



GULF AND CARIBBEAN
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WIDECAST
Wider Caribbean Sea Turtle Conservation Network



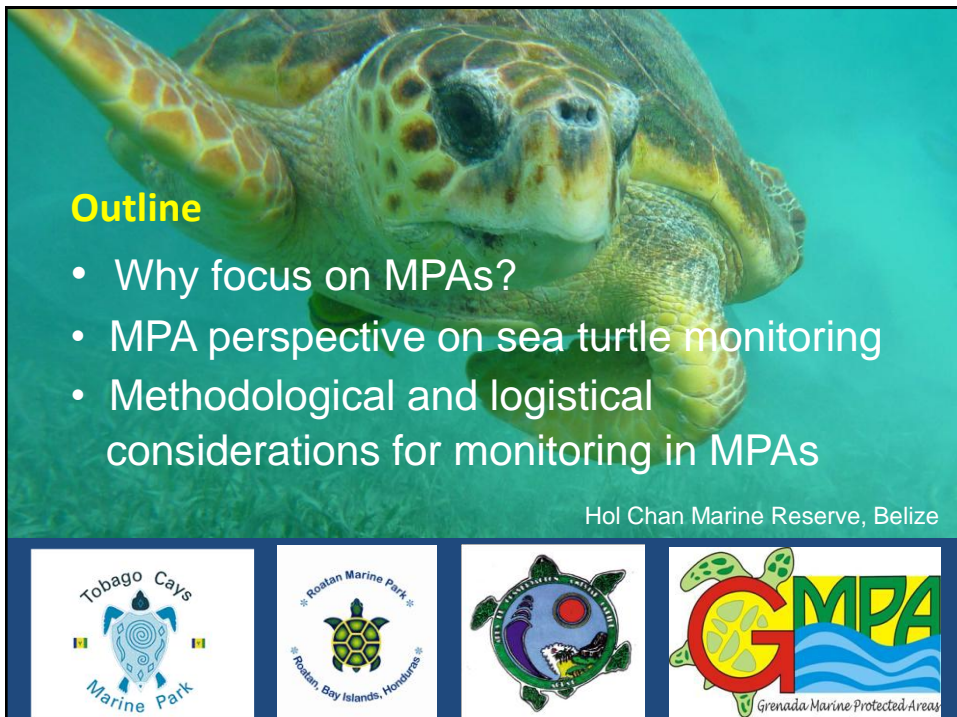
CaMPAM
Network & Forum

Sea Turtle Population Monitoring in Marine Protected Areas

WIDECAST AGM 2012

Emma Doyle





Photo: Tobago Cays Marine Park,
St Vincent and the Grenadines



Outline

- Why focus on MPAs?
- MPA perspective on sea turtle monitoring
- Methodological and logistical considerations for monitoring in MPAs

Hol Chan Marine Reserve, Belize

MPAs are a key tool in marine resource management

- **Conserve biodiversity and ecosystems**
- **Protect nursery habitats**
- **Spillover benefits for adjacent areas**
- **Recreation and tourism**
- **Focal point for public environmental education**
- **Baseline scientific data**
- **Contribute to local economies**

Bonaire National Marine Park

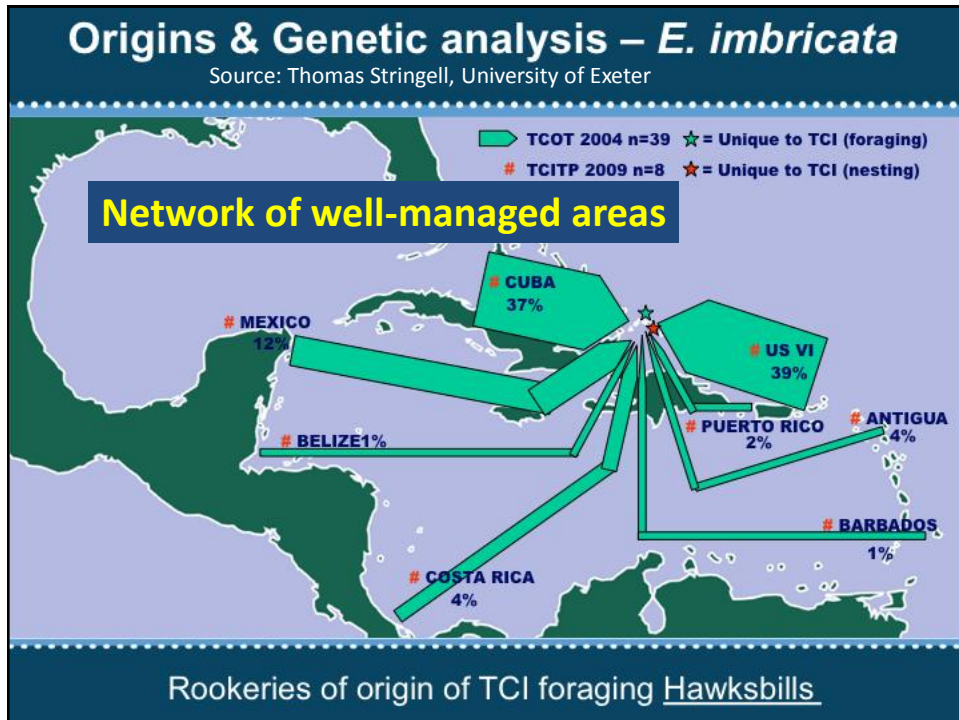
**Science-based,
stakeholder-driven**

Trade-offs

Multiple-use zoning

**Small areas in isolation – are they
sufficient to sustain populations?**

Tobago Cays Marine Park



In-Water Sea Turtle Monitoring

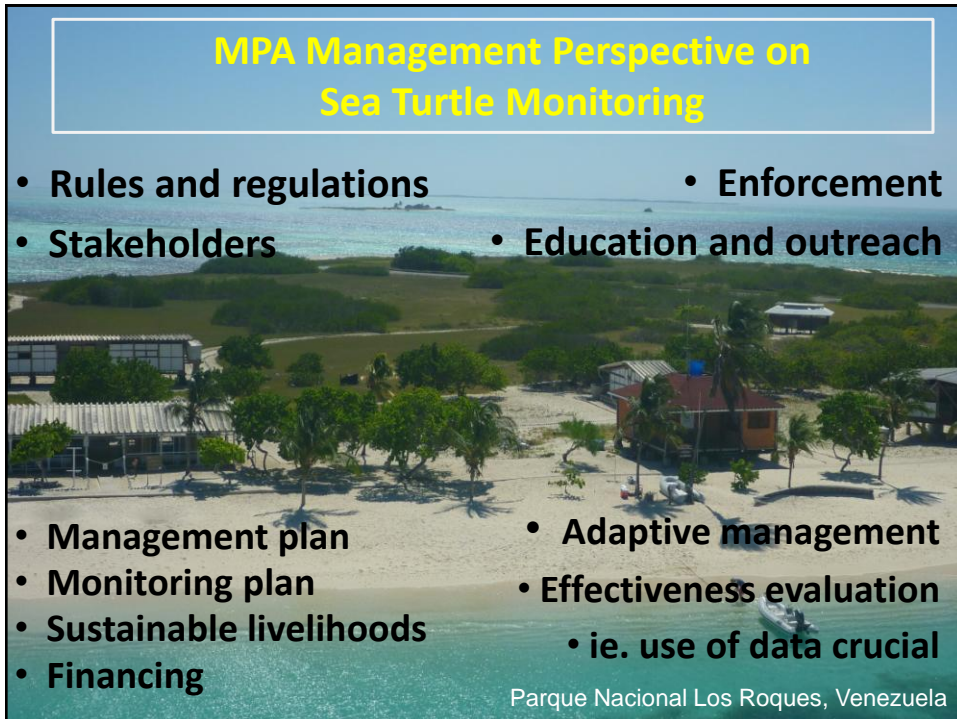
- Estimate populations and trends
 - Inform policy decisions

Tagging, health assessments, habitat use and residency, diet and growth rates

- Methods - sighting, capture recapture, net-assisted, aerial
- Sampling
- Analysis

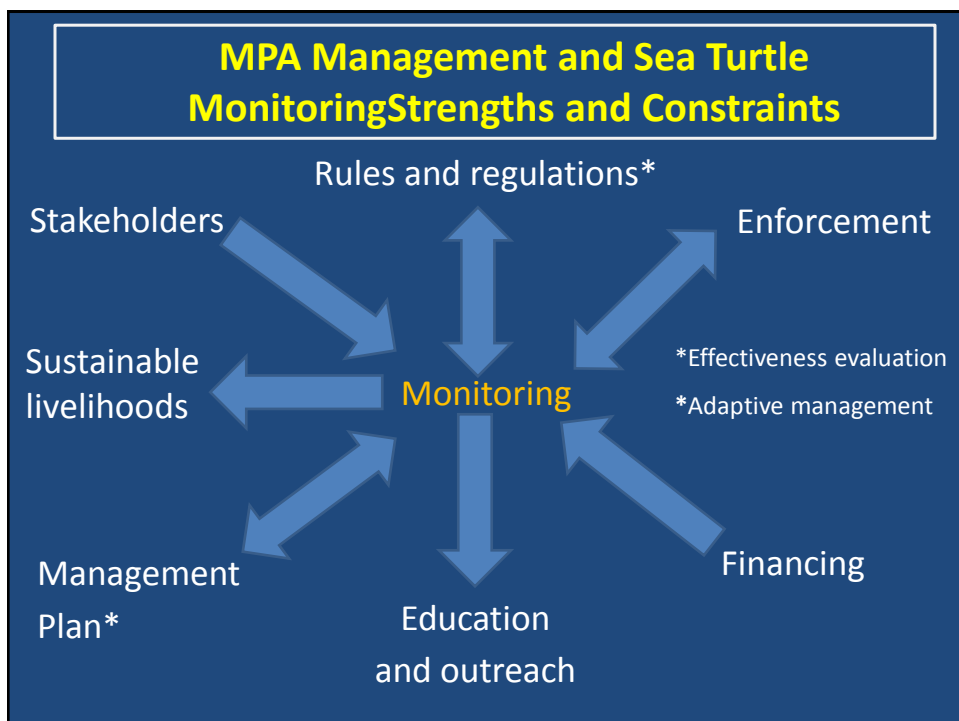
Arashi Beach, Aru

MPA Management Perspective on Sea Turtle Monitoring



- Rules and regulations
- Stakeholders
- Management plan
- Monitoring plan
- Sustainable livelihoods
- Financing
- Enforcement
- Education and outreach
- Adaptive management
- Effectiveness evaluation
 - ie. use of data crucial

Parque Nacional Los Roques, Venezuela



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Practicalities of Monitoring in MPAs

- User pressure, > Timing of field work during low-vessel availability season and on low visitation days
- Local stakeholders > Avoidance of problems eg. driving through nets
- Public visibility > Careful and humane treatment of animals, no paint marking of shells
- Visitor curiosity > Public relations, explain research work
- Speed limits > No turtle rodeos



Training Exchange Tobago Cays - Barbados



The joys of monitoring...



Moral:
Let's benefit from the effort

... the reality!



