

ENVIRONMENT NEWSLETTER

Quarterly Newsletter of the South Pacific Regional Environment Programme

Contents:

NUMBER 13

APRIL - JUNE 1988

	Page
. News In and Around the Region	1
. Feature	7
. Courses in Environmental Subjects	11
. Calendar of Events	13
. Publications	16

The South Pacific Commission's ENVIRONMENT NEWSLETTER commenced publication after having been in 'retirement' since issue No. 4 (March 1982). It is now produced on a quarterly basis commencing with No. 5 (April - June 1986). News articles and comments are welcomed for future issues.

South Pacific Regional Environment Programme

(SPREP)

South Pacific Commission



The Environment Newsletter is produced by the South Pacific Regional Environment Programme, South Pacific Commission, Noumea, New Caledonia and reports on the various activities of the programme together with news of general environmental interest to readers in South Pacific countries.

SPREP's activities are co-ordinated by a group made up of the South Pacific Commission (SPC), the United Nations Environment Programme (UNEP), the South Pacific Bureau for Economic Co-operation (SPEC), and the Economic and Social Commission for Asia and the Pacific (ESCAP).

The United Nations Environment Programme, through its Oceans and Coastal Areas Programme Activity Centre (OCA/PAC) based in Nairobi has, since SPREP's inception, given considerable financial support to the programme's activities.

Much of the work undertaken by SPREP and supported by UNEP involves utilising skills of the Universities and Training Institutions within the South Pacific, members of whom have recently formed an Association of South Pacific Environmental Institutions (ASPEI) to facilitate this work.

Printed at
The Environment Centre (NSW) Pty Ltd.
Sydney, Australia

© Copyright South Pacific Commission, 1988.

The South Pacific Commission authorises the reproduction
of this material,
whole or in part, in any form, provided appropriate
acknowledgement is given.

NEWS IN AND AROUND THE REGION

GUAM UNDERTAKES HAZARDOUS WASTE MANAGEMENT PROGRAMME

As part of its overall environmental protection work, the Guam Environmental Protection Agency has recognised that hazardous and toxic waste has a great potential for an adverse impact on the environment of Guam. Because of its remote geographical location and delicate environment, sound hazardous waste management presents problems much more complex and difficult to resolve than on the mainland.

Although Guam is fortunate for not having large hazardous chemical producing industries, nevertheless it is not free from hazardous waste problems and still must deal with hazardous wastes generated by commercial and federal sectors through importation. Hazardous materials are imported in fairly large quantities and stored; the military being the largest user. Much of this material requires special handling and storage. A significant amount of this hazardous material becomes waste thereby requiring specialised disposal consideration.

Under the Hazardous Waste Management Programme, all hazardous waste facilities are inspected at least twice a year and all hazardous waste producing facilities have contingency plans to deal with accidental discharge, fire or explosion. All facility personnel are made aware of the plan in order to organise and effectively carry out an emergency response activity.



Other activities in the Solid and Hazardous Waste Management Programme are the Spill Prevention Control and Countermeasure (SPCC) and the Underground Storage Tanks (UST). The SPCC deals with aboveground storage facilities for gasoline, oil and other substances, while UST deals with underground storage facilities. All new installation of USTs must meet requirements which will prevent releases of stored substances due to corrosion or structural failure for the operational life of the tank and new UST installations inspected to ensure compliance with regulations and the manufacturer's specifications.

The Emergency Response Team is active during normal working hours, after hours and on week-ends and holidays. The team acts as on-the-scene Co-ordinator on all oil spills at the Port Authority of Guam as well as any spills on land. In addition to oil spills, the team also responds to spills or releases at fuel storage facilities in the government and commercial sectors, as well as chemical spills occurring throughout the island.

NUCLEAR WASTE DUMPING

Ocean Disposal plans for low-level nuclear wastes by the Japanese government, continue to be the focus of increasing attention by Pacific Island nations, Guam and Saipan having been active in efforts to halt proposed dumping.

In November 1986 the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region, (the 'SPREP' Convention was signed after several years of negotiations by the governments of the region, such negotiating meetings having been instigated by the South Pacific Regional Environment Programme (SPREP). Signatory nations to this international treaty are prohibited from dumping nuclear waste within the territorial waters of countries in the region, thus offering some protection from dumping activities.

The SPREP Report on Radioactivity in the South Pacific identified the island of Guam as having one of the highest levels of natural radioactivity in the soils in the Pacific area. Guam EPA questioned the validity of findings in this report and as a result SPREP has committed funding to duplicate the study in Guam. GEPA will monitor the waters, sediments and marine life in Apra Harbor and other locations around Guam for evidence of higher than normal radionuclides in the marine environment.

(Source: Excerpts from Guam Environmental Protection Agency
Fifteenth Annual Report, 1987)

SPREP CO-ORDINATOR STRENGTHENS SPREP/IUCN CO-OPERATION



In his newly elected capacity, as IUCN Regional Councillor for Australia and Oceania and CNPPA Vice-Chairman for Oceania, Iosefatu Reti attended the 25th Meeting of the IUCN Council in Geneva, Switzerland, 8 to 10 June 1988 and the preceding CNPPA Meeting. Valuable work of specific relevance to SPREP was undertaken at both Meetings.



The CNPPA Steering Committee Meeting focussed on a future programme for CNPPA with emphasis on:

- continued work on the system of terrestrial protected areas,
- developing policy on marine protected areas,
- pursuing the socio-political aspects of protected areas,
- dealing with creative financing and economic aspects of protected areas,
- continuing work on effective protected area management, and
- strengthening the scientific base for the establishment and management of protected areas.

The Committee also gave specific recognition to the implementation of field projects in which SPREP could play a major role and discussed the possibility of IUCN becoming a member of the SPREP Co-ordinating Group.

The 25th Meeting of IUCN Council. IUCN Council which meets once a year makes recommendations to members of IUCN and to the General Assembly, the highest policy organ of IUCN which meets every 3 years. The Council gives ratings on policy, determines complementary policy guidelines and approves the work programme of IUCN. At the 25th Meeting, some important decisions were made which have relevance to the work of SPREP, namely:

- production of the Second Volume of the World Conservation Strategy,
- strengthening the role of women in the environment and development,
- reinforcing studies and research on the Greenhouse effect (Global warming),
- assistance in getting ratifications for the Montreal Convention (on ozone layer).

The appointment of Iosefatu Reti to those positions augurs well for SPREP's continued work in the protected area field and ensures that the South Pacific Region's interests are well catered for in future IUCN decisions.



**SPREP'S
WORK PROGRAMME
DISCUSSED**

Between 20 June and 1 July 1988 two major meetings were held to review SPREP's 1987-88 Work Programme and discuss implementation of the 1989-90 SPREP Work Programme. The first of these meetings was the **FOURTH CONSULTATIVE MEETING OF RESEARCH AND TRAINING INSTITUTIONS** held in Noumea, 20-24 June 1988 at which over 25 scientists from the SPREP network of research and training institutions based in the South Pacific region and representatives of government departments from Australia and New Zealand met to review progress on SPREP activities carried out by network members during 1987-88. SPREP undertakes many projects in a co-operative relationship with regional institutions, namely the Papua New Guinea University of Technology (UNITECH), the University of Guam (UOG), the University of Hawaii (UH), the University of Papua New Guinea (UPNG), the University of the South Pacific (USP), Institut français de recherche scientifique pour le développement en coopération (ORSTOM), Laboratoire d'étude et de surveillance de l'environnement (LESE), Institut français de recherche pour l'exploitation de la mer (IFREMER), East-West Center (EWC) and the Community College of Micronesia (CCM) who have all joined in an Association of South Pacific Environmental Institutions (ASPEI). Results and progress reports were presented on many of the institutional activities and the meeting reviewed the more than 140 project proposals submitted by SPREP member governments, network institutions and the SPREP Secretariat for inclusion in the 1989-90 SPREP Work Programme.

Technical and scientific merit was the basis used for evaluation by the institutions of the projects proposed under SPREP's 1989-90 Work Programme. With support from the United Nations Environment Programme (UNEP) many of the projects will be undertaken as part of wider global projects on the two important areas of:

- . climatic change/sea level rise
- . marine pollution monitoring.

**INTERGOVERNMENTAL MEETING ON SPREP ACTION PLAN
FOR 1989-90**

(Noumea, 27 June - 1 July 1988)

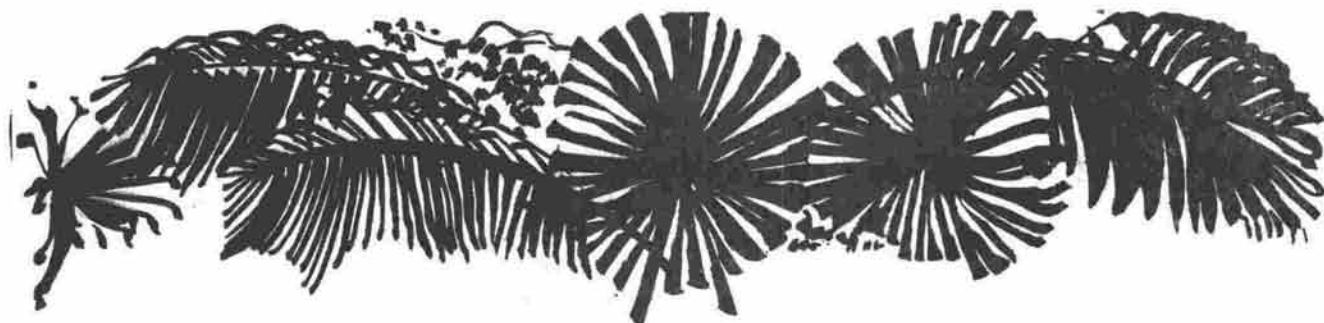
Twenty-eight delegates from 14 SPREP member governments, representatives of the SPREP Co-ordinating Group (SPEC, ESCAP, SPC, UNEP), representatives from 5 SPREP network institutions and observers from current and potential supporting organisations, met to review the achievements of the 1987-88 SPREP Work Programme and set a course for SPREP during the 1989-90 biennium. The meeting agreed that substantial and effective progress had been made in implementing the majority of activities included in the 1987-88 Work Programme and also noted the status of the SPREP Convention. Although the Convention has been signed by twelve countries, only two have ratified it. The meeting agreed a concerted effort would have to be made to encourage countries towards ratification. Ten ratifications are required to bring the Convention into force.

In reviewing the large number of projects proposed for the 1989-90 Work Programme (over 140), the meeting considered the difficulties faced by the Secretariat in implementing the Work Programme and, in particular, the lack of a firm basis of financial contributions on which to develop a budget. The overall work programme was approved and the meeting exhorted member governments to make a firm and timely commitment of their financial support to SPREP. The institutional arrangements which govern SPREP's operation were also examined, particularly the role of the Co-ordinating Group and its future.

The examination was prompted by budgetary considerations and the announcement by the UNEP representative that UNEP was withdrawing from the Group and would be ending its general support for SPREP Secretariat activities in the South Pacific region. However, UNEP indicated it would continue to assist the region in the specific project areas of climate change/sea level rise and marine pollution monitoring and control. Issues relating to the SPREP budget and the Co-ordinating Group were referred to the South Pacific Conference and South Pacific Forum meetings later in the year.



Participants at Intergovernmental Meeting on SPREP Action Plan



NATURAL RESOURCES THREATENED ON MANY SOUTH PACIFIC ISLANDS

They're pictured as idyllic bits on paradise, but many Pacific islands are facing destruction of their natural resources, according to an environmental specialist at the East-West Center in Honolulu.

"Accompanying the drama of resource development in Pacific island nations has been rapid population growth and cultural change, all of which place the environment and many plant and animal species in jeopardy," says Lawrence Hamilton of the Center's Environment and Policy Institute.

"Introduction of alien plants and animals to these vulnerable islands has resulted in wholesale reductions and even disappearance of native species," Hamilton says and cites the example of the brown tree snake, which was accidentally introduced into Guam and which within 30 years has literally wiped out the native bird population.

Other examples of natural resource degradation abound, Hamilton says. "The giant clam is threatened in the northern Marshall Islands by over-exploitation by illegal fishermen of a foreign country, and in American Samoa the development of a pleasure boat harbour threatens a beautiful bay with pollution, reef destruction and disruption of village life."

Hamilton is directing a three-year project funded by a \$ 146 000 grant from the World Environment and Resources programme of the John D. and Catherine T. MacArthur Foundation on conservation of biological diversity in tropical ecosystems. The project will concentrate on American Samoa, Palau, Marshall Islands, Northern Mariana Islands, Guam and the Federated States of Micronesia.

One of the first activities will be a response to a request by the Marshall Islands government to identify pieces of land that should be formed into a system of protected areas. This will be carried out in collaboration with SPREP.



FEATURE

ENVIRONMENTAL GROUPS BEING ESTABLISHED IN REGION

Protection of the environment can be very effectively undertaken by groups of dedicated people forming together to alert others to the need for environmental awareness. Although such groups have previously been relatively few in our South Pacific island countries, today more people are realising the need to work together for this purpose. Following is a report of two such groups.

ENVIRONMENTAL GROUP FORMED IN AMERICAN SAMOA

L
E

V
A
O
M
A
T
U
A

Le Vaomatua (Samoan for the tropical rain forest) is an environmental organisation incorporated in 1985 by a group of local residents who have a common interest in the protection of the native forests, reefs and marshes, as well as the preservation of Samoan cultural historical sites.

In Samoa, increasing population pressures and expanding commercial and industrial developments are beginning to present a danger to the flora and fauna of the islands. Le Vaomatua members believe that it is the duty of informed citizens to recognise dangers, to educate the general public to potential problems and to influence legislation that will protect the endangered areas.

Since its first public meeting in May, 1986, Le Vaomatua has been an active organisation in addressing some of these goals. To date there have been over 20 public presentations and activities by various experts on topics ranging from Samoan archaeology to whalewatching flights.

Every year there have been reef walks led by knowledgeable members, which help inform others about the ecology of the area and the identification of plants, birds and other animals. In December of last year, Le Vaomatua held its first Christmas bird count, which will become an annual event. Members gathered in the early dawn and travelled to various areas to count birds, in order to get an estimate of the island's bird population. At each event, participation by the general public far exceeded expectations of the membership. It was common for 50 or more people to turn out for an activity, while Le Vaomatua's membership at the time numbered much less.

Le Vaomatua also acts as a watchdog, reviewing any proposals for development that may appear to go against the interests of environmental preservation. Le Vaomatua members have presented informed testimony in public hearings involving issues of environmental concern. For example, members have testified in favour of a Samoan national park, and against the dredging and against the Leone Boat Harbour project. The latter is a proposal for the dredging and construction of a boat harbour in Leone Bay. Leone Bay is home to endangered sea turtles and may be a calving site for humpback whales. In May, the Environmental Quality Commission withdrew the variance previously issued for the Leone Boat Harbour Project. This is a result of the efforts of private residents in Leone who had serious questions about this project. Grassroots efforts by concerned citizens do make a difference.

The creation of a National Park in American Samoa is of much interest to Le Vaomatua. In May, the organisation held a reception for this proposal at the top of 1 500 foot Mt. Alava. After a cable-car ride to the top, more than 50 guests, including Mrs Lutali, the governor's wife, hiked the three-mile trail along Mt Alava Ridge to the Fagasa Pass road. The hikers were accompanied by guides prepared to answer questions about the proposed park and its flora, fauna, and geology. The Mt. Alava Ridge trail will be one of the major trails in the proposed park. It offers sweeping panoramas of the unspoiled north shore of the island.

Another area of concern is the continuing deterioration of the only native mangrove site on Island, due to landfill and residential building. And, there have been efforts by an American industry to use Samoa and other Pacific Nations as dumping sites for hazardous wastes. American Samoa, Western Samoa and Tonga are among the islands which have been approached. A future article will concentrate on this.

Le Vaomatua publishes a quarterly newsletter, "Rainforest Echoes", to keep its membership informed on current activities, upcoming events and ongoing projects. They have adopted the Samoan flying fox, *Pteropus samoensis*, as their club symbol to dramatise its precarious status, it having been suggested for listing as an endangered species.

Further information may be obtained by writing: Le Vaomatua, P.O. Box B, Pago Pago, American Samoa, 96799.



Samoan flying fox (*Pteropus samoensis*)
the symbol of Le Vaomatua - watching over
environmental protection in American Samoa

THE UNIVERSITY OF THE SOUTH PACIFIC'S SPACHEE

South
Pacific
Action
Committee on
Human
Ecology and
Environment

SPACHEE (the South Pacific Action Committee on Human Ecology and the Environment) is a non-government organisation started in 1982 and composed largely of USP people (staff and students alike) who are concerned about issues of the environment in the South Pacific. Other people in Suva who work in this area are also members and minutes of their meetings are sent throughout the South Pacific. The Committee keeps informed of projects on the environment occurring throughout the Pacific region and discusses areas of research that might be useful. These range from waste disposal to coral reef and mangrove ecology, water quality issues, deforestation and agricultural practices, as well as housing and urban problems. A major emphasis is on environmental education, issues being widely publicised and broadcast. This involves a week-long series of articles in local newspapers on issues such as the siting of the Suva rubbish dump, and water conservation. As SPACHEE is taking an increasingly active role in environmental issues in the region, it is also encouraging other groups to start. In 1987 and 1988 it is hoped that all countries in the USP region will develop branches of SPACHEE which will take a leading role in publicising environmental issues and in sharing information.

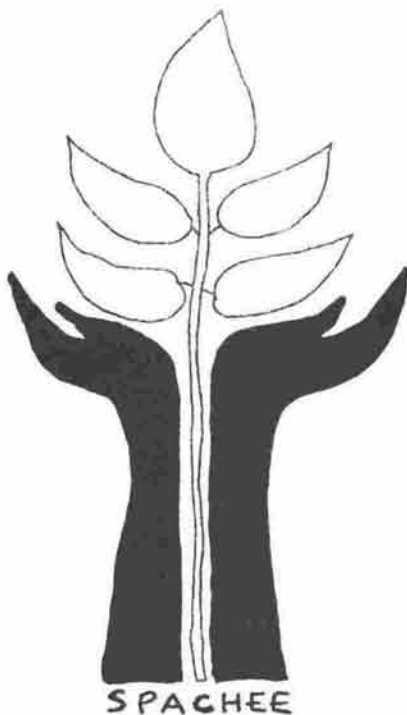
In late 1987 SPACHEE held a conference to discuss current research projects on the environment. The then SPACHEE Chairman, Dr W. Aalbersberg, who also chaired the conference, said the conference allowed people active in environmental research to get together to discuss what was being done and to stimulate each other to work in different areas in which they may not have been aware there was a need. Good contacts were made between people needing research work done and those able to do it, especially at USP.

Among topics discussed at the conference was the establishment of national parks in the South Pacific. A park already planned in detail is in the Sigatoka sanddunes area in Fiji, where walkways, permanent buildings and an education centre are to be established. Drought effects were also discussed, with reference to Fiji's dry weather which was said to be most affecting Fijian villagers.

SPACHEE had not previously received any funding but in 1988 it is receiving United Nations Environment Programme funds through SPREP to extend its environmental education network throughout the Region. SPACHEE Secretary, Dr Jenny Bryant, said it was hoped to help set up smaller environment groups in the Region, establish a library of materials received by SPACHEE and possibly work up other educational materials such as video tapes and posters.

Dr Aalbersberg said traditional practices in the islands were based on sound ecological concerns which were now under pressure because of cash cropping and other pressures. The underlying idea of conservation of the environment was very strong with island people, and they reacted very well to educational approaches. For example, SPACHEE had helped persuade Suva City Council not to relocate a rubbish dump in an area where it would create health problems.

SPACHEE recently established a resource centre and employs part time Miss Rohini Lata Ramaiya (at right) as its Information Officer.



A logo competition was also held in 1987 to find a suitable SPACHEE symbol. The winning entry, shown on the left, was produced by Miss Christina Joe of the University's Information Office. The logo will be reproduced on T-shirts, letterhead, publications and other forms of publicity. The judges felt that the logo very effectively combined both the human and physical aspects of environmental awareness.

COURSES IN ENVIRONMENTAL SUBJECTS

INTERNATIONAL CENTRE FOR OCEAN DEVELOPMENT (ICOD)

SCHOLARSHIPS FOR STUDY IN CANADA



The International Centre for Ocean Development is a Crown Corporation established by the Canadian government to initiate, encourage and support co-operation between Canada and developing countries in the field of ocean resource development and management. A scholarship programme has been established in keeping with the Centre's objective to enhance the expertise available in the developing world.

Approximately 20 graduate level scholarships are awarded annually for study at a Canadian university, in a programme leading to a Master's degree in a marine-related field of study. ICOD scholarships are intended to support students of high academic calibre who demonstrate a commitment to contribute to the development and management of ocean resources in their country or region of origin.

Applicants must hold an honours Bachelor's degree or equivalent and must be nominated by a government agency or regional intergovernmental organisations. Acceptable fields of marine-related study include: Physical, Biological, Environmental and Social Sciences, Engineering and Law.

For further information contact:

International Centre for Ocean Development
Scholarship Program
5670 Spring Garden Road
9th Floor
HALIFAX
Nova Scotia
Canada
B3J 1H6

Telex : 019-21670 ICOD HFX
Telephone : (902) 426-1512

CENTRE FOR RESOURCE MANAGEMENT (CRM)
UNIVERSITY OF CANTERBURY/LINCOLN COLLEGE
CHRISTCHURCH
NEW ZEALAND



M.Sc. (Resource Management)
M. Applied Sc. (Resource Management)
Duration: Two years

Diploma in Natural Resources
Duration: One year

The Centre for Resource Management is involved in teaching, research and communicating information about the use of natural resources.

Teaching programmes are designed to train graduates to understand the many aspects of resource management and to equip them with the knowledge, analytical skills and practical experience that will enable them to contribute effectively to the solution of resource management problems.

The University of Canterbury and Lincoln College have strengths in many disciplines, including: ecology, engineering, economics, forestry, the arts, law, social sciences, agriculture, regional planning etc. These strengths have enabled both institutions to provide leadership in the development of inter-disciplinary approaches to resource allocation, use and management.

Applicants for any of the Centre's post-graduate courses must hold, or be eligible to hold, a Bachelor's Degree in a New Zealand university or be admitted *ad eundem statum* with graduate status at either the University of Canterbury or Lincoln College. Provision exists for a limited number of overseas students at the Centre.

Enquiries are welcomed from graduates in science, arts, commerce, engineering, law, forestry, agriculture etc.

Contact:

The Academic Registrar
Lincoln College
CANTERBURY
New Zealand

Telephone: (03) 252-811
Fax : (03) 252-965

CALENDAR OF EVENTS

INTERNATIONAL WETLANDS CONFERENCE
Rennes, France

19 - 23 September 1988

Contact:

3rd International
Wetlands Conference
Museum national d'histoire naturelle
Laboratoire d'évolution des systèmes
naturels et modifiés
36, rue Geoffroy St-Hilaire
75231 PARIS CEDEX
France.

NATIONAL PARKS, NATURE RESERVES AND
NEIGHBOURS
Johannesburg

31 October - 3 November 1988

Contact:

Endangered Wildlife Trust
Private Bag XII
Parkview 2122
TRANSVAAL
South Africa

2ND INTERNATIONAL OCEAN AND COASTAL
DEVELOPMENT EXHIBITION AND SYMPOSIUM
'OCEAN, MAN AND THE COMMUNITY', Kobe, Japan

16 - 18 November 1988

Contact:

Mr S. Washimi
Techno Ocean '88
Technical Programme Committee
c/- World Import Mart Co. Ltd
3-1-3 Higashi-Ikebukuro
Toshima-Ku
TOKYO 170
Japan

ASIA AND PACIFIC REGIONAL CONFERENCE:
POLLUTION IN THE URBAN ENVIRONMENT
'POLMET' 88

28 November - 2 December 1988

POLMET 88 Secretariat
c/- Hong Kong Institution of Engineers
9/F, Island Centre
No. 1 Great George Street
CAUSEWAY BAY
Hong Kong.

1989 PACIFIC BASIN CONFERENCE ON HAZARDOUS WASTE

April 1989

Contact:

Consortium Secretariat
 Pacific Basin Consortium for
 Hazardous Waste Research
 c/- East-West Center
 Environment and Policy Institute
 1777 East-West Road
HONOLULU
 Hawaii 96848
 USA.

Telephone : (808) 944.7555
 Telex : 989171
 Cable : EASWESCEN.

**HERITAGE CONSERVATION AND SUSTAINABLE
 DEVELOPMENT**
Ottawa, Quebec City

7 - 13 May 1989

Contact:

Gordon Nelson
 University of Waterloo
ONTARIO
 Canada

INTERNATIONAL CONFERENCE ON WETLANDS.
'THE PEOPLE'S ROLE IN WETLAND MANAGEMENT'

5 - 8 June 1989

Contact:

'People's Role in Wetland Management'
 c/- Leiden Congress Bureau
 P.O. Box 16065
2301 GB LEIDEN
 The Netherlands

Telephone : (0) 71-275 299
 Telex : 39427 burut nl

20TH INTERNATIONAL ORNITHOLOGICAL CONGRESS
Christchurch, New Zealand

2 - 9 December 1990

Contact:

Dr Ben Bell
Zoology Department
Victoria University of Wellington
Private Bag
WELLINGTON
New Zealand

Phone : 64-4-721000
Telex : NZ 30882 VUWLIB
Facsimile : 64-4-712070

PUBLICATIONS

The following publications are available from SPREP:



- Nuclear Issues in the South Pacific: A Bibliography. Compiled by the Pacific Information Centre for SPREP.

- Environment and Resources in the Pacific. UNEP Regional Seas Reports and Studies No. 69.

- Physical Ocean Environment in the South Pacific Commission Area. B. Wauthy. UNEP Regional Seas Reports and Studies No. 83.

- Pesticide Use in the South Pacific. D. Mowbray. UNEP Regional Seas Reports and Studies No. 89/SPREP Topic Review No.26.

- Review of the Protected Areas System in Oceania. Prepared by IUCN based on work by Arthur Dahl.