letters, attending meetings and supporting their family as they are major stakeholders in the seafood industry and its future. Other women involved or associated with the seafood women also have an important role to play as trainers, researchers, managers, government agencies and service providers.

The WINSC recognises these attributions and the potential expertise and skills of seafood women and provides a network that will enable them to take an active, creative and visible role at local, state and national levels in ensuring a sustainable industry.

**Source:** *Professional Fisherman*, November 2000

## Making the best of the pest that clogs the nets

*by Jacquie Edwards, Ross Naidoo and Sue Poole*

One man's trash is another's treasure. That pest that clogs the nets and reduces target catches could be the next big thing on the menu. Jellyfish is a highly regarded delicacy in Asia and although it is generally regarded as a nuisance to the Australian fishing industry, the retail value of processed products in Japan ranges from A$50 to A$70 a kilogram.

Reduced fishing seasons and jellyfish catches in Asia have resulted in increased interest in harvesting the common blue jellyfish, *Catostylus mosaicus*, from Australian waters. The blue jellyfish is distributed all around the Australian coast and research into its suitability for processing has had favourable results in the Asian market. Recently both Victoria and New South Wales have instigated management plans and an exploratory licence has been issued in the Northern Territory (Professional Fisherman, February 2000). There has also been interest in developing a fishery in Queensland.

The world harvest of jellyfish tops 250,000 tonnes annually resulting in 25,000 tonnes of processed products. The demand in Japan is approximately 11,000 tonnes a year, potentially making jellyfish a very big earner for Australia. The jellyfish are simply harvested using a dip or scoop net. Large congregations of jellyfish are common during the summer, particularly in northern Australia. The jellyfish, although having some degree of mobility, are taken along with the currents and wind and large numbers can be seen inshore and caught in bays, marinas or estuaries when conditions are right.

Jellyfish processing methods are well documented. The tentacles are separated from the bell of the jellyfish and cleaned to remove dirt and mucus. Both parts of the jellyfish are used with different cultures preferring either the bell or the tentacles. A mixture of salt and alum is used to remove moisture in a series of drying stages, and up to four salting steps are used for the top quality jellyfish product. The drying of jellyfish is quite labour intensive, as the jellyfish require cleaning and turning during the drying process. Traditionally, this process is manually performed.

Once salted and dried, the jellyfish still require several steps, including de-salting, cooking and rehydrating, by the purchaser before it is ready to be served. Semi-dried jellyfish is eaten in a number of ways, but it is usually enjoyed as a bar snack with a cold beer or as a special entrée. It can also be used as an ingredient in a variety of dishes.

Les Spinks of Seafood Processors and Exporters Ltd in Ballina, New South Wales has been processing semi-dried jellyfish in Australia for several years. Recently he approached researchers at the Queensland Department of Primary Industries' Centre for Food Technology to explore the potential of adding value to the dried product. With funding support from FRDC's Seafood Services Australia, a ready-to-eat marinated jellyfish product has been developed.

It became apparent during trials that acceptance would be based on the unique texture of jellyfish flesh. The texture of the jellyfish product is all-important. Without the correct tender but crunchy texture, any newly-developed Australian products will not be acceptable to the market. This attribute is is not only achieved during the salting and drying process but through cooking as well. As the product is usually cooked by the consumer, the researchers had to develop cooking techniques for the product from a starting point of anecdotal evidence from consumers. On its own, the jellyfish has no flavour and is usually consumed with a soy sauce-based marinade. The project work involved development of a marinade using traditional Asian recipes and the final product is now ready to be assessed by traditional jellyfish eaters with the Sensory and Consumer Science group at the Centre.

One major benefit of making a pre-shredded marinated product is that it removes the emphasis from the jellyfish bell size, the traditional grading system of jellyfish in Asia. The other is offering convenience to the purchaser, as the marinated product can be eaten on its own or used in a variety of recipes without the lengthy preparation.

The most lucrative market in the world for processed jellyfish is Japan, consuming over 40 per cent of the highest quality production. The majority of this production is currently supplied by China. The value-added Australian product, as developed by the research team, is designed to target the high value convenience market in Asia. The success of this product in Asia will enhance the development of other fisheries for undervalued species.

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**Source:** *Professional Fisherman*, May 2000

# NEW ZEALAND

## Second regional course on seafood enterprise operations and management for Pacific Island women held in Nelson

SPC Fisheries Training Specialist (FTS) Terii Luciani travelled to Nelson (New Zealand) in late November to assist in the supervision of a regional course for Pacific Island women on seafood business operations and management. The course was part of the SPC Fisheries Training Section's regional programme on the management of fisheries enterprises and was funded through a grant from the New Zealand Government.

A total of 10 women from around the Pacific attended this course for three weeks. The main objective of this course was to provide an opportunity for women involved in seafood business management and operations to upgrade their technical skills and develop strategies for enhancing the commercial viability of these businesses.

The course programme was developed around two main subject areas: "Seafood Technology" and "Seafood Business Management"; each area covering a number of specific subjects or topics, including:

- Seafood Technology
- Seafood Quality and Handling
- Seafood Spoilage
- Seafood Hygiene, Sanitation and Food Safety (including HACCP)
- Seafood Legislation
- Seafood Products, Processes and Technologies
- Seafood Product Development and Improvement
- Factory Visits
- Laboratories / Practicals / Work Groups
- Seafood Business
- Staff Performance Management
- Accounting and Financial Reporting
- Budgeting and Business Planning
- Marketing

Terii Luciani

***Elvine Lehartel from Tahiti attended the course***