

Drafting a management plan in the Cook Islandsby Julian Dashwood
Ministry of Marine Resources, Cook Islands

A "Pearl Culture and Pearl Shell Fisheries Management Plan" for the Cook Islands was drafted in January - February, 1990, to provide a coordinated management approach for the booming pearl industry there. Culture developments in the Cook Islands have long been marred by conflicts between farmers, foreign interests, Island Councils, and the Government's Ministry of Marine Resources. Resolution of these conflicts, rational development of the industry, and prevention of overfishing or disease problems all require management mechanisms to be agreed upon by all industry participants.

The draft was prepared by Neil Sims, as part of a consultancy for the United States Agency for International Development. The drafting process centred on Manihiki, where the pearl culture industry is developing most rapidly. Public meetings and discussions with Island Councils were also held on Rakahanga and Penrhyn Atolls, to explain the goals of the Plan, and to review the decisions made in Manihiki. Input was also obtained from Marine Resources officials, pearl farmers, and other concerned parties on Rarotonga.

The Plan was drafted through a process of introductory village meetings, which outlined the need for and function of the Plan, followed by in-depth consultations with individual farmers, divers, and Island Councillors. A range of options were then presented to the Island Council. Unresolved issues were taken back to further

village meetings, for more consideration. Discussion and reviewing will continue, to allow a consensus to be reached among all parties before final approval.

The need for management is widely recognised on Manihiki, where there was a strong awareness of the limits of the pearl shell resource, and the inherent ceilings on pearl farm growth. Three areas of concern were particularly emphasised: controlling access by outsiders, minimising conflicts between farmers, and between farmers and divers, and preventing the establishment of disease problems. Pearl farming licenses are now reserved exclusively for Manihikians, yet even they must fulfill residence requirements and maintenance obligations. The legal procedures and administrative processes of acquiring farm licenses and lease areas were also more clearly defined. There was wide support for regulating farming and culture activities to minimise conflicts and help prevent diseases. Opinions diverged on the need for a formal pearl farmers' association, and what such a body's functions might be.

The people and Island Councils on Rakahanga and Penrhyn were keenly aware of the potential for pearl culture, but their attitudes towards farming and management were less clear. They considered themselves minor players in the Management Plan drafting, but were very interested in further technical assistance to expand their farming efforts.

Western Australian research programme funding

The following extract from *Australian Fisheries* (November, 1989, pp 47-49) details two components of the West Australian Fisheries Department pearl oyster research programme. The description is taken from a listing of projects funded in 1989 under the Fishing Industry Research and Development Committee account (FIRDC).

89/60: On-growing Mariculture Techniques for the Pearl Oyster *Pinctada maxima* Spat in Western Australia

Period: July 1989 - June 1990

Supervisor: Dr. J. Penn, Western Australian Department of Fisheries

Contact Officer: Mr. R. Dybdahl (09) 477 1366

Support: 1989-90 : A\$ 103,390

Objectives: To enhance the cultured pearl industry in Australia by increasing the supply of pearl oysters through the use of artificial propagation methods.
To further test and develop equipment for growing 0 year class oysters.
To further develop and document husbandry protocols for 0+ and 1+ year oysters.

Background: Disease and availability of natural stock limit the pearl oyster culture industry, currently valued at A\$ 55 million. Hatchery-produced pearl oysters are required for future economic expansion and to alleviate any recruitment effects on the wild stock fishery. This project continues the development of on-growing techniques for hatchery-produced spat.