffing and resources (relatively speaking) in environmental areas. It would be totally unacceptable if it was just another sacrifice to government cost cutting. The increases could be

both in permanent staff and in a significant and adequately paid Conservation Corps.

Obviously there would be other economic factors to consider, such as lower thresholds for applying income reduction, additional distortions to the market-place, etc.; but note that percentage reductions reduce in absolute terms down the pay scale.

We all know that these suggestions are counter to the present government market philosophy and that even those on good salaries are usually fully committed, but looking around the Conference at the potential waste of talent and energy that further job losses will entail, I feel compelled to offer some worthwhile and rational cause that we can pursue. I know I'd rather have less pay than no job at all!

Finally, before we start defensively eyeing our mortgages, is there a lesson to be learned from one of the more modestly paid participants at the Conference — and perhaps the most enthusiastic, happy and productive worker in conservation — the present Loder Cup holder, Hugh Wilson?

If you feel strongly about this one way or the other, please write to the Newsletter or to your Council. Perhaps if this is resolved we can all get on with the real work out there.

FORUM

We don't have one yet but propose to do so in future issues. We would like your views on contentious issues in science. How about this for starters?

The greenhouse effect is a figment of Eion Scarrow's imagination!

Over to you.....

ANNOUNCEMENT 1989 Conference

The 1989 conference is to be held at Central Institute of Technology, Trentham, on 21–25 August. It is to be a joint conference of the NZ Ecological Society and the NZ Society of Soil Science, and a large attendance is expected. Conference coordinator is Carol West, and preliminary planning for a joint symposium and general sessions is being done by a core group of Paul Blaschke, Jan Heine and Bob Lee.

The symposium's theme deals with "New Zealand's changing mantle", and its main aim is to enhance participants' knowledge of ecological changes, related to soil processes, in the major New Zealand ecosystems. Particular emphasis will be given to the effects of vegetation and land-use changes in the last 50 to 100 years. Invited papers will mainly be overviews of these historical changes, and contributed papers, which will be structured around the major ecosystems, will be able to extend this time-frame to include longer-term changes. These contributed papers will occupy at least a full day.

The conference will further incorporate a full day in the field (several field-trip options available), half a day of workshops, and a full day of general contributed papers, which will probably be a combination of plenary and concurrent ("ecological" and "soil science" streams) sessions.

A more detailed announcement and call for papers will be made in the March newsletter. In the meantime you can usefully do three things:

1. Enter the conference dates in your diary.
2. Think about the paper you are going to contribute to the symposium or general conference.
3. Please, do contact us if you have any suggestions regarding the symposium or workshop topics, or if you wish to let us know already that you intend to submit a paper for the symposium.

Communications to:

Paul Blaschke
Division of Land and Soil Sciences DSIR
Private Bag
LOWER HUTT

STAFF CHANGES AT VICTORIA UNIVERSITY

In July, the Botany Department of Victoria University of Wellington farewelled two long-serving staff members, Ross McQueen and John Dawson.

Ross McQueen has been on the staff of Victoria University since 1966, having been an undergraduate and masters student there in the 1940s. In the interim he worked as a paleobotanist at the NZ Geological Survey, as a forester in New Zealand, England, Malawi and Sudan, and carried out doctoral studies at Montpellier University. At Victoria, Ross taught ecology courses at all levels and supervised many honours and postgraduate students, who are now established in many facets of ecological work throughout New Zealand. A long interest in vegetation-soil-climate relationships led Ross, along with Colin Vucatic and then Brad Pillans, to introduce and teach an interdisciplinary pedology course which has remained an important foundation for ecological work at Victoria. Ross continued work on paleobotany and on Quaternary environments of the Wellington region, and also became interested in Southern Hemisphere *Nothofagus* forests, making several visits to South America, the results of which contributed greatly to teaching and discussion with colleagues. In 1983 Ross was the co-organiser, with Dietrich Mueller-Dombois, of a successful symposium at the Dunedin Pacific Science Congress, concerning dieback phenomena in Pacific forests, and these two are presently collaborating on a book on Pacific vegetation.

Ross is of course well known, if not notorious, among members of the Ecological Society, and he assures us that current projects and publication of research carried out over the last 20 years will ensure an active retirement and continued presence at Ecological Society conferences for many years yet.

John Dawson, who has been associated as a student and staff member of Victoria University for an equally long time, is probably best known for his taxonomic work on the Myrtaceae and Umbelliferae. For many years, he also taught a successful third-year course on the New Zealand flora, and the content of this course is likely to become known to a wider group of New Zealand ecologists with the recent publication of his book "Forest Vines to Snow Tussocks".

The departure of Ross McQueen and John Dawson, which was marked by an enjoyable

function attended by a large number of VUW botany graduates from the last 40 years, indeed marked the end of an era. On 1 July the Botany Department became part of the School of Biological Sciences, and in October the appointment of Dr Katharine Dickinson as a new lecturer in plant ecology was announced. Kath Dickinson is a graduate of Sheffield and Tasmania Universities, and in 1986-87 was at Otago University on a UGC Postdoctoral Fellowship, working on the PNA programme in central Otago and Fiordland. During this time Kath was active in the Ecological Society and was on the council for a short time before leaving for Australia, where she was most recently working on vegetation mapping in Northern Territories. She has wide ecological interests in the general fields of plant-animal interactions and vegetation dynamics. Kath is due to take up her new position in January.

AUSTRALASIAN WILDLIFE MANAGEMENT SOCIETY — something new on the local scene

In December, the inaugural meeting of the Australasian Wildlife Management Society was held in Canberra. Ecological Society members may recall a questionnaire in 1987 sounding out the need for such a society. The answer was quite emphatic on both sides of the Tasman.

Thirty papers were presented by researchers and managers on a wide variety of subjects. Six papers were offered from New Zealand.

Appropriately for the first meeting, a special session was devoted to the purposes of the Society. Broadly speaking, they are:

- to provide a forum for discussion of scientific wildlife management;
- to support and advance the scientific basis of wildlife management.

All participants were convinced that a meeting ground was needed for those involved in study and management, and also conservation and pest control. The first Conference amply fulfilled that expectation.

A full Conference and AGM will be held every two years. In the intervening year, there will be a less elaborate gathering of a workshop nature. The

second Conference will be hosted by New Zealand, in Christchurch, in 1990.

There are two New Zealand members of the committee: John Parkes of FRC Ilam, and Jim Bell of MAF Lincoln. They would welcome enquiries about the Society, and the names of eager recruits.

Mike Rudge

LETTERS

School of Biological Sciences
Victoria University of Wellington
P O Box 600
WELLINGTON
21 October 1988

Dear Editor

As part of my PhD study on miro I plan to do an electron-microscope comparison of embryo morphology among podocarps.

I would be very grateful if members of the Society who are among podocarps at any time in the coming summer and autumn months could collect podocarp seeds for me, both flesh-ripe from the tree and clean seed from the forest floor. Seeds can be sent to me at the above address. Please include a note of the species, location, approximate altitude, vegetation type, and date of collection.

Yours sincerely

Fran Hyland

Otaroa Road
43 R D WAITARA

To interested members

Hullo, although I was not able to attend this year's conference I hope this brief summary will contribute in some way, as to the work done for ecological benefits on my property.

The property is a typical North Taranaki drystock farm consisting of two blocks, one easy rolling and the other steep rolling.

I started reasonably thorough native tree plantings, incorporating a two-tier system producing avocados and macadamias while not interfering with

lamb and wool production by well spaced plantings of these tree crops.

Shelter belts, creeks, steep shaded hillsides, gulleys and pond areas were systematically fenced, working an area of approximately 10 percent of the total farm per year and almost religiously selecting native species for the various conditions involved.

The results have been very successful, with the more established trees providing good shelter for the tree crops and displaying tidy and trim-free and long-life characteristics.

Karakas dominate the varieties, as these provide supplementary nibbles for the sheep by way of wind-blown leaves and fallen berries.

Fenced-off creeks ensure a minimum of nutrient runoff polluting the water ways, and corrosion-prone hills beautified with timber-producing natives (long-term of course).

The farm has been run organically for 12 years and more recently biodynamically. Most produce is sold as organically produced.

My dreams and hopes are to promote and encourage other land holders to plant native trees on their properties and visualise extremely beautiful countryside benign to nature's laws.

Correspondence welcomed.

Yours sincerely

Chris Jury

Treasurer speaks!

Does anyone know the whereabouts of A.P. Jenkins, formerly of 22 Ruskin St, Christchurch?

Also, there are still quite a few rotters who haven't paid their subscriptions. All the unpaid subs cause your poor Treasurer a lot of additional work, sorting cards and records and sending out reminders. What's more, unpaid subscriptions cost the Society money in lost interest and additional postage and Royal Society charges. So please, pay up! If you intend to resign, emigrate, or otherwise withdraw, please let me know in advance.

Nigel McCarter

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