Final Task Report

Task Number: T4.3
Title: Raising Indigenous Community Awareness and Promoting On-ground Recovery Activities for Marine Turtles and Dugongs in Torres Strait
Start Date: 01-Nov-04
End Date: 30-Nov-05

Task Contacts
Task Associate: , Task Leader: Marsh, Helene

Objectives

Need (from proposal)

Significance (from proposal)

Research Summary

1st July 2005 - 30th June 2006

This research project began in late 2004, and field work started in early 2005. Within the 2005/2006 year three research trips were conducted in Torres Strait with the Hammond Island and TRAWQ communities. On each trip a series of turtles were caught on the reefs around the inner islands to determine sex and size class ratios and species distribution. The final aim was to deploy 4 satellite transmitters on courting turtles and track them for their migration and breeding season. Overall, 175 turtles comprising two species were caught and most were in the juvenile size ranges. Sex ratios were not significantly different to 1:1. Of the 4 animals deployed with satellite trackers; 3 were female and 1 was a male. The 3 females all migrated to the northern Great Barrier Reef and remained there for 3 to 4 months before returning back to the Torres Strait. Each turtle was tracked back to within 5km of its initial, pre-migratory, capture site. Genetic samples were collected from each turtle to analyse population structure. This will be done in the future as funding is not yet available. A final project report on this project has been submitted to DEH

1st July 2004 - 30th June 2005

Dugong and turtle hunters from the Inner Islands have been trained at two workshops and during three rodeo catching trip about sample collection, storage and assessment. Hunters from Hammond Island and Thursday Island are recording sexes and sizes of dugongs and turtles caught on data sheets. The data collected to date indicates that all the dugongs caught have been small, either immature or recently mature animals. 71% of the dugongs for which gender has been recorded were males. This pattern of harvest is interesting given that previous work and traditional knowledge show that large female dugongs are preferred by Torres Strait Islanders. All of the turtles caught by hunters have been large mature adult female green turtles. The turtles caught during the rodeo were laparoscope examined to determine gender and maturity The rodeo activities have highlighted that, despite the expert local assistance and unlike areas within the Great Barrier Reef World Heritage Area (where Hamann and others have conducted extensive similar work), turtle densities on the reefs sampled during the day are low (similar to those in Gulf of Carpentaria for which rodeo data are available) and only small juvenile Green turtles have been seen on top of the reef.
Task Associate Comment

No comment available.

Outcomes/Achievements against each Specific Objective

1: 1. Provide information on which recovery actions can be based by:
   a) conducting a satellite tagging/tracking of hawksbill and green turtles program in the Inner Islands of Torres Strait
   b) rodeo catching and monitoring the reproductive status of green turtles on the reefs of Inner Islands of Torres Strait on at least three occasions during the year
   c) monitoring the harvest of adult green turtles and dugongs by hunters based in the Inner Islands

2: 2. Engage communities in the recovery actions by:
   a) employing Indigenous counterpart(s)
   b) provide a training workshop for hunters, and
   c) providing information and feedback through community meetings

Previous Comments against Outcomes & Achievements:

1st July 2005 - 30th June 2006
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This research project has only recently been concluded. The main outcome was a final project report which has been submitted to DEH. In addition, most hunters in the Hammond Island community have been trained in turtle tagging and measuring.

1st July 2004 - 30th June 2005
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We understand that the project was explicitly commended by the Chair of Hammond Island Council at the June 2005 Torres Strait Regional Authority Board meeting, as an excellent example of working with communities and a foundation for future such activities. The project also received favorable mention at the recent Torres Strait Fisheries Management Advisory Committee for the persistence of the researchers in working with, and gaining the confidence of, the Islander communities.

Utilisation and Application of the Research, Commercialisation

No Data

Publications

(1st July 2005 - 30th June 2006)

Technical Reports:

(Previous Yearly Reports)

Refereed Conferences Proceedings:
Two abstracts have been submitted for consideration by the program committee for the 2006 International Symposium on Sea turtle biology and conservation in Crete. One each by Hamann and Grayson.
Other Outputs

1st July 2004 - 30th June 2005
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(1st July 2005 - 30th June 2006)

Number of Other Public Presentations, eg Seminars and Conference Presentations:

1st July 2004 - 30th June 2005

Workshops, Industry Information Sessions for Communications of Research findings:

Postgraduate Students

Jillian Grayson
PhD
supervised by Professor Helene Marsh, Dr Mark Hamann and Dr Stephen Sutton
start date: January 2004
finish date: July 2007
Thesis title: Information to assist Torres Strait Islanders manage their traditional fisheries for Green turtles and dugongs in a sustainable manner
support; scholarship, project assistance, supervision.

Grants & Awards

None reported.