Sea Turtle Monitoring in the Tobago Cays Marine Park

Olando Harvey Marine Biologist Tobago Cays Marine Park (TCMP)





TCMP: Tobago Cays Marine Park



Background

- In 1987 the Tobago Cays was declared a Marine Conservation Area (Fisheries Act 1986).
- December,1997 the Tobago Cays Marine Park was officially gazetted (No. 40; Section 5).
- 66 km² in area (seagrass beds, Coral Reefs & Mangroves)
- 1 inhabited Island (Mayreau) & 6 uninhabited Islands.
- Relatively Isolated Area (managed from ~ 5 miles away)
- ~ 65,000 visitors annual.
- ~ 7,500 yachts annual.

Tobago Cays Marine Park



Monitoring Program in TCMP

WIDECAST was contracted* (March 2010) to:

- Develop a methodology for population and habitat assessment (i.e. population size, demographics and habitat types).
- Develop training methodology for an ongoing sea turtle monitoring program within TCMP.
- Identify the threats and opportunities for conservation of turtles and their habitats.
- Provide recommendations for management of turtles within the TCMP.

*(OPAAL Funded)

Monitoring Training (Bermuda)





In-water

Monitoring Training (Barbados)





In-water

Monitoring Training (Barbados)



Beach Patrols

TCMP Methodology

- Two methodologies:
 - Hand capture by snorkeling
 - > Netting (twine)
- Double tag on the front flipper (Inconel & Monel)
- Weigh
- Measure (CCL/CCW & SCL/SCW)
- Release

Monitoring in the TCMP



Year 1: 92 Turtles were captured; 85 Greens and 7 Hawksbills Year 2: 50 captured (22 recaptures); 49 Greens and 1 Hawksbills



- The TCMP contains an important foraging aggregation of sub-adult green turtles.
- Based on live coral cover, hawksbills appears underrepresented.
- Regression analysis indicated that weight is predictable according to length.



- Long term annual in-water monitoring (reef & seagrass areas)
- Establishment of a structured nesting beach monitoring program
- Continued enforcement

Thank You!

