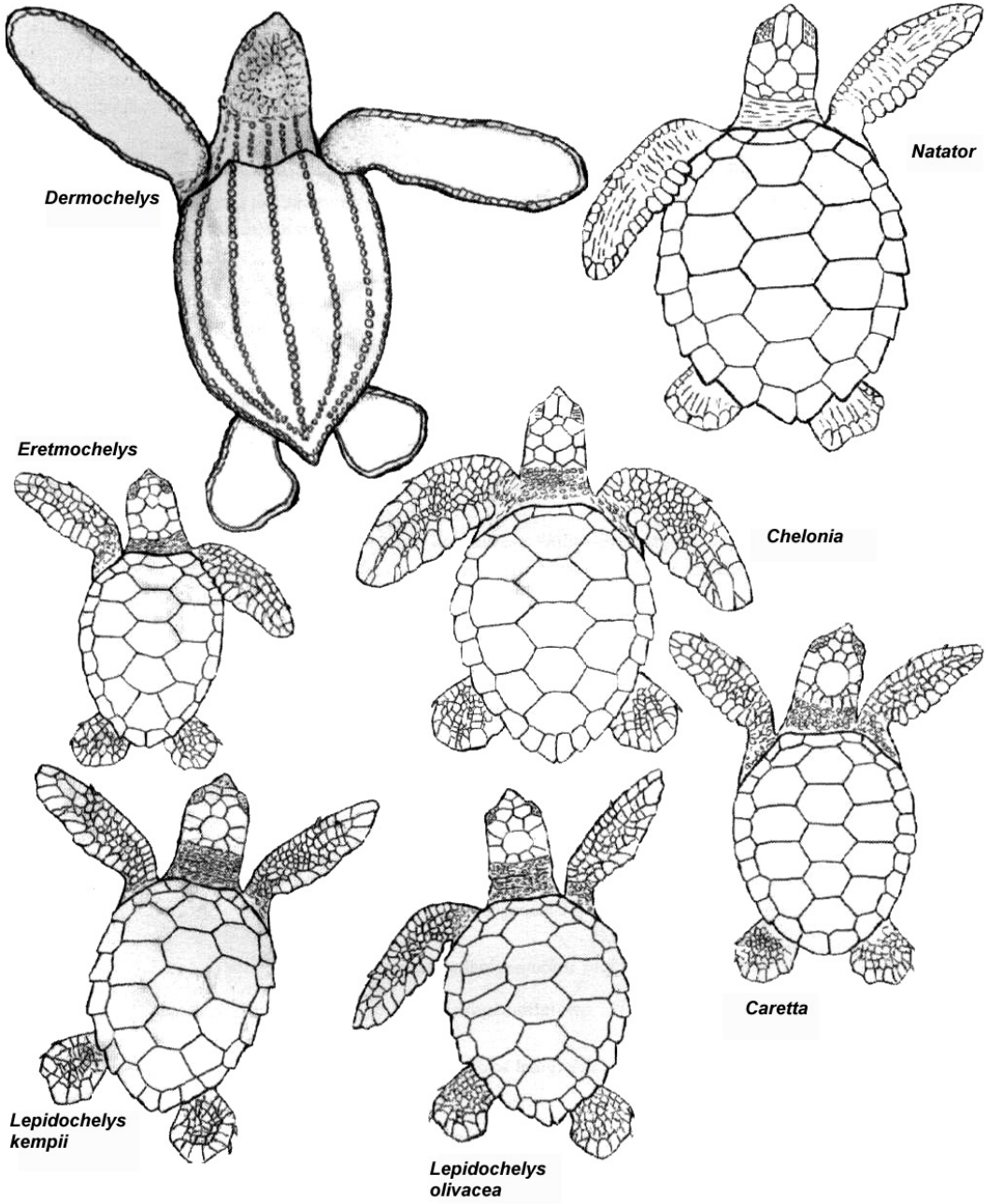
Trails Through The Caribbean: Regional Cooperation to Monitor Sea Turtles

Dr. Darren C. Browne

SEA TURTLES are gentle, ancient creatures that have traveled the World Ocean since before the dinosaurs ruled the earth.

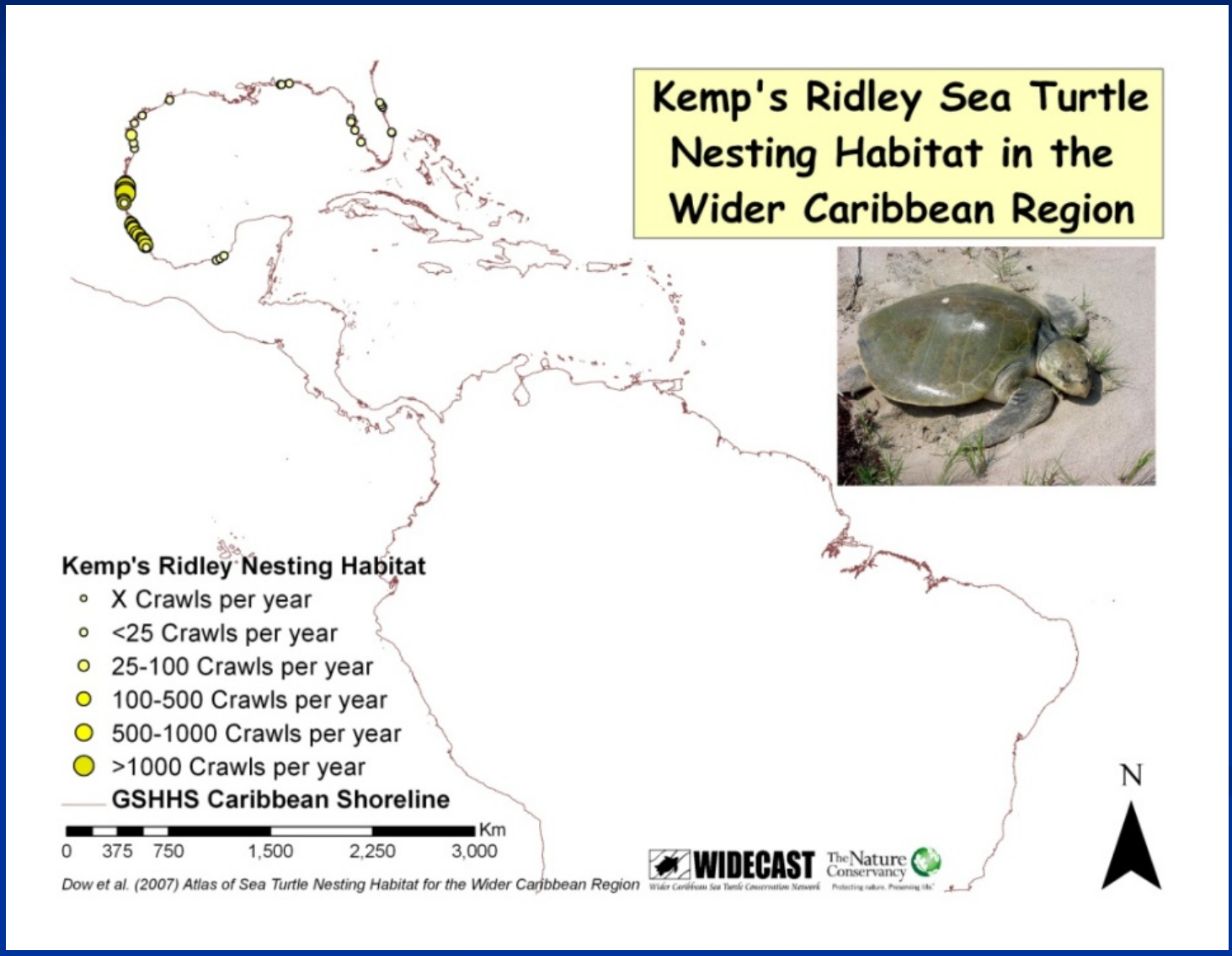
Sea turtles originated in the lower Mesozoic Era. The oldest sea turtle fossil (*Santanachelys*) dates to 112 million years ago.



There are 7 modern species – 6 are found in the Caribbean Sea, which supports some of the largest remaining populations.

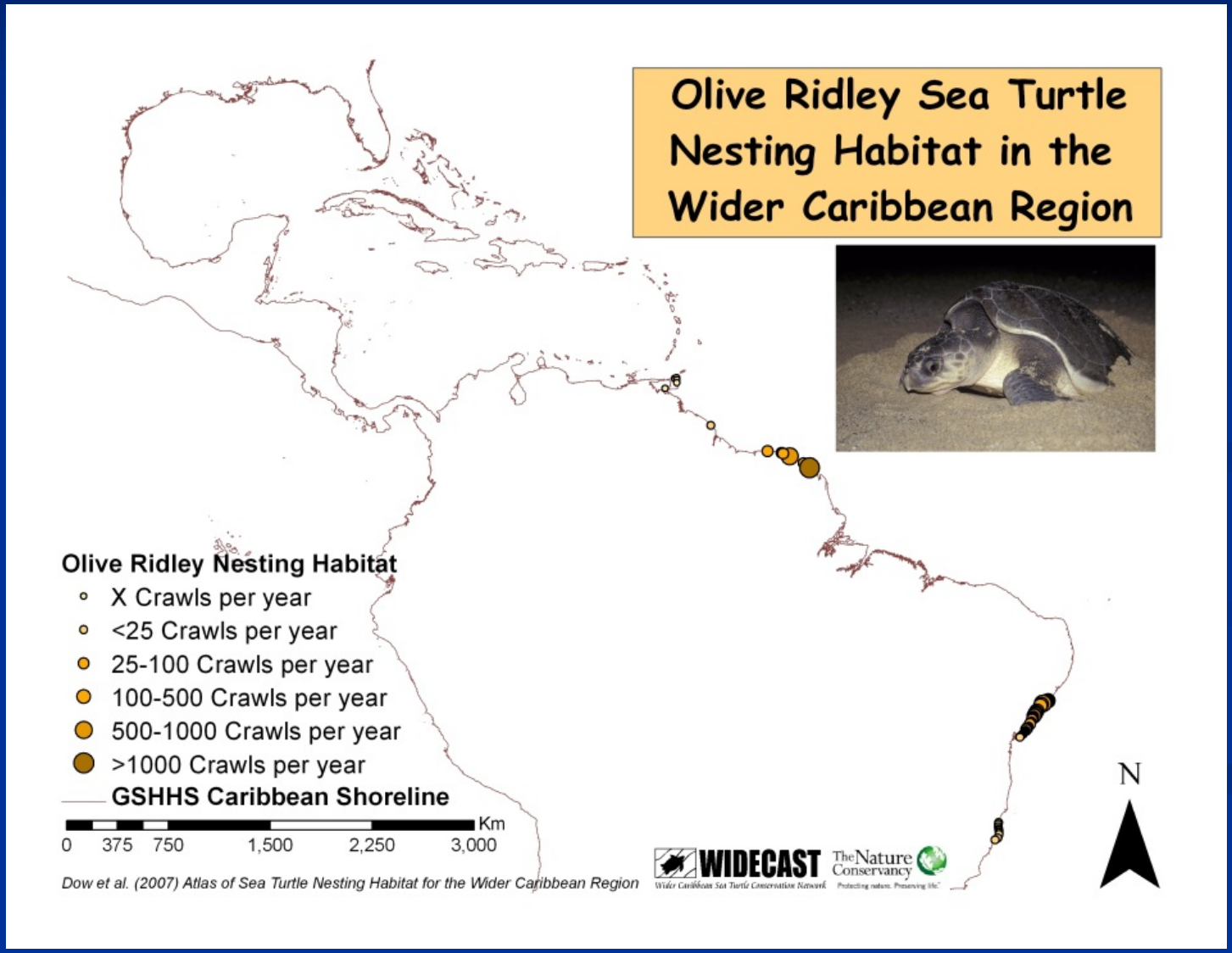
Kemp's Ridley (*Lepidochelys kempii*)

Status: Critically Endangered



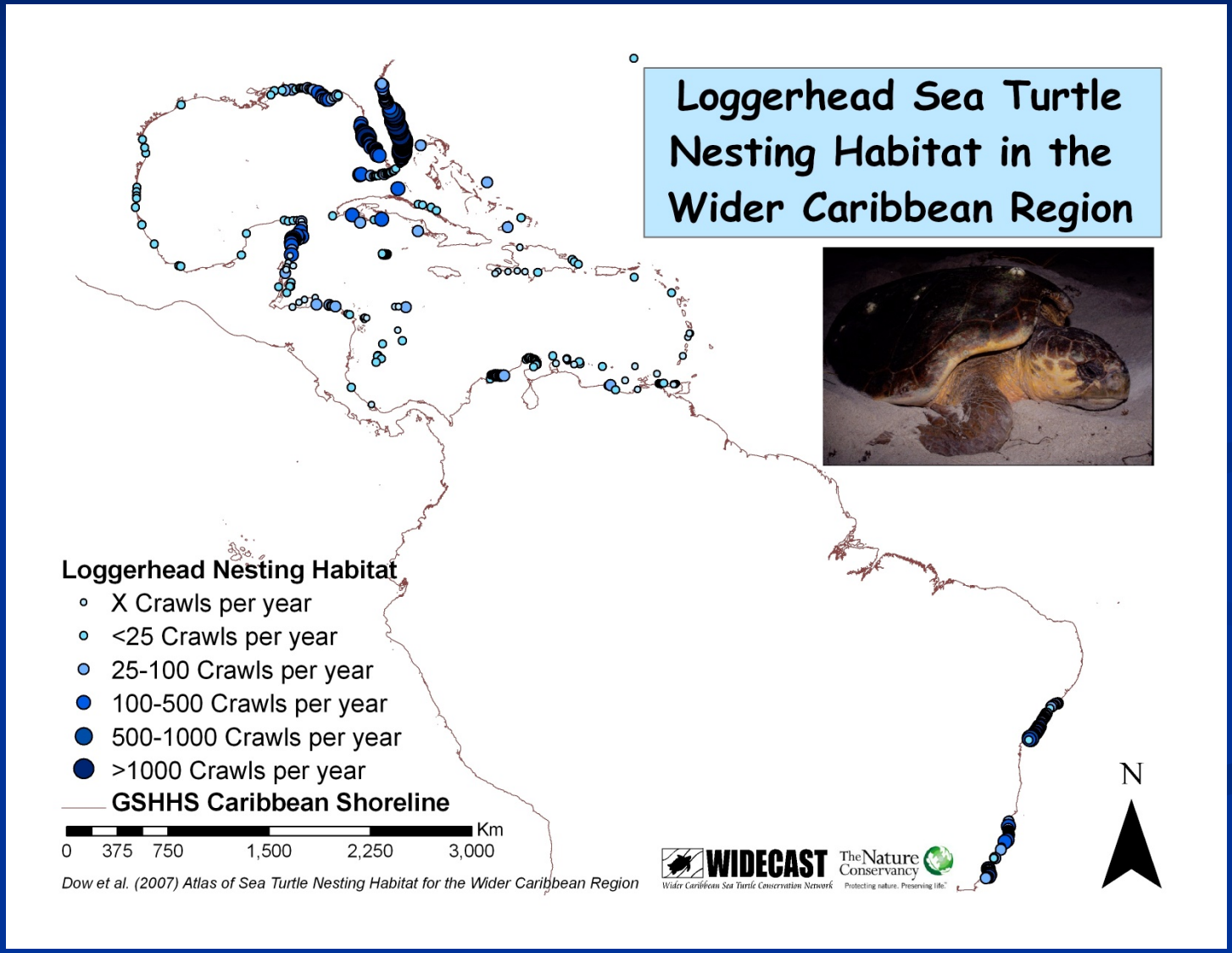
Olive Ridley (*Lepidochelys olivacea*)

Status: Vulnerable



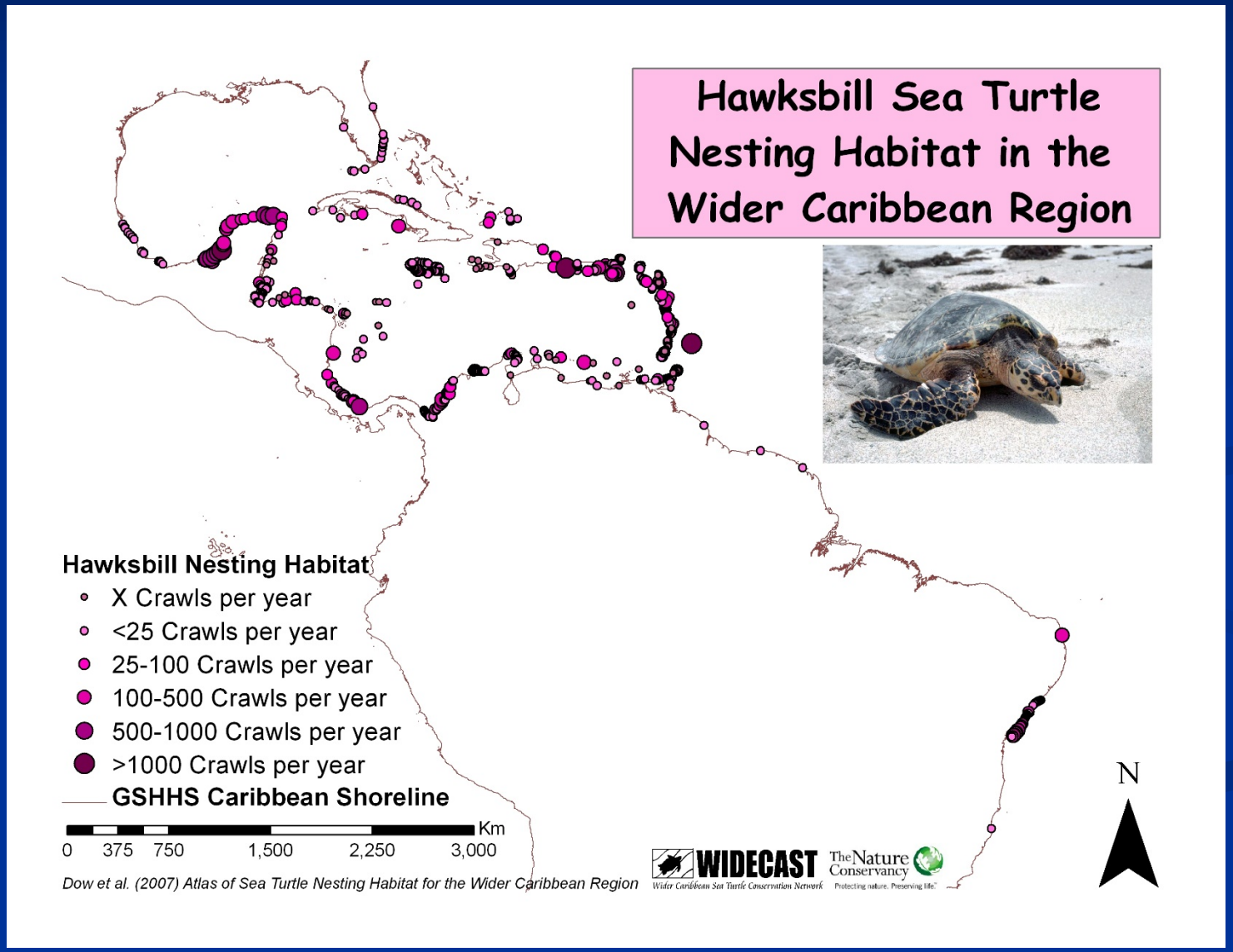
Loggerhead (*Caretta caretta*)

Status: Vulnerable



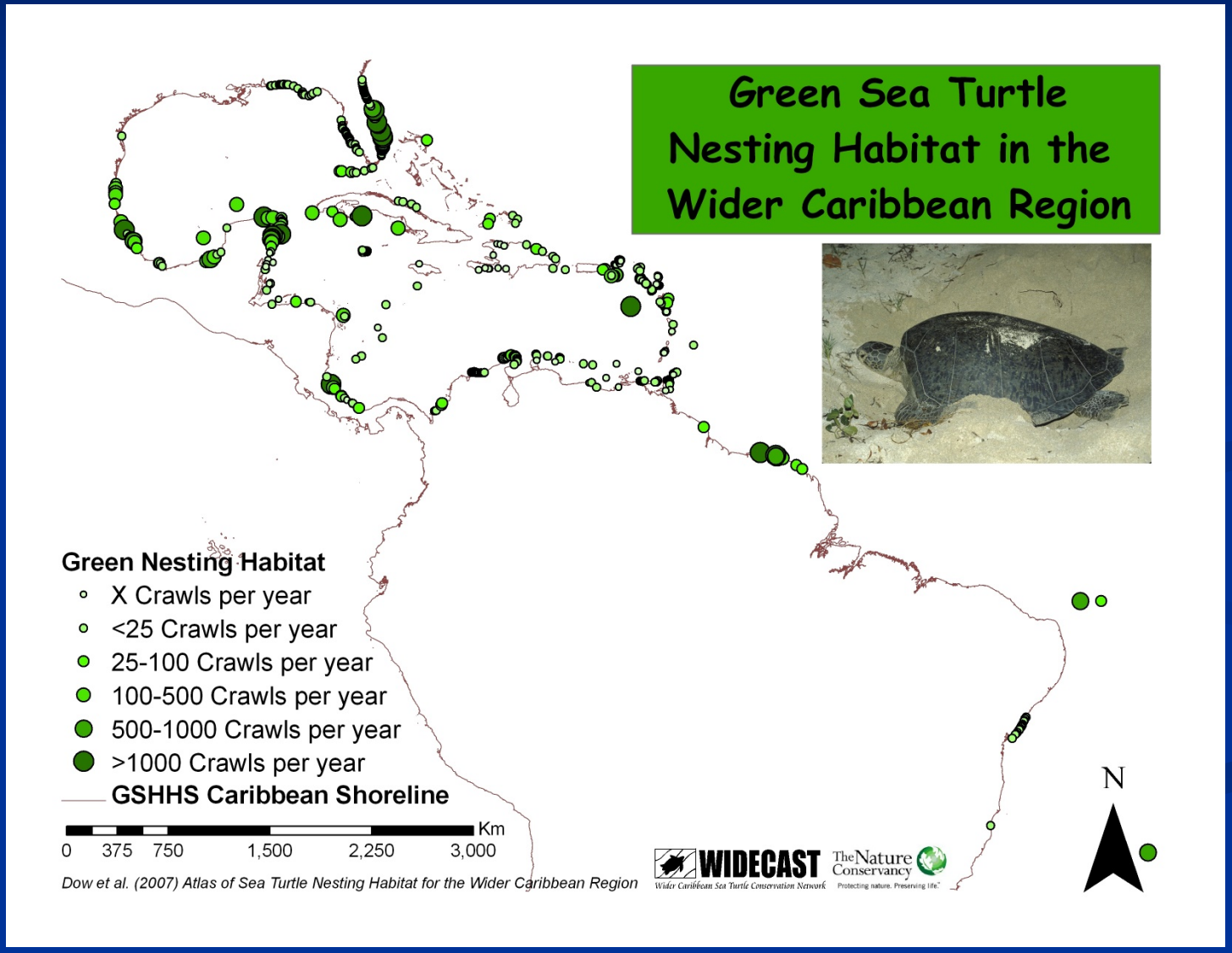
Hawksbill (*Eretmochelys imbricata*)

Status: Critically Endangered



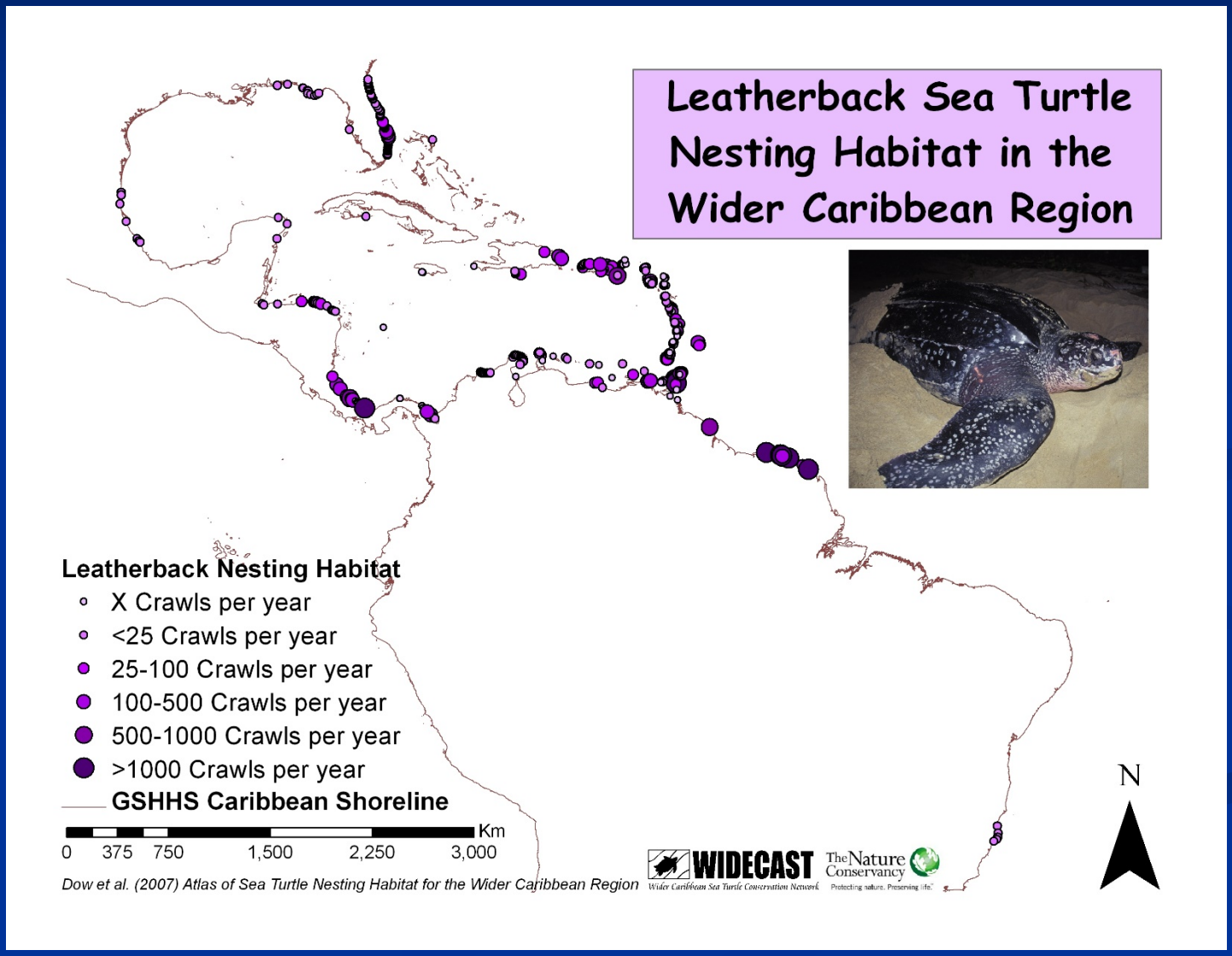
Green (*Chelonia mydas*)

Status: Endangered

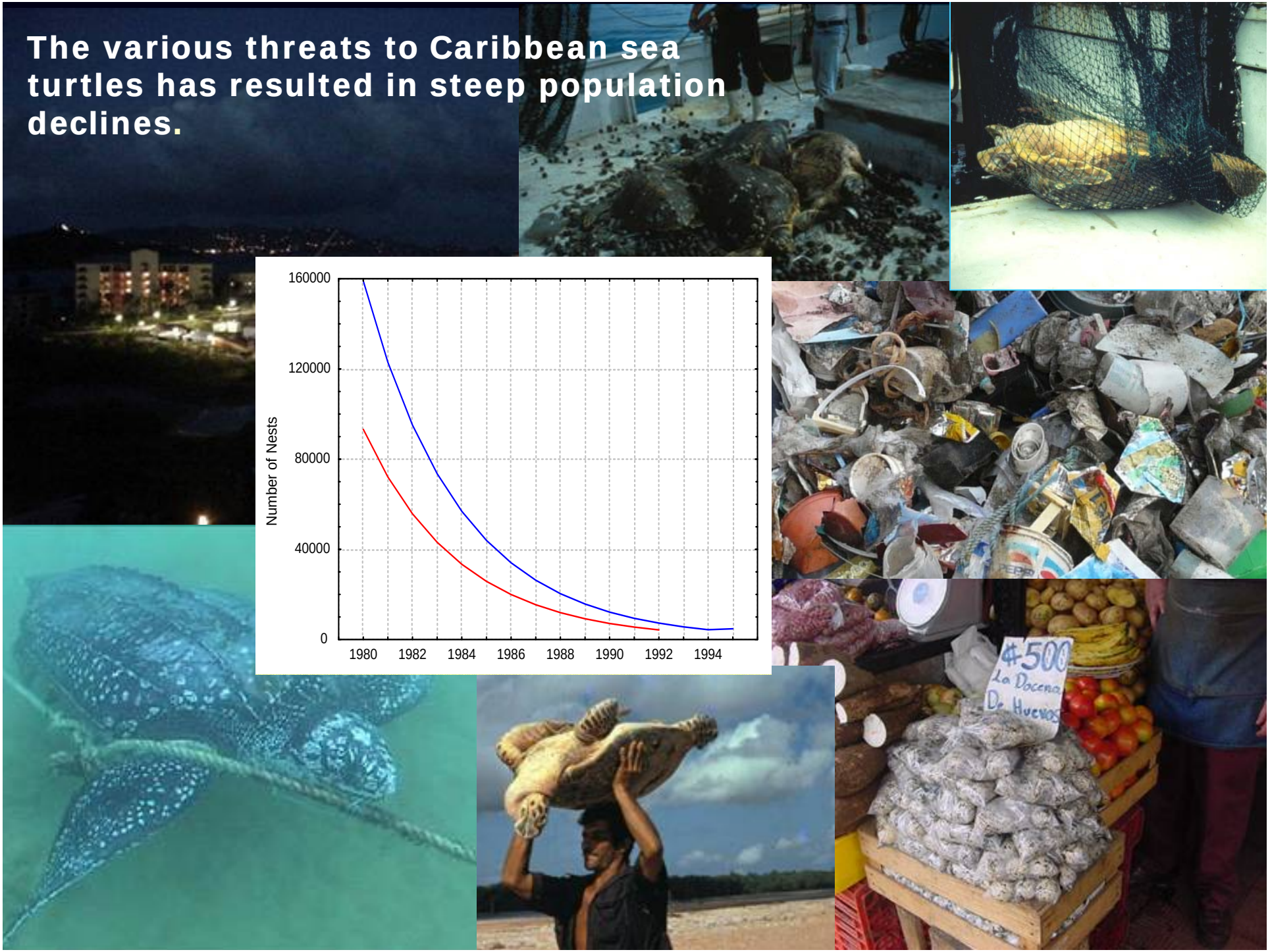


Leatherback (*Dermochelys coriacea*)

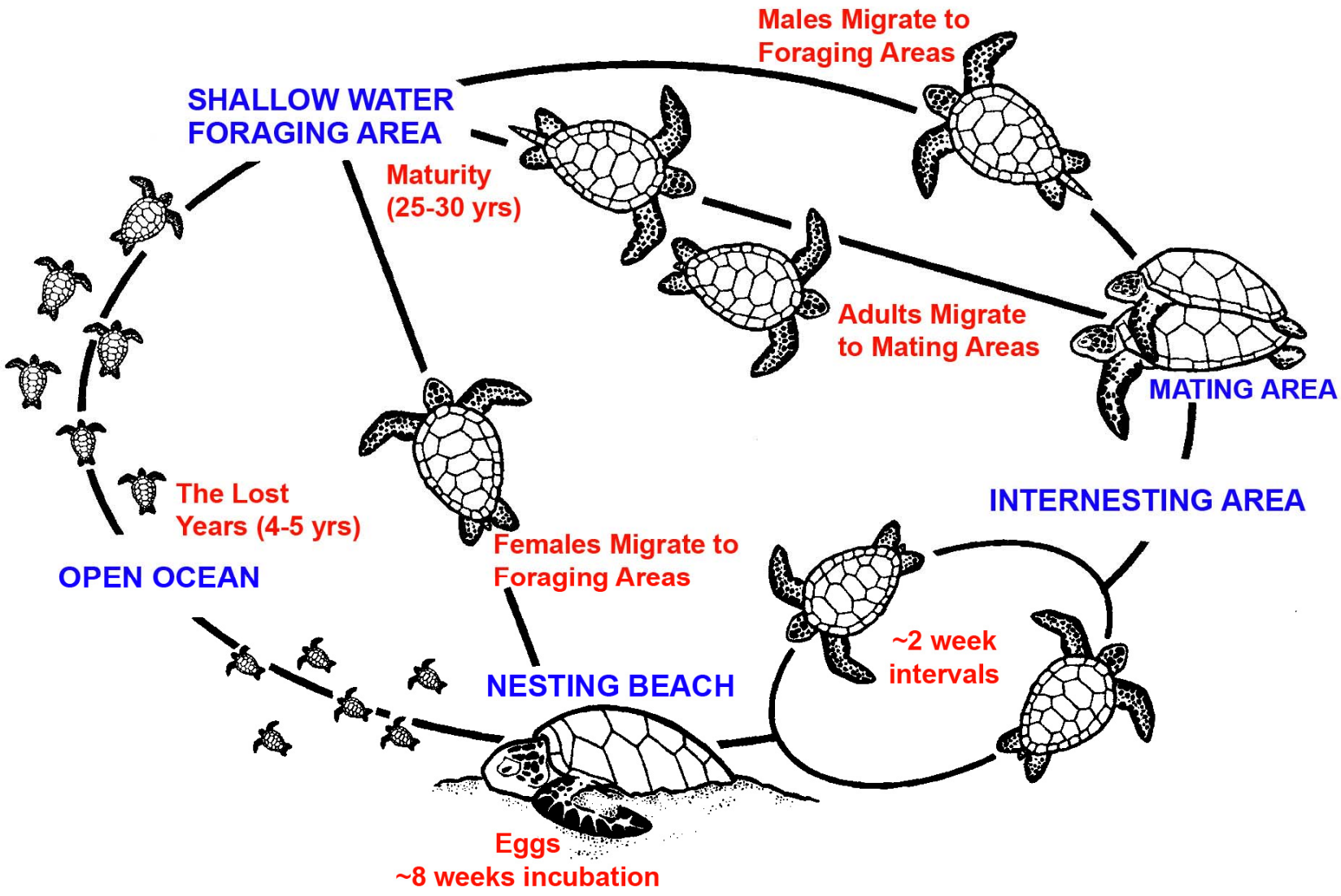
Status: Vulnerable



The various threats to Caribbean sea turtles has resulted in steep population declines.



Reversing population declines is complicated…..



Approaches to Conservation

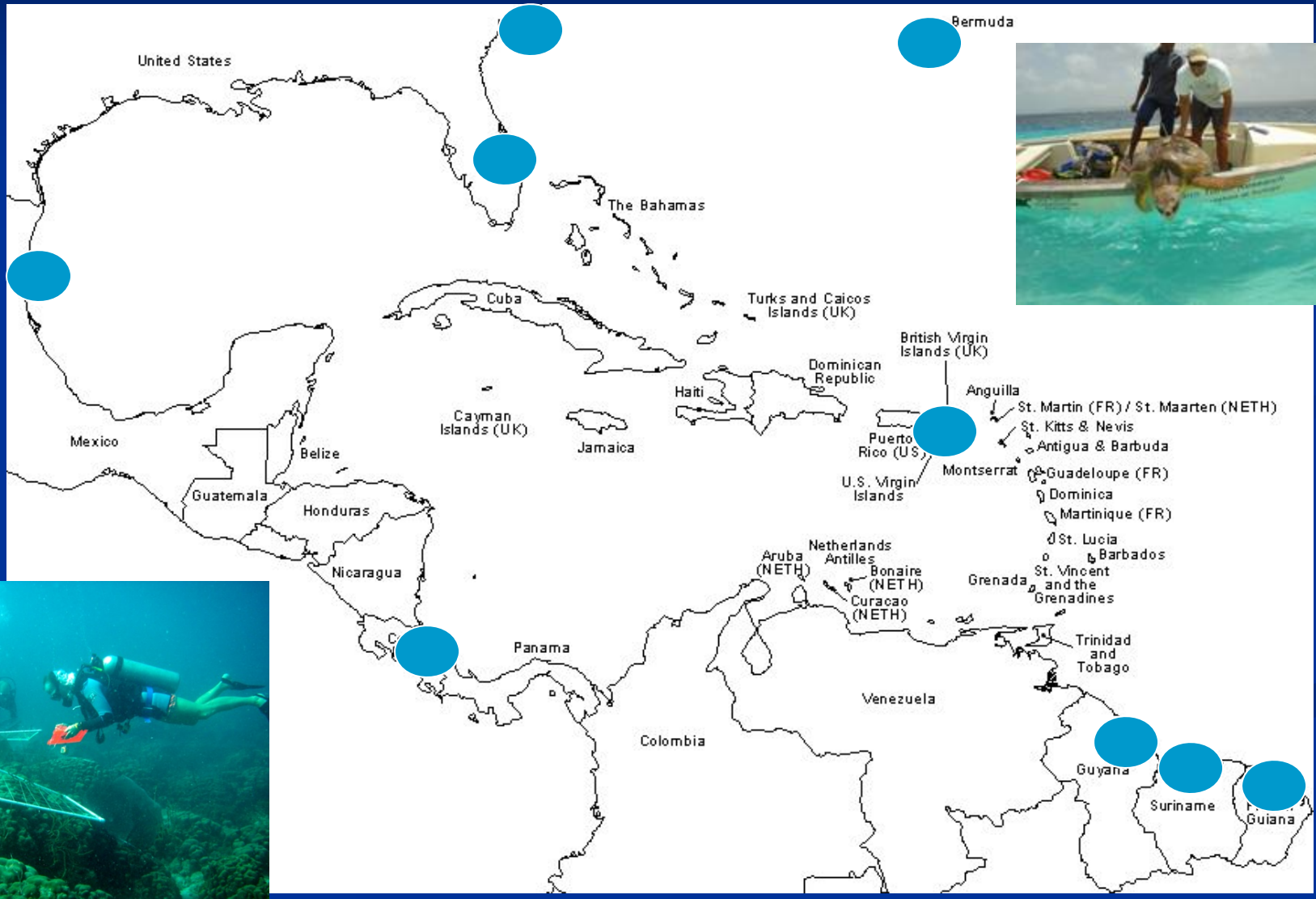
Coordination of efforts at the national and international levels

Inclusive networking throughout the Wider Caribbean Region

The Wider Caribbean Sea Turtle Conservation Network (WIDECAST)

- An international coalition of experts
- Works from the premise that conservation must be nurtured from within, it cannot be commanded from outside
- Partner Organization ("Regional Activity Network") to the United Nations Environment Programme's (UNEP) Caribbean Environment Programme (Kingston, Jamaica)

25 years ago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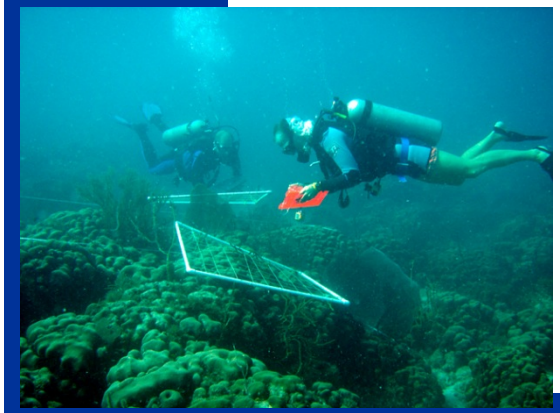
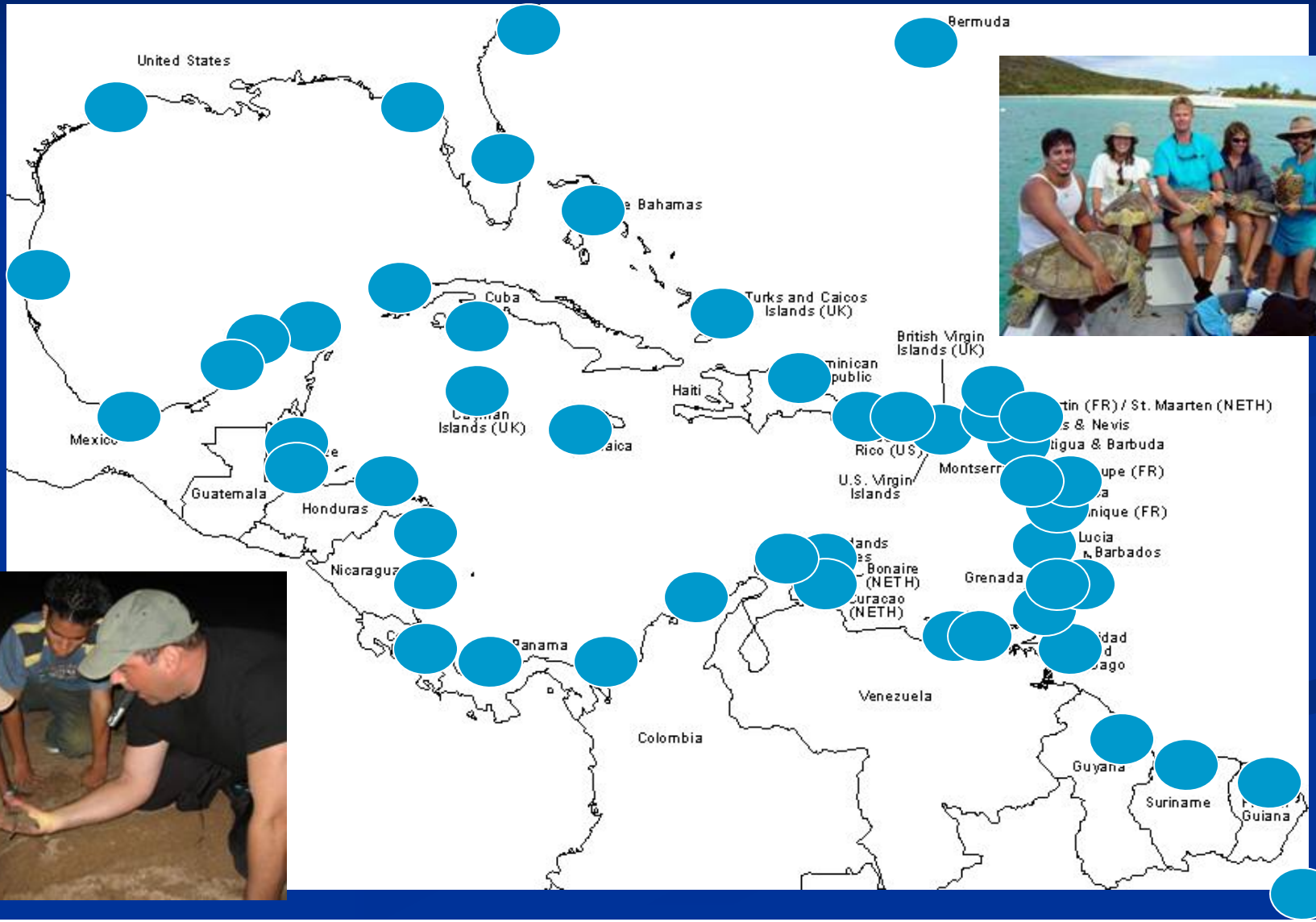
United States
The Bahamas
Cuba
Turks and Caicos Islands (UK)
British Virgin Islands (UK)
Dominican Republic
Haiti
Anguilla
St. Martin (FR) / St. Maarten (NETH)
St. Kitts & Nevis
Antigua & Barbuda
Cayman Islands (UK)
Jamaica
Puerto Rico (US)
Montserrat
Guadeloupe (FR)
U.S. Virgin Islands
Dominica
Martinique (FR)
St. Lucia
Barbados
St. Vincent and the Grenadines
Grenada
Mexico
Belize
Guatemala
Honduras
Nicaragua
Netherlands Antilles
Aruba (NETH)
Bonaire (NETH)
Curacao (NETH)
Panama
Trinidad and Tobago
Venezuela
Colombia
Guyana
Suriname
Guiana



Today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Honduras
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Bonaire (NETH)
Curacao (NETH)
Grenada
Barbados
Panama
Venezuela
Colombia
Guyana
Suriname
Guiana

Leadership Training &
Capacity Building

Emphasizing Shared Goals

TURTLE WATCHING
Sustainable
Policies

Research and
Monitoring

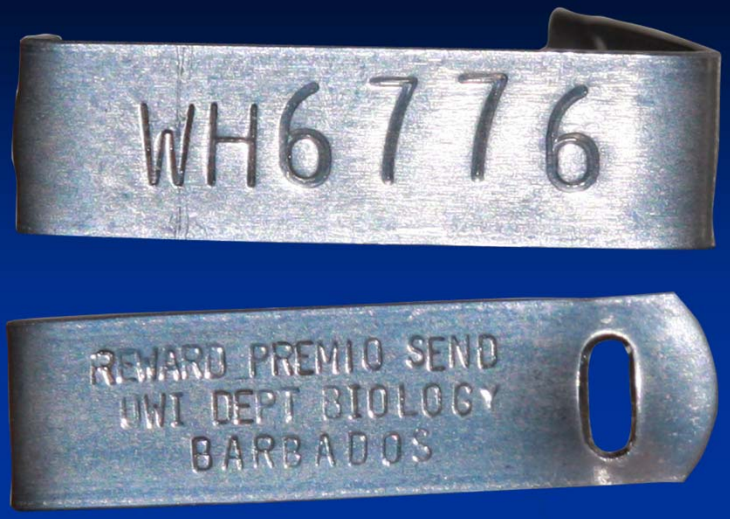
Public
Awareness

Alternative
Livelihoods

- **Best available science to management, conservation, and governance**
- **Empower stakeholders to make effective use of science in the policy process**
- **Promote leadership training for Caribbean scientists, managers and policy-makers**
- **Secure funding to achieve shared goals and promote the "mainstreaming" of environ-mental concerns into other sectors**
- **Demonstrate and replicate the best models for successful community-based programs**

Tagged Turtles

The tagging of turtles enables monitoring of different life stages over an extended period

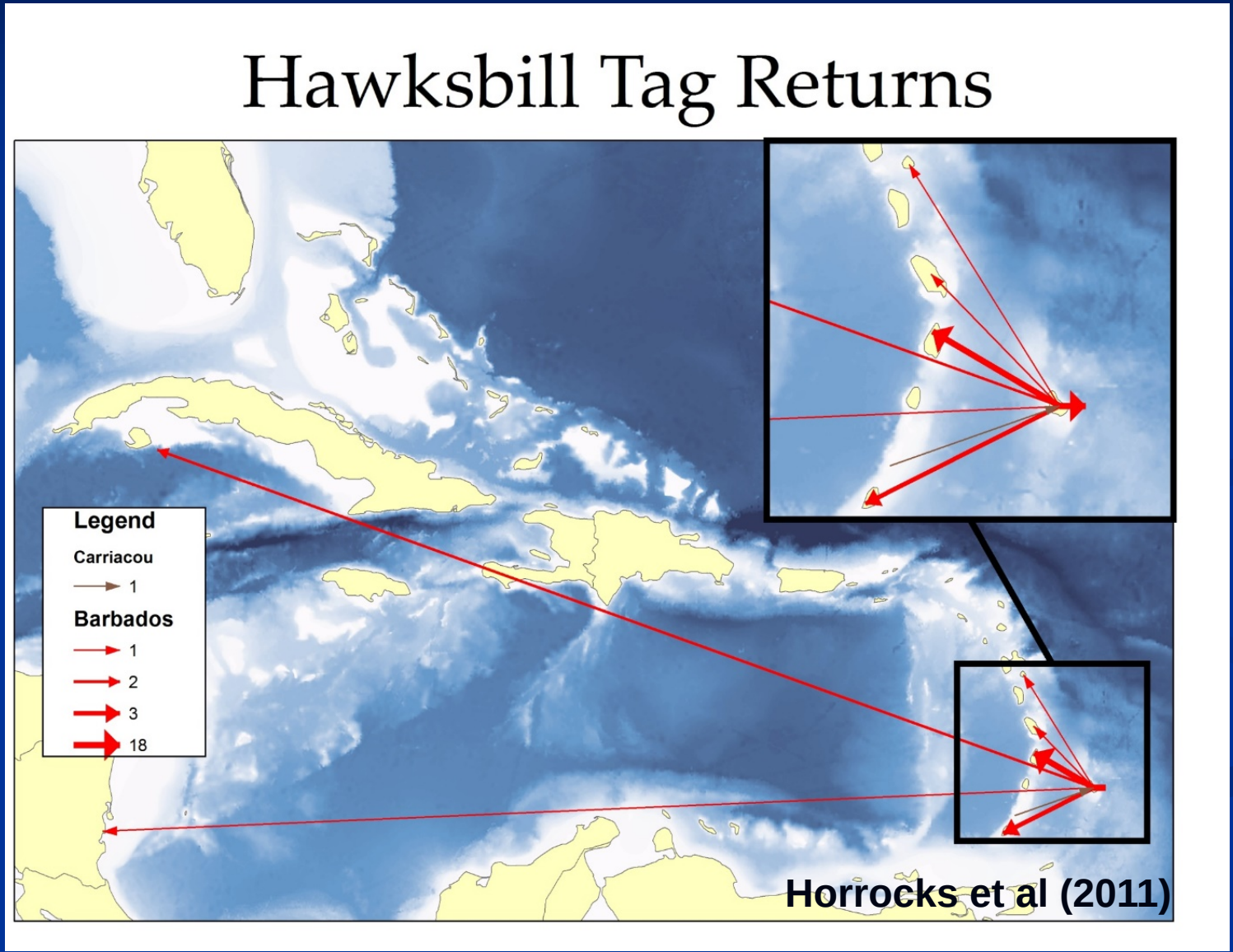


The Marine Turtle Tagging Centre

WIDECAST Marine Turtle Tagging Centre
University of the West Indies

- Provides up to 200 tags per year
- Maintains a record of tag distribution
- Maintains a record of deployed tags
- Receives all tag returns
- Rewards tag returns
- Notifies relevant projects

MTTC Tag-Return Results



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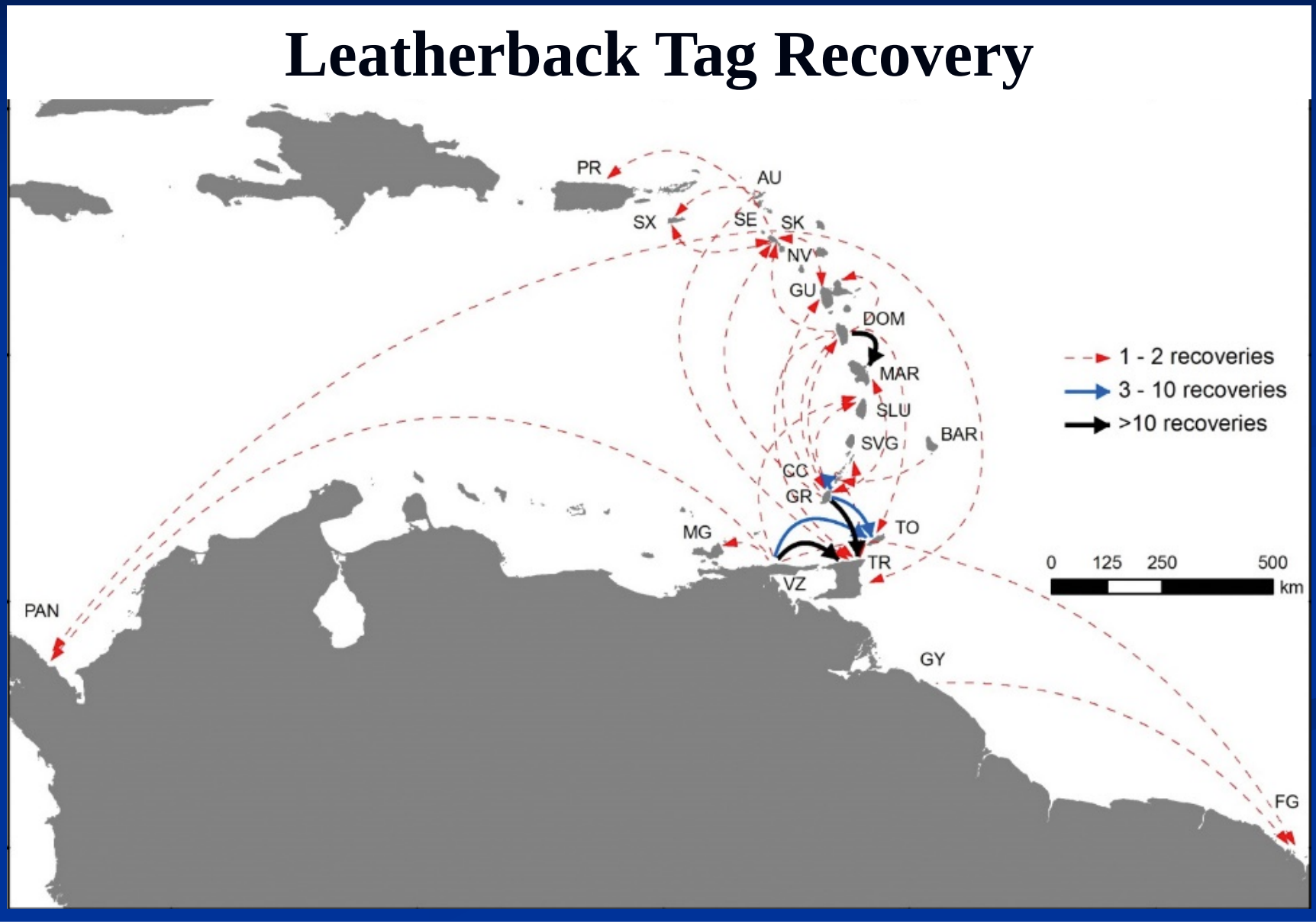
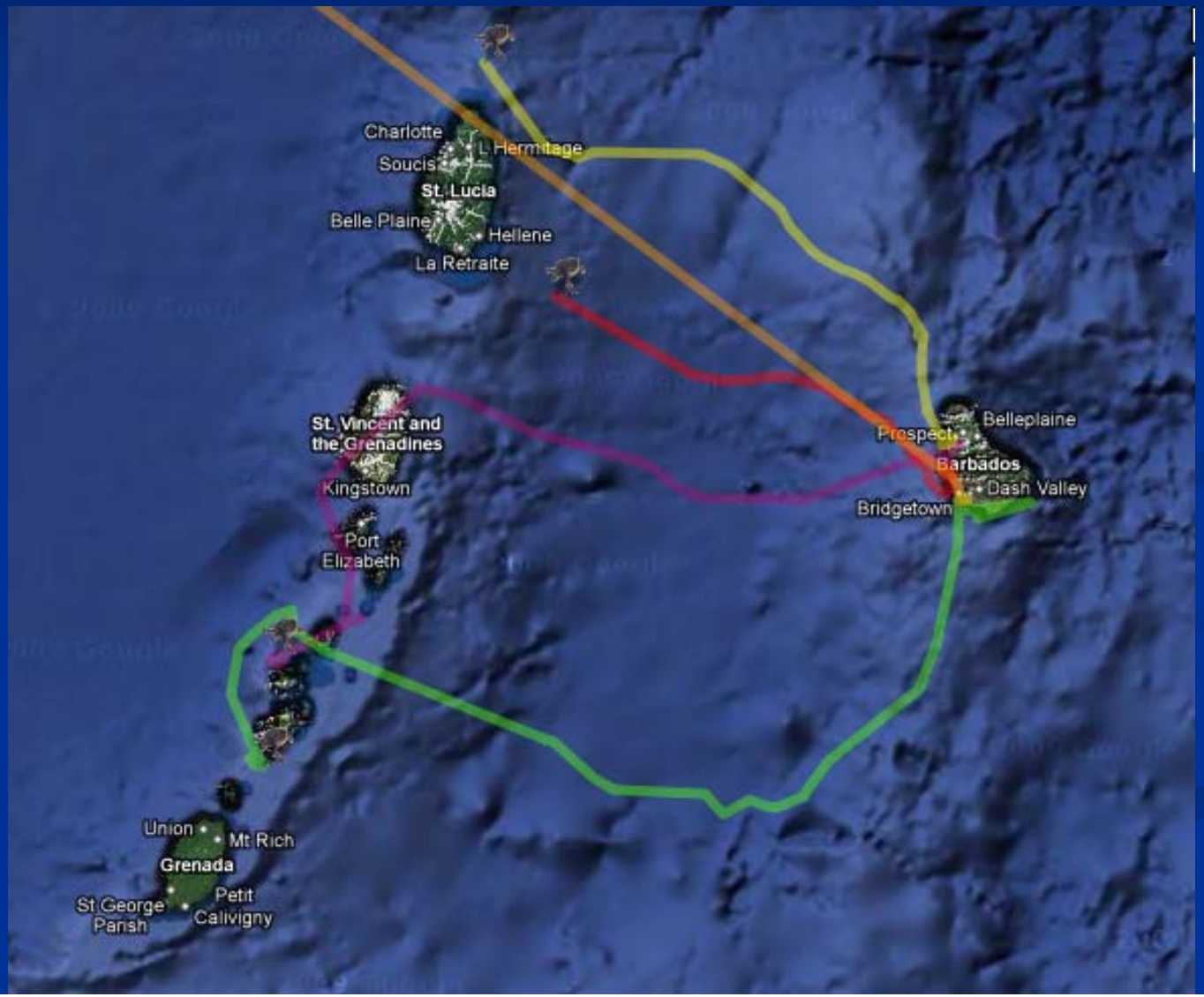


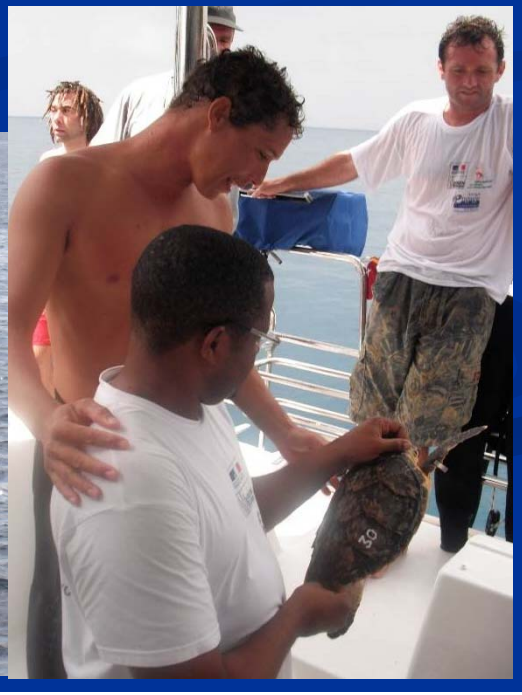
WIDECAST Training in Satellite Telemetry

Movements of Barbadian Turtles



Tobago Cays team training in Barbados, 2010

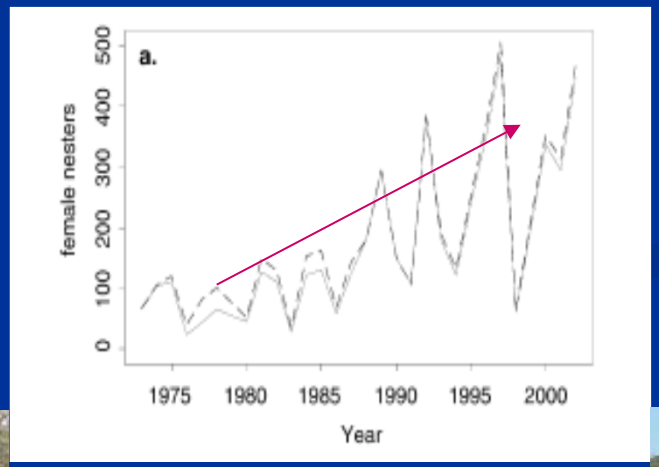
Martinique team training, 2011



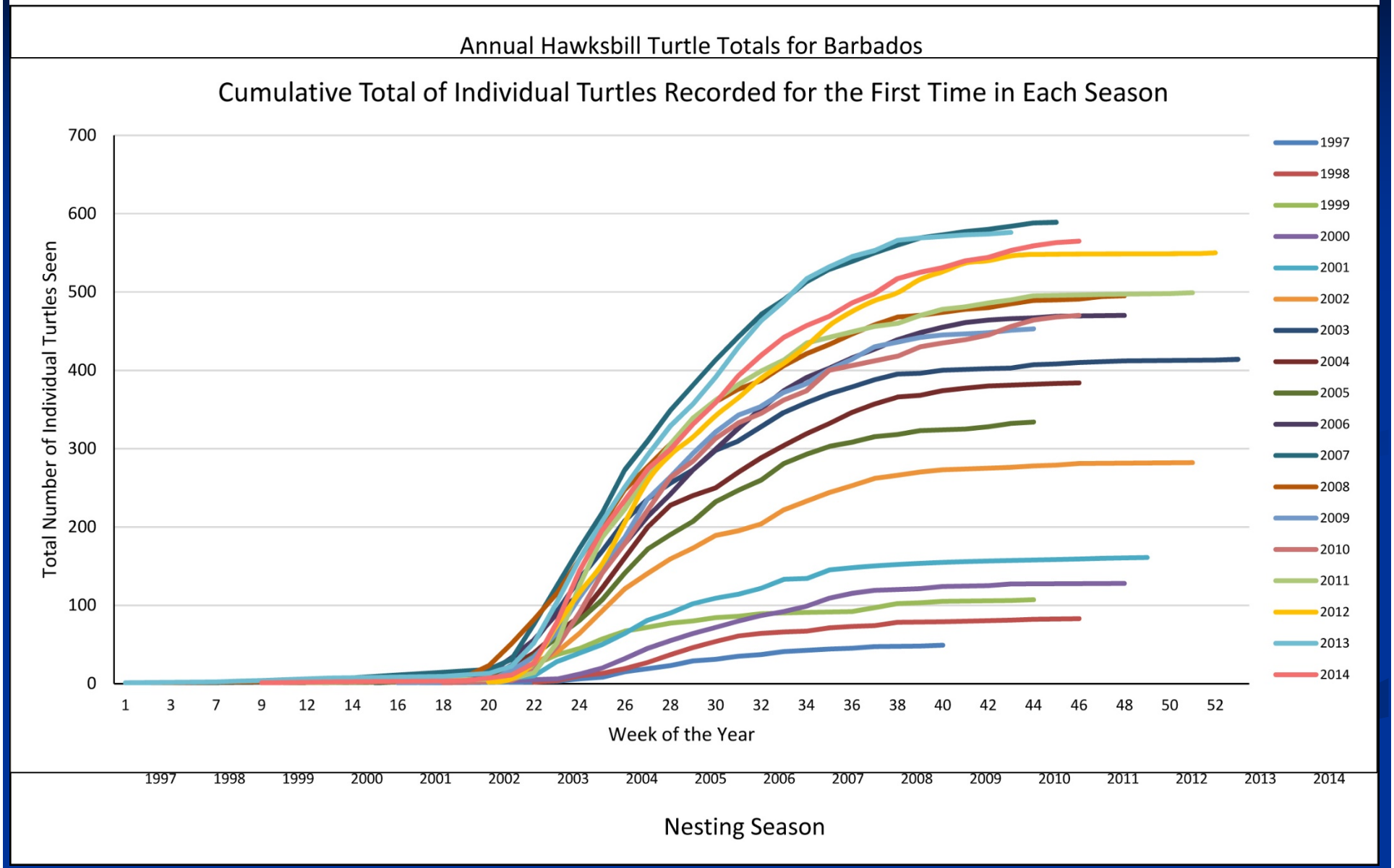
Outcomes:
Are Populations Increasing?

For all six Caribbean-occurring species, there are examples of rising populations

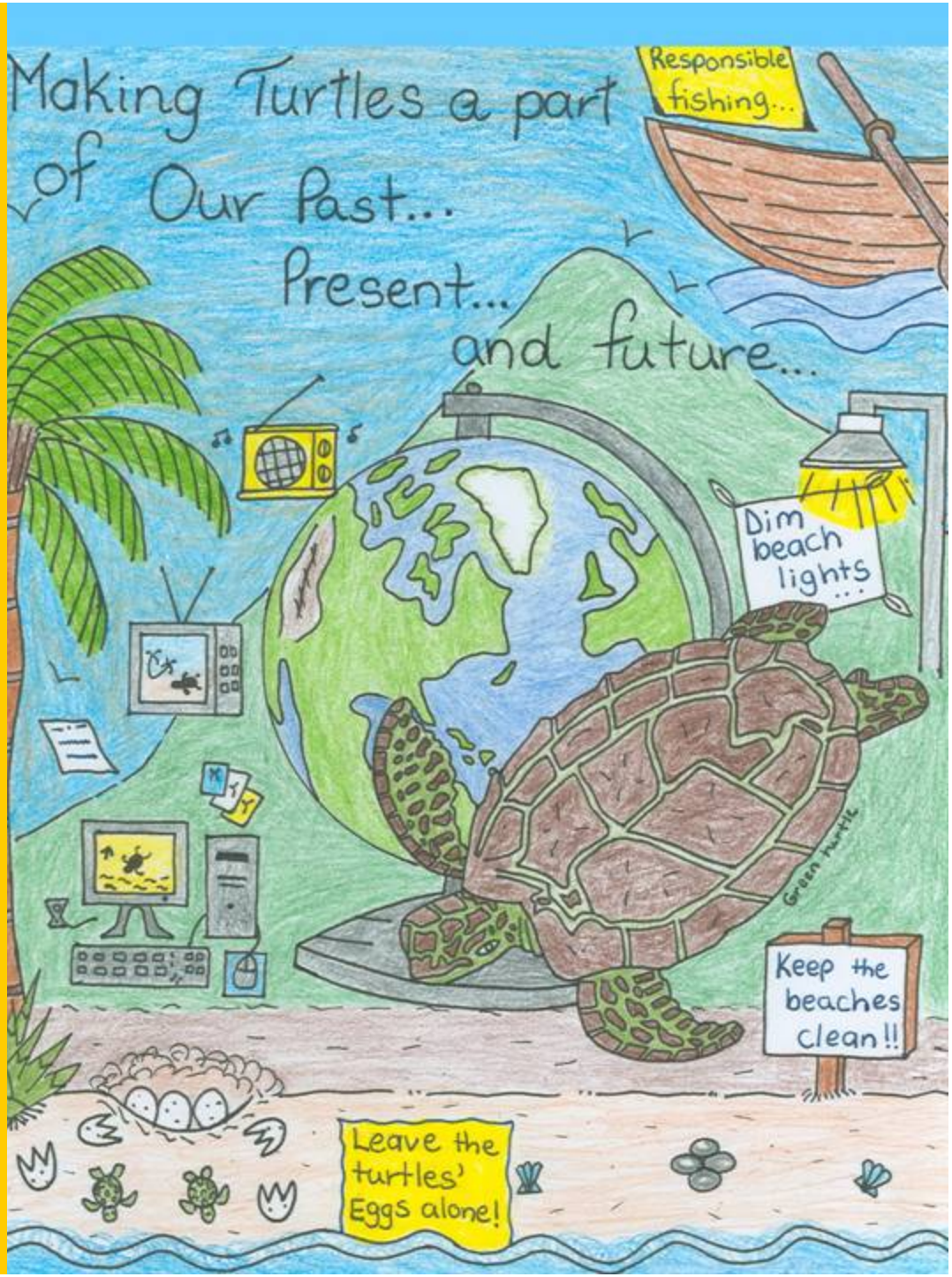
Success is a reflection of unity, of working together to meet challenges that would otherwise overwhelm us if we were working alone



Barbados: A success Story



"QUESTIONS?"


Making Turtles a part of Our Past... Present... and future...
Responsible fishing...
Dim beach lights...
Keep the beaches clean!!
Leave the turtles' Eggs alone!
Green turtle