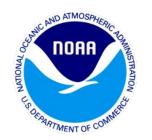
# Marine turtles: the poster child for international collaboration in science







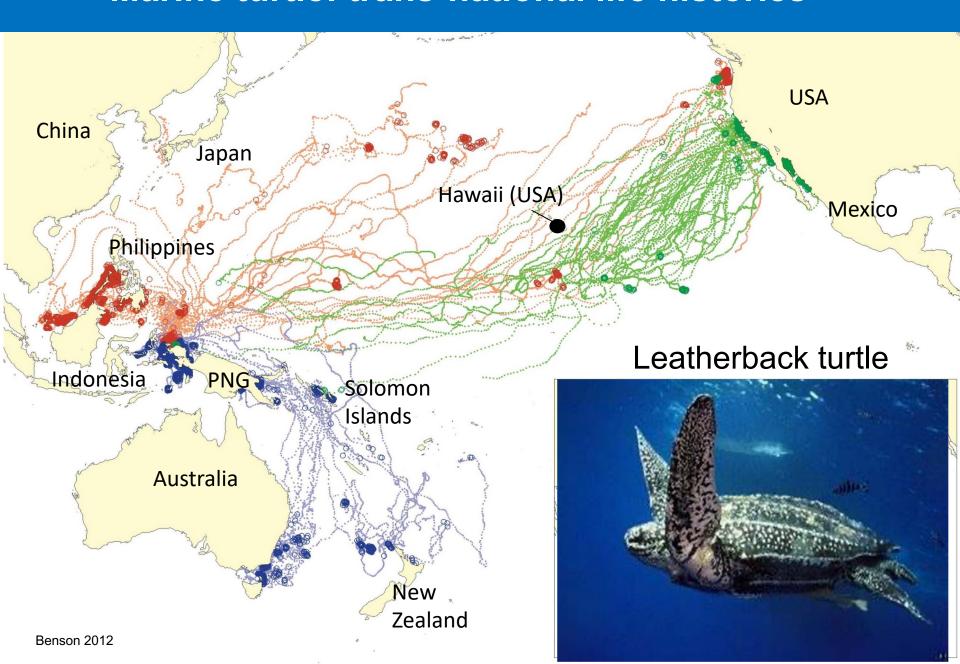
#### Alexander R. Gaos, Ph.D.

NOAA Pacific Islands Fisheries Science Center Marine Turtle Biology & Assessment Program Honolulu, Hawai'i, USA





### Marine turtle: trans-national life histories



# **Working with people = relationships**





# **Working with people = relationships**

- Effective communication
- Respect and understanding
- Share knowledge, expertise, funding
- Empower others





# Successful International collaborations

- Find good partners
- Schedule meetings
- Face to face
- Set goals and activities
- Be flexible give and take
- Confident but humble



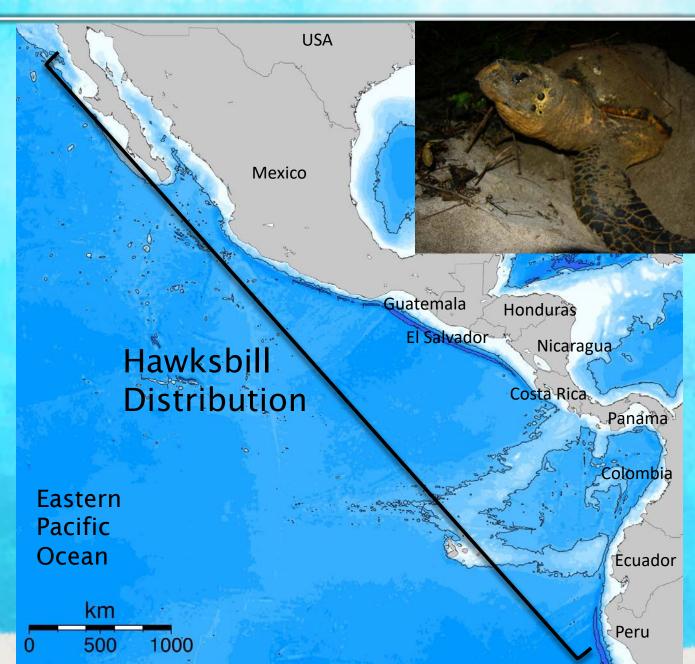


# Hawksbills in the eastern Pacific Ocean

# 2007

No nesting records

Considered functionally extirpated

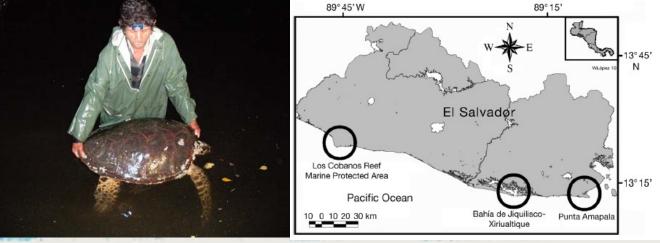


# Linking with partners in Mexico



# Linking with partners in El Salvador







# Linking with partners in Ecuador



# Shifted the panorama



#### Eastern Pacific Hawksbill Initiative

































































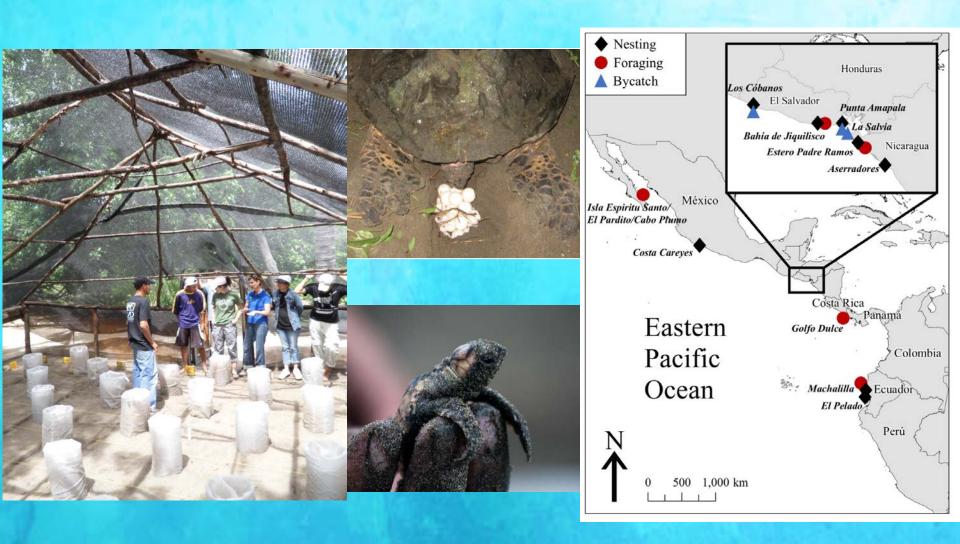








# Many projects & successful conservation





Signs of hope in the eastern Pacific: international collaboration reveals encouraging status for the severely depleted population of hawksbill turtles Eretmochelys imbricata

ALEXANDER R. GAOS, F.A. ABREU-GROBOIS, J. ALFARO-SHIGUETO, D. AMOROCHO R. Arauz, A. Baquero, R. Briseño, D. Chacón, C. Dueñas, C. Hasbún, M. Liles

Vol. 14: 23-30, 2011 doi: 10.3354/esr00338 ENDANGERED SPECIES RESEARCH Endang Species Res

= 3, M. Peña, J.A. Seminoff Published online April 7 [.L. YAÑEZ and P. ZÁRATE



#### ACTA BIOLÓGICA COLOMBIANA

wwf.org.co

ARTÍCULO DE INVESTIGACIÓN

ESTUDIO POBLACIONAL DE LA TORTUGA CAREY Eretmochelys imbricata (CHELONIIDAE) EN EL PACÍFICO SUR DE COLOMBIA

Population Study of the Hawksbill Turtle Eretmochelys imbricata (Cheloniidae) in the Southern Pacific region of Colombia

**Open Access** 

ALEXANDER TOBÓN- LÓPEZ1, M. Sc.; DIEGO FERNANDO AMOROCHO LLANOS2; Ph. D.

Hawksbill turtles *Eretmochelys imbricata* in El Salvador: nesting distribution and mortality at the largest remaining nesting aggregation in the eastern Pacific Ocean

Michael J. Liles<sup>1,\*</sup>, Mauricio V. Jandres<sup>2</sup>, Wilfredo A. López<sup>1</sup>, Georgina I. Mariona<sup>1</sup>, Carlos R. Hasbún<sup>3</sup>, Jeffrey A. Seminoff<sup>4</sup>



Contents lists available at ScienceDirect **Biological Conservation** 

journal homepage: www.elsevier.com/locate/biocon

One size does not fit all: Importance of adjusting conservation for endangered hawksbill turtles to address local nesting habi in the eastern Pacific Ocean

Michael J. Liles <sup>a,b,\*</sup>, Markus J. Peterson <sup>a,1</sup>, Jeffrey A. Seminoff <sup>c,2</sup>, Eduardo Altan Ana V. Henríquez <sup>b,4</sup>, Alexander R. Gaos <sup>e,f,5</sup>, Velkiss Gadea <sup>d,3</sup>, José Urteaga <sup>d,3</sup>, P Bryan P. Wallace g,h,6, Tarla Rai Peterson i,j,7

Spatial ecology of critically endangered hawksbill turtles Eretmochelys imbricata: implications for management and conservation

Alexander R. Gaos<sup>1,2,3,\*</sup>, Rebecca L. Lewison<sup>2</sup>, Bryan P. Wallace<sup>1,4,5</sup>, Ingrid L. Yañez<sup>1</sup>, Michael J. Liles<sup>1,6</sup>, Wallace J. Nichols<sup>1,7</sup>, Andres Baquero<sup>1,8,9</sup>, Carlos R. Hasbún<sup>10</sup>, Mauricio Vasquez<sup>1,11</sup>, José Urteaga<sup>1,12</sup>, Jeffrey A. Seminoff<sup>1,13</sup>

> New foraging grounds for hawksbill (*Eretmochelys imbricata*) and green turtles (Chelonia mydas) along the northern Pacific coast of Costa Rica, Central America

Maike Heidemeyer<sup>1,2</sup>, Randall Arauz-Vargas<sup>2</sup> & Erick López-Agüero<sup>2</sup>

- Posgrado en Biología, Universidad de Costa Rica, San Pedro, 11501-2060 San José, Costa Rica; maike@pretoma.org
- Asociación Programa Restauración de Tortuga Marinas (PRETOMA), Tibás, San José, Costa Rica; rarauz@pretoma.org

#### **Ecology and Evolution**

of eastern Pacific rookeries

Biol. Lett

Published online

doi:10.1098/rsbl.2011.0603

Hawksbill turtle terra incognita: conservation genetics

Alexander R. Gaos<sup>1,2,3,16</sup>, Rebecca L. Lewison<sup>1</sup>, Michael J. Liles<sup>4,16</sup>, Velkiss Gadea<sup>5,16</sup>, Eduardo Altamirano<sup>5,16</sup>, Ana V. Henríquez<sup>16</sup>, Perla Torres<sup>5,16</sup>, José Urteaga<sup>5,6,16</sup>, Felipe Vallejo<sup>7,16</sup>, Andres Baquero<sup>7,16</sup>, Carolina LeMarie<sup>7,16</sup>, Juan Pablo Muñoz<sup>7,8,16</sup>, Jaime A. Chaves<sup>8</sup>, Catherine E. Hart<sup>5,10,1</sup>, 16, Jejandro Peña de Niz (2<sup>1</sup>,6) Didiher Chácon<sup>13,16</sup>, Luis Fonsecal<sup>3,16</sup>, Sarah Otterstrom<sup>14,16</sup>, Ingrid L. Yañez<sup>16</sup>, Erin L. LaCasella<sup>15</sup>, Amy Frey<sup>15</sup>, Michael P. Jensen<sup>3</sup> &



biology Conservation biology

Shifting the life-history paradigm: discovery of novel habitat use by hawksbill turtles

Alexander R. Gaos 1,2,\*, Rebecca L. Lewison 1, Ingrid L. Yañez2, Bryan P. Wallace3,4, Michael J. Liles<sup>2,5</sup>, Wallace J. Nichols<sup>6</sup>, Andres Baquero<sup>7,8</sup>, Carlos R. Hasbún9, Mauricio Vasquez10, José Urteaga<sup>11</sup> and Jeffrey A. Seminoff<sup>12</sup>

Connecting international priorities with human wellbeing in low-income regions: lessons from hawksbill turtle conservation in El Salvador

Michael J. Liles<sup>a,b\*</sup>, Markus J. Peterson<sup>a</sup>, Yvonna S. Lincoln<sup>c</sup>, Jeffrey A. Seminoff<sup>d</sup>,

159-182 Bol. Invest. Mar. Cost. ISSN 0122-9761 Santa Marta, Colombia, 2014

RELACIONES FILOGEOGRÁFICAS DE ALGUNAS COLONIAS DE ALIMENTACIÓN Y ANIDACIÓN DE LA TORTUGA CAREY (ERETMOCHELYS IMBRICATA) EN EL PACÍFICO Y CARIBE COLOMBIANOS\*

Natalia Trujillo-Arias<sup>1, 2</sup>, Diego F. Amorocho<sup>3, 4</sup>, Diana López-Álvarez<sup>5</sup> y Luz M. Mejía-Ladino<sup>6</sup>



Journal of Experimental Marine Biology and Ecology

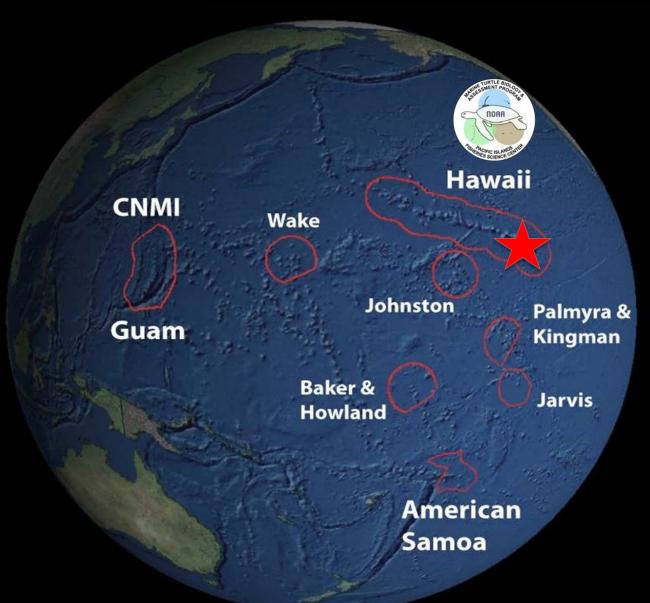
journal homepage: www.elsevier.com/locate/jembe

Dive behaviour of adult hawksbills (Eretmochelys imbricata, Linnaeus 1766) in the eastern Pacific Ocean highlights shallow depth use by the species

Alexander R. Gaos a,b,c,\*, Rebecca R. Lewison a, Bryan P. Wallace b,d,e, Ingrid L. Yañez b, Michael J. Liles b,f, Andres Baquero b,g,h, Jeffrey A. Seminoff b,i



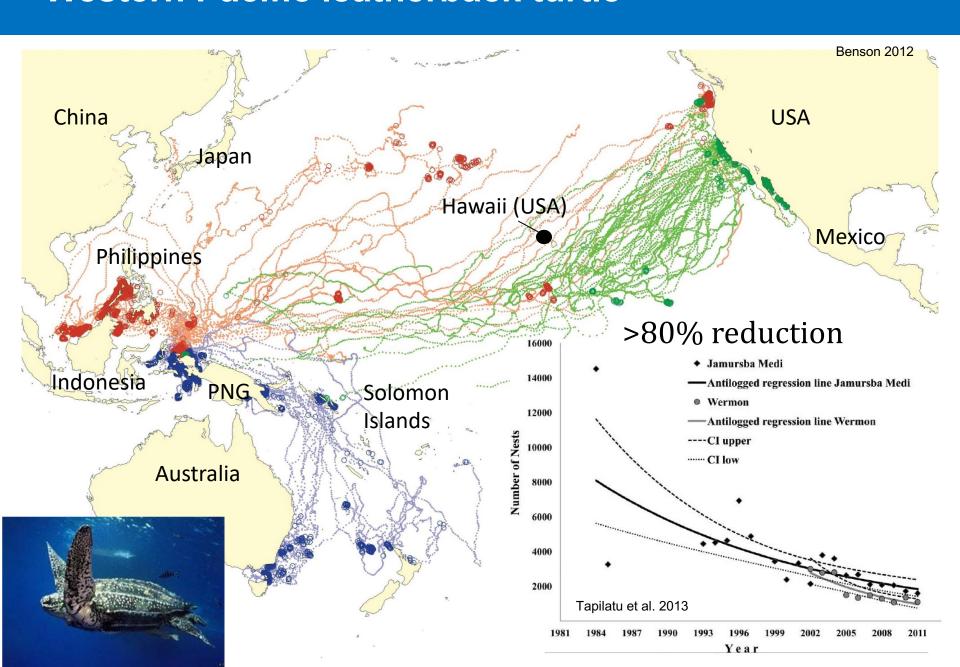
# **NOAA Fisheries - Pacific Islands Region**







#### Western Pacific leatherback turtle





### Leatherback - Nesting beach research & conservation







### Solomon Islands



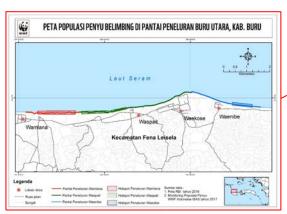


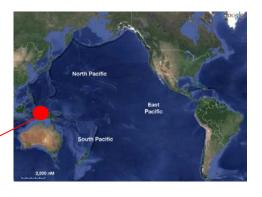


### Leatherback - Nesting beach research & conservation

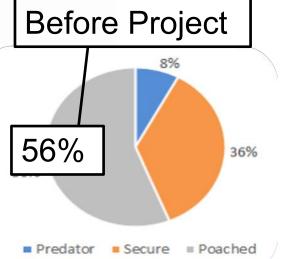
#### Indonesia – Buru Island

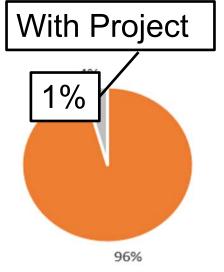






#### Egg harvest





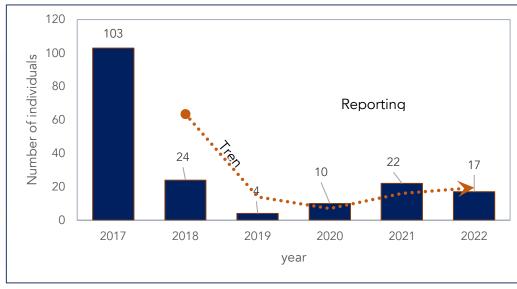


### Leatherback – Leatherback hunt

#### Indonesia - Kei Islands





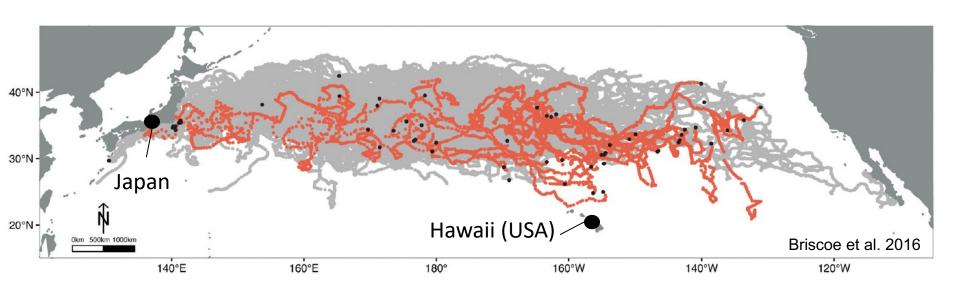








## Loggerhead – Central North Pacific DPS - Endangered







### Loggerhead – Nesting beach research and conservation









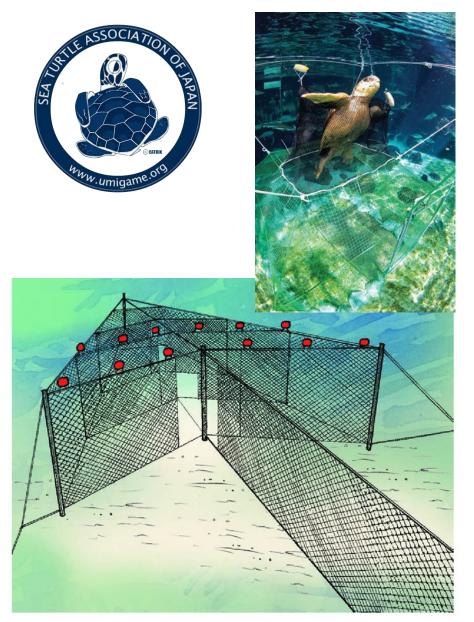








# Loggerhead – Closed pound net research











### Approaches to international work

- Bottom-up: more personal
- Top-down: e.g., government initiatives
- NOAA International Office bridge
  - Support of Japan and Indonesia work
  - Setting up bi-lateral science initiatives







# 44th International Sea Turtle Society Symposium





# Thank you

Alexander R. Gaos, Ph.D. alexander.gaos@noaa.gov







