

## FINAL TASK REPORT 2003-06

<b>TASK NO.</b> <b>T1.16</b>	Tropical Rock Lobster Resource Assessment Group
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### Task Contacts

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### Research Summary

The Tropical Rock Lobster Resource Assessment Group (RAG) was created in 2005 to provide an open and transparent stock assessment and peer review process. The RAG met twice in 2006 and successfully drew together research, management and industry representatives from Torres Strait, Papua New Guinea and Queensland fisheries. These were the first times all jurisdictions exploiting the single lobster stock had held such meetings together.

The second meeting of the RAG reviewed the stock assessment present by CSIRO and carried out as part of CRC Task 1.3. The RAG focussed on:

- the stock assessment model used;
- the fisheries catch and survey data used in the modelling
- estimates of sustainable production and from the fishery fishing mortality associated with that level of production;
- historical rates of fishing mortality relative to  $F_{msy}$ ; and
- as recommended by the authors of the report the level of escapement estimated to be associated with  $R_{msy}$  at varying levels of probability.

Based on the assessment and additional advice from the authors the RAG concluded that it should recommend a new "sustainability objective" for the fishery as follows: "To maintain the spawning stock at levels that meet or exceed the level required to produce the maximum sustainable yield".

The RAG also considered the process for recommending Total Allowable Catches for the fishery and reviewed the work done on this by T1.3. While there is a long way to go before the process is fully bedded down, the RAG has recommended a process and reference points that are consistent with the Harvest Guidelines being developed for other Commonwealth fisheries. The RAG would have recommended a quota for 2006 had the second meeting not been so late in the season.

The RAG requested CSIRO to do an analysis using CPUE data (from a reference year with similar abundance and potentially a reference group of boats) and the estimate of the stock in 2007 to estimate the potential catch. This potential catch would then be compared with the TAC and, if the potential catch exceeds

the TAC, then a recommendation be made to PZJA to vary input controls to reduce effort to the point where it no longer will lead to a catch exceeding the TAC in 2007.

The RAG has also supported two members, Nokome Bentley and Yimin Ye, to continue to develop the Operational Model as a means to test various operational scenarios.

The RAG is in its infancy however it has made some significant contributions relevant to the management of the fishery and has value added the research done in Task 1.3. The RAG is expected to convene again in March 2007 to recommend a TAC for 2007 and continue to refine methodology and data sets.