Status of Antillean Manatees in Belize
Status of Antillean Manatees in Belize

Belize

- regional stronghold of the Antillean Manatee (*Trichechus manatus manatus*)

- Belize population is estimated to be in the region of 800 to 1000 animals

- Highest recent aerial survey count (2014) of just over 500 individuals
Belize is a signatory of several international commitments to protect threatened species – including Antillean manatees.

- **Convention on Biological Diversity** - obligation to maintain threatened species, including Antillean manatees
- **CITES** - Belize limits international trade in threatened wildlife or wildlife parts, through the CITES permitting system
- **SPAW (Special Protected Areas and Wildlife) Protocol to the Cartagena Convention** – provides support for protection and sustainable management of areas of special value, and threatened or endangered species of flora and fauna
LEGAL FRAMEWORK

Manatee Protection Ordinance of 1933, with a moratorium on hunting declared in 1936.

This was to address a critical decline of this species as a result of hunting pressure.
LEGAL FRAMEWORK

The Belize Forest Department (Ministry of Forestry, Fisheries and Sustainable Development) - the current legislative body for the protection of Antillean manatees in Belize.

- **Wildlife Protection Act, 1982 (CAP 220, revised 2000)**, addresses the need to protect wildlife resources, whether within or outside protected areas, and includes legal protection of Antillean manatees and other threatened species. Manatees are listed as a protected species on the Wildlife schedule.

- The **Forest Department-Wildlife Program** enforces the regulations
Legal Framework

The Department of the Environment (Ministry of Forestry, Fisheries and Sustainable Development) regulates coastal development.

- **Environmental Protection Act (1992)**, addresses the need to protect the environment.

- **Environmental Impact Assessment Regulations** (SI 105 of 1995) which control and regulate the EIA process. EIAs are assessed by NEAC – membership on NEAC includes the Forest Department and Coastal Zone Management Authority and Institute (CZMAI).

- When an EIA is accepted, an **Environmental Compliance Plan** is drawn up – a legal agreement between Government and developer, which will contain mitigation actions for minimizing impacts to manatees.
The Coastal Zone Management Authority and Institute (CZMAI), whilst not legally responsible for the West Indian manatee, is responsible for planning in the coastal zone in Belize.

The CZMAI developed the Belize Manatee Recovery Plan in 1998 to provide a framework for the implementation of key strategies. This is currently being updated.

CZMAI hosts the Manatee Programme, with a dedicated officer housed in the Coastal Zone Management Authority and Institute (CZMAI).
Status of Antillean Manatees in Belize

BELIZE MANATEE RECOVERY PLAN (1998)

Key Strategies

- Establish key protected areas
- Establish the National Manatee Working Group
- Capacity building of community-based protected area co-management partners
- Establish the Manatee Rehabilitation Centre
ESTABLISH KEY PROTECTED AREAS

In Belize, areas protected for specific species or ecosystems fall under the category “Wildlife Sanctuary”.

There are two categories under the “Wildlife Sanctuary designation:

* **Wildlife Sanctuary 1:**
  No natural resource extraction. Permitted activities are tourism, education and research.

* **Wildlife Sanctuary 2**
  Traditional natural resource extraction permitted, if based on a sustainable use management plan and well regulated. Other permitted activities are tourism, education and research.

BELIZE MANATEE RECOVERY PLAN (1998)
Status of Antillean Manatees in Belize

ESTABLISH KEY PROTECTED AREAS

Designation of three protected areas considered critical for continued viability of national manatee populations.

A fourth key area – Placencia Lagoon – is currently awaiting designation.

BELIZE MANATEE RECOVERY PLAN (1998)
Status of Antillean Manatees in Belize

Corozal Bay Wildlife Sanctuary

Size: 178,000 acres (72,000 ha)
IUCN Category: IV
Management Authority:
Forest Department
Co-management Partner:
Sarteneja Alliance for Conservation and Development (SACD)
Management effectiveness (2009): MODERATE
Corozal Bay Wildlife Sanctuary
Part of a larger, system level transboundary / planning initiative

Status of Antillean Manatees in Belize

Northern Belize Coastal Complex
Management Action Planning Outputs
Summary

2015 - 2020

Funded by the Protected Areas Conservation Trust

PACT
Protected Areas Conservation Trust

SACD
Sustainable Alliance for Conservation and Development

Google Earth

The Northern Belize Coastal Complex

Belize
Gales Point Wildlife Sanctuary

Size: 9,097 acres (3,680 ha)
Statutory Instrument: SI 92 of 1998
IUCN Category: IV
Management Authority: Forest Department
Co-management Partner:
  Gales Point Wildlife Sanctuary Community Management Committee (GPWSCMC)
Management Effectiveness (2009): POOR

Status of Antillean Manatees in Belize
Swallow Caye Wildlife Sanctuary

Size: 8,972 acres (3,630 ha)
Statutory Instrument: SI 102 of 2002
IUCN Category: IV
Management Authority: Forest Department
Co-management Partner: Friends of Swallow Caye (FOSC)
Management Effectiveness (2009): POOR
Selecting the Release Site

Placencia Lagoon

Proposed as a Wildlife Sanctuary based on importance for:

- manatees and other threatened species
- traditional fishermen
- local tourism
- Current and anticipated threats from coastal development and establishment of cruise ship terminal

Part of a larger, system level management unit – the Southern Belize Reef Complex
Status of Antillean Manatees in Belize

THE NATIONAL MANATEE WORKING GROUP

Acts as an oversight committee for the CZMAI Manatee Project.

The Working Group includes government, non-government and research representation.

The primary activities of the Working Group are:

- To oversee the CZMAI National Manatee Project
- To evaluate all proposed manatee research projects in Belize and provide recommendations to the relevant Ministry
- To review legislation concerning manatees and provide recommendations to the Ministry
- To ensure sound management plans are produced for protected areas
Capacity building through conservation planning for the manatee population in the Corozal Bay Wildlife Sanctuary, evaluating the status of the manatee population and identifying those parameters considered critical for optimum conditions.
Capacity building in water quality monitoring to provide insight into physical water parameters.

Capacity building in use of aerial surveys for manatees, in partnership with Lighthawk.
Status of Antillean Manatees in Belize

CAPACITY BUILDING OF COMMUNITY-BASED PROTECTED AREA CO-MANAGEMENT PARTNERS:
Example: SACD
Status of Antillean Manatees in Belize

ESTABLISHMENT OF THE MANATEE REHABILITATION CENTRE

- Hosted by Wildtracks
- Operates under a Memorandum of Agreement with the Forest Department.
- Provides rehabilitation care for all live strandings that require care.

BELIZE MANATEE RECOVERY PLAN (1998)
STATUS OF ANTILLEAN MANATEES IN BELIZE

ESTABLISHMENT OF THE MANATEE REHABILITATION CENTRE

Objectives:

1. To rehabilitate, where possible, manatees of Belize for eventual release back into the wild

2. To increase efficiency and effectiveness of manatee management through greater, well defined collaboration between the Forest Department and the Manatee Rehabilitation Centre

3. To provide greater protection to manatee species through conservation, research, education and public awareness

BELIZE MANATEE RECOVERY PLAN (1998)
Status of Antillean Manatees in Belize

ESTABLISHMENT OF THE MANATEE REHABILITATION CENTRE

- 16 manatees have been brought to the Manatee Rehabilitation Centre in the last 16 years
- 5 manatees are currently in rehabilitation care
- 6 manatees have been returned to the wild
Status of Antillean Manatees in Belize

THREATS TO MANATEES IN BELIZE

This report just got in. Today would have been the only week without a dead manatee but it literally seems we cannot get out of a week without one. This female manatee got hit by a boat near the river mouth and died leaving the new born calf to fight a losing battle as no way such a young baby would survive alone. Once again there is serious need for urgent effort and response to put a halt to these incidents. Soon no effort we put in will be able to recover our already endangered population. Today’s two deaths are number 16 and 17 for the year.
There is an increasing trend of manatee strandings in Belize

- The majority of deaths occur in the Belize City / Belize River waters - a key manatee use area.
- The majority are the result of anthropogenic causes – primarily collisions with watercraft.
- A small number are live strandings: orphaned or abandoned calves, injured juveniles, sub-adults or adults.
Between 2010 and mid-2015, 142 manatees have been stranded.

87 strandings occurred in the Belize City area.

Boat strikes are confirmed as the primary cause in 33% of strandings. 90% of these were in the Belize City.

Cause of strandings in another 33% of strandings were unverified.

12% of strandings are live animals.

36 manatees have already been confirmed as dead so far in 2015.

THREATS
There are increasing threats from tourism activities in the coastal area, linked to watercraft-incidents and tourism boat-based day trips.

Projected development of two new cruise ship disembarkation points on near-shore cayes, both in key manatee areas:

- Belize City/Drowned Cayes
- Placencia Lagoon / Harvest Caye
Other causes for concern are:

- Pollution - Tissue samples from a juvenile male in Placencia Lagoon were found to have a cobalt concentration ten times higher than the population average, and lead and zinc concentration three times higher (Ramey, 2010)

- There is still illegal hunting of this species for food - verified report from 2010 of a manatee being killed and butchered for meat
Status of Antillean Manatees in Belize

THANK YOU!

QUESTIONS?