

JELLYFISH – A POSSIBLE NEW FISHERY FOR VICTORIA

Principal researcher – Noel Coleman

Dried jellyfish is a highly regarded food item in many Asian countries, especially in Japan where it is considered to be a delicacy. The Chinese and Japanese jellyfish markets are currently supplied with catch taken in Thailand, Malaysia and China, but increasing demand has created opportunities for Australian involvement.

One jellyfish species found in Victorian coastal waters is a potential candidate for harvest. *Catostylus mosaicus*, a native species that is often found in large numbers in our bays, belongs to the order of jellyfish (the Rhizostomeae) that contains the edible jellyfish harvested in other parts of the world.

Initial processing trials undertaken in late 1990s indicated that *Catostylus* could be caught during the summer and autumn months. Dried bells (with tentacles removed) from jellyfish caught in Victorian waters were prepared for taste tests and were considered to be above average quality in Asian markets.

A Fishery Management Plan was then prepared for the jellyfish fishery, which has been declared a Developmental Fishery for two years. One Melbourne based company is working in partnership with a Chinese processing company to prepare and process jellyfish caught in Port Phillip Bay for export. A processing facility has been established in Queenscliff to undertake this venture.

Research has been undertaken by the Marine and Freshwater Resources Institute (MAFRI) in Queenscliff to gain a better understanding of jellyfish numbers and biomass along the coast and whether the fishery will be sustainable. The results of this three year investigation are currently being finalised for Fisheries Victoria and the Fisheries Research and Development Corporation (FRDC).

MAFRI scientists investigated jellyfish abundance in Port Phillip, Western Port and Corner Inlet. They found that the jellyfish was most abundant in Port Phillip Bay and Corner Inlet with relatively few jellyfish being found in Western Port. Numbers and biomass varied considerably from year to year as well as between localities. Researchers have concluded, based on jellyfish numbers and proximity to processing facilities, Port Phillip Bay could support a fishery of several thousand tonnes in some years, though this would not be the case every year.

The reason(s) for the variability in jellyfish numbers are not known although are likely to be related to environmental conditions, particularly those of water temperature and salinity. Jellyfish caught from Port Phillip Bay, as part of this research, were supplied to local processors and Industry representatives to develop their processing method with supervision from Chinese processing experts.

The results of this research will help Fisheries Victoria determine the total allowable catch and most appropriate fishing season for this developing fishery.

For more information about this project, please contact Dr. Noel Coleman at the Marine and Freshwater Resources Institute on (03) 52580 111.