Field research and other work on Antillean Manatees in the Dominican Republic

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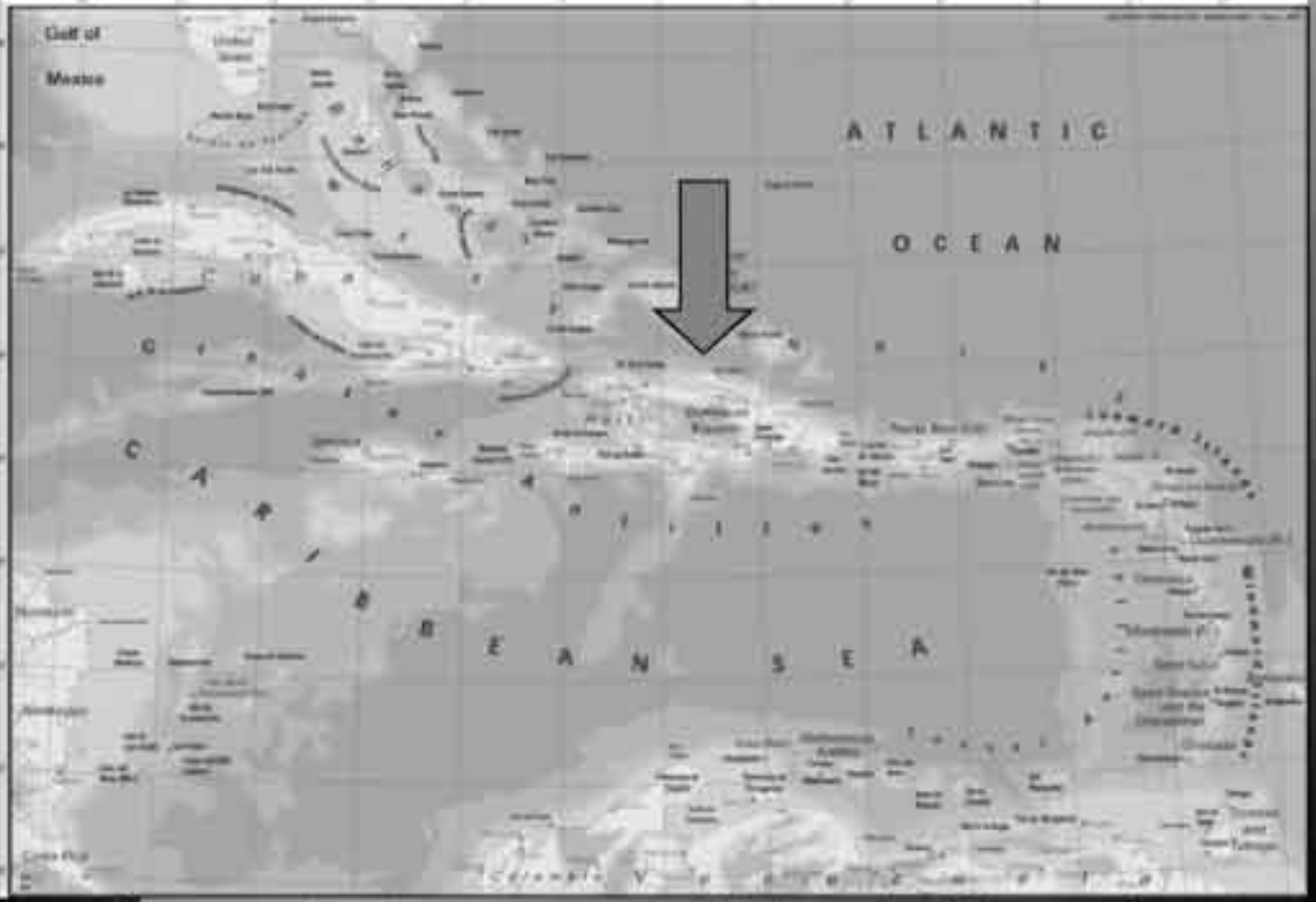
Research Pilot Project: Training workshop
Holbox Island, Mexico
26 – 28 June 2012

Outline

- Field research in the DR and other activities
- Implemening the Manatee Bycatch Pilot Project in the DR

Field Research

- 2006: Boat based surveys and informal interviews during short site visits (max. 3 days) to 5 locations around the DR. TNC, FUNDEMAR & CIBIMA-UASD.
  - Monte Cristi, Estero Hondo, Samana Bay area, Boca de Yuma & Barahona
  - Direct sightings in 3/5 locations
  - Description and locations of manatee sighting areas and sighting records from interviews



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2006 Study Areas

Dominican Republic

Field Research

- 2007-2008: Cano Estero Hondo. CIBIMA-UASD.
  - Interviews
  - Habitat characterization
  - Boat based surveys
  - Observing human activity
  - Photo-id effort (underwater video)

Caño Estero Hondo
© 2006 Europa Technologies
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Photos: Haydée Dominguez

Interviews

- 138 questionnaires in 6 communities
- 97% men (46% fishermen)
- 95% correctly identified the manatee from pictures shown to respondents during interviews
- 86% had seen manatees personally
- 67% thought manatees were present year-round
- 77% perceived an increase in manatee population in the area in the last 10 years
- From 1996 to 2007 there were 11, possibly 12, reports of dead manatees (0.92 to 1 manatee death per year)
- 119 sightings were reported: 103 within and 16 outside the study area

Interviews

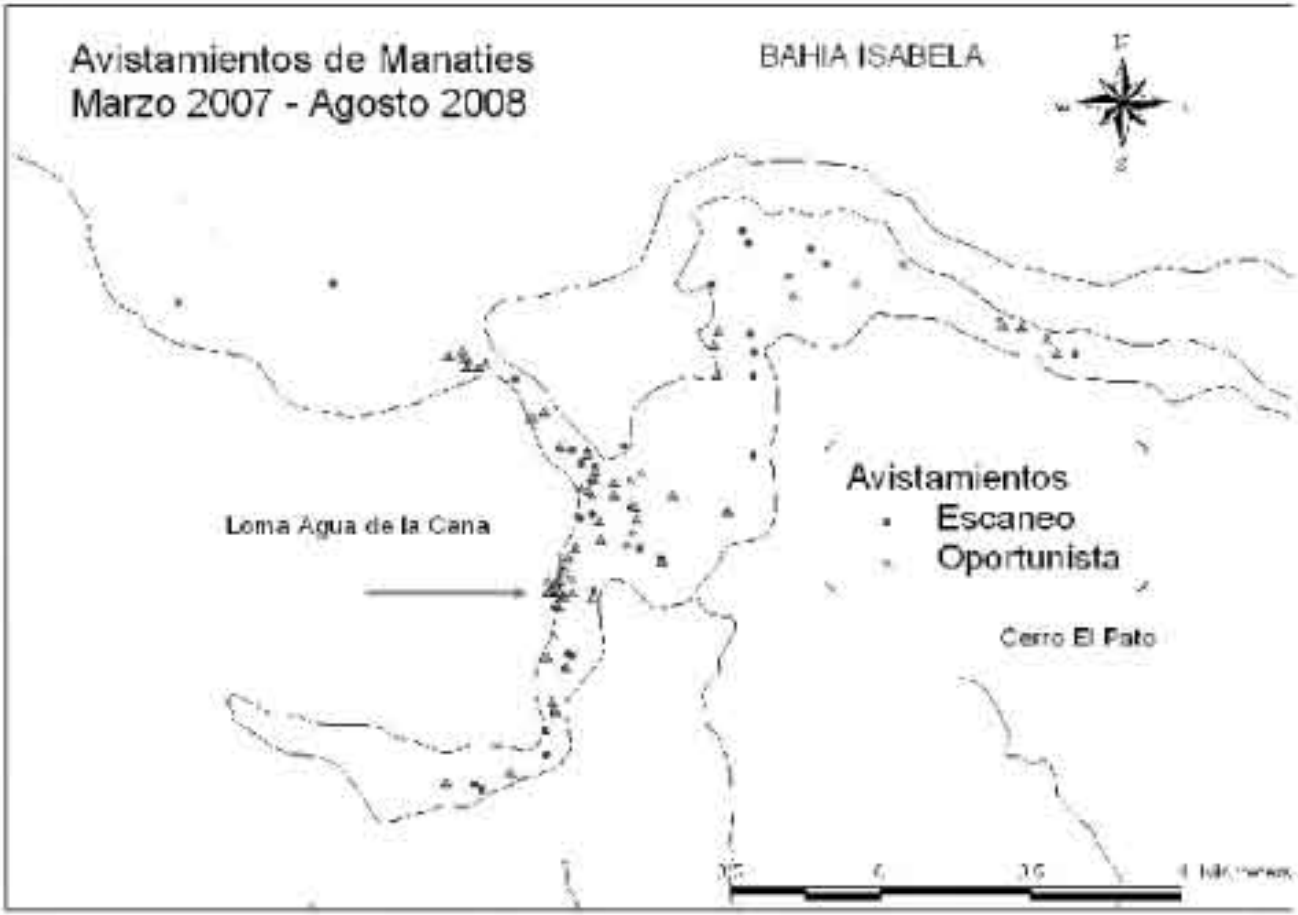
- Pictures shown to respondents

Interviews

- Captures: 63% said manatees were not captured in the study area vs. 19% that said they were
- 1 to 3 manatees were captured per year, according to 11 respondents
- Manatees are captured mainly with nets ("chinchorros" and "trasmallos"), but also with harpoons
- Mainly used for food, and bones used for medicinal purposes
- 94% affirmed that manatees were a protected species

Boat based surveys

- From March 2007 to August 2008
  - 270 h of effort, 183 completed 30 minute point-scans
  - 103 sightings: 27 within point-scans and 76 opportunistic
  - Overall sighting probability was 14.8% (27/183)
  - 22 out of 76 opportunistic sightings were land-based:
    - Playa Marisa (7)
    - The dock (5)
    - Observation point in the west arm of the lagoon (10)
  - Maximum duration of a sighting: 4 h 21 minutes from observation point in the west arm of the lagoon

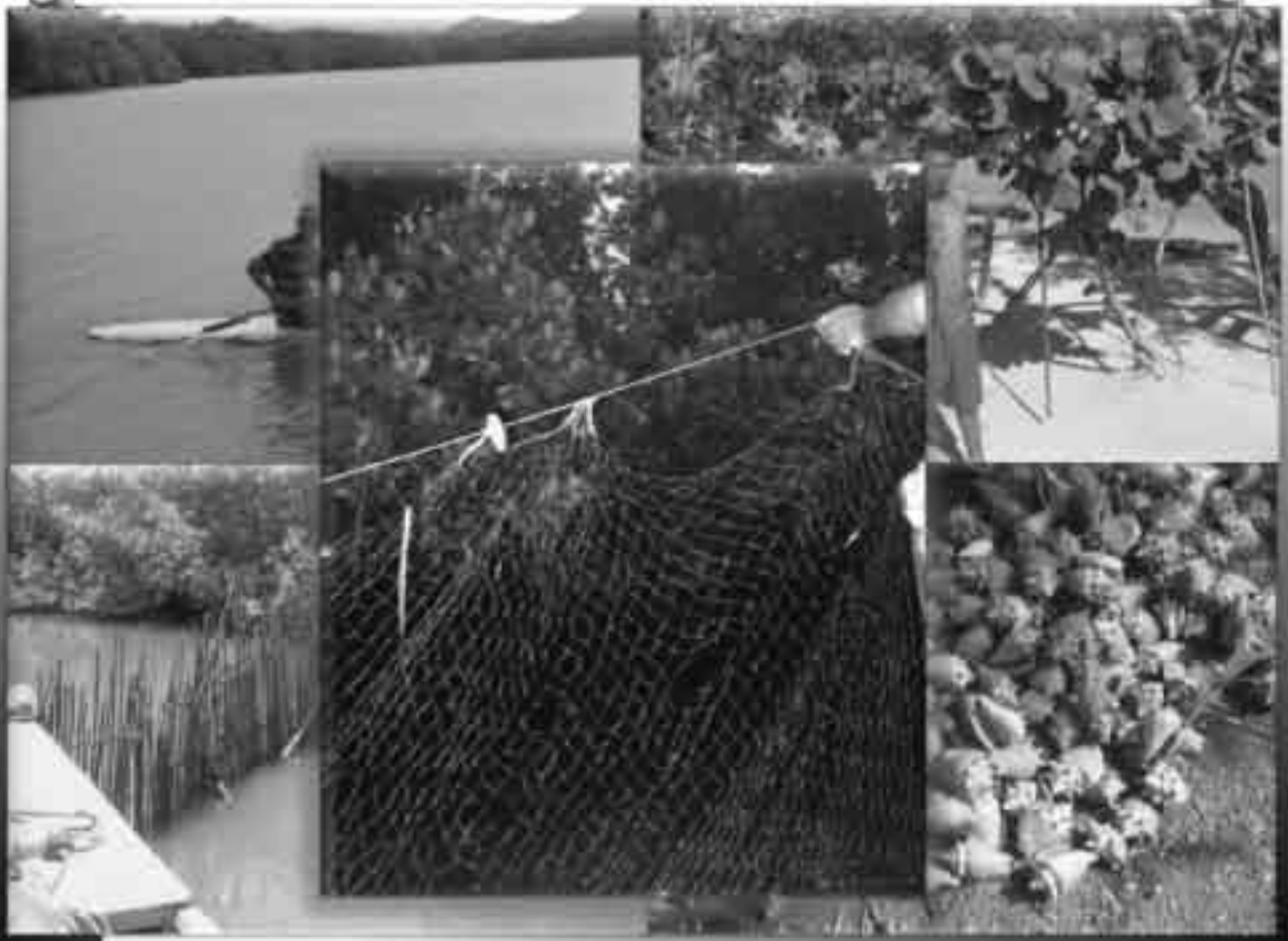

Avistamientos de Manaties
Marzo 2007 - Agosto 2008
BAHIA ISABELA
Loma Agua de la Cana
Avistamientos
Escaneo
Oportunista
Cerro El Pato

Other photo

Boat based surveys

- Presence of manatees, including calves, was confirmed throughout the year.
- Calves were present in 47 out of the total 103 sightings
- Maximum manatee group size during one sighting: 9 animals, including 3 possibly 4 calves
- Although evasive, manatees have been observed feeding, resting, travelling, socializing and milling within Caño Estero Hondo
- Manatees were seen entering and leaving the lagoon on several occasions (but could not be followed by us)

Human activities



Conclusions

- Locals are knowledgeable about manatees in the area and are conscious they are protected
- Caño Estero Hondo is an important manatee activity center with protected shallow warm waters, freshwater sources and abundant seagrasses
- Manatees are present in Caño Estero Hondo throughout the year (including calves), and they are observed frequently in resting holes and feeding areas
- Relatively low human impact in the area, but fishing with nets in the Sanctuary is illegal and represents a principal threat for manatees
- Manatee photo identification efforts were not successful and are not recommended for this lagoon

Field Research

- 2008: North coast of Samana Peninsula. CIBIMA-UASD.
  - Interviews
  - Habitat characterization
  - Land and boat based surveys
  - Observing human activity
  - Photo-id effort (underwater video)