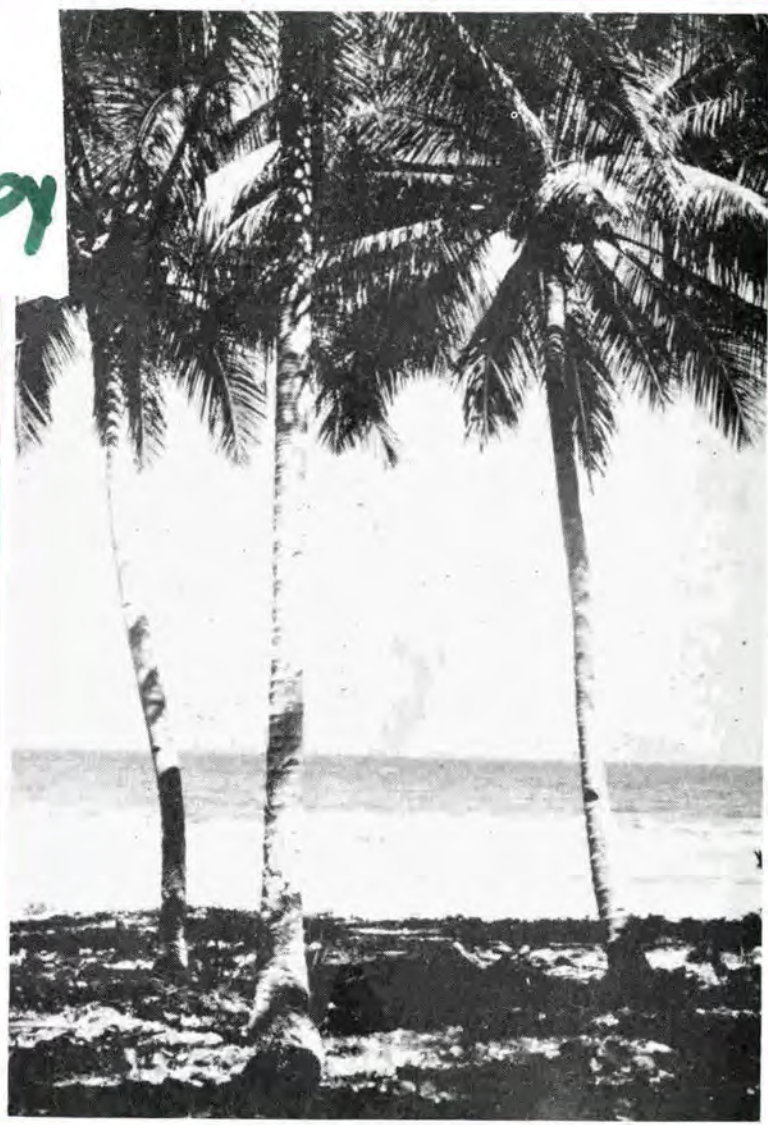


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Action Strategy for Nature Conservation in the South Pacific Region

Prepared during the Fourth South Pacific Conference on
Nature Conservation and Protected Areas,
Port Vila, Vanuatu, 4-12 September 1989

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**ACTION STRATEGY FOR NATURE CONSERVATION
IN THE SOUTH PACIFIC**

South Pacific Regional Environment Programme (SPREP)

**International Union for Conservation
of Nature and Natural Resources (IUCN)**



November 1989



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FOREWORD

The Fourth South Pacific Conference on Nature Conservation and Protected Areas, sponsored by the South Pacific Regional Environment Programme in co-operation with IUCN and the Government of Vanuatu, produced a number of important outputs for nature conservation in the region and pointed the way to new directions, goals and policies for the next four years until the fifth regional conference in 1993. This Action Strategy is one of the outputs and is the result of a thorough revision of the Action Strategy for Protected Areas in the South Pacific which was developed by the Third South Pacific National Parks and Reserves Conference held in Western Samoa in 1985.

The revised Action Strategy was prepared by the conference participants who represented 20 of the 27 member countries of the South Pacific Regional Environment Programme (SPREP) and some 36 international and regional non-government, conservation and development assistance organizations. It is thus designed for the particular needs of the governments of the South Pacific and will provide a valuable guide on national, regional and international priorities for the wide range of organizations committed to assisting conservation in the region.

This strategy recognizes the importance of the human dimension in natural resource conservation in a region where much of the population is dependent on the sustainable use of the resources of the natural environment. Most of these resources and the rights to use them are communally owned and strong emphasis is given to the importance of encouraging non-government and local community participation in all facets of natural resource conservation and management. Similarly, the strategy recognizes the strong potential of traditional knowledge and custom to assist in the development of sustainable resource use practices appropriate for the special circumstances of the island countries of the South Pacific.

It is clear that growing populations and the accelerating pace of economic development are placing heavy demands on the limited resources of the small island countries of the South Pacific region. Governments are recognizing the need for urgent action if the debilitating environmental problems stemming from resource over-exploitation which are affecting many other regions of the world are to be avoided. Implementation of this strategy will assist the South Pacific countries towards this goal. However, achievement of its ambitious targets will require not only a strong commitment from the governments concerned, but also the continued support, and co-operation of the international conservation community.

The Fourth South Pacific Conference on Nature Conservation and Protected Areas demonstrated the depth of that support and we are particularly grateful to the generous contributions from the Australian Government, East-West Center, Commonwealth Secretariat, CITES Secretariat, Australian National Parks and Wildlife Service, Greenpeace and the Maruia Society which made the conference and the development of the Action Strategy possible.

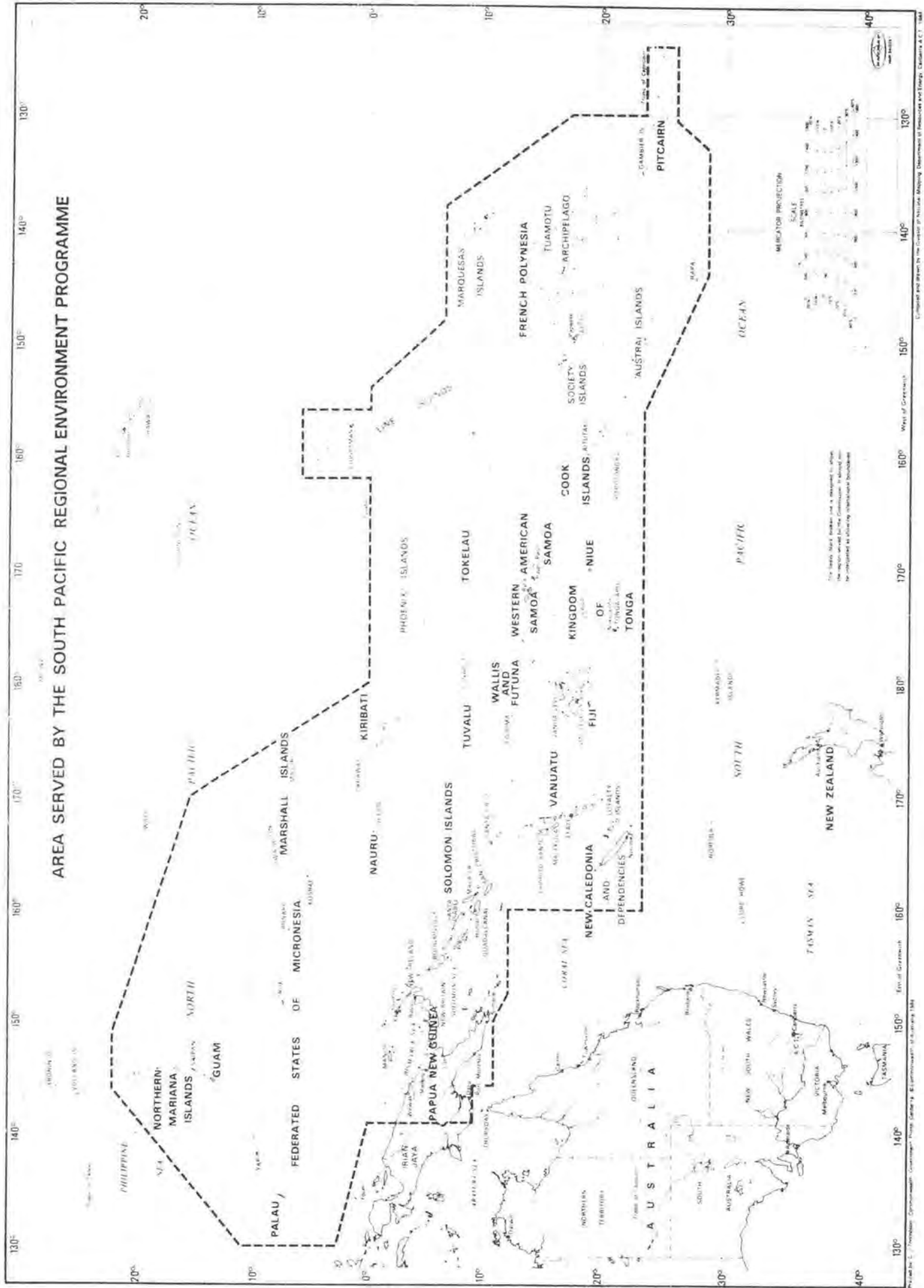


Atanraoi Baiteke
Secretary-General
South Pacific Commission



Martin Holdgate
Director-General
IUCN

AREA SERVED BY THE SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME



ACTION STRATEGY FOR NATURE CONSERVATION IN THE SOUTH PACIFIC REGION

INTRODUCTION

The South Pacific is a vast region extending over 29 million sq km, or seven times the area of the Caribbean. Of this, only about 500 000 sq km is land. The island environments present special, often critical, problems for nature conservation. Geographical and ecological isolation have led to the evolution of unique species and communities of plants and animals, many of which are adapted to only one island or island group, and found nowhere else in the world. There are about 2 000 different types of ecosystems throughout the South Pacific, and on some islands 80% or more of the species are endemic. Limited space means that ecosystems are restricted, with small biological populations and this increases their vulnerability.

Population growth, steady habitat destruction from increasing demands on limited land resources, and competition and predation by introduced species have all combined to put pressure on natural environments and native species. A recent comprehensive review of environmental concerns in the region highlighted the problems of land and habitat destruction due to accelerated soil and coastal erosion, coastal reclamation, mining activities, excessive harvesting of native forests and of coastal fish resources, and pollution of both inland and coastal waters. On many islands of the region the diminishing area of natural undisturbed environments has become critical. Relatively large numbers of native plant and animal species are endangered (or extinct). There are about seven times more endangered bird species *per capita* in the South Pacific than in the Caribbean, and one hundred times more than in North America or Africa, placing heavy conservation responsibilities on the small island nations of the region.

Some island countries have made great efforts in protecting their natural environments. By 1985 there were approximately 95 protected areas in the region, totalling approximately 800 sq km. However, this represents only about 0.15% of the total land area and less than 20% of the region's ecosystems. Despite an urgent need for the expansion of the conservation or protected area network, progress with the establishment of new protected areas since 1985 has been slow. This Strategy recognizes that further establishment of conservation or protected areas is vital in the South Pacific, both on land and at sea. The sustainable utilization of resources and the conservation of nature can be aided by such areas which can serve the environmental, social, economic, cultural and spiritual needs of societies by:

- assisting the maintenance of traditional customs and culture,
- maintaining the main life support systems and enhancing the resource values of these systems,

- contributing to the maintenance of island biological diversity and the conservation of threatened species and genetic resources,
- providing opportunities for education and research, and
- providing economic opportunities through nature tourism and recreation.

Within the South Pacific region the conservation and sustainable use of natural resources and the establishment and effective management of conservation areas involves several considerations. These include a close working relationship between governments and community groups in the planning and management of natural resources, the development of an effective integrated policy and legal framework, strengthened environmental management and planning units, the integration of modern and traditional skills applied in the field and support for education, training, research and information services. Pacific countries also have a need to consider more flexible categories of conservation areas for the management of those natural resources and processes which are essential for the maintenance of the balanced and healthy environment on which island people depend for survival. Indeed, it was in recognition of this need for greater flexibility that the delegates at the Fourth South Pacific Conference on Nature Conservation and Protected Areas preferred to use the term 'conservation area' to the more widely used 'protected area' in this strategy.

This strategy aims to provide a work programme to help implement the nature conservation and protected area objectives of the South Pacific Regional Environment Programme Action Plan for Managing the Natural Resources and Environment of the South Pacific region.

However, the effective implementation of the strategy cannot be achieved by one agency alone. It will require the concerted efforts of the countries and people of the South Pacific region, international conservation and development assistance agencies and the many non-government organizations and other individuals dedicated to achieving the conservation and sustainable utilization of the region's natural resources and the protection of its environment.

The strategy was developed and adopted at the Fourth South Pacific Conference on Nature Conservation and Protected Areas, conducted within the framework of SPREP in Port Vila, Vanuatu, 4-12 September 1989. It was endorsed for adoption within the SPREP Work Programme for 1991/92 which will be developed at the SPREP Intergovernmental Meeting to be held in September 1990. It also incorporates the views of IUCN's Commission on National Parks and Protected Areas which was a co-sponsor of the Conference. Other sponsors of the conference which enabled the development of this strategy to take place were the East-West Center, Australian International Development Assistance Bureau, Australian National Parks and Wildlife Service, CITES, Greenpeace and the Maruia Society.

APPROACH

This strategy has seven goals concerned with national strategies for sustainable resource use; establishing representative conservation area systems; promoting the integration of traditional knowledge and resource conservation; fostering links between conservation and tourism; improving public environmental awareness; developing training and education in nature conservation and conservation area management and promoting regional and international co-operation. A number of objectives are identified within each goal under which are listed activities needed at national, regional and international levels.

It is recognized that the small size of some countries in the South Pacific may preclude independent action by all countries on some of the activities identified in the strategy. In such situations there is a key role for SPREP in working closely with the countries and other concerned regional and international organizations or in coordinating joint action to carry out the activities.

Specific project suggestions for each South Pacific country appear in Appendix 1 and Regional Programmes for Marine Turtle and Avifauna Conservation in Appendices 2 and 3 respectively. Both these regional programmes were adopted by the conference for inclusion in the Action Strategy.

ACTION STRATEGY GOALS, OBJECTIVES AND ACTIVITIES

GOAL A: TO INCORPORATE NATURE CONSERVATION VALUES AND THE CONCEPTS OF SELF-RELIANCE AND SUSTAINABILITY INTO NATIONAL RESOURCE MANAGEMENT POLICIES.

OBJECTIVE A.1. TO DEVELOP, AND IMPLEMENT WHERE APPROPRIATE, NATIONAL CONSERVATION AND SUSTAINABLE RESOURCE MANAGEMENT STRATEGIES FOR SPECIFIC COUNTRIES WITHIN THE REGION.

Activities at the National Level

1. Identify those national agencies best qualified to draft national conservation strategies and provide adequate staff and budget to do so.
2. Identify donor agencies and bilateral arrangements that could assist in financing development of national conservation strategies and provide additional expertise for their development.

3. Involve economic policy makers, natural resource managers and planners in the process of strategy development.
4. Ensure full public involvement, and in particular that of customary landowners, in the strategy development process.

Activities at the Regional and International Level

1. SPREP to seek international funding and regional expertise for the development and implementation of these strategies.

OBJECTIVE A.2. TO ENSURE NATIONAL PLANNING POLICIES TAKE ACCOUNT OF POPULATION GROWTH AND INCREASED PRESSURE ON LIMITED LAND AND OTHER RESOURCES AS MAJOR FACTORS AFFECTING NATURE CONSERVATION.

Activities at the National, Regional and International Level

1. Support national population policies by providing information, case histories and ecological arguments to promote population stability and sustainable land and other resource use.
2. Investigate the relationships between demands on key resources and projected levels of population.
3. Develop sound arguments and analyses which show that protected critical natural areas help support food production outside these areas, through for example the protection of soil and water values, the protection of source areas for fishery stocks, etc.
4. Recognize the key role played by women in family planning and provide support and information to women's organizations on the relationship between population levels, natural resource use and family welfare.
5. Develop special training courses on conservation for extension and social workers who deal directly with human welfare, particularly for communities in proximity to established conservation areas.

OBJECTIVE A.3. TO DEVELOP AND IMPLEMENT PROCESSES AND POLICIES WHICH PROMOTE SELF-RELIANCE AND THE ABILITY OF COUNTRIES AND LOCAL COMMUNITIES TO ACHIEVE SUSTAINABLE RESOURCE MANAGEMENT.

Activities at the National Level

1. Identify and promote appropriate natural resource uses and technologies.
2. Develop and implement or strengthen appropriate legislation, institutional arrangements and planning and management methods such as:
 - identifying and implementing interim procedures to stop over-exploitation of natural resources and degradation of natural environments pending more detailed reviews of the impact of such exploitation and comparison with the likely impact of alternative resource conservation strategies, including land use options;
 - developing and applying levies on resource users, including the tourism sector, to assist with establishment and management costs of conservation areas and other nature conservation programmes;
 - preparing management plans for critical zones including vulnerable coastal and nearshore areas, lowland and upland forests and catchments, agriculture and forestry development areas, and conservation areas;
 - implementing measures to rehabilitate degraded areas or increase populations of depleted species, such as marine turtles;
 - strengthening institutions with responsibility for enforcing laws and regulations on resource use;
 - ratifying appropriate international conservation conventions.

Activities at the Regional and International Level

1. Encourage donors to follow policies that enhance self-reliance and encourage sustainable development and resource use practices.
2. Develop model Environmental Impact Assessment legislation for circulation through the region.

3. Provide technical and infrastructure support and coordination for regional regulatory and enforcement activities.
4. Develop or encourage membership of international conventions which promote or regulate sustainable utilization and trade of the natural resources of the region.

OBJECTIVE A.4. TO DEVELOP AND IMPLEMENT NATURAL RESOURCE USE MONITORING AND REVIEW PROCESSES AND, WHERE NECESSARY, AMEND INAPPROPRIATE POLICIES AND PRACTICES.

Activities at the National Level

1. Review legislative and administrative arrangements.
2. Review and, if necessary, renegotiate timber contracts to achieve sustained yield goals and the establishment of conservation areas.
3. Assess the impacts of new and existing economic policies (including tax structures and subsidies) on the achievement of conservation and sustained resource use objectives.
4. Formulate and implement monitoring programmes on management practices relating to use of natural resources.
5. Develop and improve national capabilities to undertake environmental monitoring and review, especially environmental impact assessment.

Activities at the Regional and International Level

1. To further develop the ability of SPREP to co-ordinate assistance to member countries with environmental and conservation legislation and policy reviews, the development of review processes and the capability to undertake these, especially environmental impact assessment.
2. To encourage international conservation and donor organizations to support the review and development of institutional arrangements for reviewing and monitoring resource use including the development of environmental impact assessment capability and techniques.

OBJECTIVE A.5. TO DEVELOP AND MAINTAIN THE INFORMATION BASE NECESSARY TO INCORPORATE NATURE CONSERVATION VALUES IN NATIONAL POLICIES AND PROGRAMMES.

Activities at the National Level

1. Develop as an urgent first step, lists of high priority marine and terrestrial sites for conservation based on Dahl's 1980 and 1986 surveys.
2. Develop strategies to identify available natural resource information gaps and a timetable of short and long term actions to fill those gaps. Means for managing and disseminating the information including return of information and samples to the country of origin should be a key part of the strategy.
3. Using the information strategy, prepare more detailed inventories of island ecosystems (both terrestrial and marine) and species for conservation.
4. Ensure local people are involved in and informed of all inventories and surveys, and that local knowledge is incorporated into results.
5. Use the questionnaire approach more frequently as a reliable, cheap, and rapid method to document known species distribution patterns and utilization rates.
6. Ensure that all research results are made available in the country. This includes technical and non-technical reports and technical expertise (through use of local counterparts).

Activities at the Regional and International Level

1. Provide the necessary information and other forms of support to governments to enable them to develop, implement and monitor national nature conservation policies.
2. Develop and maintain a current regional information base on island ecosystems and species for conservation. This information base should have provisions for the co-ordination of information exchange between island countries, and should provide technical assistance in setting up in-country information bases and repositories of such information.

3. Help to ensure the return of information to countries in the region.
4. Strengthen national capabilities for resource surveys, inventories and biological information management through regional information and training programmes.
5. Promote collaboration by governments in developing a marine and coastal biogeographical classification system which could be used throughout the region, at a scale which would be meaningful for assessing national coverage for protecting biological diversity.
6. Disseminate bibliographies of research and resource inventory publications, and maintain a register of Pacific researchers containing information on current research interests.
7. Encourage international organizations collecting and managing information on the biological diversity of the region to coordinate their efforts through SPREP.

GOAL B: TO ENSURE THE CONTINUED VIABILITY OF THE FULL RANGE OF ECOSYSTEM TYPES AND SPECIES THAT MAKE UP THE REGION'S NATURAL HERITAGE AND CONTRIBUTE TO ITS CULTURE

OBJECTIVE B.1. TO IDENTIFY, DEVELOP AND IMPROVE MEASURES FOR THE EFFECTIVE CONSERVATION OF ISLAND ECOSYSTEMS AND SPECIES.

Activities at the National Level

1. Identify, in consultation with NGOs and landowners, a range of management and co-operative mechanisms which respect customary ownership of property while achieving conservation objectives, including all 'Approaches to Protected Area Establishment on Customary Lands' listed in the SPREP Report of the Workshop on Customary Tenure, Traditional Resource Management and Nature Conservation (pages 11-12).
2. Review national legislation, and where appropriate develop new legislation for establishing conservation areas in public ownership or customary tenure.
3. Ensure the legislation on conservation areas makes specific reference to the special features of the marine and coastal environment.

4. Ensure that the process of establishing conservation areas identifies all landowners, and resolves disputes prior to implementation, and that the landowners are legally empowered to make collective decisions about the leasing and use of their property.
5. Inform landowners of conservation values on their property and encourage them to manage it in a manner that will sustain these values.
6. Develop mechanisms to encourage landowners to establish conservation areas, including recognition of development opportunities foregone.
7. Provide financial support for the establishment and effective management of conservation areas from national and international sources including where appropriate, from levies on resource uses.
8. Ensure that conservation area projects are included in programmes for which international and bilateral development assistance is sought.
9. Liaise with SPREP to identify the applicability and relevance of international conservation conventions and programmes.

Activities at the Regional and International Level

1. Develop a detailed report on the range of incentives available for the conservation of customary property, and develop mechanisms for exchanging experiences to foster landowner action.
2. Provide advice to governments on legislation, regulations, and other administrative measures necessary for establishing conservation areas, ranging from national parks to voluntary traditional management agreements.
3. Take initiatives to elicit greater financial support from existing and new donor agencies for the establishment and effective management of conservation areas in the region, including the setting up of a regional fund for this purpose, for distribution to member countries.
4. Prepare and circulate briefing material on World Heritage and Ramsar (Wetlands) Conventions and the MAB-UNESCO Biosphere Reserve Programme, and assess/review the relevance of these to Pacific island countries.

OBJECTIVE B.2. TO ESTABLISH A REPRESENTATIVE SYSTEM OF CONSERVATION AREAS TO ENSURE THE EFFECTIVE CONSERVATION OF ISLAND ECOSYSTEMS AND SPECIES (see also Objective A.5).

Activities at the National Level

1. Within the next four years, ensure the identification and conservation of at least the most unique ecosystems and species (terrestrial or marine) and establish at least one additional conservation area in each country.
2. Identify good indicator species for monitoring the condition of conservation areas, and develop repeatable survey methods to regularly assess the status of these indicator species.
3. Examine the management status and objectives of existing parks, sanctuaries and other reserves to see if they are adequate to fulfill their role.

Activities at the Regional and International Level

1. Use the regional and national information base to determine whether the island ecosystems and species in the region have adequate and viable conservation status, and identify areas where conservation measures need to be implemented or strengthened.
2. Provide national conservation agencies with the information and expertise required to plan conservation of island ecosystems and species.
3. Demonstrate how conservation areas can contribute to the wider conservation and development needs of countries.
4. Continue to develop and maintain the global database on conservation areas and important ecosystem types, and publish South Pacific regional directories periodically.

GOAL C: TO PROMOTE THE INTEGRATION OF TRADITIONAL KNOWLEDGE AND CUSTOMS INTO SUSTAINABLE RESOURCE CONSERVATION PRACTICES AND CONSERVATION AREAS MANAGEMENT

OBJECTIVE C.1. TO INCREASE AWARENESS OF THE DEPTH AND VALUE OF TRADITIONAL KNOWLEDGE AND CUSTOMS IN NATURAL RESOURCE MANAGEMENT.

Activities at the National, Regional and International Level

1. Promote the integration of information about traditional knowledge and resource-management techniques into formal school curricula. Emphasize the spiritual and aesthetic values and not merely the material, practical aspects of traditional relationships of people to land and sea.
2. Encourage museums, cultural centres, and other institutions devoted to cultural preservation to be active centres for the documentation and dissemination of information on the traditional use and management of natural resources.
3. Promote the study of traditional knowledge through the award of scholarships.
4. Support local or regional workshops and training courses to address the issues involved in integrating traditional knowledge and custom into natural resource planning and management.
5. Assist customary resource owners to record their traditional knowledge and customs.
6. Produce information e.g. books, pamphlets, posters, videos, slides, newspaper articles, radio and TV items, etc. on traditional knowledge and custom regarding natural resource conservation.
7. Utilize interpretive facilities in conservation areas (self-guided walks, display boards, etc) to improve public awareness of the importance of traditional knowledge in natural resource conservation.
8. Develop and seek support for regional programmes for the collection and recording of traditional knowledge and the development of a regional information base on traditional resource management.

OBJECTIVE C.2. TO ASSIST THOSE ENTITLED TO CUSTOMARY RIGHTS OF OWNERSHIP AND/OR USE TO CONTINUE, OR REVIVE, APPROPRIATE TRADITIONAL RESOURCE MANAGEMENT PRACTICES.

Activities at the National, Regional and International Level

1. Provide information to customary resource rights holders about development options and their potential consequences and encourage and assist their close involvement in the development planning process from the outset.
2. Devise cost-sharing arrangements with customary landowners to make traditional resource management systems economically realistic development options.
3. Advocate and assist the establishment of community-based conservation areas which allow the sustained and traditional use of natural resources.
4. Establish and promote legal mechanisms whereby resource owners can preserve or protect their traditional knowledge, customs, and natural resources.
5. Examine and encourage approaches to the establishment of conservation areas on customary land that reflect and build upon traditional customs and practices.

OBJECTIVE C.3. TO ENSURE THAT TRADITIONAL KNOWLEDGE AND TECHNIQUES THAT ENCOURAGE SUSTAINABILITY ARE TAKEN INTO ACCOUNT IN NATURAL RESOURCE PLANNING AND MANAGEMENT, MINDFUL OF THE SENSITIVITIES AND ETIQUETTES INVOLVED IN THE COLLECTION AND USE OF TRADITIONAL KNOWLEDGE.

Activities at the National, Regional and International Level

1. Involve customary resource owners and users in all phases of natural resource planning and management by government agencies.
2. Develop Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) processes which require the obligatory assessment of impacts on traditional knowledge, traditional resource use, subsistence activities and community incomes.

3. Develop better techniques for evaluating the economic and social values of traditionally used resources.
4. Promote the recording and use of traditional knowledge and customs relevant to the conservation of natural resources.
5. Promote the participation of relevant NGOs in ensuring that traditional knowledge is incorporated into natural resource planning and management.
6. Establish tribunals or other arbitration procedures to hear disputes between developers and customary rights holders.
7. Conduct research into the scientific basis of traditional knowledge and practices with a view to assessing their sustainability and applicability elsewhere in the region.

GOAL D: TO FOSTER POSITIVE LINKS BETWEEN TOURISM AND NATURE CONSERVATION

OBJECTIVE D.1. TO ENCOURAGE APPROPRIATE VILLAGE-BASED ENTERPRISES, SUCH AS NATURE TOURISM, TO PROVIDE AN INCENTIVE FOR THE CONSERVATION OF NATURAL ENVIRONMENTS.

Activities at the National Level

1. Assist individuals and local community groups with the establishment of village based nature tourism.
2. Provide support, where appropriate, to institutions and organizations working with local communities on the development of nature-based tourism activities.
3. Monitor and assess the economic, cultural and environmental costs and benefits of nature based tourism projects.
4. Encourage governments to charge a special levy on the tourist industry to provide low interest loans for village based, small scale, low impact nature tourism projects.

Activities at the Regional and International Levels

1. Encourage the Tourism Council of the South Pacific and other tourism organizations, in collaboration with SPREP, to prepare guidelines for the establishment and management of nature tourism industries.
2. Prepare a SPREP Topic Review Paper focusing on the relationship between nature based tourism and conservation in the region.
3. Prepare an assessment of the contribution made by nature tourism projects to achieving nature conservation goals in the region for inclusion on the agenda of the Fifth South Pacific Conference on Nature Conservation and Protected Areas.
4. Seek inclusion of 'Regional Perspective on Nature Conservation and Tourism' as a major topic at a future South Pacific Conference.

OBJECTIVE D.2. TO IMPROVE COMMUNICATION BETWEEN CONSERVATION, TOURISM AND DEVELOPMENT PLANNING AGENCIES, AFFECTED COMMUNITIES, APPROPRIATE NON-GOVERNMENT ORGANIZATIONS AND TOURISM INDUSTRY REPRESENTATIVES.

Activities at the National, Regional and International Level

1. To prepare relative articles on nature tourism for incorporation in the SPREP and Tourism Council of the South Pacific newsletters.
2. Encourage and support seminars on tourism and the environment.
3. Support exchange visits between representatives of communities which are experiencing and/or contemplating tourism developments.
4. Promote the inclusion of nature conservation information in tourism education programmes.
5. Encourage conservation area and wildlife managers and planners to interact with the tourism industry.
6. To improve liaison between SPREP and regional tourism organizations such as the Regional Tourism Council of the South Pacific and the Pacific Area Travel Association.

OBJECTIVE D.3. TO ENCOURAGE AND ASSIST MEMBER GOVERNMENTS TO INCORPORATE FINANCIAL MECHANISMS TO SUPPORT NATURE CONSERVATION IN NATIONAL TOURISM POLICY AND DEVELOPMENT PLANS.

Activities at the National, Regional and International Level

1. Identify appropriate mechanisms by which tourism industries can contribute directly to nature conservation.
2. Encourage governments to charge levies on extractive industries to assist the establishment and maintenance of conservation areas.
3. Evaluate the application of 'user-pays' concept to tourism related activities, including concessionaire charges, and to natural resource rentals.
4. Encourage universities or other institutions to research the economic benefits of nature tourism.
5. Provide and assist in expanded technical training to ensure adequate local expertise in evaluation of the long term economic, social and environment costs associated with tourism and other forms of development.

GOAL E: TO ACHIEVE A LEVEL OF ENVIRONMENTAL AWARENESS AND APPRECIATION THAT ENABLES INDIVIDUALS, COMMUNITIES AND GOVERNMENT AGENCIES TO PARTICIPATE IN AN INFORMED MANNER, IN THE ACHIEVEMENT OF NATURE CONSERVATION AND SUSTAINABLE RESOURCE USE GOALS

OBJECTIVE E.1. TO FACILITATE MAXIMUM POSSIBLE COMMUNITY INVOLVEMENT IN THE DEVELOPMENT OF CONSERVATION AREA SYSTEMS AND TO ENSURE PUBLIC AWARENESS OF THE NEED FOR NATURE CONSERVATION.

Activities at the National Level

1. Encourage governments to produce relevant educational material on the importance of conservation areas management and nature conservation.
2. Provide publications in appropriate languages for each conservation area for distribution to schools.
3. Develop manuals to assist teachers to incorporate environmental education into their curricula.
4. Prepare films and slide presentations on selected conservation topics with particular emphasis on translation of material into local languages.
5. Encourage the media (radio, newspapers and television) to increase coverage of environmental issues by providing them with environmental education material and news items on environmental issues.
6. Encourage the co-operation and participation of non-government organizations and SPREP in environmental education projects, particularly those at village level.

Activities at the Regional and International Level

1. Encourage the establishment of a network of environmental journalists within the region.
2. Organize communication workshops to assist the production of environmental education material in local languages.
3. Encourage SPREP to continue its efforts in the production of region-wide environmental education material (for in-country translation where appropriate) and to ensure its effective distribution to all sectors of the community.
4. Encourage donor organizations to provide financial support for SPREP's environmental education, training and information activities.
5. Support attendance by representatives of member governments and NGO's in training courses and seminars in environmental education.

OBJECTIVE E.2. TO PROVIDE OPPORTUNITIES FOR MEMBERS OF THE PUBLIC TO LEARN ABOUT APPROPRIATE TECHNOLOGY AND TRADITIONAL RESOURCE MANAGEMENT PRACTICES RELEVANT TO NATURE CONSERVATION AND SUSTAINABLE RESOURCE USE (see also Objective C.1).

Activities at the National Level

1. To document examples of appropriate technology and traditional resource management practices which represent or contribute to sustainable development.
2. Design and establish demonstration and model projects (relating to appropriate technology and traditional resource management practices) and encourage governments and NGO's to develop extension programmes for these projects.

Activities at the Regional and International Level

1. Incorporate the concepts of conservation and sustainable development in curricula of schools and tertiary institutions through close liaison with teacher training colleges, universities and curriculum development units (CDU's) throughout the region.

OBJECTIVE E.3. TO ESTABLISH MECHANISMS THAT ENABLE PEOPLE TO EFFECTIVELY PARTICIPATE IN GOVERNMENT AND COMMUNITY DECISIONS WHICH DETERMINE THE FUTURE OF THEIR ENVIRONMENT.

Activities at the National Level

1. Encourage governments to establish a statutory process which allows public review of planning and Environment Impact Assessment (EIA) procedures with provision for effective participation by all sectors of the community.
2. Encourage communities to establish advisory groups to ensure that they have adequate skills to effectively participate in decisions concerning the future of their environment.
3. Seek the support of SPREP and other interested agencies for in-country initiatives which develop effective liaison between governments, non-government organizations and local communities through workshops, regular meetings and environmental seminars (particularly those associated with a National Environment Week celebration).

Activities at the Regional and International Level

1. Encourage donor organizations to support SPREP-organized workshops which strengthen in-country capacity to develop statutory provisions for Environmental Impact Assessment with effective public participation procedures.

GOAL F: TO PLAN, DEVELOP AND MAINTAIN APPROPRIATE TRAINING AND EDUCATION IN NATURE CONSERVATION AND CONSERVATION AREA MANAGEMENT IN THE SOUTH PACIFIC

OBJECTIVE F.1. TO IMPROVE THE INSTITUTIONAL CAPACITY TO PROVIDE APPROPRIATE EDUCATION AND TRAINING IN NATURAL RESOURCE AND CONSERVATION AREA MANAGEMENT.

Activities at the National, Regional and International Level

1. Develop environmental and natural resource management programmes in educational institutions with specific orientation to South Pacific needs and using South Pacific professionals as resource persons where possible.
2. Urge educational institutions to incorporate more marine and coastal science and management into their curricula.
3. Encourage regional educational institutions with programmes in environmental and natural resource management to collaborate to eliminate duplication and build on each other's strengths, for example, through 'twinning' arrangements both with other regional institutions and institutions outside the region.

OBJECTIVE F.2. TO STRENGTHEN THE EXPERTISE AND CAPABILITIES OF EXISTING NATURAL RESOURCE AND ENVIRONMENTAL MANAGEMENT STAFF.

Activities at the National Level

1. Encourage management authorities to provide opportunities for nature conservation and protected area professionals to learn from local communities and traditional sources.
2. Increase in-service training with greater emphasis on the human dimension, to promote understanding of the needs and aspirations of local people and visitors.
3. Ensure that visiting overseas experts concerned with nature conservation and conservation area management include a training component for host country nationals in their project activities.

Activities at the Regional and International Level

1. Obtain increased support from donors for education and training scholarships in nature conservation and conservation area management.
2. Promote greater professional interchange between countries through staff exchange, joint workshops and research projects.
3. Provide a basic library of the major recent references dealing with conservation for conservation area and natural resource management agencies.
4. Provide to ranger or technical staff, appropriate technical material on a regular basis through the publication of a regional technicians' newsletter and provision of appropriate existing material such as the Australian Ranger Bulletin.
5. Seek funds to reinstate publication of IUCN's international journal 'PARKS' and underwrite it so that it can be provided without charge to all professionals in the South Pacific.
6. Request appropriate regional and international institutions, particularly ESCAP, UNEP, UNESCO and the Commonwealth Secretariat to increase their activities in training and education emphasising the special needs of countries of the South Pacific region.
7. Encourage conservation area and wildlife management professionals from other countries visiting the region, for whatever purposes, to volunteer their time to involve themselves in technical interchange with local counterparts.
8. Provide increased support to assure the timely and regular production and distribution of the SPREP Environment Newsletter as a professional networking tool.
9. Develop a wildlife techniques component to be added to the SPREP Training Manual (1987).
10. Develop and implement training programmes for conservation area management personnel using the SPREP Training Manual (1987) and other technical materials where relevant and concentrating in particular on the development of a regional training course or workshop which focuses on marine protected area management.

OBJECTIVE F.3. TO ENCOURAGE THE DEVELOPMENT OF A GREATER POOL OF PROTECTED AREA WARDENS, TECHNICIANS AND LOCAL COMMUNITY LEADERS WHO ARE INVOLVED IN NATURE CONSERVATION AND CONSERVATION AREA MANAGEMENT PROGRAMMES.

Activities at the National Level

1. Increase the indigenous natural history content and field activities in high school science curricula, as a means of stimulating students to aspire for careers in nature conservation.
2. Develop effective links with the community by the selection of persons respected locally, and provide them with education and training opportunities to increase their effectiveness in nature conservation.
3. Encourage nature conservation and conservation area personnel to organize national awareness programmes e.g. Environment Week in Tonga and Fiji, Conservation Week in Western Samoa.

Activities at the Regional and International Level

To support national level initiatives for the implementation of this objective particularly through the provision of training opportunities, expertise and funding for workshops and other programmes.

OBJECTIVE F.4. TO ENCOURAGE CONSERVATION AREA AND WILDLIFE MANAGERS TO CONVENE REGULAR WORKSHOPS AND SEMINARS THAT BRING TOGETHER ADMINISTRATORS AND PLANNERS FROM ALL SECTORS OF GOVERNMENT TO DEVELOP THEIR UNDERSTANDING OF THE NEED FOR NATURE CONSERVATION AND CONSERVATION AREAS.

Activities at the National, Regional and International Level

1. Seek funds to implement this objective and invite experts from other countries to present appropriate case studies.

GOAL G: TO STRENGTHEN CO-OPERATION IN PROMOTING CONSERVATION IN THE REGION AND SUPPORT FROM INTERNATIONAL AGENCIES

OBJECTIVE G.1. TO PROMOTE CO-OPERATION AMONG THE COUNTRIES OF THE SOUTH PACIFIC TO ENSURE EFFECTIVE MANAGEMENT AND PROTECTION OF THEIR NATURAL RESOURCES

Activities at the Regional and International Level

1. Provide support for SPREP and its programmes as the regional co-ordinating agency for natural resource and conservation area management issues.
2. Encourage interchange of ideas, information and expertise in conservation amongst countries, at senior policy, professional and research levels and between government and non-government organizations.
3. Offer study tour and working tour facilities to examine conservation activities within countries of the region.
4. Encourage interchange of expert staff between national resource management agencies, particularly where expertise is needed to address specific problems.
5. Establish a regional data base on aspects relating to natural resource conservation and protected area management and the establishment of mechanisms for circulating this information between countries.
6. Encourage support for international and regional conventions particularly the SPREP Convention, the World Heritage Convention and CITES.
7. Promote the co-ordination and implementation of conservation projects which transcend national boundaries such as the establishment of joint conservation areas across common boundaries and the conservation of migratory species such as marine turtles.
8. Encourage contributions to newspapers, magazines, journals and other media thereby contributing to increasing awareness of conservation within countries and at the regional level.

SOUTH PACIFIC COUNTRY PRIORITIES FOR ACTION ON NATURE CONSERVATION AND PROTECTED AREAS

This annex is a summary of information submitted by country delegates. It is a provisional list of project ideas relating to conservation and protected areas identified by delegates as those matters which are in most urgent need of implementation in their countries. The projects relate to the goals and objectives of the Strategy and offer specific suggestions where it could be implemented. It is hoped that, after suitable consultation, these and other project ideas will be developed and formalized in each country and implemented as resources permit and with regional or international assistance if required. In addition to this annex, information on the conservation importance of specific Pacific islands and special features worthy of protection is contained in the IUCN Review of the Protected Areas System in Oceania (Dahl, 1986) and the Regional Ecosystems Survey of the South Pacific Area (Dahl, 1980).

AMERICAN SAMOA

- Establish an American Samoa National Park including an area from ridge to reef front on northern Tutuila and southern Ta'u and reef area on Ofu.
- Initiate the process for special conservation designation for Leone and Nu'u'uli pala lagoons and the marsh area on Aunu'u.
- Develop and implement public education programmes on conservation; programmes would be coordinated by related territorial agencies and NGO's and implemented by schools, media, church groups and villages.
- Provide regionally appropriate ranger training for Fagatele Bay National Marine Sanctuary and other conservation areas when established.
- Ensure the quality of the watershed above Fagatele Bay National Marine Sanctuary.
- Document and compile information on traditional conservation practices and assess their effectiveness. Make this information available to the public, government agencies and NGO's.
- Encourage mangrove preservation measures through public information and village enforcement.
- Implement increased erosion control measures in watersheds not only to promote conservation of soil and fresh water resources but to maintain healthy mangroves and coral reefs.

COOK ISLANDS

- Establish the following proposed protected areas: Kakerori Reserve, Takutea National Park and the Te Manga Nature Reserve.
- Complete baseline data surveys on the above protected areas, prepare and implement management plans.
- Develop and implement public education programmes through the production of interpretive materials and organize activities to highlight the benefits and values of the established protected areas.
- Develop the concept of a shared management regime for the management of protected areas involving customary land.
- Develop island conservation plans to address the environmental issues of individual islands.
- Develop a contingency plan for the control of pollution and oil spill in the Cook Islands exclusive economic zone.
- Continue with the Kakerori Recovery Programme.
- In collaboration with the Ministry of Marine Resources, develop monitoring and management techniques for marine ecosystems in the Cook Islands being used for mariculture of pearls, shells, trochus, clams and other species.
- Complete and implement the management plan for Suwarrow National Park.
- Devise effective management techniques for the protection and conservation of the coastal zone of Rarotonga and Aitutaki.
- Completion of a computerized database of Cook Islands animals and plants which includes ethnobotany information.

FIJI

- Develop protected area legislation and supporting administration and management structures.
- Undertake development and management works within the Sigatoka Sand Dunes National Park to ensure the long term protection of the area's dune system and archaeological features, and to develop its recreational and tourism opportunities.
- Establish and develop Waikatakata Archaeological Park and Forest Reserve on Viti Levu to protect a major archaeological site, river system with waterfalls, and forest as a traditional landowner park with nature tourism potential.
- Establish and develop Bouma Forest Park on Taveuni to protect outstanding forest, river/waterfall, lacustrine and mountain features as a nature tourism/ traditional landowner project.
- Acquire, through lease or purchase, the freehold coastal strip along Rovadrau Bay at Deuba to establish Karobo Coastal Park.
- Establish as protected areas those areas identified in the Maruia Society Report 'A Representative System of National Parks and Reserves for Fiji's Tropical Forests'. At least two areas, Taveuni and Sovi Basin, are potentially World Heritage Sites.
- Establish and develop Wainikavika National Park at Navua on Viti Levu, to be comprised of the existing Garrick Memorial Reserve (containing tropical lowland rainforest), native lease and freehold areas.
- Establish and develop the Vaturu Dam Conservation Park to protect the dam catchment, forest remnants and archaeological sites, and to develop compatible tourism and recreation opportunities.
- Establish marine reserves around Yadua Taba Island (Crested Iguana Sanctuary), at Tai-Elavuka, and around Namenalala Island.
- Implement the recommendations of the national Mangrove Management Plans, with establishment of resource reserves throughout Viti Levu.
- Develop and implement environmental education awareness programmes.
- Undertake comprehensive ecological surveys of the country's remaining natural areas to identify other suitable areas/ecosystems for establishment of national parks and protected areas.

FEDERATED STATES OF MICRONESIA

- Prepare a national coastal management plan that would include recommendations for protecting important local ecosystems and minimizing development related environmental impacts.
- Encourage and assist states to identify areas that should come under some form of protection and management.
- Develop a coordinated strategy to market appropriate natural areas in the country as tourist destinations.
- Support and encourage state and regional turtle conservation efforts.
- Support the development of protected areas identified in state coastal management plans.
- Investigate the feasibility of designating Oroluk atoll as a National Marine Reserve.
- Seek assistance as needed to achieve these priorities.

FRENCH POLYNESIA

- Pursue arrangements for establishing a protected land area and a protected sea area.
- Establishment of one or two bird sanctuaries, as part of the Polynesia avifauna conservation programme.
- Continuation of the public awareness campaign on birds, through publication of additional posters.
- Adoption of further appropriate legislation for conservation of marine wildlife, in particular with regard to turtles and black coral.
- Drafting of specific legislation for the establishment and management of protected areas.
- Organization of management of existing protected areas: Scilly, Eiao, Hatutaa Motu One, Taiaro and Faaiti.

- Continuation of control of introduced plant pests, e.g. *Miconia flavescens*.
- Development of the public education and awareness programme:
 - . production of educational leaflets and booklets;
 - . production of video films on environmental hazards;
 - . production of environmental messages for broadcasting on television;
 - . organization of 'environment days' and 'tree-planting days' throughout French Polynesia, in co-operation with NGOs.

GUAM

- Formally review the effectiveness of current conservation programmes and protected area initiatives through a coordinated effort by concerned agencies.
- Continue to promote environmental protection and conservation awareness through multi-media public outreach information programmes.
- Develop a Territorial Environmental Conservation Strategy.
- Conduct a comprehensive review of terrestrial and marine ecosystems and develop an Environmental Conservation Plan to include protected areas.
- Effect the conversion of appropriate newly surveyed government lands into conservation reserves through legislative action.
- Establish a protected area for native flora in the form of a botanical garden at the University of Guam.

MARSHALL ISLANDS

- Develop and implement a National Conservation Strategy.
- Negotiate and formulate legislative initiatives providing for the establishment and management of protected areas in the Northern Marshall Islands that remain sensitive to customary land ownership requirements.
- Expand and implement already-enacted environmental legislation, with emphasis on requirements for environmental impact assessments early in the planning for major developments.
- Seek assistance in the development of a comprehensive environmental awareness programme.
- Seek assistance in identifying funding sources to promote conservation and protected area goals.

NEW CALEDONIA

South Province

- Extension of 'Rivière Bleue' Territorial Park to include the 'Haute Pourina' area (approximately 4 000 ha), for conservation of the Cagou (*Rhynochetus jubatus*).
- Establishment of a Territorial Park near Bourail (in an area of thick rainforests between 'Col des Roussettes' and 'Col d'Amieu'), for conservation of the Cagou (*Rhynochetus jubatus*), the Green Pigeon (*Drepanoptila holosericea*), and the Crested Parakeet (*Eunymphicus cornutus cornutus*).
- Resumption of management activities in the Thy Territorial Park.

North Province

- Establishment of a marine reserve on the barrier reef at Gatope (West coast), for marine ecosystem and dugong conservation.
- Establishment of a marine reserve at the northern tip of New Caledonia (consisting of Huon Island and its reef north of d'Entrecasteaux reefs), for conservation of turtles and marine ecosystems.

- Establishment of a marine reserve on the barrier reef at Mengolia (East coast, near Touho)
- Establishment of a marine reserve on the reef between the Hienghène passage and the Ouaieme passage (East coast).
- Establishment of three rotating marine reserves on the Matthieu barrier reef (West coast).
- Development of the Povila forest reserve (Poindimié) for use as a public park (education and recreation).

PALAU

- Develop and implement a National Conservation Programme which includes the following:
 - a) appropriate staff
 - b) public awareness
 - c) enforcement
 - d) adequate funding.
- Assess living and non-living resources with a view to establishing more reserves as needed to conserve Palau's major ecosystems. Expand trochus sanctuaries to include all marine organisms in the area.
- Review and update all laws and regulations pertaining to environmental protection and develop management plans and policies.
- Adopt and implement the Ngerukewid Wildlife Reserve Management Plan.
- Facilitate the ratification of regional conventions, particularly the SPREP Convention.
- Facilitate nomination and approval of Ngerukewid Wildlife Reserve as a World Heritage Site.

PAPUA NEW GUINEA

- Review National Policies and develop a Conservation Strategy aiming at the fortieth objective of Papua New Guinea Natural Development Plan, that is, 'Environmental Management for Sustainable Development'.
- Review legislation and develop mechanisms in which conservation areas can be incorporated with development plans.
- Promote and develop a conservation areas data base (consultation plus training package).
- Review and incorporate coastal and marine ecosystem into the appropriate legislation.
- Promote and develop environmental education and public awareness programmes.
- Review and promote threatened ecosystem and species management procedures.
- Review and revive the turtle project.

SOLOMON ISLANDS

- Develop a National Conservation Strategy to provide the policy framework for sustainable development and conservation.
- Draft and enact legislation relating to conservation areas, wildlife protection and environmental impact assessment.
- Develop, expand and implement a public Environmental Awareness programme in conjunction with NGO's, schools, media, church groups and local communities and other environmental agencies.
- Undertake staff training in the fields of ecology/biology, environmental engineering, environmental impact assessment, and park establishment and management.
- Undertake broadscale survey of the distribution of Solomon Islands fauna and flora, establishing a database for reserve selection with this information.
- Establishment of conservation areas including wildlife management areas.

TOKELAU

- Safeguard populations of clams and turtles by the establishment of turtle hatcheries and by clam farming. Assistance is needed specifically in the exchange of information and, if possible, in sponsoring training for three Tokelauans in the techniques of clam farming and turtle hatching.
- Record traditional knowledge and practice on the use and conservation of resources.
- Secure three areas for national parks 1. Fakaofu, 2. Nukunono, 3. Atafu. Provide assistance and support for the preparation of management of the new parks.
- Prepare a National Conservation Strategy.

TONGA

1. Assess and evaluate the volume and extent of the *Goniopora* coral communities, otherwise commonly known as brain coral, for medicinal purposes.
2. Assess and evaluate the result and success of the giant clam (*Tridacna sp.*) rejuvenation programme in Tonga.
3. Undertake ecological studies of Eua Island in Tonga.

VANUATU

- Develop a National Conservation Strategy - Phase III.
- Establish a Kauri Reserve on Erromango Island involving:
 - . negotiation with and compensation of customary land owners as appropriate;
 - . survey and inventory of proposed area;
 - . development of management plan;
 - . support for park officer training and positions.
- Survey and inventory the mangrove areas of Malekula.

- Undertake a survey of Trochus and Giant Clam resources.
- Develop a coastal conservation management plan.
- Establish recreational reserves on Espiritu Santo and Malekula involving:
 - . survey and inventory of proposed areas;
 - . negotiation with and compensation of customary land owners as appropriate;
 - . development of management plans;
 - . support for marine conservation officer.

WESTERN SAMOA

- Carry out detailed ecological inventories with particular emphasis on the presence of endangered species for the following potential or existing protected areas:
 - a) Falealupo (proposed)
 - b) Tafua (proposed)
 - c) Mt. Va'ai Scenic Reserve
 - d) Palolo Deep Marine Reserve
 - e) Vailima Botanical Garden.
- Develop and implement management plans for the areas listed above.
- Review existing management plans for protected areas and amend or develop new plans.
- Strengthen the existing administrative and management capability of the protected area system by recruitment of appropriate personnel and provision of suitable training.
- Establish and operate a mobile environmental education unit with provision of personnel and operating costs.
- Develop a National Conservation Strategy.
- Pursue establishment of a protected area in the Aleipata Islands, following upon the conclusions and recommendations of the SPREP report 'Marine Environment Survey: Proposed Aleipata Islands National Park, Western Samoa'.

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- Dahl, A.L. 1980. *Regional Ecosystems Survey of the South Pacific Area*. South Pacific Commission/IUCN Technical Paper 179. South Pacific Commission, Noumea, New Caledonia.
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A REGIONAL MARINE TURTLE CONSERVATION AND MANAGEMENT PROGRAMME FOR THE SOUTH PACIFIC REGION

**Developed by the Marine Turtle Working Group
at the Fourth South Pacific Conference
on Nature Conservation
and Protected Areas**

INTRODUCTION

It is now generally accepted that the conservation of migratory species such as marine turtles cannot be achieved solely by conservation measures at the national level. International and/ or regional co-operative efforts that involve 'range' countries are necessary to ensure the long term survival of marine turtles and other migratory animals. In recognition of this situation and the importance of marine turtles as a cultural and subsistence resource of the peoples of the South Pacific, the second Intergovernmental Meeting of the South Pacific Regional Environment Programme (SPREP) which was held in Noumea, New Caledonia, 27 June - 1 July 1988, endorsed the recommendation 'that a project for the co-ordination and integration of regional marine turtle management initiatives be developed which will focus on the promotion of field conservation activities, the development of supporting legislation and public education programmes and the development of regional arrangements for marine turtle management.'

The meeting further requested the representative of UNEP, which is the Secretariat of the Action Plan for the Protection and the Development of the East Asian Seas Region, to bring the problem of marine turtle management to the attention of the forthcoming Intergovernmental Meeting convened under that Action Plan with a view to seeking inter-regional co-operation between SPREP and the East Asian Seas Region on the subject.

To implement the recommendation SPREP sought the assistance of the Australian National Parks and Wildlife Service with the development of a draft regional programme for consideration by a special purpose working group at the Fourth South Pacific Conference on Nature Conservation and Protected Areas. Utilizing assistance from the CITES Secretariat for the conference, a number of people with regional experience in aspects of turtle conservation, management and research were drawn together to finalize the proposed programme, which was subsequently endorsed for inclusion in the Action Strategy for Nature Conservation in the South Pacific region adopted by the Conference.

A phased work programme will be developed for the overall programme and funding support for its implementation will be sought from appropriate international conservation and development assistance agencies. The overall implementation of this programme will be co-ordinated by SPREP. It must be recognized that the success of the programme will also require the co-operation and support of the member countries of the South Pacific Regional Environment Programme and other regional and international institutions as well as SPREP. Of particular importance is the support and involvement of the many national and regional marine resource management agencies either located or working within the South Pacific region.

SPECIES OCCURRENCE AND DISTRIBUTION

Six of the seven species of marine turtles found in the world today are found in the South Pacific Region. They are the Green turtle *Chelonia mydas*, the Hawksbill turtle *Eretmochelys imbricata*, the Loggerhead turtle *Caretta caretta*, the Olive or Pacific Ridley *Lepidochelys olivacea*, the Flatback turtle *Chelonia depressa* and the Leatherback turtle *Dermochelys coriacea*. Of these, the flatback turtle has a very restricted distribution in northern Australian and southern Papua New Guinean waters. The distribution of the remaining five species of marine turtles in the South Pacific region is shown in Table 1.

The most abundant, widespread and migratory marine turtles in the South Pacific region are the green and hawksbill turtles. Although the loggerhead turtle appears to be less widespread and abundant than the green and the hawksbill, tag recoveries indicate that Australian nesting loggerheads migrate to feeding grounds in Papua New Guinea and New Caledonia.

Tag recoveries from existing mark-recapture programmes (Figure 1) provide an indication of the movements of marine turtles throughout the South Pacific region. More intensive tagging programmes throughout the South Pacific region will provide a more comprehensive and accurate picture of marine turtle movements.

SOCIO-ECONOMIC IMPORTANCE OF MARINE TURTLES TO THE SOUTH PACIFIC PEOPLES

In areas where they are abundant, green and hawksbill turtles have been hunted for centuries to supply the basic needs of the traditional subsistence village community e.g. food, tools, decoration and items for trade. Hunting practices which have evolved over many years represent the oral knowledge of the village relating to the turtle, where it lives, its habits and the most efficient ways of hunting it. The complex social interactions involved in observing the many rules, rituals and traditional ownership patterns contribute to make the hunt an organized and disciplined affair and the consumption of turtles a special social event in the village. Where they occur, these traditional patterns of capture and consumption have helped to regulate the exploitation of marine turtles.

PRESSURES ON MARINE TURTLE POPULATIONS

In many areas in the South Pacific today, easier access to natural resources and the increasing trend to sell marine turtles for cash in town markets has resulted in many situations where turtle exploitation is unregulated. If unchecked the depletion and possible disappearance of the resource and its economic, social and cultural values could occur. However, if wisely managed, it should be possible to combine conservation goals with sustainable levels of harvest of marine turtles for the benefit of the present and future generations.

The IUCN Red Data Book lists the green and hawksbill turtles as endangered. The primary cause of decline in green turtle populations is the systematic commercial exploitation of eggs and adults. While the green turtle has been traditionally used as a food source, the introduction of cash economies, access to improved technology and the increase in human populations are factors which could raise subsistence harvests to levels which are no longer sustainable. The primary cause for the widespread depletion of hawksbill turtles is the commercial trade in raw tortoiseshell and tortoiseshell products.

OVERALL AIM OF THE PROPOSED REGIONAL MARINE TURTLE CONSERVATION AND MANAGEMENT PROGRAMME

The overall aim of the proposed Regional Marine Turtle Conservation and Management Programme is:

To conserve marine turtles and their cultural, economic and nutritional values for the coastal peoples of the countries served by the South Pacific Regional Environment Programme (SPREP).

OBJECTIVES

The Regional Programme has the following objectives:

1. Implementation

1.1 To implement the Programme by:

- a) seeking the agreement and support of the SPREP Member countries and action by the governments and peoples of the region for an integrated long-term programme to conserve marine turtles, and
- b) establishing a Project Team Leader and a Project Team based in the South Pacific to implement the objectives of this programme.

To be achieved by this Conference:

- a) endorsing the Regional Marine Turtle Conservation and Management Programme, and its adoption as an element of the Action Strategy for Nature Conservation in the South Pacific region, and
- b) recommending the inclusion of the programme into the SPREP Work Programme.

2. Information

2.1 To develop a regional database for marine turtles.

To be achieved by the establishment and maintenance of an ongoing regional database and information network for marine turtles. This database should include existing databases on marine turtles, if relevant to the region (e.g. database held at the World Conservation Monitoring Centre).

2.2 To review all previous work carried out on marine turtles in the region with the aim of identifying the current status of research and management efforts in the region.

To be achieved by contracting a consultant (consultants) to carry out a literature search of published and unpublished material, reports and articles, and to interview government agencies and marine turtle researchers who have worked/are working in the South Pacific region. This information to be included into the regional database.

2.3 To contact government agencies within the region with the responsibility for the management and/or conservation of marine turtles with the aim of:

- a) identifying existing legislation, protected areas and enforcement mechanisms relating to marine turtles in the region, and
- b) determining existing gaps in management coverage.

To be achieved by contracting a consultant to collect the information required, and identifying priorities for action. This information to be included in the regional database.

3. Institution Building

- 3.1 **To assist** countries, where necessary, to develop appropriate legal, policy and administrative measures for the preparation and implementation of national marine turtle conservation and management programmes.

To be achieved by regional/international funding agencies making specific grants to governments to assist them to establish adequately staffed and funded long-term programmes which are consistent with the regional priorities for the continued survival of the marine turtle resource in the region.

- 3.2 **To provide** training and education opportunities for appropriate personnel involved with marine turtle conservation in the region, as requested by governments.

To be achieved by co-ordinating a regional training programme involving institutions, local community groups (e.g. NGO's, traditional landowners) and government agencies.

4. Management Related Research

- 4.1 **To gather** reliable data on the population status and distribution of marine turtle species occurring in the region.

To be achieved by:

- a) the establishment of a series of baseline survey sites in countries and along important migratory paths throughout the region,
- b) the encouragement, financial support and regional coordination of tagging programmes including standardization of tags, centralization of return address, publicity and record keeping; and
- c) the identification of genetically discrete populations of marine turtles in the region.

- 4.2 **To encourage continuing** research on all aspects of sea turtle biology (e.g. growth rates, life histories, population dynamics, mortality rates); management techniques, and the socio-economic, cultural and nutritional values of marine turtles for traditional communities.

To be achieved by seeking the co-operation of funding agencies to give greater priority to funding research on marine turtles and on the development of effective management techniques for the conservation of marine turtles, both within and outside the region.

- 4.3 **To investigate** ways of obtaining information on marine turtle activity in isolated areas.

To be achieved by:

- a) investigating existing resource surveillance activities such as overflights, coast watching, and fishery patrol vessels, by evaluating the potential for integrating surveillance of key turtle habitats in isolated areas into these activities, and
- b) by recommending implementation measures to relevant government agencies.

5. Traditional Knowledge

- 5.1 **To encourage** the development and implementation of national programmes to document traditional knowledge and the socio-economic importance of the hunting and consumption of marine turtles.

To be achieved by regional and national agencies undertaking marine turtle projects within countries to collect this information using cost-effective means (e.g. questionnaires and postal surveys such as those developed by Papua New Guinea and Vanuatu).

- 5.2 **To promote** the inclusion of relevant traditional ecological knowledge in conservation and management strategies for marine turtles.

To be achieved by encouraging governments to incorporate traditional ecological knowledge, established rights and traditional tenure systems into the design of marine turtle conservation and management programmes.

- 5.3 **To promote** the involvement of traditional landowners and traditional resource users in the management of the marine turtle resource.

To be achieved by facilitating joint participation in management decisions by government authorities, traditional landowners and traditional resource users.

- 5.4 **To encourage** the incorporation of appropriate traditional ecological information relating to marine turtles into curricula and educational activities for schools.

To be achieved by encouraging educational institutions to design projects relating to traditional information on marine turtles, and encouraging close liaison between conservation agencies and education institutions in designing curricula.

6. Conservation Measures

- 6.1 **To identify** important breeding and feeding sites and encourage countries to protect and manage these sites.

To be achieved by the Project Team Leader and in consultation with the Project Leader Team developing a list of critical and key habitats (both terrestrial and marine) for marine turtle populations within the region and encouraging countries through the provision of technical expertise and/or financial assistance, to prepare and implement plans for the protection and management of these habitats, in consultation with traditional landowners.

- 6.2 **To develop** applicable guidelines for the management of turtle harvesting for incorporation into national marine turtle legislation.

To be achieved by encouraging and supporting countries to:

- a) survey turtle nesting sites and to monitor all forms of impact including traditional/subsistence harvesting, local/national/regional/international levels of commercial exploitation; incidental catch through fisheries interactions and the impact of pollution or habitat degradation (both terrestrial and marine);
- b) identify trends and to set realistic guidelines for traditional utilization, and
- c) encourage countries to take where necessary specific action to reduce or minimize these impacts.

7. Conservation Education/Publicity Programmes

- 7.1 **To develop** an education programme promoting the conservation of marine turtles in the region.

To be achieved by the Project Team Leader and in consultation with the Project Team co-ordinating the implementation of a regional education programme on marine turtle conservation, and assisting individual countries in the production and translation of various educational materials into local languages.

- 7.2 **To promote** community involvement by non government conservation groups, church groups etc. in development of local or community projects involving marine turtles (e.g. nest protection, recording traditional uses for turtles); and for the distribution of educational material to local communities.

To be achieved by the Project Team Leader and in consultation with the Project Team co-ordinating in consultation with government agencies, a programme of community involvement through the provision of technical and/or financial assistance and educational materials to community groups.

8. International Efforts

- 8.1 **To encourage** countries to accede to international and regional species conservation agreements (especially CITES) and to review the need for specific provisions relating to marine turtle conservation in regional agreements.

To be achieved by the provision of technical expertise and financial assistance to enable countries to establish administrative procedures required to accede to and implement international agreements.

- 8.2 **To participate** in international efforts promoting the conservation, management and wise use of marine turtles.

To be achieved by the regional programme linking in with marine turtle programmes in other regions through liaison with the IUCN/SSC Marine Turtle Specialist Group, the UNEP East Asian Seas Programme, the IUCN/WWF TRAFFIC Network and other non-government organizations.

- 8.3 **To encourage** the exchange of information and development of joint conservation programmes between "range" countries within the region.

To be achieved by those countries entering into bilateral/multilateral agreements to establish the framework for the development of long-term management and conservation strategies for shared marine resources.

Table 1. Distribution of Feeding and Nesting Populations of Marine Turtles in the South Pacific Region

	Green	Hawksbill	Loggerhead	O/Ridley	Leatherback
Australia	N/F	N/F	N/F		
Cook Islands	N	N*			
Federated States of Micronesia	N/F	N/F*			
Fiji	N/F*	N/F*			
French Polynesia	N/F*	*			
Kiribati	N/F	F			
Marshall Islands	N/F*	N*			
New Caledonia	N/F	LN	N/F		
Northern Mariana Islands	F	F			
Palau	N/F	N/F			
Papua New Guinea	N/F	N/F	LN/F	LN/F	N
Solomon Islands	LN/F	N/F			N
Tonga	N/F	LN*			N
Tuvalu	N/F*	F*			
Vanuatu	N/F*	N/F*			

* denotes little information available

N denotes nesting population

F denotes feeding population

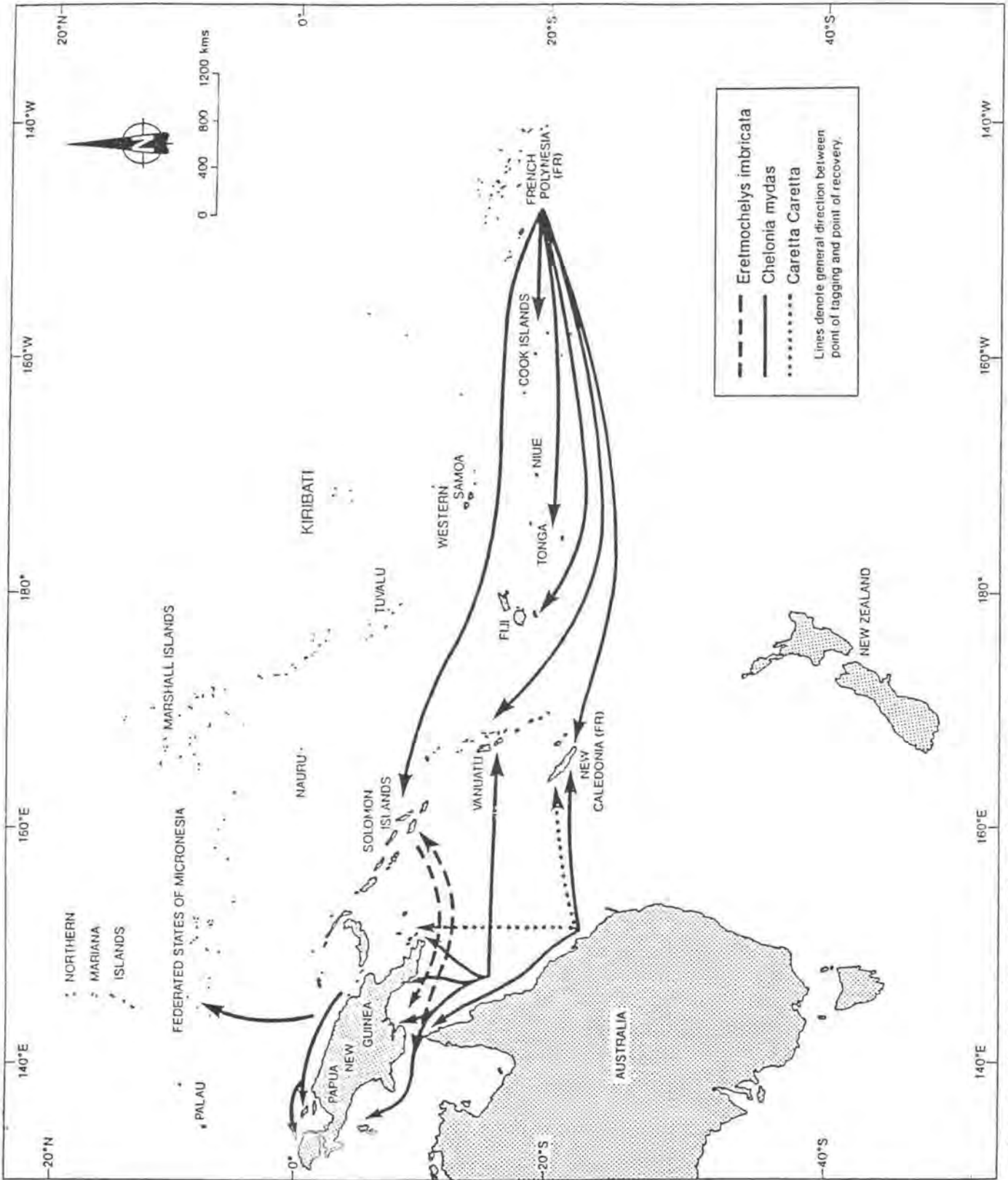


Figure 1: Marine Turtle Migrations in the South Pacific Region.

**A REGIONAL AVIFAUNA CONSERVATION STRATEGY
FOR THE SOUTH PACIFIC REGION**

**Developed by the Avifauna Working Group
at the Fourth South Pacific Conference
on Nature Conservation
and Protected Areas**

BACKGROUND

A regional conservation strategy focusing specifically on birds in the South Pacific is appropriate for several reasons. In many cases birds provide highly visible indicators of environmental condition and change. There is considerable public interest, knowledge and sympathy for birds. It is possible to capitalize on that interest as a means of furthering the environmental protection cause generally. There are a number of bird conservation activities presently under way in the region. While all contribute to the welfare of the region's avifauna, they nevertheless constitute a largely ad hoc approach, meaning that there is insufficient coverage of some major issues. There is still a serious lack of information on the status and distribution of many species and there are still species and groups of species requiring urgent attention. Priorities are therefore proposed under the general headings of information, survey and species recovery and management. This strategy was prepared by a special working group at the Fourth South Pacific Conference on Nature Conservation and Protected Areas held in Port Vila, Vanuatu, 4-12 September 1989, and is proposed for a two year period, with a review to be agreed on following the ICBP 20th World Conference, November 1990, at which a Symposium on Pacific Island bird conservation will be held.

GOAL

The goal of the regional avifauna conservation strategy is:

**TO ENSURE THE WISE MANAGEMENT OF BIRD COMMUNITIES AND THEIR
HABITATS IN ORDER TO FACILITATE THE RECOVERY OF ENDANGERED SPECIES
AND THE CONSERVATION OF ALL OTHER INDIGENOUS SPECIES.**

OBJECTIVES

The regional strategy has the following objectives:

1. Information

To **document** relevant information on avifauna and make it available to the countries in the region in a form appropriate for their use.

To be achieved by:

- 1.1 Establishing a regional database for avifauna, concentrating particularly on information on distribution and abundance both from local sources and the scientific literature.
- 1.2 Establishing a reporting procedure whereby outputs from the database are made available to countries, researchers, managers and planners in a form most suitable for their individual use.
- 1.3 Using current projects in the Cook Islands and French Polynesia as models, facilitate the production of a series of bird posters for selected countries in the region.
- 1.4 Writing and producing a 'popular' account of bird conservation issues suitable for use in the region.
- 1.5 Preparing a manual of techniques of study and management of birds.
- 1.6 Promulgating currently available information on the danger of the introduction of rats and other predatory animals to islands and providing information on how to avoid this occurring and mitigate against their impact.
- 1.7 Liaising with ICBP in the development of their Biodiversity Project and their revision of the Red Data Book to help ensure that these documents are of direct relevance to the Pacific region.
- 1.8 Liaising with TRAFFIC (Oceania) in order to make use of and contribute to their review of trade in birds of the Pacific region.

2. Avifauna Surveys

To identify regional and national priorities and to plan and implement projects for the survey of priority areas.

To be achieved by:

- 2.1 Reviewing present and future plans for natural resource inventories in the region and promote the integration of surveys of avifauna into those inventories. Current ecosystem mapping in Western Samoa and a proposed forest inventory in Vanuatu are candidates for this activity.
- 2.2 Developing, in liaison with government and NGO organizations, a priority list of islands and habitats requiring survey. Priorities currently include forest habitats in Papua New Guinea, the Solomon Islands, Vanuatu, New Caledonia, Fiji and Western Samoa; and seabird colonies in Kiribati, Tuvalu and French Polynesia. Other areas will also be included.
- 2.3 Developing and producing a rapid inventory methodology for carrying out the above surveys.
- 2.4 Overseeing, in conjunction with local agencies, outside interest groups, government agencies and volunteers, the implementation of priority surveys.
- 2.5 Making a list of priority species, for which particular surveys are required and developing the appropriate methodologies. Species include San Cristobal mountain rail, cagou, Tuamotu sandpiper, tooth-billed pigeon, Marquesas pigeon, Society Islands pigeon, silktail, Ponape mountain starling and Santo mountain starling.

3. Species Management

To develop species recovery and management plans for those species whose conservation is a priority and for which there is sufficient information available.

To be achieved by:

- 3.1 Developing and implementing species recovery programmes. A recovery plan has already been prepared for the Rarotonga flycatcher. In consultation with local agencies, such recovery plans are required for a number of rare species. For most, however, more information on status and factors affecting their abundance is required before a recovery plan can be prepared.
- 3.2 Establishing a programme of research on the sustainability of harvest of a range of exploited species. The first phase of this research is literature review of the subject of sustainable harvest, concentrating particularly on seabirds, pigeons and birds of paradise.
- 3.3 Applying the results of the above research programme to management planning for a range of exploited species and colonies.

4. Public Education and Publicity

To develop an education and publicity programme which promotes public understanding of the need for bird conservation and its benefits and support for wildlife conservation programme in general.

To be achieved by :

- 4.1 Developing and distributing regionally applicable and appropriate education and publicity materials (posters, booklets, pamphlets, video, etc.) on avifauna and avifauna conservation.
- 4.2 Utilizing the services of volunteers, schools and community and service groups in national level bird conservation projects and programmes.
- 4.3 Publicizing avifauna conservation projects through the local and regional media (radio, newspapers, magazines and television).
- 4.4 Recording and promoting local and traditional knowledge of bird species and using this for conservation management, publicity and education purposes.

IMPLEMENTATION

The implementation of this programme will be co-ordinated by the South Pacific Regional Environment Programme working with the governments of the region, international conservation and funding assistance agencies and NGO conservation organizations and individuals. Funding for the wide range of activities embraced by the programme will be sought from donor agencies and the avifauna survey projects will be integrated with wider natural diversity surveys whenever possible. A phased work programme based on the identification of priority activities for attention over the next two years will be developed to assist with programme implementation and securing funding. The overall programme will also be incorporated into the 1991/92 SPREP Work Programme to be developed in September 1990 and specific elements will be selected for funding under that programme. The programme will also be reviewed for adoption by the ICBP 20th World Conference to be held in November 1990.

