

SITUATIONAL ANALYSIS OF SEA TURTLE CONSERVATION EFFORTS IN GUATEMALA

Colum Muccio

Wildlife Rescue and Conservation Association (ARCAS)

Guatemala

Presented to the 2015 WIDECAS annual meeting



Who are we?

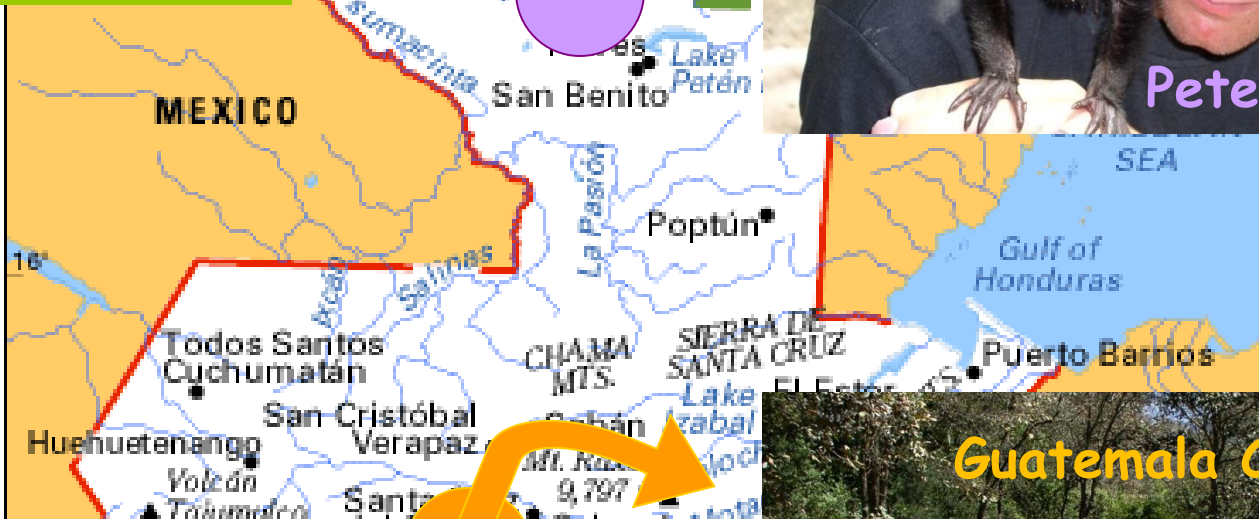
A non-profit Guatemalan NGO created in 1989 by a multidisciplinary group of Guatemalan professionals concerned

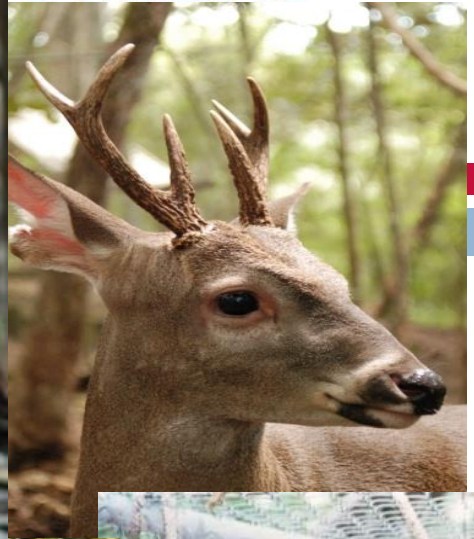


with the deterioration of the natural resources of the country



ARCAS WORKS IN THREE AREAS OF GUATEMALA









17 11 2005



Megadiverse,
biologically and
culturally

Environmental
education

Income generation

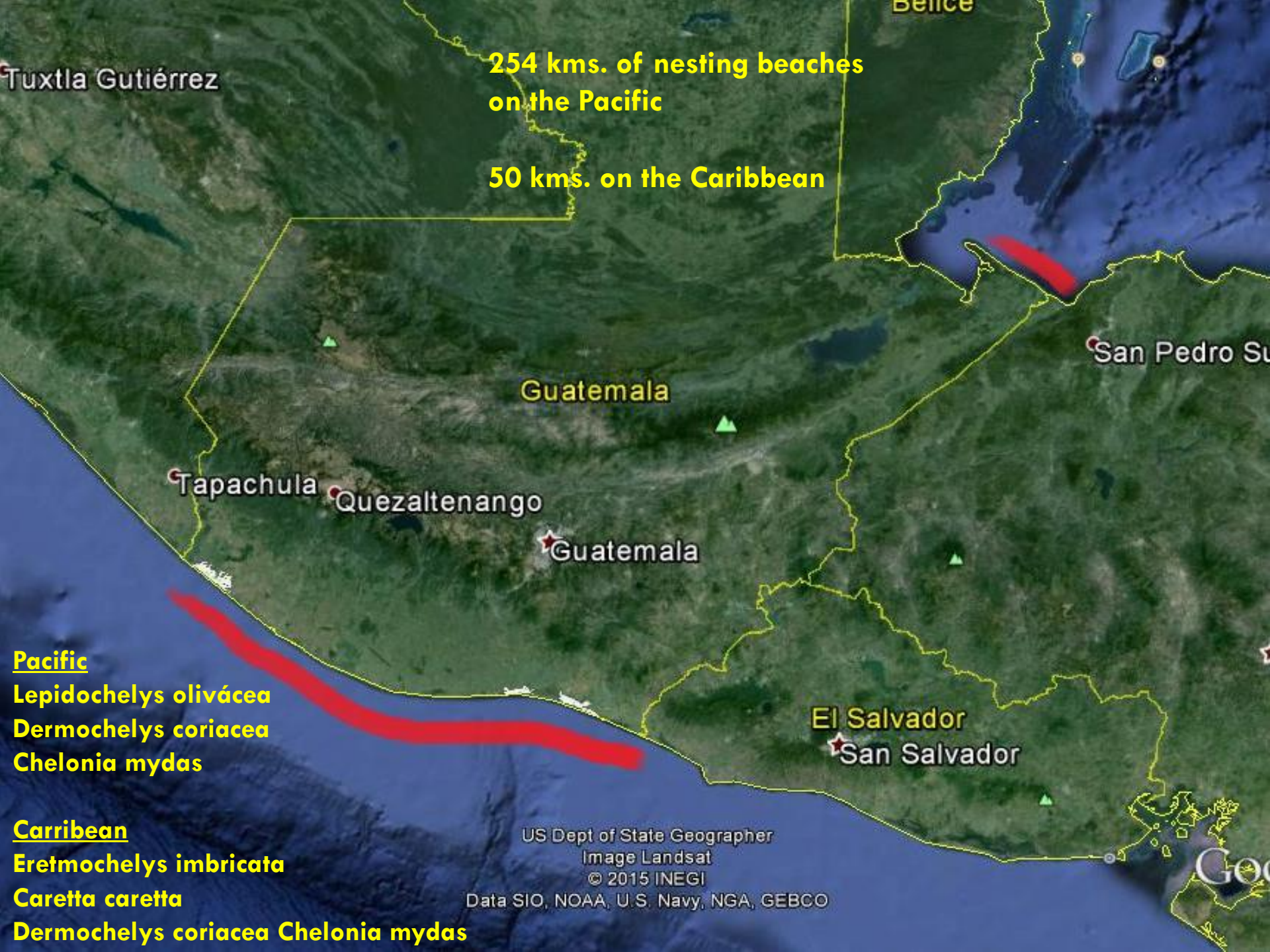
Volunteers!!!



26 8 2005

Sea Turtle and Mangrove Conservation and Research





**254 kms. of nesting beaches
on the Pacific**

50 kms. on the Caribbean

Tuxtla Gutiérrez

Belize

San Pedro Su

Guatemala

Tapachula

Quezaltenango

Guatemala

El Salvador

San Salvador

Pacific

- Lepidochelys olivácea**
- Dermochelys coriacea**
- Chelonia mydas**

Carribean

- Eretmochelys imbricata**
- Caretta caretta**
- Dermochelys coriacea**
- Chelonia mydas**

US Dept of State Geographer
 Image Landsat
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 Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Geo

El Caribe – Livingston, Punta Manabique



Distrito de Toledo

Livingston

Puerto Barrios

Cuyamel

San Pedro Sula

Cofradia

Izabal

CA13

7E

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO
US Dept of State Geographer.

15°51'21.02" N 88°26'45.80" O elevación 3 m

Little evidence of harvesting for meat or shells



Punta Manabique

- Jaloa Hatchery – closed
- Guatemala Hatchery – 2010 un nido, 2011 inoperativo
- Ingovernability

○ Cambalache

○ La Graciosa

○ San Francisco del Mar

Tortugario San Francisco del Mar (FUNDARY)

	2006	2007
Carey	14 nidos = 1,342 huevos	5 nidos = 535 huevos
Caguama		2 nidos = 360 huevos

○ Macho Creek

CAS

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Image © 2012 DigitalGlobe
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
US Dept of State Geographer

15°49'47.90" N 88°25'18.74" O elevación 13 m

Google earth

Alt. ojo 44.21 km

Punta Manabique

- Plastic waste
- Lawlessness



Hatcheries of the South Coast

254kms, 8233 crawls (2013)



Tortugarios de la Costa Sur
de Guatemala, 2011

© 2012 Cnes/Spot Image
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
US Dept of State Geographer
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14°00'35.13" N 91°10'00.07" O elevación 18 m

Google earth

Alt. ojo 208.09 km



**20% Conservation
Quota
Only olive ridleys
Hatcheries**



Hawksbills on the Pacific?

Juveniles incidentally caught off shore and in the mangroves...

... but no adults or nesting.



Fotos: Scott Handy, Akazul



Pacific greens (*Chelonia mydas*)

First nesting documented in
2008.

2-6 nests per year since



Habitat shift?



TOTAL WITHOUT COVERAGE

118.91kms

% of total

46.81%

INCLUDING PUNTA MANABIQUE

168.91kms

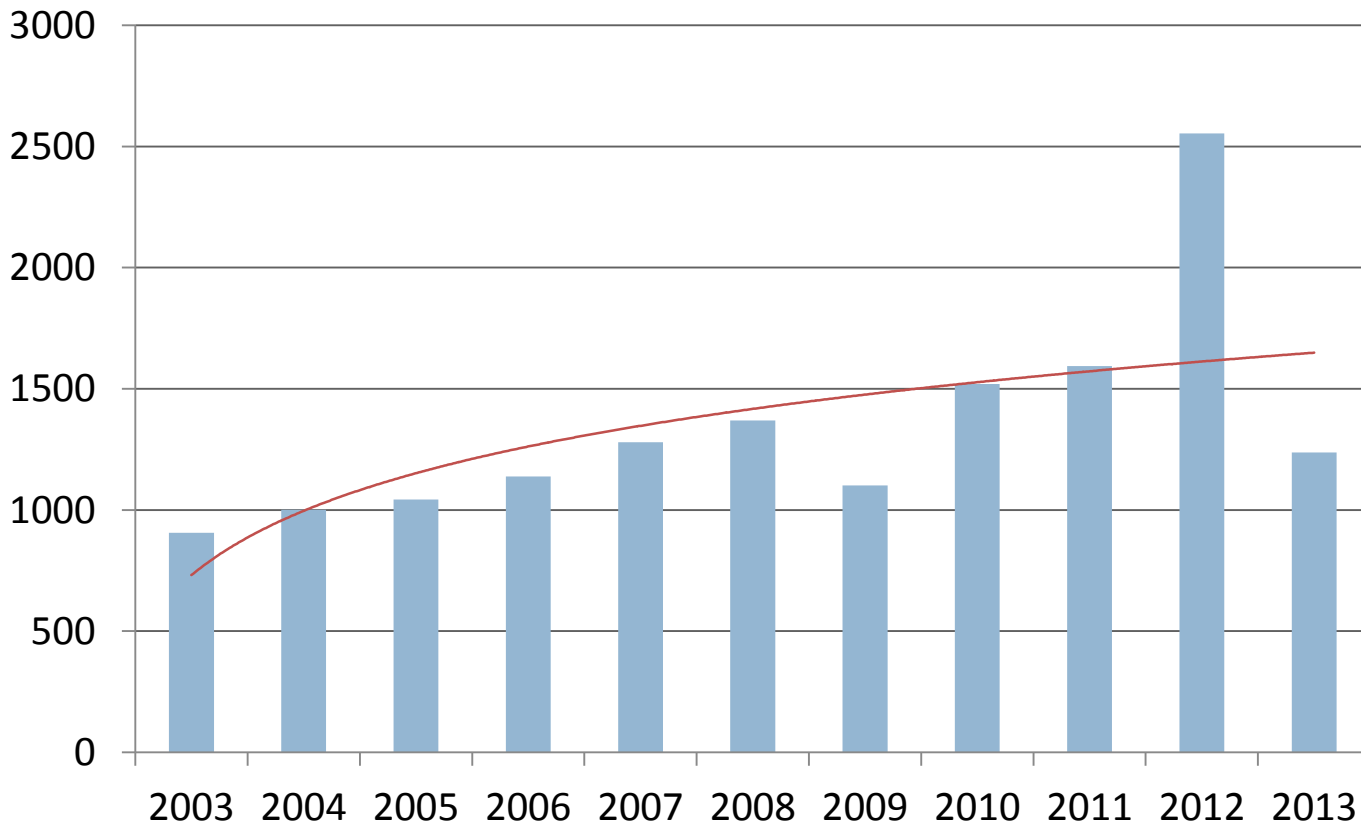
% including Punta Manabique

55.56%

Olive ridleys of the Pacific coast

Upward population trend

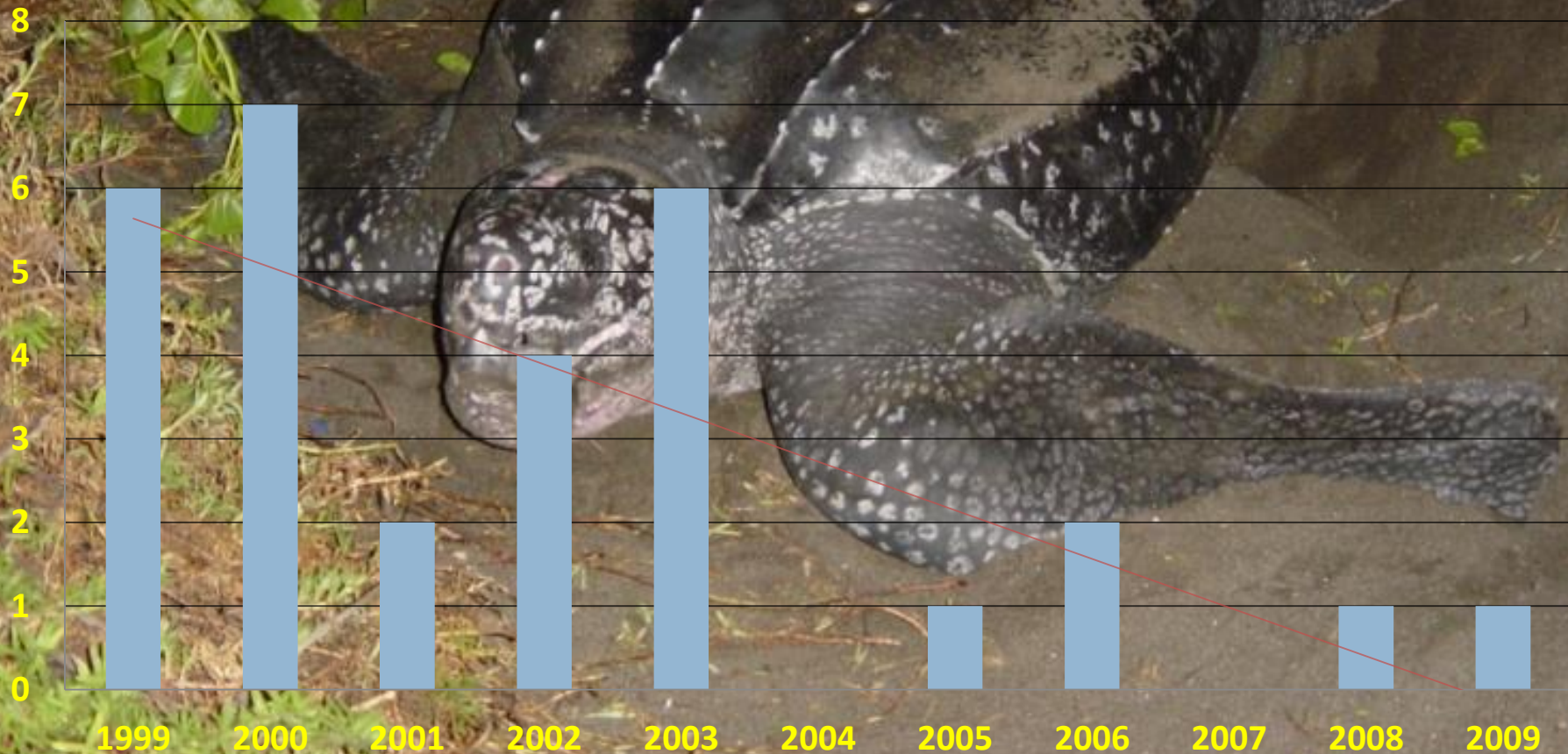
Huellas/ Crawls (July-December, L.o) Hawaii, Guatemala. 8 kms



Leatherbacks of the Pacific coast

Critically bad population trend

Leatherbacks per year, Hawaii, Guatemala, 8kms



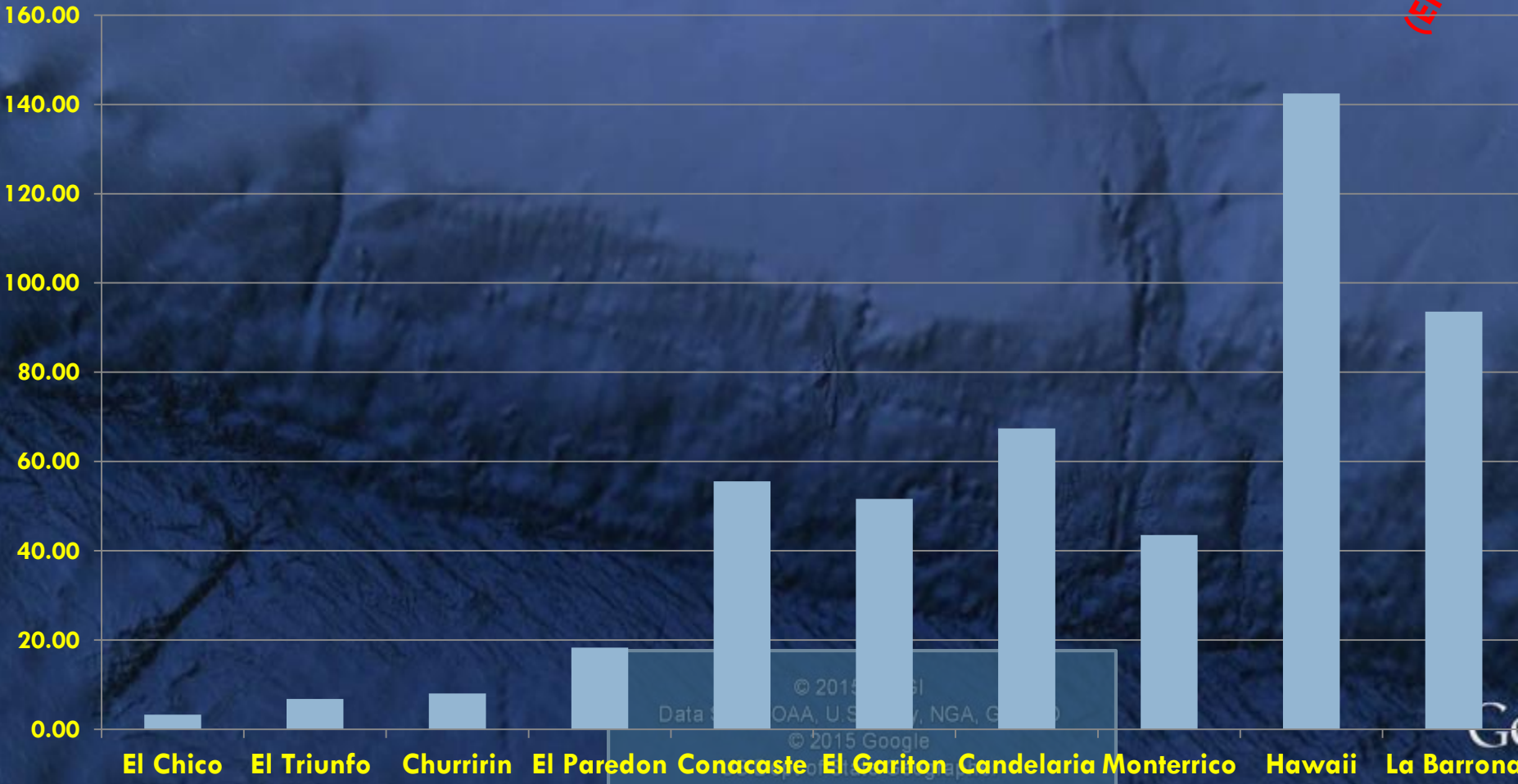
(Mexico)

(El Salvador)

Nesting frequency Pacific coast Guatemala

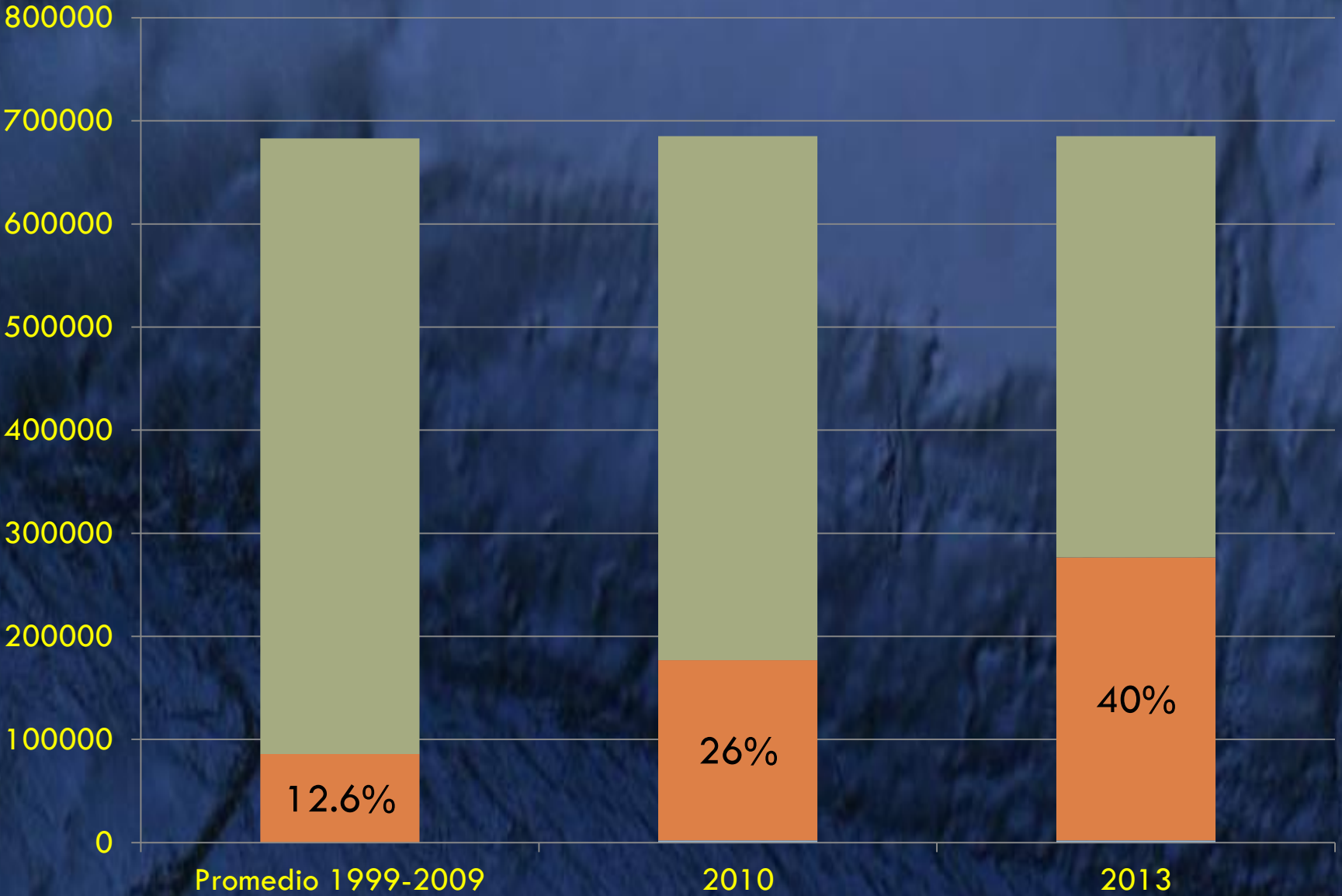
Crawls per km per year

(Montes, PP, Conteos 2013)

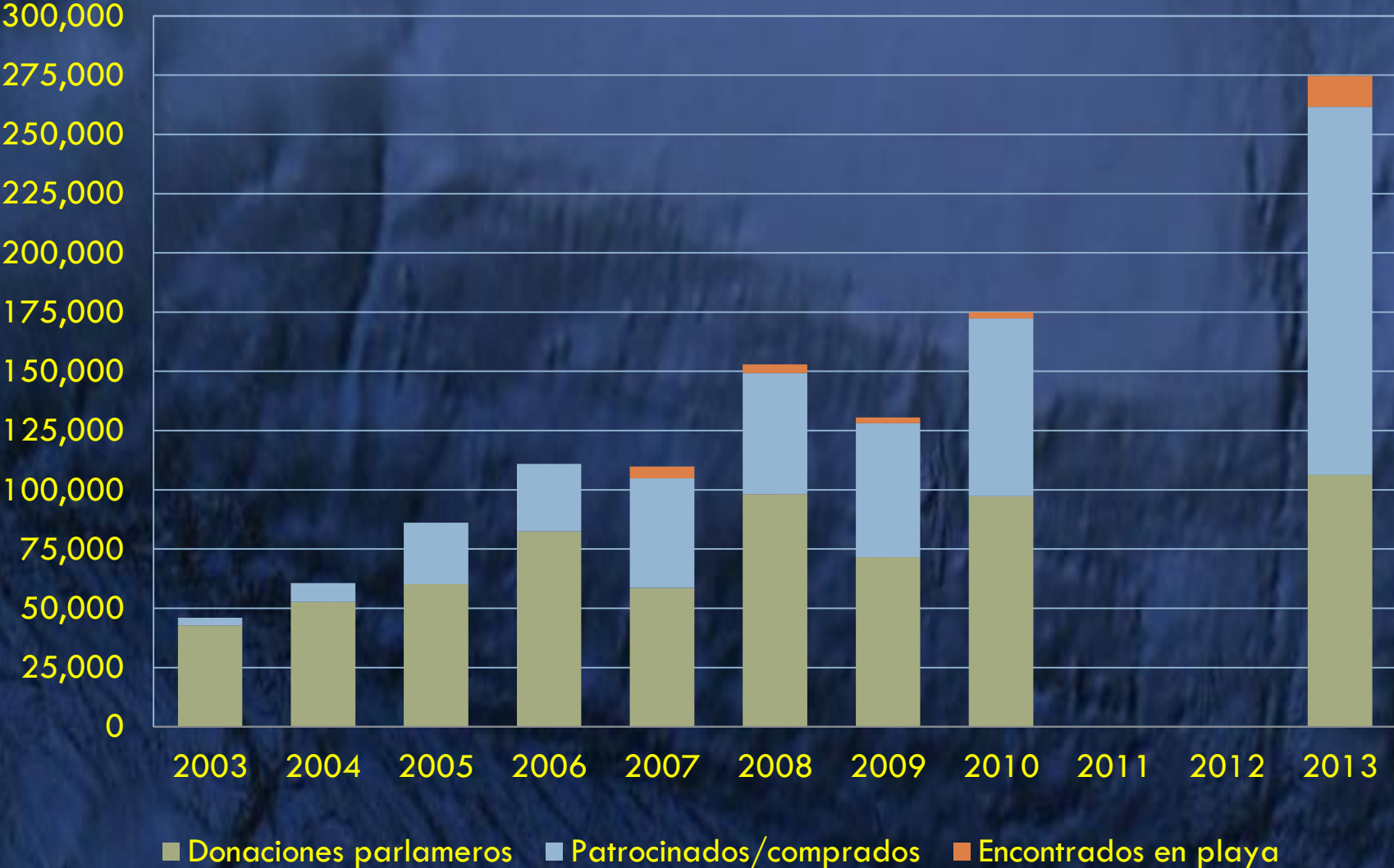


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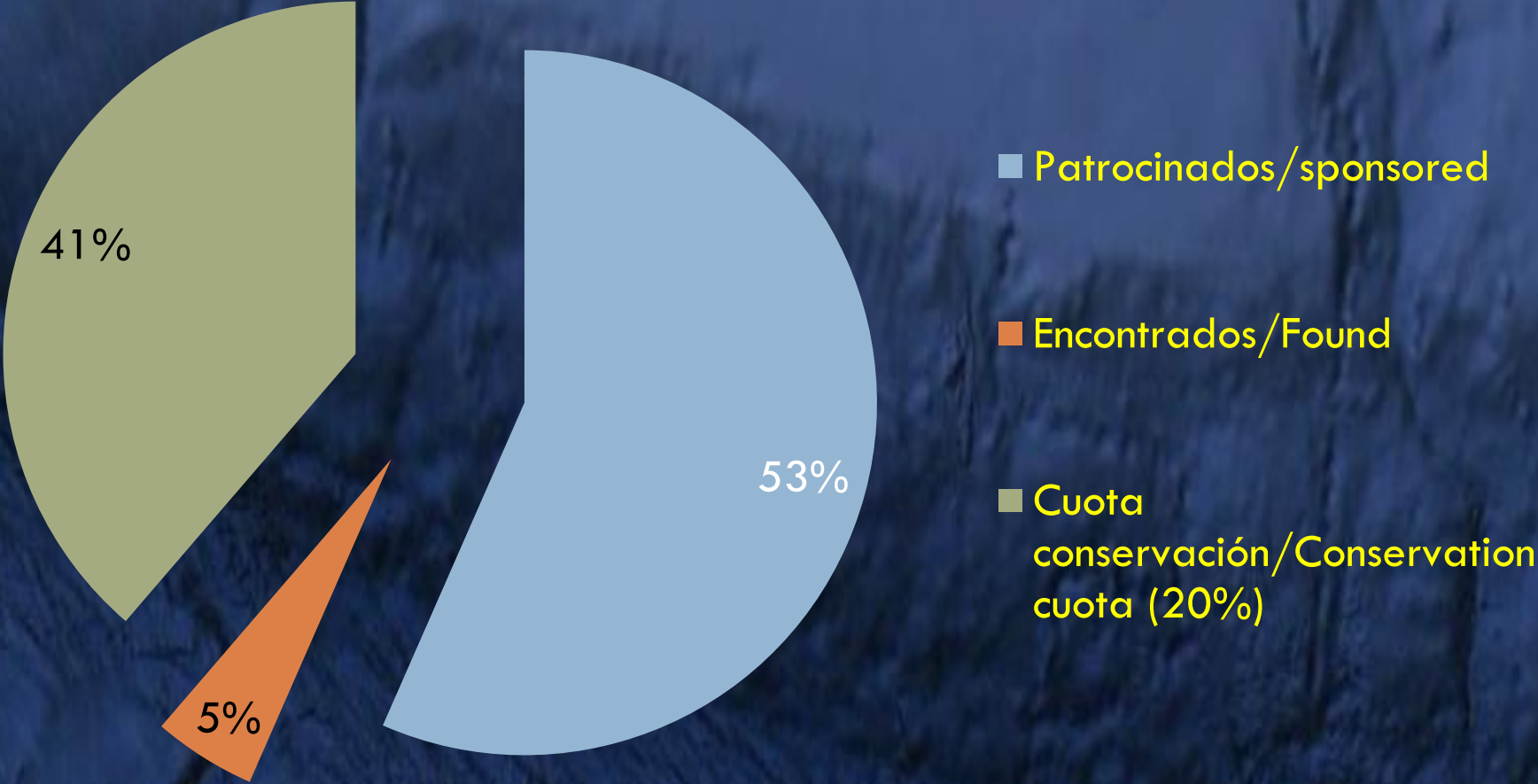
PERCENTAGE OF SEA TURTLE EGGS RESCUED



Origin of eggs rescued, 2003 - 2013



ORIGIN OF EGGS RESCUED IN GUATEMALA IN 2013



PACIFIC COAST SEA TURTLE STRANDINGS

- 2011 – 39 olive ridleys
- 2013 – 128 olive ridley and greens
- July 2014 Regional sea turtle stranding workshop





GRACIAS!!!

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