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A REGIONAL MARINE TURTLE
CONSERVATION AND MANAGEMENT
PROGRAM

by

C. Sylvia Spring,
Australian National Parks,
and Wildlife Service,
Canberra.

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.

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

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 Turtle and the Hawksbill Turtle. 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.

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 eg. 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 organised 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 a situation where there is unregulated exploitation. 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 turtle and the hawksbill turtle 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.

SPREP RECOMMENDATION

At the second Intergovernmental Meeting of the South Pacific Regional Environment Programme (SPREP) which was held in Noumea, New Caledonia, 27 June - 1 July 1988, the following resolution was passed :

" 79. Following discussion and general support , the meeting 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. "

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

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

To achieve the agreement and support of the SPREP Member Countries and regional and international conservation agencies for an integrated, co-ordinated long term program to conserve marine turtles and their cultural, economic and nutritional values for the coastal peoples of the South Pacific Region.

OBJECTIVES AND ACTIONS

The Regional Program has the following objectives:

1. INFORMATION

- 1.1 To develop a regional database for marine turtles.
To be achieved by the establishment and maintenance of a regional database and information network for marine turtles. This database should include existing databases on marine turtles, if relevant to the South Pacific Region eg. database held at the IUCN Conservation Monitoring Centre.
- 1.2 To review all previous work carried out on marine turtles in the South Pacific 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 material and to interview marine turtle researchers who have worked/ are working in the South Pacific Region.

2. INSTITUTION BUILDING

- 2.1 To identify 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 where gaps in coverage exist and priorities for action.
To be achieved by contracting a consultant to collect the information required, by interviewing relevant government agencies.
- 2.2 To assist countries to develop appropriate legal, policy and administrative measures to prepare and implement national marine turtle conservation and management programs.
To be achieved by regional/ international funding agencies making specific grants to South Pacific Governments to establish adequately staffed and funded programs which are consistent with the regional priorities for ensuring the continued survival of the marine turtle resource in the South Pacific Region.
- 2.3 To provide training and education opportunities for appropriate personnel involved with turtle conservation in the South Pacific.
To be achieved by developing a regional training program involving institutions with well established marine turtle conservation programs.

3. RESEARCH/MANAGEMENT

- 3.1 To encourage further research into marine turtle biology and the development of effective management techniques for the conservation of marine turtles in the South Pacific Region.
- 3.2 To gather reliable data on the population status and distribution of marine turtle species occurring in the Region.
To be achieved by the establishment of a series of baseline survey sites in countries and along important migratory paths throughout the Region.
- 3.4 To undertake research on all aspects of sea turtle biology eg. growth rates, life histories, population dynamics, mortality rates ; as well as research into management techniques such as headstarting and ranching.
To be achieved by seeking the co-operation of funding agencies to give greater priority to funding research on the biology of marine turtles and development of effective management techniques for the conservation of marine turtles.

4. TRADITIONAL KNOWLEDGE

- 4.1 To encourage the development and implementation of national programs to document traditional knowledge on and the cultural/ economic significance surrounding the hunting and consumption of marine turtles.
To be achieved by regional and national agencies establishing marine turtle projects within countries to collect this information. Funding to be provided by regional/international agencies such as Greenpeace, WWF etc.
- 4.2 To promote traditional ecological knowledge as relevant for inclusion into conservation and management strategies for marine turtles.
To be achieved by encouraging governments to incorporate established rights and traditional tenure systems into the design of marine turtle conservation and management programs.
- 4.3 To promote the involvement of traditional landowners and resource users in the management of the marine turtle resource.
To be achieved by facilitating dialogue between management authorities and traditional communities through joint participation on decision making committees.
- 4.4 To encourage the incorporation of traditional ecological information into appropriate curricula and educational activities for schools.
To be achieved by encouraging educational institutions to design projects to collect traditional information on marine turtles, and establishing close liaison between conservation agencies and education institutions in designing curricula.

5. CONSERVATION MEASURES

- 5.1 **To identify** and support a range of marine turtle conservation measures at the national, regional and inter-regional levels.
- 5.2 **To identify** regionally important nesting sites and encourage countries to protect these sites
To be achieved by the Project Team developing a list of critical or key habitats (both terrestrial and marine) for marine turtles within the South Pacific Region and encouraging countries through the provision of technical expertise and/ or financial assistance to prepare and implement plans for the protection of these habitats.
- 5.3 **To develop** regionally applicable guidelines for the management of turtle harvesting for incorporation into national level marine turtle legislation.
To be achieved by encouraging and supporting countries to 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) to identify trends and to set realistic guidelines for traditional utilisation.

6. CONSERVATION EDUCATION/PUBLICITY PROGRAMS

- 6.1 **To develop** and implement an education program appropriate for individual countries in the South Pacific region and to include information on the biology of the marine turtle resource and the traditional use of the resource that is compatible with its long term conservation.
To be achieved by the Project Team developing and implementing a regional education program including the production and distribution of various educational materials in local languages, on sea turtle conservation.
- 6.2 **To promote** community involvement by non government conservation groups, church groups etc. in development of local or community projects involving marine turtles eg. nest protection, documentation of traditional uses for turtles; and for the distribution of educational material to local communities.
To be achieved by the Project Team coordinating a program of community involvement through the provision of technical and/ or financial assistance and educational materials to community groups.

7. INTERNATIONAL EFFORTS

- 7.1 **To encourage** and support countries to accede to international and regional species conservation agreements and to review the need for specific marine turtle conservation policies in regional agreements such as the APIA and SPREP Conventions.
To be achieved by the provision of technical expertise and financial assistance to enable countries to establish administrative procedures required to accede to International Agreements especially CITES. (ANPWS has considerable experience and expertise in this area and may be able to offer assistance to countries in the form of training programs or through the exchange of personnel).

- 7.2 **To participate** in international efforts promoting the conservation and sustainable use of marine turtles.
To be achieved by the Regional Program linking in with marine turtle programs in other regions, through liaison with the IUCN/SSC Marine Turtle Specialist Group and the UNEP Regional Seas Program, the IUCN Traffic Specialist Group and other non-government organisations.
- 7.3 **To encourage** the exchange of information and development of joint conservation programs between adjacent range states within the Region.
To be achieved by neighbouring range countries entering into bilateral agreements to establish the framework for the development of long-term management and conservation strategies for shared marine resources.

8. IMPLEMENTATION

- 8.1 **To implement** this Program by seeking action by the governments and peoples of the South Pacific Region.
To be achieved by this Conference seeking financial assistance from international funding agencies to establish a Project Co-ordinator and a Project Team based in the South Pacific to implement the objectives of the Regional Marine Turtle Conservation and Management Program.

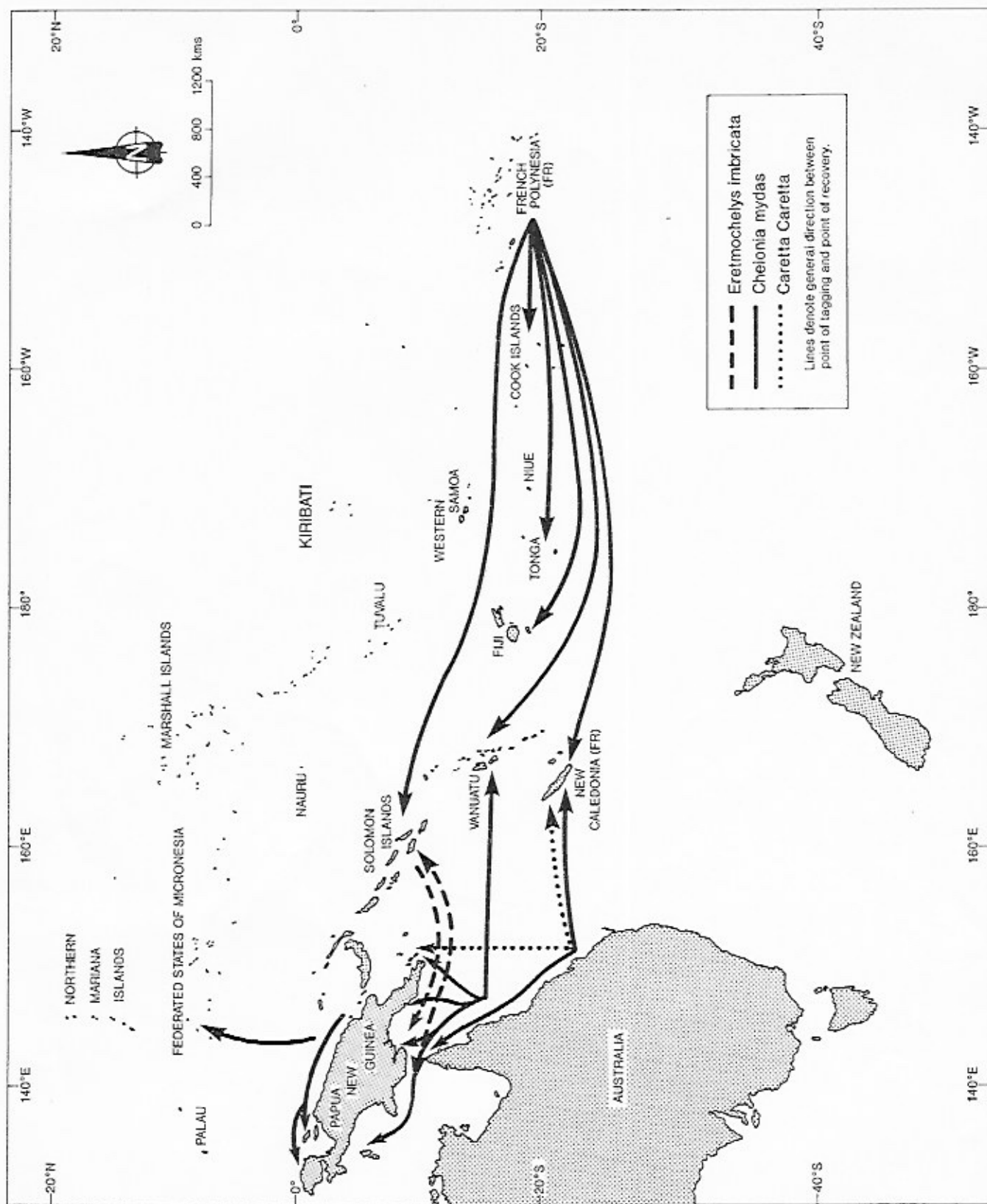


Figure 1: Marine Turtle Migrations in the South Pacific Region.