

ANNUAL REPORT FOR THE YEAR ENDING 31 MARCH 1988

Overview

It has been a year of introspection for the New Zealand Ecological Society. Changes in the direction, funding and structure of science in New Zealand have forced upon the Society a re-appraisal of its finances, publications, organisation and role. The task is not yet complete and it is being made all the more difficult by the continually changing economic and social climate that presently envelops New Zealand.

We have only to look back at our two most recent annual reports to reflect upon the magnitude of recent changes and the uncertainties accompanying them. The 1986 annual report recorded our positive support for the re-structuring of environmental administration in order to remove major conflicts of interest within and between some government departments. The emergence of a single guardian of the natural estate and heritage, the Department of Conservation, was welcomed. Yet, after only one year of operation, this new department is severely constrained financially and is to be subjected to a far-reaching review of its administration and management. Major structural changes are portended.

Alongside that review is another encompassing all environmental law statutes. This too will have major ramifications which will almost certainly result in further changes in administration. The impact of these further changes on who does and who commissions ecological research will be profound.

The emphasis on cost recovery, referred to in last year's annual report and which now pervades our science has ensured the role of ecological research to be one of increasing servitude. Greater emphasis is now placed on short-term problem-solving research at the behest of clients who have funds to spare. It is not wrong that science should be both accountable and contribute to economic wellbeing, but should all research be revenue-earning or management-driven? Already research funds have sharply diminished. What now? And where is the long-term perspective?

An appendix to last year's annual report listed our priorities for ecological research in New Zealand over the next decade. We compiled that list at the request of the Department of Scientific and Industrial Research. Now, 12 months later, our considerable endeavours appear as an exercise in futility. No agency, it seems, now has the security of funding, nor

the mandate to embark on topics in the long-term national interest.

It is easy to be overwhelmed with pessimism about the perceived role of science in the present economic and political climate. The 'Beattie report' on science and technology has sunk, virtually without trace. Fellow scientists are being declared redundant. Science enrolments at universities continue to decline. And our parent body, the Royal Society, is seemingly unable to convince economic and science ministers within government, or the public at large of science's value and role. It all bodes ill for science over the next decade.

But as students of ecology we learn much about adaptation to changing environments. And it is this process that prompted the Society's year of introspection.

The regular meetings of Council have for years been subsidised by employers. Now in the 'user pays' environment this support is being withdrawn and the Society is having to carry a higher administrative cost. Our immediate response has been two-fold: (i) to constitutionally limit the size of Council in direct relation to the number of members; and (ii) to transact some Council business by means of a 'core-Council', a quorum of councillors, domiciled this year in Wellington who can inexpensively handle some of the more routine business. This year, the core-Council met three times and the full Council (of eight councillors plus officers) three times. With a little further refinement this procedure could serve the Society well in the future and constrain administrative expenditure.

How are we to allocate and commit our limited financial and human resources? This was one of several questions which motivated a re-defining of the Society's *raison d'etre*. Accompanying this annual report is a copy of a discussion paper on the future direction and role of the society, prepared by vice-president Judith Roper-Lindsay and councillors Gavin Daly and David Norton. Before Council can move positively in any of the directions suggested in that paper, it requires feedback from members.

This review of the Society's role and direction precluded the re-establishment of former council sub-committees. No initiatives were taken in the fields of education, conservation or on nuclear issues, nor did

the Society prepare any submissions on environmental matters or awards. Past efforts in these fields have rested very heavily on but a few shoulders, and if the Society is to continue past initiatives and responses on such topics, a wider involvement of the membership will be necessary. But members have to re-confirm their interest in the Society being involved in political and environmental issues.

Council is conscious that past activities of the Society have concentrated on promoting the study of ecology, leaving our other objective, promoting the application of ecology, out in the cold. To more successfully fulfill our two objectives, the society needs to include in its ranks more non-scientists. And it should ensure a forum for dialogue between scientists and the users of science information. It is pleasing therefore to report a membership increase of 42 for the year, to an all-time high of 478. A further increase, particularly including natural resource managers, is hoped for following our forthcoming annual conference.

Our publications still reflect our primary concern with the study of ecology. The *NZ Journal of Ecology* has 149 subscribers and a total print run of 650 per issue but is this the only formal publication we should produce? The journal editor, Nigel Barlow, reports below on a review of our publications. Suffice to say that the journal, together with our modest newsletter, consumes 70% of our annual income, which leaves very little room for other initiatives. Nor does it leave any room for other than voluntary production of our publications. The tentacles of 'user pays' are descending towards our journal and some hard decisions about our principal publication will have to be made in the next year.

Financially, the Society remains in good heart with a reserve equal to one full years' operating costs. This allows a modest level of support for students attending our annual conference and for the occasional funding of overseas speakers. It is the Council's policy to maintain the reserve at or about its present level.

All officers and members of Council have had major tasks this past year and it is a pleasure to acknowledge their very considerable voluntary effort. So too do I record with gratitude the efforts of Matt McGlone and Kelly Duncan in seeing our newsletter compiled and distributed, and of Nigel Barlow in producing his third issue of the *New Zealand Journal of Ecology*.

Murray Williams
President

Editor's Report

This report is rather longer than usual for two reasons. One is the eventful year, the other the Editor's long suppressed desire to reveal all. The journal is currently thriving, the number of papers submitted increases every year, and we have begun to look seriously at options for the future. Do we forge a closer ecological relationship, for example, and merge with the Australian journal?

Twenty five papers or short communications were submitted for Volume 10 and 20 accepted. Several of those initially declined required major revision and were reconsidered for the current volume. This represents a lower initial rejection rate (20%) than in the previous and current year (31%).

This year 32 papers have been offered, three of which were too late to meet the deadline for Volume 11 (31 December) and a further nine rejected. Reasons for rejecting papers included bad methodology (one), poor writing (two), inappropriate subject matter (e.g. purely botanical or purely behavioural; two), lack of scientific merit (e.g. uncritical reviews or basically 'thin' papers: two), and author intransigence (two); some were rejected for more than one reason.

The proceedings of the moa symposium are nearing completion, thanks to Mike Rudge, and all the papers have been processed. It will be published in a format uniform with the journal and as a separate supplement to a volume. In spite of keeping their heads low moas appear to have a high profile at the moment, and the possibility exists of re-editing and publishing a second version for sale to a wider audience.

On a personal note, editing the journal over the last few years has been something of a chore, but also a privilege and a tremendous learning experience. Every year things happen which I vow will not happen the next. Generally, they do not, but others do. It therefore takes three years or so to become acquainted with the job, by which time the input is beginning to take its toll. Some problems appear every year, such as the large amount of time required to process a small proportion of the papers, the worst papers taking the most time. The bane of an editor's life is the author who persistently refuses to grasp the essence of a referee's or editor's criticism and repeatedly returns partly revised scripts; the correspondence can go on for years. On the other hand a quality well-written paper makes one want to ring up the author and thank him/her. Another problem is the obvious one; is a marginal paper actually worth publishing? For this editor at least, agonising over this is the most

difficult part of the job. In practice it helps to ask whether it would be accepted by *Oecologia* or one of the British journals. The fact that one can even ask this question suggests that the New Zealand journal is not entirely a soft option for papers which cannot be published overseas, though it is obviously still easier to have a paper published here. This raises another problem, which is that of balancing international acceptability and attractiveness with what members like to read; they, after all, pay for the journal and the two aims are not always compatible. Finally there is the problem of batch-processing of papers throughout the year, which is, to some extent, an editorial indulgence, or survival strategy, and which deserves explanation to some puzzled or frustrated authors. Basically, a paper submitted too late for one issue is acknowledged but does not get processed until that issue is out, which can mean a delay of several months before anything appears to happen. It does not affect the overall time between submission and publication, but does mean that authors submitting early have no longer to revise their papers than those submitting late. This will change in future, and the time to publication is still far less than for any other ecological journal I know of, even with only one issue a year.

Partly because the journal has reached a turning point, in terms of cost and demands of editor's time on the one hand and potential to expand on the other, Council appointed a subcommittee comprising Nigel Barlow, Carol West and John Parkes, to address the options for future Society publications. The other main reason was to assess how best to achieve the Society's aim of better communication and promotion of ecology. For the journal, the recommendation was to increase to at least two issues a year if possible, either by increased membership fees and/or commercial sponsorship, or through a cost-effective arrangement with Blackwell Scientific Publications. This last option is being explored in detail but could only eventuate through a merger with the *Australian Journal of Ecology*. Needless to say, this has both advantages and disadvantages for the Society. In any case the editorial system would change, with a larger Board, one editor responsible for each volume and an editor-in-chief overall, and a business manager in the event that the Society continued to act as publisher. In terms of other publications, there was a strong desire by Council to see a glossy magazine produced by the Society, selling ecology and its relevance to management to a wide audience in an attractive form. However, the cost, including a paid editor, was

prohibitive. The recommendation was therefore for an improved newsletter format and enlarged content, and to consider production of individual ecological/management fact sheets along the lines of AgLink (Ecolink?) or Alpha.

Returning to the journal, I offer my thanks as always to the sub-editors John Gibb, Peter Johnson and Dave Towns, and to the anonymous referees whose handwriting is often so well-known. Perhaps it is time we had more international referees.

Nigel Barlow
Editor

OBITUARY

SIR CHARLES FLEMING, K.B.E.,
O.B.E., B.A., D.Sc.(N.Z.), D.Sc.Hon.
Causa, F.R.S., FRSNZ, F.M.A.N.Z.,
F.G.S., For.Mem.Amer.Phil.Soc.

It is difficult to pay adequate tribute to a man who has contributed so much to our knowledge and understanding of New Zealand's natural history. Nor, in the present ecological context, is it sufficient to look at the long list of Sir Charles' publications and highlight those that are ecological in content. Through thousands of stimulating conversations and probing questions, and through a prodigious number of letters to observers and other correspondents up and down the country, amateur and professional alike, Charles Fleming has had an enormous influence on the development of natural history studies in New Zealand. The breadth of his interest extended from the organisms of marine environments to those of the coastal, lowland, montane and alpine zones. The systematic position, behaviour and evolutionary history of these organisms were all of interest to him. In his own words: 'Because ecology is an essential approach in any modern work on systematics, distribution, bio-stratigraphy, and evolution, it is difficult to separate any particular part of a study as ecology' (Fleming 1952a).

Sir Charles contributed to this Society's first annual conference in 1951 when he discussed historical factors affecting the ecology of isolated areas. In that contribution he wrote: 'As ecologists we see but a single frame or two in a motion picture and our single frame can give a misleading idea of relation or organic distribution to environmental factors' (Fleming 1952b). It was this awareness of the relationship between geological time and an organism's history

that Sir Charles brought to all his scientific thinking. It enabled him to approach current conservation and management problems with a perspective that not only made one conscious of the immense and unique history of some of our endangered animals and plants, but which also brought the true significance of changes currently affecting them into sharp relief.

His many published scientific contributions began with his 1939 paper on Chatham Island birds. These observations have proved to be the foundation stone on which all subsequent bird conservation work in the Chathams has been built. This study was not only an intellectual challenge, but a physical one as well. He was the first ornithologist to scale the formidable cliffs of Mangere Island and establish that both the black robin and Forbes parakeet had survived there even though disappearing from all other islands in the group as a result of forest destruction and the introduction of cats and rats.

Sir Charles' ecological interests were never restricted to birds. His contributions to palaeontology made as a result of his work with marine molluscs have been far-reaching for the understanding of the New Zealand stratigraphic sequence. But his approach to these molluscs was ecological: 'The time is past when fossils were considered empirically as mere labels to rocks of different stratigraphic position and their study as members of former living communities, defined by environmental factors, helps geology as much as biology' (Fleming 1952a). On land his invertebrate interests extended to cicadas for which he made pioneer contributions to their systematics, ecology and acoustic behaviour (e.g., Fleming 1975a).

His interest in plants and their distribution is evidenced in his discussion of the age of the alpine biota (Fleming 1963), New Zealand as a place of origin for certain plants dispersed elsewhere (Fleming 1976) and of course in his three major biogeographic syntheses published between 1962 and 1979.

Charles Fleming was never afraid to promote an unconventional idea. Although some writers before him had suggested that the extinction of moas could be attributed to man, it was not until Sir Charles assembled the evidence for this in an unambiguous manner, that man's role in this most significant ecological event of the country's Holocene history become clear. In view of the continuing controversy over whether the Maori were 'conservationists', it is pertinent to note Sir Charles' remarks about moa extinction: 'It seems we are reluctant to blame our fellow men for a pre-historic offence against modern conservation ideals and would rather blame climate or

the animals themselves' (Fleming 1962b).

Sir Charles had an acute feel for what was 'good science' in the sense of being able to recognise a real question susceptible to scientific enquiry. His approach was unashamedly curiosity-motivated and, to use his own word, 'elitist', because as he so rightly pointed out: 'truth' is not determined by majority vote, 'not by the favour of the many, but by the wit and energy of the few, often, indeed, by a minority of one' (Fleming 1964, 1984). He knew the value of the 'educated guess' in science, as for example when he wrote his history of the New Zealand landbird fauna (Fleming 1962c): unless one is prepared to provide a hypothesis to test, even though the data are limited, it is often not possible to make progress.

He toiled unceasingly to convey to people the uniqueness of the biota and the environment of the country in which we live. It was this awareness that spurred on his efforts to protect our natural heritage, including Lake Manapouri, from the enormous forces that are operating to reduce this country's biological diversity to that of so many 'developed' countries in other parts of the world. His years of service on advisory bodies such as the National Park Authority, the New Zealand Environmental Council and the Fauna Protection Advisory Council (of which he was its first independent chairman), and his presidency of and other work for the Royal Society of New Zealand, all contributed to this effort. Beyond this was his extensive behind-the-scenes lobbying to make New Zealand a more interesting place in which we and our children can live rather than merely exist.

Throughout all his work Sir Charles was assisted and supported, in the field and at home, by his wife 'Peg'. We are particularly grateful to her for the extent to which she helped Charles maintain an incredibly high output of scientific writing despite a serious health problem in his latter years. We can be thankful that as a result of his help so much of his wisdom and learning has been left in written form for those not privileged to know him personally.

Sir Charles was always ready to give credit to the scientific achievements of others and to give encouragement to those struggling with the difficult problems of managing and protecting endangered species. His positive influence can never be properly assumed because he often helped in subtle and obtrusive ways. We have lost both a wise counsel and a friend, but we are fortunate to have had such a man among us.

Ian Atkinson
2 March 1988

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NOTE: A comprehensive account of Sir Charles Fleming's life and work is to be published by the Royal Society of New Zealand.

ERRATUM – Vol. 11, p. 135, last two paragraphs.

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