

## Grading the pearls

Back on dry land the next day, Michael Kallis took me to meet David Norman, the Master Grader who is responsible for the grading of the harvested pearls and the selling of the crop. An unbelievable sight met my eyes when David Norman took me through the vault doors into the grading room. There was a sea of pearls everywhere! In bags, on the table, in the safe. The pearls are firstly roughly sorted by size and colour.

Then they are cleaned and logged into the computer. The bags are double checked to ensure the number inside tallies with the number stated on the tag and then given for grading. The graders, all dressed in white, are seated at a table covered in white. This is to ensure that the colour of the pearl is not affected by any other colour around it. Using a board to roll the pearls along they use their skills to check the shape, size and colour of the pearl.

The colour can vary from a greyish hue through to a golden colour. These pearls are then bagged according to their size, etc., and given to David Norman. He grades the pearls still further, for quality and for

sale purposes. Watching David at work surrounded by the sheer beauty of trays and trays of perfect pearls, destined to eventually make their way to the chic boutiques and jewellers around the world, is an image that will stay in my memory for a long time.

But none of this would be possible without the pristine, warm waters of the Australian coast. The companies using these waters need to work together to ensure that no pollution spoils this environment. The distance between each stretch of water used for the cultivation of the pearls is carefully regulated, as are the sizes of the farms.

The companies themselves take great care to keep the water free from pollution. Indeed, the whole pearl industry is environmentally friendly. Even the shells which can no longer be used for producing pearls are not wasted. The meat is taken from the inside and used in cooking. The shell is ground down for the mother of pearl products such as buttons.

If the future of the Australian pearl industry is to remain secure, everyone has to work together to ensure that the waters remain pure and unspoiled.



## Pearls vs Tuna

*by Neil A. Sims*

There is much mileage made in the regional media out of the Pacific tuna industry. It certainly demands attention: there is an entire agency devoted to regional fisheries management (read 'tuna'), and a branch of another agency expending a comparable effort on tuna research. There are standing committees and ad-hoc committees, and whole phalanxes of staff in just about every national fisheries office.

All this attention over what? The entire Pacific-wide tuna catch – including that of various foreign fishing fleets – had an annual value of around US\$ 1.7 billion in 1995 (Gillett, 1997). This is up considerably from 15 years ago, when the 1982 value of the catch was a mere US\$ 375 million. Tuna's contribution to Pacific Island economies is mainly through licensing fees to governments (this might possibly explain why

governments are so enamoured of the tuna industry). These access fees comprise around US\$ 66 million per year, for the entire region (Gillett, 1997).

There may be some potential for expansion of the catch to perhaps 50 or 100 per cent of its current volume, without endangering stocks, but the only way to significantly increase its value to the Pacific Islands is to encourage greater participation in the fishery on the part of the islanders. Some modest gains have been made in this arena, but they appear doomed to be always modest. Gillett (1997) estimated that locally-based tuna vessels contributed maybe US\$ 100 million per year to Pacific Island economies. There were perhaps 21 000 to 31 000 tuna-related jobs generated throughout the region (ibid).

By contrast, gross revenues for pearls from French Polynesia alone are around US\$ 150 million. This represents roughly 10 per cent of the total value of the regional tuna catch—from one country, thirty odd lagoons. There are six or seven countries which can offer considerable scope for black pearl expansion. With continued strong promotional efforts, it is not inconceivable that this industry could sustain a three-fold, five-fold, or greater increase in volume and value over the next decade or two. In an article in this issue ('Balanced on Pearls', pp. 18–19), Sibani of Tahiti suggests that such an expansion could be easily sustained.

This article also touches on one most important—and most frequently forgotten—consideration: pearl revenues are earned directly by the individual farmers in the Pacific Islands. The revenues stay in the islands, and primarily on outer atolls, away from urban centres. It has multiplier effects throughout the atolls themselves, and to the producing nations.

The best available information on job creation in the pearl industry is from French Polynesia in 1989, when 2 300 people were estimated to be directly employed in pearl culture. This number has probably seen a five-fold increase in the intervening years, as the industry has similarly grown since then. Using the same multiplier ratios as Gillett (*ibid*) of between 1:1 and 1:2 for direct: indirect jobs created, yields a total employment figure for French Polynesian pearls of between 23 000 to 34 000 jobs. Most of these, remember, are jobs on the outlying atoll islands.

Pearl culture is also an aquaculture industry. It is cultivating, not extracting. It is the essence of sustainability, in a way that wild stock exploitation (of finfish or shellfish) could never hope to be.

With the imminent hatchery-driven expansion of pearl farming across the Pacific, this industry will grow. It may never eclipse tuna in terms of total value of the catch, but it might possibly have already exceeded the tuna industry in terms of the revenues brought into, and circulated around within, the island economies.

No, we don't want to detract from the attention accorded to the Pacific pelagics. We all love our sashimi, and the access fees sure do help keep the governments running. But pearls have eclipsed most other likely candidates for comparison. There is little else in the marine sector by which to measure it. The total value of all other commercial fishing in the region, outside of the industrial tuna fishery, for example, is estimated to be around US\$ 82 million p.a. (Dalzell, et al. 1996).

I know, I thump this drum every issue. Same drum, different beat. I guess I would just like to see more folk more aware of this perspective. Pearls deserve some greater recognition. Perhaps the place to start is for each of us to commit to memory a couple of the above facts or figures, and toss them out casually in conversation with one or two of your more influential friends.

## References

- DALZELL, P., T. ADAMS & N. POLUNIN. (1996). Coastal Fisheries in the Pacific Islands. Oceanography and Marine Biology: an annual review, Volume 34, UCL Press. 395-531.
- GILLETT, R. (1997). The Importance of Tuna to Pacific Island Countries. A Report Prepared for the Forum Fisheries Agency. FFA, Honiara. 36 p.



## Pearls and Pacific regionalism

by Neil A. Sims

-The principal constraint to growth of the Pacific pearl industry in new areas has been the limited numbers and restricted distribution of wild stocks. Over the past decade, hatcheries have shown increasing promise, but the conventional wisdom was that you still couldn't seriously consider farming in areas without a large pool of wild oysters.

Over the last six months, however, the muted hatchery bugling has reached a fanfare crescendo. Simply-constructed, economically-run hatcheries have yielded spat in the hundreds of thousands for three separate projects. Post-settlement handling techniques have

also improved dramatically, meaning that a far greater proportion of these spat will reach seedable size.

These milestones underscore the impending expansion of pearl farming across the Pacific. The lustre—and the lucre—of pearl farming has for too long been hidden beneath a bushel; or more factually, hidden beneath the surface of the NW Australian coast, or eastern Polynesian lagoons. Farming has for too long been tethered to wild stocks for collection, or for supplying consistent spat-falls to collectors. This is now changing. Pacific pearl culture is in the fledgling stages of becoming a regional industry.