

Developing a new fishery for *Ylistrum balloti* in New Caledonia

Mike Dredge¹ and Loic Bourguine²

¹3498 Huon Highway Franklin Tasmania; ²Direction du Développement Economique et de l'Environnement, Province Norde, Kone, Nouvelle Calédonie
flatcalm@ozemail.com.au

A resource of saucer scallops, *Ylistrum (Amusium) balloti* was first identified by divers in the New Caledonia Grande Lagoon in the late 1970s. The distribution and extent of the resource was established in a series of trawl surveys in the period 1987-1991. These surveys indicated that a population varying between 1200 and 3000 tonnes (whole animal weight) existed in the area between 19°20'S and 20°05'S within the waters of the Grande Lagoon. This area covers almost all of the water depths in the Lagoon between 35 – 55 m, which is the normal depth range for this species.

A partnership between a Queensland-based consortium, the New Caledonia Northern Province government and the people of Belep, an island community from northern New Caledonia, developed a short-lived fishery for the species between 1995 and 1998. The fishery collapsed when a manager absconded with the joint venture's operating funds.

The resource remained untouched until February 2016, when a second consortium which included an investment arm of the Northern Province government, the Belep community and a Western Australian fishing company supported a detailed survey of the resource and examined by-catch that may have been taken in a fishery. The survey established that a resource of approximately 3000 tonnes existed in the area bounded by 19°25'S 163°20'E - 163°50'E and 19°58'S 163°42'E – 19°49'S 164°02'E. By-catch to scallop ratios in areas where commercially viable concentrations of scallops existed averaged 0.135:1, which is much lower than seen on equivalent grounds in Australia. The by-catch was dominated by fish, with one species (*Nemipterus peronii*) making up about 70% of the entire by-catch.

A 6 week fishery took place after the survey, and is being developed for a February 2017 re-opening. The fishery is remarkable both for the level of *a priori* information about the resource and for the nature and detail of management arrangements. It is subject to an annual pre-season survey, a quota (no more than 50% of B_0), limited entry (a single boat), mandatory use of TEDs and by-catch reduction systems and on-going catch reporting. A skill transfer / training program for the young people of Belep is an integral component of the development. The fishery has the potential to be a valuable source of employment and training for a remote community with little other access to local employment.

The most obvious threat to the future of the fishery is the impact of increased water temperatures. There has already been one well recorded case of a population collapse in the Western Australian distribution of the species triggered by a warm water event, and suggestion that the Queensland population is under stress, possibly through warming water.