

Moves in French Polynesia to improve standards and marketing by Philippe Cabral, EVAAM Rangiroa, French Polynesia

A new association of independent producers has recently been created, called the SPPTI (*Syndicat professionnel des perliculteurs de Tahiti et de ses îles*, or the Consortium of Pearl Producers of Tahiti and its Islands). Its objectives are to standardise a professional and technical approach to pearl classification based on physical criteria of quality and to regroup production to ensure better and more efficient national and international marketing of pearls – basically, the exportation of a higher quality product. The association brings together approximately 60 independent farmers in the Tuamotu Islands.

A new government agency, the *Groupement d'intérêt économique (GIE) Perles de Tahiti,* has also just been created. Made up of members of the government and professionals, it is responsible for developing a better promotion strategy for our cultured pearls on the world scene.

Editor's note: also see the article on page 12: The Papeete plan to keep pearls in black

Solomon Islands pearl oyster project initiates blacklip spat collector trials

by Johann Bell, ICLARM Coastal Aquaculture Centre Honiara, Solomon Islands

The Australian Centre for International Agricultural Research (ACIAR) has provided ICLARM's Coastal Aquaculture Centre with funding for two years to assess the feasibility of farming pearl oysters in Solomon Islands.

The project stems from the observation that reasonable quantities of both blacklip and goldlip pearl oysters have been harvested from many areas within Solomon Islands on a regular basis. In view of the success of the blacklip pearl industry in Tahiti and Cook Islands, ACIAR, ICLARM and the Solomon Islands Fisheries Division are collaborating to determine whether it is possible to establish blacklip pearl oyster farms in other types of coral reef habitats in the Pacific, e.g. the more open lagoon complexes of Solomon Islands. The most important question in this regard is, 'Are there sufficient wild spat of the blacklip pearl oyster in Solomon Islands to set up a viable industry?' To answer this question, Johann Bell and Mark Gervis, from the Coastal Aquaculture Centre, have designed a sampling programme to measure spatial and temporal variation in abundance of blacklip spat over a wide area of Solomon Islands.

Spat of blacklip pearl oysters will be collected from three sites in each of five main areas (i.e. a total of 15 sites). At each site, a 100m longline will be set up. Spat collecting bags will be suspended from the longline 2–3 m below the surface. Fifty spat bags will be added to each longline every three months.

Each group of 50 spat bags will be removed after they have soaked for six months. This procedure is designed to provide a reasonable 'window' to catch any spat present during a given three-month period, and then allow enough time for the spat to grow to a size where they can be identified easily. Two types of spat collecting material will be used for the spat collecting bags: shadecloth and black plastic sheet.

The five areas to be sampled will be chosen from the following regional centres: Marau, Tulagi, Auki Yandina, Seghe, Munda and Gizo. All these areas

provide access to a range of sheltered reef habitats. adult gol The final selection of the five areas will be based on site inspections (November 1993) and historical and his

Blacklip spat collected at each site will be grown out to market size in lantern cages in nearby coastal villages. This is an important part of the project: one of ICLARM's goals is to develop ways of increasing income from coral reef habitats to benefit coastal villagers in developing countries. The hope is that the sampling programme will identify areas where villagers can reliably catch and grow enough spat to attract an overseas pearl farming company. The villages would then sell their live mature shells to the industry.

The ACIAR funds will also be used to provide an estimate of the distribution and abundance of wild

First successful larval rearing of Marshall Islands blacklip pearl oysters adult goldlip oysters in Solomon Islands. There are also plans to collaborate with Professor John Lucas and his team from James Cook University in Townsville, Australia, to investigate low-cost methods of rearing blacklip or goldlip oysters in hatcheries.

In addition to the part-time involvement of Johann Bell and Mark Gervis, the following staff will be employed on the project full time: a Research Associate (Mr Kim Friedman), two full-time technical aides (to be appointed), an officer from Solomon Islands Fisheries Division (Mr Gideon Tiroba), and Mr Robert Jimmy, a recent graduate from the University of Tasmania in Australia. Robert, who is from Vanuatu, has volunteered to work on the project during the first year, with a view to assessing the feasibility of a similar development in his country.

> by Dale Sarver, Black Pearls, Inc. Kona. Hawaii

Black Pearls, Inc. operates a blacklip pearl oyster hatchery and experimental growout facility in Kailua-Kona, Hawaii. In September 1993, the company was awarded a U.S. National Marine Fisheries Service grant to develop black pearl farming in the Marshall Islands. The initial phase of the project will focus on the lagoon of Namdrik atoll, and will last 18 months.

Pearl oysters are naturally scarce in the Marshall Islands, as in many of the other island groups in the South Pacific. This scarcity is due to either earlier overfishing, heavy predation by fish and octopii, or a natural flushing of the larvae out of the lagoons. In most cases, there are not enough oysters to develop commercial pearl farms, even though the oysters may grow well and may be capable of producing excellent pearls.

Black Pearls, Inc., in conjunction with the Marshall Islands Marine Resources Authority, is building on earlier work carried out by the South Pacific Commission and Forum Fisheries Agency. A pilot pearl farm is being developed in the Namdrik lagoon, with about 3,000 wild-collected adult oysters currently hung on longlines. Some of these will be seeded for pearls in the next few months. Artificial spat collectors and remote quarantine hatchery technology will also be evaluated as sources of supply of further oysters for farming. Several thousand spat collectors are currently deployed throughout the lagoon, and more will be set over the next year.

Hatchery production of spat is an integral aspect of this project. In October, 30 broodstock were transported to Hawaii and held in the Governmentapproved quarantine facility at the Natural Energy Laboratory of Hawaii in Kona. This hatchery has the unique capacity of using fossil seawater drawn from over 700 metres deep. This water has its origins in the Antarctic, and is essentially sterile. By using this water to hold broodstock and rear the larvae, the facility ensures that the Marshall Islands oysters never come into contact with the Hawaiian surface water. In addition, all effluent from the hatchery is disposed into an approved deep injection well. This prevents any possibility of disease transfer or genetic exchange between the Hawaiian and the Marshall Islands stocks. The spat can therefore be safely transferred back to the Marshall Islands once they have been reared to a suitable size.

All the broodstock shipped in October survived the trip and two successful spawns have been induced since their arrival. Spat from the first larval cycle are settling now, while the second cycle is currently in progress. Over the next year spat of various ages will be sent back to Namdrik for further grow-out.

This remote quarantine hatchery technology has exciting potential for many of the other island groups throughout the South Pacific.

levels of blacklip harvests.