

NOTES FROM THE REGIONAL TRAINING WORKSHOP: MARINE TURTLE RESEARCH AND MONITORING

27th August – 2nd September 2002, Grand Cayman



An Initiative of Turtles in the Caribbean Overseas Territories (TCOT), a project funded by the Department for Environment, Food & Rural Affairs (Defra) and the Foreign and Commonwealth Office Environment Fund for the Overseas Territories

Hosted by the Cayman Islands Department of Environment and the Cayman Turtle Farm.

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Sue Ranger	Marine Conservation Society, UK (TCOT Team)
Timothy Austin	Cayman Islands Department of Environment



Bruce Dinwiddy, Governor of the Cayman Islands, pictured here with (from right) Dr Brendan Godley, TCOT Project Coordinator, Gina Ebanks-Petrie, Director of the Cayman Islands Department of Environment, and Peter Richardson, Marine Conservation Society (far left).

SCHEDULE

Wednesday 28th August	Opening – <i>Bruce Dinwiddy, Governor of the Cayman Islands</i> Introduction to Turtles in the Caribbean Overseas Territories – <i>Peter Richardson</i> Country reports • <i>Cayman Islands – Catherine Bell</i> • <i>Anguilla – James Gumbs</i> • <i>Bermuda – Jennifer Gray</i> • <i>British Virgin islands – Mervin Hastings</i> • <i>Cayman Turtle Farm – Ken Hydes</i> • <i>Montserrat – John Jeffers</i> • <i>Turks & Caicos Islands – Amber Thomas & Jasmine Parker</i> Turtle biology and research protocols – <i>Dr Brendan Godley with contributions from Jennifer Gray, Catherine Bell & Janice Blumenthal</i> Introduction to Socio-economic component of TCOT and draft questionnaires – <i>Dr Lisa Campbell</i>
Thursday 29th August 2002	Early morning rookery visit (6.00am) with nest excavation– <i>Catherine Bell & Joni Solomon CIDoE</i> Socio-economic questionnaire planning/group discussion – <i>Dr Lisa Campbell & Sue Ranger</i> Revision of questionnaire – <i>Dr Lisa Campbell & Sue Ranger</i> Questionnaire field testing – <i>All participants</i> Public talks organised by CIDoE and hosted by the Holiday Inn. Presentations by Joni Solomon (CIDoE), Dr Brendan Godley and Peter Richardson
Friday 30th August	Questionnaire discussion of field testing and finalisation – <i>Dr Lisa Campbell</i> WIDECAST tagging programme – <i>Dr Karen Eckert</i> Tour of Cayman Turtle Farm – <i>Joe Parsons</i> Practical session: handling, tagging, genetic sampling protocols – <i>Staff of CTF, CIDoE & TCOT</i>
Saturday 31st August	In-water sampling: search and capture techniques, practice protocols learnt on day 4 – <i>CIDoE</i> Review of foraging site transect methodology – <i>Dr Brendan Godley & Peter Richardson</i>
Sunday 1st September	Further discussion and revision of questionnaire – <i>Dr Lisa Campbell & Sue Ranger</i> TCOT Tourism leaflet & Diver Survey – <i>Sue Ranger</i> Fundraising – <i>Peter Richardson</i> Turtles in Japan and Costa Rica- <i>Nel Beaumont</i> Workshop close – <i>Dr Brendan Godley</i>

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1 WORKSHOP COMPONENTS

1.1 Presentations *(All participants)*

Copies of the presentations made during the workshop are included on the TCOT workshop participants CD (Annex 1), distributed to all participants. The aim of these notes is to record additional activities and key points from discussion.

1.2 Early morning rookery visit and nest excavation *(CIDoE)*

Delegates accompanied CIDoE staff on their routine morning rookery visits and assisted with the excavation of emerged nests. Delegates were shown how to locate and excavate contents from a hatched nest. They then assisted CIDoE staff in retrieving and recording shells from successfully hatched eggs, un-hatched eggs, including those that showed no sign of development and those that had stopped developing at various stages, dead hatchlings and live hatchlings that had not emerged with the rest of the clutch. Delegates were also shown how to take tissue samples for genetic analysis.

Collecting this information in the OT's will, over time, increase knowledge of clutch sizes and hatching success as well as providing samples to genetically profile the nesting turtle population.

1.3 Questionnaire field testing *(All participants)*

Following an exhaustive introduction to the socio-economic questionnaire and the opportunity to trial sections on fellow delegates, the CIDoE arranged for everyone to have the opportunity to put their interview techniques into practice with fishermen, restaurant owners, dive operators and members of the public. The experience brought home to everyone involved in TCOT what is involved in conducting a comprehensive survey of this kind and proved invaluable in highlighting areas of the questionnaire that needed to be reworked, removed or added.

Delegates were able to identify and discuss the challenges that lie ahead in administering the survey. Among their concerns was the fact that many of them are enforcement officers and they acknowledged that conducting this survey might prove difficult as they are, in some cases, asking individuals to reveal details about activities that contravene existing legislation.

With lively discussion and enthusiastic input from all delegates the questionnaire underwent significant changes during the workshop. It was originally planned that the questionnaire would be finalised at the workshop, but as all delegates wanted the opportunity to comment on the final version, it was decided that all changes would be made and the questionnaire would be circulated

to all delegates for comment following the workshop. It will then be finalised and will be administered in the OT's in 2003.

1.4 Cayman Turtle Farm: handling, tagging, genetic sampling protocols (CTF, CDoE and TCOT staff)

The delegates were made very welcome at the CTF and enjoyed an informative guided tour of the facilities. Though some delegates have been involved in marine turtle research and conservation for some time, others had never tagged a turtle or taken a genetic sample. At the Farm, delegates had the unique opportunity of receiving hands-on training in inserting PIT tags and flipper tags in some of CTF's future green turtle (*Chelonia mydas*) breeding stock. In addition they were shown how to take genetic samples from large turtles and practised taking standard carapace measurements.

1.5 In-water sampling: search and capture techniques (CDoE)

The CDoE arranged for delegates to spend a morning participating in their established in-water sampling project. All delegates had the opportunity of searching for turtles using the "man-on-tow" method and capturing them while free diving. Captured turtles were brought to a research boat where CDoE staff demonstrated standard biometric data collection, tagging, tissue and blood sampling. Delegates and CDoE staff had a successful day and 4 foraging juvenile hawksbill turtles (*Eretmochelys imbricata*) were captured and sampled.

1.6 TCOT tourism leaflet & Caribbean Turtlewatch diver survey (Sue Ranger)

In addition to the socio-economic questionnaire, two self-selective surveys have been designed to fulfil a suite of functions. The TCOT tourism leaflet was developed with input from all OT partners and aims to engage the general public. The reply slip included in the leaflet not only allows interested individuals to report on their turtle encounters in that OT, but also encourages them to support conservation work by supporting the local organisation involved. The other initiative, Caribbean TURTLEWATCH, arose from an interest expressed by dive operators in the OT's. The scheme allows recreational dive operators to keep records of their dives and record whether or not they see turtles, which species they see and where they see them. As dive operators regularly visit the same dive sites, this will allow for consistent recording of the presence or absence of turtles at certain sites as well as elucidating trends in abundance over time.

2 KEY ISSUES RAISED IN DISCUSSION

2.1 Legislation, penalties and enforcement

- Some delegates were keen to know which legislation, penalties and levels of enforcement are in place in the various OT's.
- Though there is legislation regarding marine turtles in place in all 6 OT's and, in some instances, significant penalties exist; delegates expressed scepticism about the efficacy of

existing measures. For example, cases were reported where individuals had been found in breach of legislation designed to protect marine turtles, but no action had been taken against them.

- Delegates also identified inappropriate legislation, for example minimum size limits which protect juvenile turtles, but allow the harvest of breeding adults. It was reported that fishermen are unlikely to take small turtles in any event, and are more likely to target larger animals that yield more meat.
- Challenges to effective enforcement of legislation, like size limits, species restrictions or closed seasons, were identified by delegates included the difficulty of achieving effective coverage of vast territorial waters with limited budgets, equipment and staff.
- It was reported by some delegates that the turtle fishery was experiencing a decline as few young fishermen were taking it up. Enforcement authorities in some OT's felt that legislation banning harvest is inappropriate at this time as the fishery is likely to disappear naturally. It was, however made clear that there is still an active fishery in some OT's, where a proactive approach to changing practices may be necessary.
- Some delegates felt that there was pressure from the UK to terminate the utilisation of turtles in the OT's. The TCOT team pointed out that this project was not instigated with any particular outcome in mind, but that the aim was to assess the particular situation in each OT and make recommendations based on findings over 3 years.
- As alternatives to legislation and enforcement, some success was reported in working towards engaging turtle fishers in research and conservation work. It was felt that this might be a more effective way of changing practices than legislating against the use of turtles. In addition to a decline in demand it was also reported that turtle meat is disappearing off the menu in some places as a result of opposition from the tourists and the tourist industry, which is the mainstay of most OT economies.

There are currently significant reviews of legislation underway in some of the OT's and delegates identified the shortcomings of existing legislation. It was felt that this would be an opportune time to look towards harmonisation of legislation relating to marine turtles throughout the UK OT's. Dr Karen Eckert of WIDECASST agreed to circulate a document containing details of support for harmonised legislation including recommendations from OECS, SPAW and the Regional Sea Turtle meeting held in the Dominican Republic. In addition this document will include draft recommendations for harmonised legislation proposed by WIDECASST.

2.2 Constraints to carrying out marine turtle monitoring and research

- Delegates identified a lack of resources and time as a major constraint to carrying out consistent monitoring.

- Vast territorial waters and accessibility of nesting and foraging habitat on uninhabited or remote cays were identified as constraints to consistent monitoring.
- For all delegates, marine turtles represent only one component of their work and do not always take priority.
- It was suggested that one way to overcome this obstacle is to limit efforts to certain times of year and carry out intensive monitoring which can be replicated from one season to the next

The TCOT team reminded delegates that part of their remit is to assist OT partners in securing funding and acquiring skills to ensure that baseline research and monitoring can get underway and continue. It was recommended that delegates identify vital skills or resources that they are lacking so that progress can be made towards meeting their needs. As an outcome of this workshop, delegates will be provided with details of potential sources of funding.

2.3 Capacity building initiatives

- Delegates recognised the value of being able to attend this workshop and gain hands on experience of research and monitoring techniques.
- Those delegates who were fortunate enough to receive support to attend the Bermuda Turtle Project in-water training workshop in 2002 stressed the benefits of this extended period of exposure to field research.
- It was reported that researchers at a well-established nesting beach monitoring site in Antigua had already expressed willingness to host and train representatives from the UKOT's. Karen Eckert of WIDECASST indicated that her organisation would fully support this kind of skills transfer.
- Delegates indicated that it would be highly beneficial to their ongoing research and monitoring efforts to ensure that individuals within each OT were equipped with the skills necessary to conduct effective, standardised research.

It was agreed that efforts be made to try and ensure that representatives from all OT's be given the opportunity to attend the Bermuda Turtle Project in-water sampling training course.

2.4 Ownership of information

- Delegates agreed that ownership of all data gathered during the TCOT project should be overtly established. Delegates expressed concerns about previous experience of foreign researchers conducting research and not passing information on to the relevant OT government

The TCOT team will draw up a document overtly establishing ownership of information, which will be circulated to all OT partners for comment.

2.5 Reporting and networking

Delegates recognised the benefits of meeting and establishing a loose network of colleagues in the region. Following from this they expressed a desire to meet again at the end of the TCOT project to report on progress, identify outstanding issues that need to be addressed and plan for the future.

With this in mind, it was felt that the TCOT Team should work towards securing funding to hold a closing meeting for TCOT partners in 2004/05. Delegates also felt that representatives from UK OT's should be offered support to attend the annual International Sea Turtle Symposium to present findings of their work, but also to network with the international marine turtle community.

3 TCOT WORKSHOP CDs

As an output of this workshop, TCOT has produced 2 resource CDs for the participants in order to aid their TCOT research and conservation work. The contents of these CDs are outlined in Annex 1, and include the presentations from the workshop, monitoring protocols, datasheets, scientific papers, downloads from the NOAA Electronic Reading Room as well as a small photograph library.

These photographs may be used for audio-visual purposes only and may not be used for publication without prior permission from the photographers. If you would like to use these pictures for publication, please contact TCOT.

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Annex 1

TCOT REGIONAL TRAINING WORKSHOP CD

Compiled by TCOT, with assistance from WIDECAST and the Cayman Island Department of Environment

CONTENTS

TCOT Workshop CD

1 GENERAL

Contents

TCOT Workshop briefing document

TCOT Workshop Proceedings Notes (incl. contact details of all participants)

TCOT Participants contact list

DEFRA TCOT leaflet for CITES CoP12

WIDECAST recommendations for a regulatory framework for marine turtle management.

2 TCOT PARTNER COUNTRY REPORTS

Microsoft PowerPoint presentations given at the TCOT workshop by Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Montserrat and Turks and Caicos Islands.

3 TCOT INTRODUCTION, METHODOLOGY AND CONSERVATION ISSUES

Microsoft PowerPoint presentations given at the TCOT workshop including:

Bermuda Turtle Project Net Sampling Methodology

Cayman Genetic Analysis Overview

Cayman In-water Hand Capture Methodology

Introduction to Socio-Economic Assessment

Introduction to TCOT

Marine Turtle Biology and TCOT Methodology

Questionnaire Explanation

Sea Turtle Project Data Management

Sea Turtles and Light Pollution

Turtle Conservation in Japan

Why Tag a Sea Turtle

4 FUNDRAISING

Guidance notes, application forms and contact details for over 20 sources of funding relevant to marine turtle conservation and research in the Overseas Territories including:

BP Conservation

British Airways

British Chelonia Group

Chelonia Research Foundation

Conservation, Food and Health Foundation

Darwin Initiative

Department of Food and Rural Affairs/ Flora & Fauna International

Foreign and Commonwealth Office

Global Greengrants Fund

MCS Turtle Conservation Fund

National Wildlife Federation

National Fish and Wildlife Service

PADI

People's Trust For Endangered Species

Other sources of funding

5 PHOTOGRAPHS

Over 200 photographs, mostly from the MCS marine turtle photo library along with contributions from the CIDoE, arranged into categories including:

Conservation, Research and Awareness
Harvest
TCOT Workshop
Threats
Tiger Shark
Turtle Pictures

These photographs are not to be used for publication without prior permission from the photographers. If you would like to use these photographs for publication, please contact TCOT.

6 EXAMPLES OF PRESS COVERAGE

Press releases, newspaper and internet articles about the TCOT Workshop

7 TCOT BIBLIOGRAPHY, MTRG SCIENTIFIC PAPERS AND OTHER TECHNICAL REPORTS

The TCOT Bibliography, a www.seaturtle.org ID key, as well as 35 .pdf format papers from the Marine Turtle Research Group, University of Wales Swansea, arranged into categories including:

Diving Behaviour
Hatchling Development
Nesting
Pollution
Research Methods
Satellite Telemetry
Status Estimates

8 TCOT MONITORING PROTOCOLS AND SAMPLE DATASHEETS

The TCOT research protocols as well as 6 different sample datasheets from TCOT, the CIDoE and the Bermuda Turtle Project.

9 CARIBBEAN TURTLEWATCH

The publicity poster, instructions for dive operators and datasheets in .pdf format and Access database for entry of dive data.

NOAA 'Electronic Reading Room' Downloads CD

RECOVERY PLANS: NOAA US Atlantic Recovery Plans and US Pacific Recovery Plans for six species of marine turtle.

SYMPOSIA: 14 separate and full .pdf format copies of Proceedings from all sea turtle symposia from the 8th Annual Workshop on Sea Turtle Conservation and Biology (1988) to the 20th Annual Symposium on Sea Turtle Biology and Conservation (2000) inclusive.

TURTLES: 5 additional marine turtle papers and proceedings from the NOAA Electronic Reading Room, dealing with issues such as the Cuban hawksbill harvest, Long-lining, TED's and status assessments.

Annex 2

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