

Research Collaborations in the Turks and Caicos Islands

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A satellite map of the Turks and Caicos Islands. The main island, Grand Turk, is the largest and most prominent, showing a mix of green land and white sandy beaches. To its north are the Caicos Islands: North Caicos, Middle Caicos, and South Caicos. To the west of North Caicos is the small island of Providenciales. In the center of the main island is a large, shallow lagoon labeled 'Caicos Banks'. To the east of Grand Turk is a small, isolated cay labeled 'Salt Cay'. The surrounding ocean is a deep blue, while the shallow waters near the islands are a lighter turquoise color.

North Caicos

Providenciales

Middle Caicos

Caicos Banks

Grand Turk

Turks and Caicos Islands

South Caicos

Salt Cay

UK Overseas Territory

Population approx. 35,000

Signatory to the Convention on Migratory Species through the UK



Low-lying islands



Extensive seagrass beds, creeks...

Sea grass habitat: *Thalassia testudinum*; *Halodule wrightii*; *Syringodium filiforme*.



...as well as patch and fringe reefs.



Hawksbill turtle foraging habitat.





Abundance of immature green and hawksbill turtles on sea grass beds and reefs.

Richardson et al. (2009) Marine turtles in the Turks and Caicos Islands: remnant rookeries, regionally significant foraging stocks and a major turtle fishery. Chelonian Conservation and Biology 82: 192-207

Approximately 400 fishing license holders in TCI



...mostly targeting lobster...





...and queen conch, with some directed and opportunistic catch of green and hawksbill turtles.

Turtle fishery regulated by the Fisheries Protection Ordinance (1998)

- Nesting females and eggs protected
- 20" minimum size limit
- No closed season

Richardson et al. (2006). Marine turtle fisheries in the UK Overseas Territories of the Caribbean: domestic legislation and the requirements of multilateral agreements. Journal of International Wildlife Law and Policy 9: 223-246.





Photo: Peter Richardson/MCS

Fishery takes mostly juveniles and sub-adults, but historical hunting on nesting beaches and current occasional take of breeding adults has contributed to decline in TCI nesting populations...



...with limited nesting now restricted to remote, uninhabited cays.

Richardson et al. (2009) Marine turtles in the Turks and Caicos Islands: remnant rookeries, regionally significant foraging stocks and a major turtle fishery. Chelonian Conservation and Biology 82: 192-207

TURKS AND CAICOS ISLANDS TURTLE PROJECT (2008-2011)



Aim

To fully engage stakeholders in developing a durable turtle fishery management regime that facilitates traditions of use and includes appropriate measures for the protection of the larger size-classes and breeding adult turtles in TCI waters.





Photo: Amdeep Sanghera/MCS

Multi-disciplinary approach - biological assessment of fishery...



Working closely with Government officers.

... sampling turtle stocks at fishing sites
led by University of Exeter..



... sampling turtle stocks at fishing sites in partnership with local fishermen.





...on seagrass
and reef habitats..



**Biometric
measuring**

Tissue sampling



PIT tagging





...flipper tagging for mark-recapture...

...includes satellite telemetry to
explore turtle range and
behaviours...





...nesting beach surveys...



Grade 1 18th September 2011

The National Flower
The Island Hibiscus is the national flower. It grows
around the salt ponds throughout the Turks Islands
and the Southern Cayman Islands and Cuba.
In the past it was used as dye. Today it is
still used to make tea.

..education and outreach..



...combined with social research and stakeholder engagement.

Photo: Tommy Philips

Summary of Results

- Two distinct turtle fisheries;
- Many fishers involved, catching at different volumes;
- Important & varied fisher motivations for capture;
- Broad distribution of turtle meat within community;
- Recognised social value within South Caicos.



Photo: Amdeep Sanghera/MCS

Fishery lands approx. 240 greens and 170 hawksbills per year at main harbours in South, Grand Turk and Provo (minimum estimate).

Presented to TCI Government March 2013, approved February 2014.



Ministry of Environment and Home Affairs
Department of Environment and Maritime Affairs
Lower Bight Road, Providenciales
Turks and Caicos Island Government



20 June 2014

Press Release – New Turtle and Conch Regulations take Effect 1 July 2014

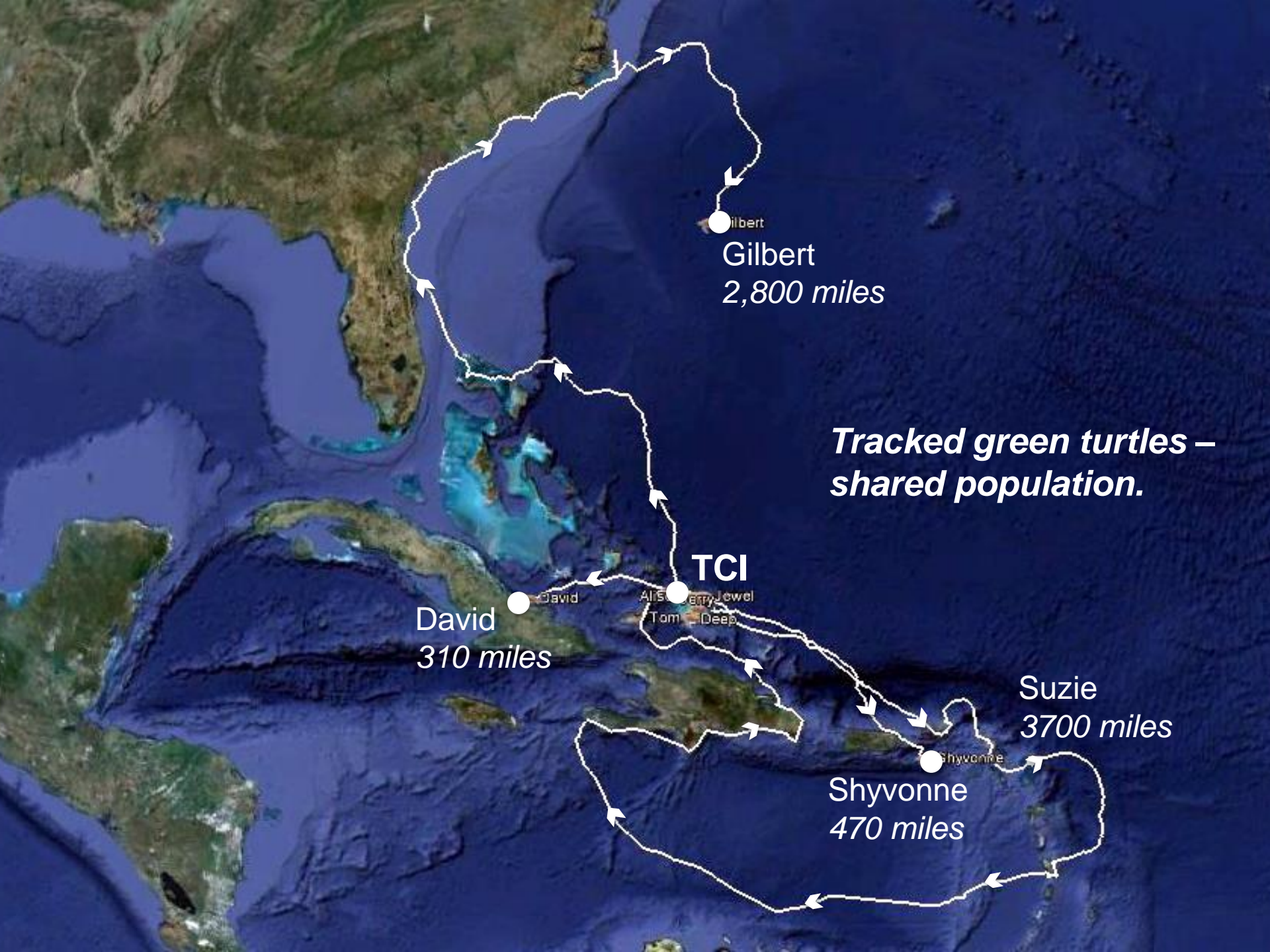
The Department of Environment and Maritime Affairs (DEMA) would like to inform the public that as of 1 July 2014, new regulations for turtle and conch under the Fisheries Protection Ordinance will take effect. The regulations include the following restrictions on the taking of turtles:

1. A closed season for Hawksbill turtles from 1 August to 31 March (inclusive). During the closed season it will be unlawful to take, purchase or possess hawksbill turtles or hawksbill turtle products.
2. A legal size limit of 18 inches (minimum) and 24 inches (maximum) for green and hawksbill turtles. It will be unlawful to possess green or hawksbill turtles larger than 24 inches or smaller than 18 inches.
3. A permanent closure on the taking of Kemp's ridley, leatherback, loggerhead and olive ridley turtles. As of 1 July 2014 it will be unlawful to take or fish for any of these species.
4. A ban on the export of all turtles and turtle products, except for scientific purposes. No turtle products shall be exported from TCI.
5. A ban on the keeping of turtles in captivity. As of 1 July it will be unlawful to keep any turtles in captivity, unless such captivity is necessary to rescue, rehabilitate or preserve the life of the turtle.
6. A prohibition against processing turtles at sea. All turtles will need to be landed live and in whole condition after being taken and only processed where it is to be sold, processed or used for personal consumption.

In addition to the above turtle regulations, as of July 1, 2014, it will become lawful to export conch shells, conch jewellery, conch pearls or craft products made of conch shells during the closed season for conch. This regulation will allow such products to be exported for non-commercial or personal use only.

Continuing Collaborations...

- **Marine Conservation Society**
- **Community Conservation Partnership Program**
- **Participants include**
 - **Amanyara Resort (Providenciales)**
 - **Big Blue Unlimited (Providenciales)**
 - **SURFside Ocean Academy (Providenciales)**
 - **Bohio Dive Resort (Grand Turk)**
 - **Blue Water Divers (Grand Turk)**
 - **The School for Field Studies (South Caicos)**



Gilbert

2,800 miles

***Tracked green turtles –
shared population.***

TCI

David
310 miles

Suzie
3700 miles

Shyvonne
470 miles

Migration



● **Turtle 10:** Argos locations 3, 2, 1, & A unsmoothed

More tracking planned for 2015 to increase sample size – also serves to diversify participating fisher income and knowledge of their fishery.





Community Collaborations

- Dive centers and visiting divers
- Local residents:
Beach surveys
- Reports of illegal behaviour
- Environmental Education





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**With thanks to Peter Richardson and
the Marine Conservation Society for
their continued commitment to the sea
turtles of the TCI**

ANY QUESTIONS?

