



**Australian Government**

**Department of the Environment, Water, Heritage and the Arts**

## **Marine and Tropical Sciences Research Facility (MTSRF) September 2008 Milestone Report**

### **Project 1.4.1 – Condition trends and projected futures of marine species of conservation concern.**

**Project Leader: Dr Mark Hamann, James Cook University.**

#### **Summary**

##### ***Objective (A)***

We have made good progress with objective (A) following the completion of year 2 activities. A turtle rodeo was held in July 2008 to provide training for Torres Strait people in turtle tagging and western-based methods - 10 people were trained at this workshop. Community liaison has been held between the Traditional owners at Murray Island, and the project team. We again have permission from the Traditional Owners to conduct the third year of field work at Murray Island in December and February. The first trip will also serve to continue the field based training trip for TSRA Turtle & Dugong project officers. Additional field trips are currently planned for December (Raine Island), January (Milman Island) and February (Bramble Cay), all three with EPA in kind support.

We now have foraging turtle data sets from central Torres Strait (from the July 2008 trip) PhD student Mariana Fuentes is progressing well with her PhD

PhD student Kristen Weiss has completed her confirmation seminar and has started her data collection phase

##### ***Objective B***

The communication workshop on research and spatial closures was held between 15 and 17 of October on Thursday Island. A report will be finalised for the next milestone report.

## **Project Results**

### ***Description of the results achieved for this milestone***

Project 1.4.1 is on track. Field based activities for objective (a) are underway and have been successful. Objective (b) was completed in October.

## ***Objective (a) – milestone report***

### **Schedule of field activities**

#### *Mer (Murray Island)*

Field trip 1 - November 23 to 28.

The aims of this trip are to:

- Collect baseline biological data on nesting turtles,
- Quantify the nesting success of female turtles
- Collect beach morphology data such as beach profiles and sediment for sand analysis
- Deploy temperature transmitters into the sand to measure the incubation regime for turtle nests.
- Train TSRA turtle and dugong project staff

Field trip 2 – planned for late January or early February 2009. The aims of the trip would be to:

- Quantify hatchling success from nests
- Download and re-deploy sand temperature loggers
- Train TSRA turtle and dugong project staff

#### *Raine Island and Moulter Cay (QPWS/EPA co-investment)*

Queensland Parks and Wildlife Service will run a trip to Raine Island and Moulter Cay in the first two weeks of December. On this trip they aim to:

- Continue the long term turtle project (QPWS)
- Use RTK GPS to survey the island (QPWS)
- Collect sand samples for a sand type assessment

This trip is funded by QPWS.

#### *Milman Island*

Late January 2009 - (in cooperation with QPWS)

The aims of this trip are to:

- Collect baseline biological data on nesting green turtles,
- Quantify the nesting success of female green turtles
- Deploy temperature transmitters into the sand to measure the incubation regime for green turtle nests.

#### *Bramble Cay*

One trip (December 2008 (in cooperation with QPWS))

The aims of this trip are to

- Deploy temperature transmitters into the sand to measure the incubation regime for green turtle nests.
- Train TSRA turtle and dugong project staff

### ***Proposed schedule of training events for Murray Island Indigenous participants***

We will run field trip to Murray Island in late November/early December 2008 and a second trip is earmarked for February 2009. On these trips we will work with members of the TSRA turtle and dugong project as well as other members of the Murray Island community (individuals are yet to be decided) to train them in western based turtle monitoring techniques. In addition we will seek advice and expertise from islanders about traditional turtle monitoring techniques. Training will cover.

- Turtle tagging and measuring (as per standard methods used in Australia)
- Track counts and the types of information that are important such as the number of turtles that successfully lay each year
- Beach morphology surveys
- Assessing the success of turtle nests to produce hatchlings
- Monitoring of beach temperature profiles.

A specific training plan which spells out expectations, roles and responsibilities is being prepared and will be discussed with the Murray Island Council and Torres Strait Regional Authority (TSRA) Land and Sea Management Unit before being finalized.

### ***Explanation of Activity changes***

No changes to activity planning, personnel or execution have occurred, or are expected to occur for either objective (a) or (b)

### ***Communications, major activities or events***

#### **During milestone reporting period**

#### **Summary of liaison activities that have been held**

**Liaison** with Dr Mark Read **GBRMPA** is regular (approximately monthly) and ongoing.

**Liaison** with Dr Colin Limpus **EPA** is regular (approximately fortnightly) and ongoing.

**Liaison** with members of the Raine Island Steering Committee is regular (approximately every three months) and ongoing.

#### **Summary of liaison activities that have been held (objective b)**

#### ***During next milestone reporting period***

##### *Objective (a)*

Field trips to Murray Island, Milman Island and Bramble Cay will occur.

##### *Objective (b)*

Prepare the workshop report