

ANNUAL REPORT FOR THE YEAR ENDING 30 JUNE 1979

(presented for adoption at the 27th Annual General Meeting)

MEMBERSHIP

The Society accepted 47 new members and received 22 resignations during the year. Membership at 30 June 1979 was 507. There were 129 subscribers to the *Journal* (51 in New Zealand and 78 overseas).

COUNCIL ACTIVITY

The Council met nine times at the Forest Research Institute, Ham, Christchurch. The following were reappointed by the Council: Dr M. C. Crawley as Editor, Dr M. R. Rudge as representative to the Member Bodies' Committee of the Royal Society, Mrs H. R. Hughes as representative to the New Zealand Committee for Water Pollution Research, and Dr C. L. McLay as Newsletter Compiler. Conveners of Sub-committees appointed by the Council were: A.G.M. and Conference 1979, Mrs M. J. A. Bulfin; Awards, Miss R. Mason; Registrar of Ecological Consultants, Mr D. C. Drummond; Conservation, Dr P. A. Williams; Ecological Education, Mrs M. E. Austin; Energy, Dr M. J. Winterbourn; Population, Dr W. Q. Green.

The Society Rules, as approved at the last A.G.M., were reprinted.

The Council made a submission to the Committee on Official Information, and also representation to the Minister of Internal Affairs (and a Press Release) expressing our alarm that the position of Director of the Wildlife Service was being advertised without any requirement for expertise in this field.

EDITOR'S REPORT (M. C. Crawley)

Volume 1 of the *New Zealand Journal of Ecology* was well-received by members of the Society, judging by views expressed to the Editor. Distribution of the Information Leaflet overseas has not yet resulted in any new subscriptions being taken out, but there is still hope that this will happen. Many abstracting services were informed of the change of name of our publication; in some cases the *Proceedings* of the Society had not previously been included in the lists of journals inspected.

The 1979 issue (Volume 2) of the *Journal* is in an advanced stage of preparation. It contains fewer, and generally shorter, papers than Volume 1 and includes contributions from the 1978 Annual Conference (Palmerston North) and the 1979 ANZAAS Congress (Auckland), as well as some contributed papers.

There has been a disappointing response from members to requests (in the Editorial of Volume 1, in the 1978 Annual Report and in the Society Newsletter) to support the new *Journal* by submitting papers for publication. Surprisingly few full-length papers from the 1978 Annual Conference were offered (in some cases not even resumes of papers read could be obtained by the Editor) and the number of contributed papers was also small. If it had not been for a last-minute arrangement to publish some papers delivered at the 1979 ANZAAS Congress, then Volume 2 of the *Journal* would have been very slim indeed.

The publication of our *Journal* is a worthwhile endeavour. Please support it by contributing papers and by ensuring that you make every effort to assist the Editor by submitting well-prepared manuscripts in good time. The Editor is very willing to assist prospective contributors in any way possible and should be contacted without hesitation if there are any problems with preparation of papers.

REPORT OF ROYAL SOCIETY MEMBER BODIES' COMMITTEE REPRESENTATIVE (M. R. Rudge)

The Member Bodies' Committee held its Annual Meeting in May 1979.

Member Bodies were thanked for their participation in the Auckland ANZAAS Conference. The Royal Society announced that it will be sponsoring the Pacific Science Congress in Dunedin in January 1983 and hoped that Member Bodies would schedule their own conferences to coincide with it.

The Royal Society is planning meetings of journalists so as to improve scientific reporting in the daily papers. It continues efforts to bring about liaison among scientific editors especially so as to assist editors of member bodies (the Ecological Society initiated this action in 1977).

Science Fairs go from strength to strength and a new venture, inter-school science quizzes, has been successfully tested in Christchurch.

The President of the Royal Society wishes member bodies such as ours to make more use of the senior body in solving problems.

The Ecological Society has not been called upon during the year to act in its role of conservation subcommittee of the Member Bodies' Committee.

CONSERVATION REPORT (P. A. Williams)

The Council prepared a submission on the

Pesticides Bill (1978) which replaces the Agricultural Chemicals Act (1959). Part of the function of the Bill was to empower the newly-named Pesticides Board to designate certain pesticides to be controlled. This means they can be applied only by the holders of licences issued under the Bm. The Society generally supported the Bill, but suggested amendments to 16 sections that would reduce the ambiguities and loopholes.

The Council was unsuccessful in its submissions to the Minister of Forests to have biological expertise represented on the officials committee on West Coast Reserve Proposals. Our worst fears were realised when the final recommendations of the Committee were approved by Cabinet. Okarito State Forest will be logged, as will much of the valuable lowland forests in the other reserves such as the montane valleys. The full significance of the proposals to these smaller reserves will not be known until after a detailed comparison of the proposed reserves with the recommendations of the Beech Forest Co-ordinating Committee. The recent discovery of a rare subspecies of kiwi has also compounded the problem of the fate of the Okarito forests.

Two Society members, Dr D. R. Given and Dr G. W. Ramsay, convened two symposia at ANZAAS on rare and endangered species and their habitats. The Nature Conservation Council published the proceedings as "A Vanishing Heritage" and announced their intention to review the topic. The Ecological Society Council will prepare a submission if there are sufficient ideas forthcoming from members.

REPORT ON ANZAAS SYMPOSIA (J. A. Wightman)

The Ecological Society was invited by the ANZAAS Executive to present two linked symposia on a conservation theme. In view of the subjects of recent meetings, the Sub-committee decided to "restrict" the subject to "Conservation in Australasia and the Southern Ocean". This neatly cut off Antarctica and the vexed question of its commercial exploitation. We started looking at many lines, such as the pros and cons of krill catching and the possible impact of submarine mining activities on the Sub-antarctic Islands. But owing to the limitations imposed upon us by a shortage of time and the unavailability of certain speakers we finished with a final product that had a different, but pleasing, flavour from that originally intended.

Our intention was to put some of the decision-makers of Australasia on the platform to explain their philosophy and to answer whatever questions

an ANZAAS audience could produce. The programme as presented was:

1. Terrestrial Resources
 - Chairman: Dr K. O'Connor
 - Conservation and the law
 - I. L. Baumgart and P. Hewitt (Commission for the Environment)
 - Forest estates of New Zealand by 2079
 - A. Kirkland (N.Z. Forest Service)
 - Status and future of Australian grasslands
 - R. H. Groves (CSIRO Division of Plant Industry)
 - Use and status of New Zealand grasslands in 2079
 - D. Scott (Grasslands Division, DSIR)
2. Island and Marine Resources
 - Chairman: Professor J. M. Diamond (U.C.L.A. School of Medicine)
 - Opening address (Chairman)
 - The future of whales and whaling in Australasia
 - M. W. Cawthorn (M.A.F., Wellington)
 - Research problems associated with sustained yield harvesting in New Zealand fisheries
 - R. Francis and D. Robertson (M.A.F., Wellington)
 - Problems and values of Marine Reserves
 - B. Ballantyne (Leigh Marine Laboratory)
 - Interrelationships of feral stock, sea birds and vegetation on Campbell Island
 - P. R. Wilson (Ecology Division, DSIR, Nelson)

EDUCATION REPORT (M. E. Austin)

The Sub-committee has concentrated its efforts on the production of the Slide-tape sequences outlined in the last report. The draft editions presented at the Ecological Society and N.Z. Science Teachers' Association Conferences in 1978 have been revised, refereed and submitted to the Curriculum Development Division of the Department of Education for costing and acceptance.

We are indebted to A. H. C. Christie and J. A. Wightman for the time and effort put into the completion of very worthwhile productions on Chamois and Grassgrub Life Cycle respectively. The title suggested for the series is "New Zealand Ecological Studies".

Further topics currently being prepared include:

- Beech Forests in New Zealand

- Grasshopper Energetics

- Starling-Myna Interaction

- The Grassgrub and its environment

The Commission for the Environment in conjunction with the Joint Centre for Environmental Sciences (Canterbury) has set up a working party on environmental education. The convener attended

their first meeting in May 1979 at which the main effort was to establish guidelines for action to coordinate the endeavours in this field.

POPULATION REPORT (W. Q. Green)

Over the past year the growth rate of the New Zealand population has been close to zero. As long as this situation persists there appears to be little demand for a high level of activity by the Population Sub-committee. In addition, the New Zealand Demographic Society is now handling many of the issues which previously would have come to the Population Sub-committee.

Nonetheless, there is still a need for good educational material on population and related issues. The Environmental Council made a useful contribution in this area with the release this year of a new booklet titled "Population Perspective". The Sub-committee feels that some aspects of this publication could be improved before a second printing and intends making a submission at an appropriate time.

GROUP REPORTS

1. *Canterbury Group* (M. R. Butcher)

At the 1978 A.G.M. (held in October instead of June) the following committee was elected: Chairman, Mike Butcher; Secretary /Treasurer, Les Batcheler / Melvin McLennan; Newsletter Editor, Jim Bell; Committee, Glen Stewart/Tony Williams.

The lateness of the 1978 A.G.M. required only four talks to be arranged:

4 December 1978 Snares Island Ecology. J. Early (7).

12 February 1979 Some aspects of the Biology and Ecology of the Argentine Stem Weevil. S. Goldson (9).

9 April 1979 Some Ideas Concerning Population Regulation of Chamois. C. Clarke (14).

25 June 1979 Dispersion of Opossums in Mixed Hardwood Forests. J. Coleman (19).

The numbers in parentheses indicate the attendance, which has been low in recent years. The increase apparent for the April meeting coincided with a mention of this problem in the national body Ecological Society Newsletter!

The major undertaking of the committee, in light of the diminished attendances, was to prepare a Canterbury Group information brochure. To date 3 new members have been "recruited" as a result of the brochure.

At the 1979 A.G.M. (in June) the following Officers and Committee were elected: Chairman, Mike Butcher; Secretary jTreasurer, Melvin Mc-

Lennan; Newsletter Editor, Jim Bell; Committee, Tony Williams/Bruce Warburton.

Several members expressed wishes that (more) Botany, Human Ecology and Ethology be incorporated into the meeting topics and the new committee will be looking into this.

2. *Manawatu Group*

This group was formed after the last A.G.M. At the inaugural meeting on 22 November 1978 the following informal committee was elected: Helen Broad, Leon Tindale, John Skipworth, Mike Greenwood, Brian Springett and David Drummond. It was agreed that the general format for each meeting should be a brief "show and tell" session followed by a speaker and questions, and finally supper. Occasional field excursions were planned. A theme for each year will be adopted, not to the exclusion of everything else, but so that continuity and a centre of interest can be developed.

A formal report to 30 June 1979 had not been received by the Council at the time of going to Press.

ANNUAL CONFERENCE 1978

The 27th annual conference was held at Massey University, Palmerston North, on 16 to 18 August 1978. A total of 129 people registered their attendance.

On the first day there was a symposium on "The Ecology of the Ruahine Range and Manawatu River Catchment". Symposium papers read were:

1. C. B. Hubbard, M. Marden, V. E. Neall, and J. A. pollok: "The relationship of geology and soils to erosion in the southern Ruahine Range".
2. P. J. Grant: "Major erosion periods on the Ruahine Range since the 13th century and their impact on the vegetation".
3. J. L. Nicholls: "Forest types of the Ruahine Range".
4. I. R. Logan: "Wild animals of the Ruahine mountains: their introduction, establishment and control".
5. A. Cunningham: "Forest deterioration in the Ruahine Range".
6. R. L. Hathaway: "Revegetation of eroded areas in the southern Ruahine Range".
7. M. K. Holland: "The Manawatu River and its catchment".
8. M. G. Lambert and B. P. Devantier: "Nitrogen, phosphorus and sediment losses from grazed hill country catchments".
9. K. J. Currie: "The water quality and general

ecology of the Manawatu River system during summer flows".

10. R. M. Greenwood and J. P. Skipworth: "Keeble's Bush-a lowland forest remnant: how can it be managed?"
 11. G. N. Park: "Assessing the conservation value of lowland forest remnants".
 12. J. G. Innes: "Diet and reproduction of the ship rat (*Rattus rattus*) in Tawa-dominated forest in lowland Manawatu".
 13. M. R. Butcher: "The species composition of the Manawatu River estuary".
 14. L. J. Davies and H. A. Robertson: "Birds of the Manawatu River system".
- On the second day there was a field excursion to the region of the symposium topic.
- The third day was devoted to contributed papers and a successful new venture, a poster session. Contributed papers read were:
1. A. Sakai and P. Wardle: "Freezing resistance of some New Zealand shrubs and trees".
 2. D. R. Given: "Vegetation on heated soils, Wairakei: description, distribution and conservation".
 3. J. Wightman: "Energy and nitrogen budgets of leaf cutter bee larvae".
 4. J. C. Watt: "Conservation of the Cromwell chafer beetle (*Prodontria lewist*) (Coleoptera: Scarabaeidae)".
 5. G. J. Struik and J. R. Bray: "Fish survey in the Marlborough Sounds estuary from 1971 to 1978".
 6. J. A. Gibb: "Fluctuations of rabbits and of riverbed vegetation in the Orongorongo Valley, Wellington".
 7. E. B. Spurr: "A theoretical assessment of bird species at risk from 1080 poisoning".
 8. M. Williams: "Black swans at Lake Ellesmere: management or laissez-faire?"
 9. R. C. W. Zander: "Habitat utilization and some behavioural observations of paradise shelduck in Southland and Otago".
 10. B. J. Gill: "Breeding of the shining cuckoo (*Chrysococcyx lucidus lucidus*) at Kowhai bush, Kaikoura".
 11. J. Craig: "Communal breeding of pukeko: do the helpers really help?"

12. A Stewart: "Social organization of the tui (*Prosthemadera novaeseelandiae*)".

26TH ANNUAL GENERAL MEETING

The 26th Annual General Meeting was held at Massey University, Palmerston North, on 16 August 1978, and was attended by 59 members.

The minutes of the 25th A.G.M. were approved, and the Annual Report for 1977/78 was accepted as printed in the *New Zealand Journal of Ecology* Volume I. Reports were received from the Treasurer, Editor, Royal Society Member Bodies' Committee Representative, and the Ecological Education and Conservation Sub-committees.

Dr J. A. Mills reported that the Council had not the resources at present to evaluate and make awards such as recommended by the A.G.M. 1977.

The meeting adopted a number of amendments to the Rules. None of the amendments affected the policy or general procedures of the Society.

The President, on behalf of the Society, congratulated Professor A. F. Mark for attaining the highest honour in New Zealand science by being elected as a Fellow of the Royal Society of New Zealand.

Dr J. A. Gibb and Dr G. R. Williams were elected Honorary Life Members of the Society, with acclamation.

Professor Mark complimented the Council (and Mr Drummond in particular) on the completion of the Membership Directory.

The meeting elected the following Officers and Councillors:

| | |
|-----------------|---|
| President: | Dr J. Warham |
| Vice-President: | Dr M. C. Crawley |
| Secretary : | Dr E. B. Spurr |
| Treasurer: | Dr J. M. Williams |
| Council : | Mrs M. E. Austin, Mrs M. J. A. Buffin, Dr M. N. Clout, Mr O. C. Drummond, Dr D. R. Given, Dr W. Q. Green, Dr C. L. McLay, Miss R. Mason, Dr J. A. Mills, Dr P. Simpson, Dr E. G. White, Dr J. A. Wightman, Dr P. A. Williams, Dr M. J. Winterbourn. |

Boyd, Knight and Co. were re-appointed Honorary Auditors.