

# PEACE PARKS FOUNDATION

THE GLOBAL SOLUTION







## OVERVIEW



### TREATY SIGNED

- 1 /Ai/Ais-Richtersveld TP\* (Namibia/South Africa)
- 2 Kgalagadi TP\* (Namibia/South Africa)
- 3 Kavango Zambezi TFCA (Angola/Botswana/Namibia/Zambia/Zimbabwe)
- 4 Great Limpopo TP\* (Mozambique/South Africa/Zimbabwe)
- 5 Malawi-Zambia TFCA\* (Malawi/Zambia)

### MEMORANDUM OF UNDERSTANDING SIGNED

- 6 Lubombo TFCRA\* (Mozambique/South Africa/Swaziland)
- 7 Maloti-Drakensberg TFCD\* (Lesotho/South Africa)
- 8 Iona-Skeleton Coast TFCA (Angola/Namibia)
- 9 Greater Mapungubwe TFCA\* (Botswana/South Africa/Zimbabwe)
- 10 Chimanimani TFCA (Mozambique/Zimbabwe)

### TFCAs in PROCESS

- 11 Maiombe Forest TFCA (Angola/Congo/DRC)
- 12 Liuwa Plains-Mussuma TFCA\* (Angola/Zambia)
- 13 Lower Zambezi-Mana Pools TFCA\* (Zambia/Zimbabwe)
- 14 ZIMOZA TBNRMP (Mozambique/Zambia/Zimbabwe)
- 15 Kagera TFCA (Rwanda/Tanzania/Uganda)
- 16 Niassa-Selous TFCA (Tanzania/Mozambique)
- 17 Mnazi Bay-Quirimbas TFCMA (Tanzania/Mozambique)
- 18 Western Indian Ocean TFCA (Comoros/France/Madagascar/Mauritius/Mozambique/Seychelles/Tanzania)

\* Peace Parks Foundation directly involved



# LUBOMBO

TRANSFRONTIER CONSERVATION & RESOURCE AREA  
(MOZAMBIQUE/SOUTH AFRICA/SWAZILAND)





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# PONTO DO OURO PARTIAL MARINE RESERVE



# Turtles in PPMR

- Loggerhead - *Endangered*
- Leatherback – *Critically Endangered*
- **Season:** *September* to March
- May nest **multiple** times in one season
  
- Other species observed in Mozambique:
  - Green
  - Hawksbill
  - Olive Ridley

# History

- Monitoring & Tagging – Titanium flipper tags
- Initiated **1994**
- Mr **Pierre Lombard** & family
- Supported by **Dr George Hughes**
- **30 km** – Ponta Malongane – Ponta Dobela
- **2014** – **20 years** of Turtle Monitoring

# Who is Collecting Data?



**Machangulo Group**

**PPMR Marine Team**

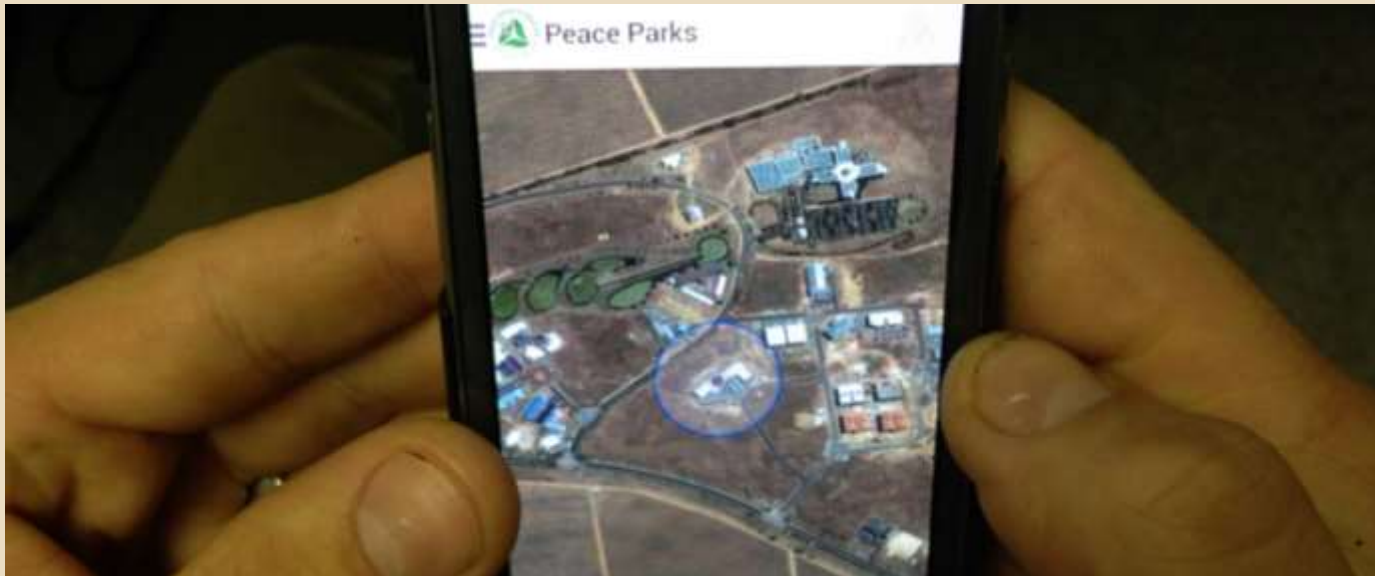
*(Marine Guards, Manager & Community)*

**Lombard Family**

**Dolphin Encountours**

# Data Collection Methodology

- Night patrols for nesting females
- By foot or car
- Untagged turtles – tagged
- Four groups collecting data





# Data Collection Methodology

## **1. Pierre Lombard**

- Distance travelled & notebook
- Distance travelled, notebook & GPS

## **2. Community Members**

- Poles on the beach (known locations)

## **3. PPMR Marine Team**

- GPS & paper forms/notes

## **4. Dolphin Encountours**

- GPS & paper forms

# What are they Collecting

- Location (GPS / Distance travelled)
- Species
- Sex
- Tag Numbers (Newly added or existing)
- Nesting or Not
- Carapace Length & Width
- Mortalities
- All four (4) group's data – central repository





# Data Collection - Tools

- **Collector for ArcGIS & similar**
- Runs on Smart Phones / Other Devices
  - Cedars
  - Trimbles

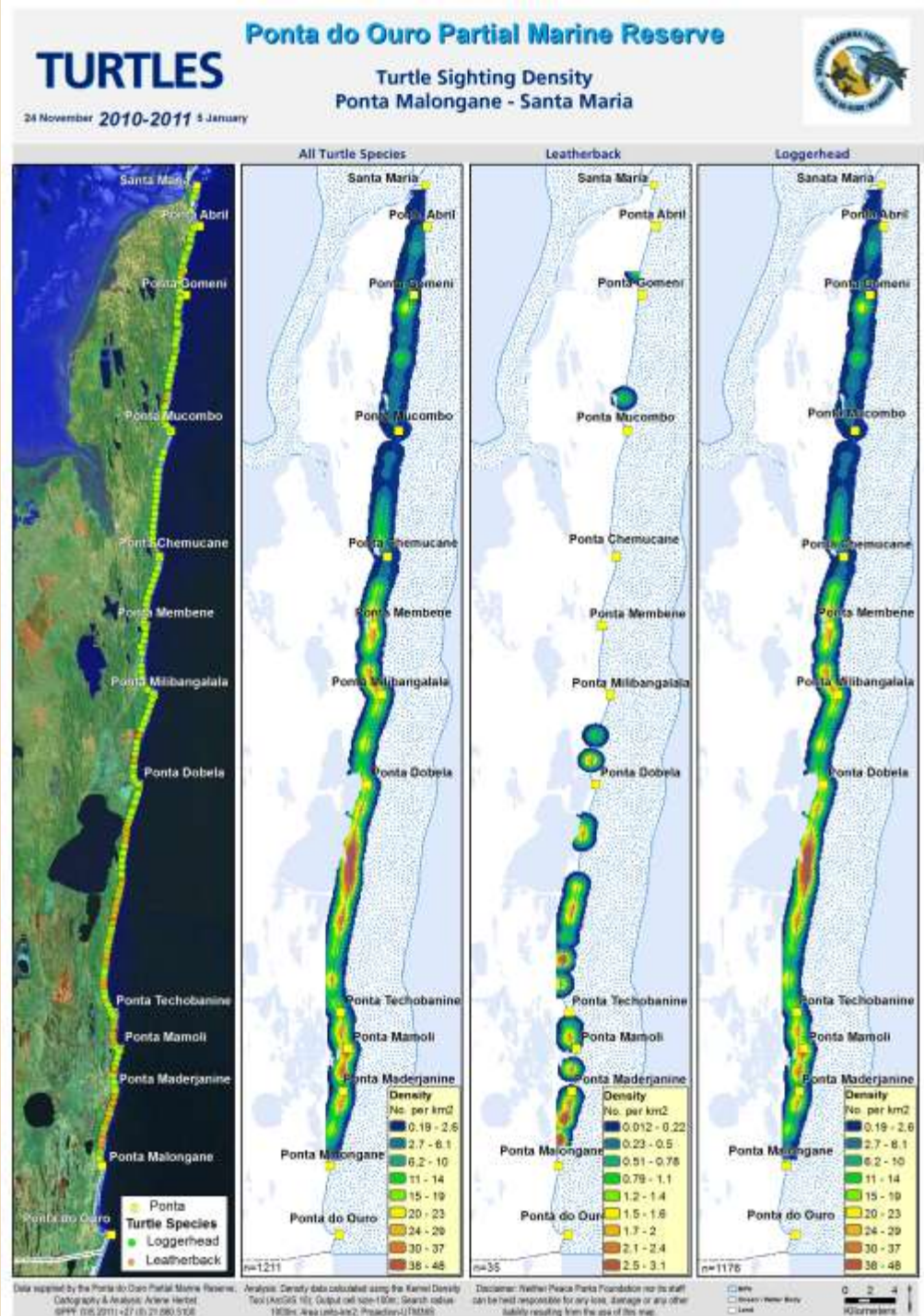




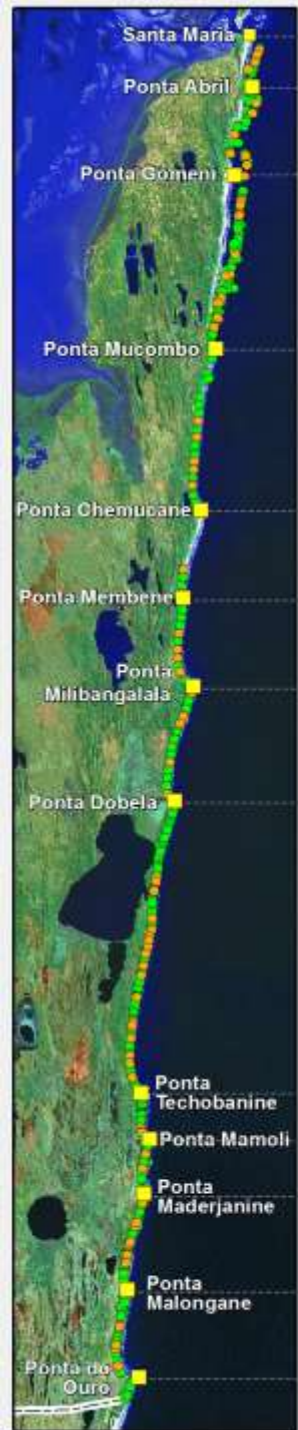
# Annual Reporting

- Done by CTV (no spatial analysis)
- Report for Mozambique
  - **Methods** and **period** per *monitoring area (MA)*
  - **Tracks** per **species** per *MA*
  - Number of **nests** laid per **species** & per *MA*
  - For each Spp – the **number** of **nests** per *MA*
  - Number of **eggs & hatchlings** per species (where applicable)
  - Number of **nests destroyed** by **natural** and **anthropogenic** causes per *MA*
  - Number of **turtles tagged** per **species**
  - Number of **recaptures** per **species**

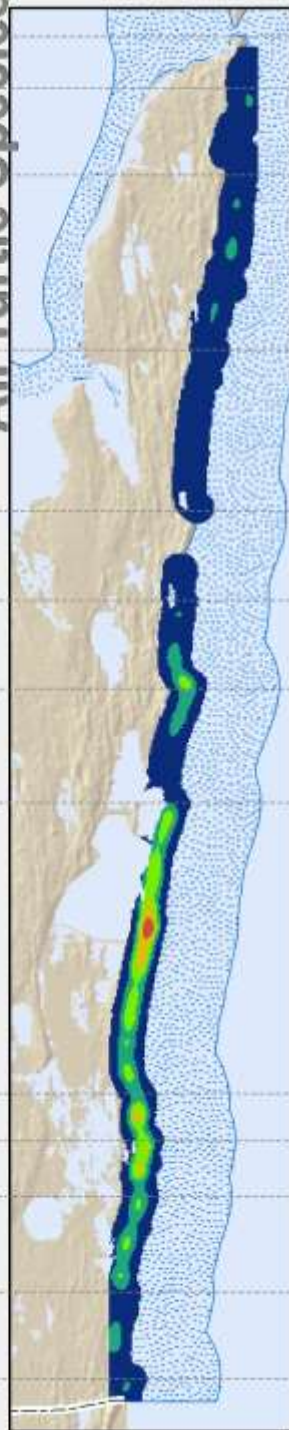
# Maps & Reports







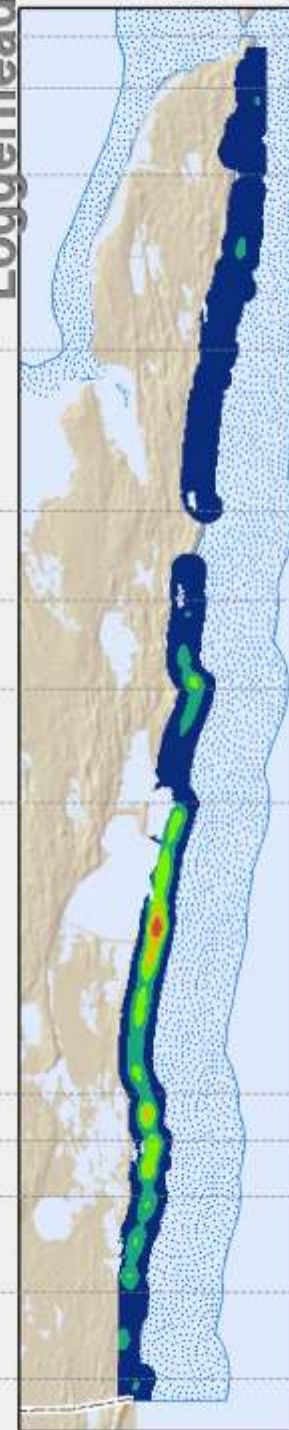
# All Turtle Species



# Leatherback



# Loggerhead



2013 - 2014

**Turtle Species**

- Ponta
- Loggerhead
- Leatherback

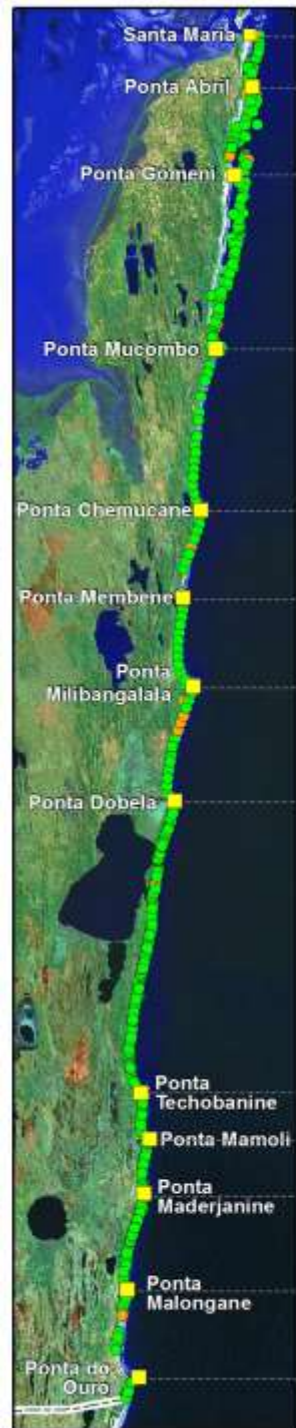
**Density**  
No. per km<sup>2</sup>

- 0 - 17
- 18 - 33
- 34 - 49
- 50 - 66
- 67 - 82

**Density**  
No. per km<sup>2</sup>

- 0 - 1
- 1.1 - 1.9
- 2 - 2.8
- 2.9 - 3.8
- 3.9 - 4.7





# All Turtle Species



# Leatherback

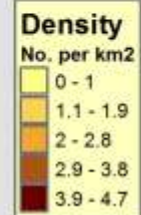
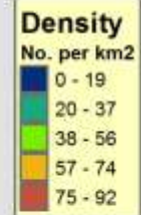


# Loggerhead



2014 - 2015

- Ponta
- Turtle Species**
- Loggerhead
- Leatherback





# Reports & Dashboards

- Close to real time
- Auto-generating reports and maps



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