



CIT-CC15-2018-Tec.14

**INTER-AMERICAN CONVENTION FOR THE  
PROTECTION AND CONSERVATION OF SEA TURTLES**

**IAC Index Nesting Beach  
Data Analysis  
(2009-2018)**

Prepared by:

Jeffrey Seminoff, Luz Helena Rodríguez, and Matthew Steinwurtzel

**IAC Secretariat *Pro Tempore* · Virginia USA**

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## Inter-American Convention for the Protection and Conservation of Sea Turtles

# ***IAC Index nesting beach data analysis (2009-2018)***

**CIT-CC15-2018-Tec.14**

**Prepared by:**

**Jeffrey A. Seminoff, Luz Helena Rodríguez and  
Matthew Steinwurtzel**

***IAC Secretariat Pro Tempore • Virginia, USA***

This report is intended to provide the IAC Member Countries with a view of the index nesting beach data that has been provided as per the adopted IAC protocols for reporting nesting beach abundance information. The first version of this report was prepared by Dr. Jeffrey A. Seminoff delegate of the United States to the IAC Scientific Committee and his research assistant Mr. Matthew Steinwurtzel in 2014. This report was updated in 2018 by Ms. Luz Helena Rodríguez, IAC technical assistant with help of Dr. Jeffrey Seminoff. The report is included in the IAC Technical Document series CIT-CC15-2018-Tec.14

## *Introduction*

During the 9th Meeting of the IAC Scientific Committee Meeting in Buenos Aires, Argentina, the IAC Scientific Committee Working Group on Nesting Trend Analysis reported the results of a study to examine the value of IAC Annual Report data for monitoring changes in nesting abundance for sea turtles in the IAC countries (Document CIT-CC10-2013-Tec.5; Selecting Index Nesting Beaches in the IAC Region and Data Collection Guidelines). The goals of this report were 1) to explain why the IAC Scientific Team recommends the use of real numbers instead of ranges for tracking or monitoring long-term changes in nesting abundance, 2) to describe the advantages and disadvantages of reporting only for nesting index sites rather than all sites in a country, and 3) to develop guidelines for determining which nesting beaches should be considered index sites within IAC countries. Based on this report, the IAC Scientific Committee agreed that for future IAC Country Annual Reports, each country will report real nesting numbers (versus ranges in numbers) and will provide this information for species-specific index nesting beaches in each country. During the 10<sup>th</sup> Meeting of the IAC Scientific Committee Meeting in Tegucigalpa, Honduras, the IAC Index Beach Working Group reported the results of a study to examine the value of IAC Annual Report data for monitoring changes in nesting abundance for sea turtles in the IAC Member Countries. During the meeting, each Scientific Committee Member was asked to provide a summary of the proposed index sites for each sea turtle species nesting in their country. At the 11<sup>th</sup> meeting of the IAC Scientific Committee, the first report was prepared with the goal that this report will be updated every five years. In line with this plan, the report was updated as part of the activities of the 15<sup>th</sup> meeting of the Scientific Committee. The current document summarizes all nesting data provided so far and provides a country-by-country and a species-by-species account of how nesting abundance has changed over the last nine years (2009-2018). This update includes information through 2018 or until the last season reported by each country. We recognize that nine years of nesting abundance data is insufficient for determining population trends, but by continuing with this reporting strategy we expect that more years of data will eventually allow for a strong understanding of population trends.

## Nesting Beach Data Reported To Date

The countries that have provided information herein include Belize, Brazil, the Caribbean Netherlands, Costa Rica, Dominican Republic, Ecuador, Guatemala, Mexico, the United States, and Venezuela. The specific index sites for each country/species are listed in Table 1.

**Table 1.** Summary of Index Nesting Beach data provided by IAC countries. DC = *Dermochelys coriacea*, CM = *Chelonia mydas*, LO = *Lepidochelys olivacea*, LK = *Lepidochelys kempii*, CC = *Caretta caretta*, EI = *Eretmochelys imbricata*.

Name of beach	DC	CM	EI	CC	LO	LK
<b>Belize (2)</b>						
Gales Point			x			
Bacalar Chico Marine Reserve		x		x		
<b>Brazil (12)</b>						
Comboios	x			x		
Povoação	x			x		
Interlagos (Previously Busca vida and Santa Maria)			x	x		
Guarajuba (Previously Barra de Jacuipe, Guarajuba and Itacimirim)			x	x		
Praia do Forte			x	x		
Farol (Previously Barra do Furado, Farol, Farolzinho, Maria Rosa)				x		
Berta			x			
Pipa			x			
Mangue Seco					x	
Coqueros					x	
Pirambu					x	
Trindade Island		x				
<b>Caribbean Netherlands (3)</b>						
Klein Bonaire, Bonaire		x	x	x		
Zeelandia, St. Eustatius	x	x				

Name of beach	DC	CM	EI	CC	LO	LK
Playa Chikitu, Bonaire		X				
<b>Costa Rica- Pacific (9)</b>						
Isla Murcielago		X				
Nancite					X	
Naranjo		X			X	
Cabuyal		X				
Nombre de Jesus		X				
Punta Pargos		X				
Playa Grande		X				
Ostional					X	
Hermosa					X	
<b>Costa Rica – Atlantic (4)</b>						
Tortuguero	X	X				
Pacuare Norte	X					
Mondonguillo	X					
Cahuita			X			
<b>Dominican Republic (9)</b>						
Cabarete	X					
Isla Catalina		X	X			
Isla Saona		X	X			
La Vacama	X					
El Valle	X	X				
Playa Guiba, Distrito Nacional			X			
Manresa	X	X	X			
Playas Sans Souci y Manresa		X				
Bonita Beach	X					
<b>Ecuador (9)</b>						
San Lorenzo					X	
La Botada					X	
Playa Chocolatera		X			X	
Playa Tres Cruces		X			X	
PlayaMar Bravo		X			X	
Playita (Machalilla)			X			
Quinta Playa (Galapagos)		X				
Barahona (Galapagos)		X				
Las Bachas (Galapagos)		X				

Name of beach	DC	CM	EI	CC	LO	LK
<b>Guatemala (2)</b>						
Hawai	x				x	
La Barrona					x	
<b>Mexico – Atlantic (12)</b>						
Rancho Nuevo, Tamps		x		x		x
Barra del Tordo, Tamps		x		x		x
Altamira, Tamps		x		x		x
Mirama, Tamps						x
Lechuguillas, Ver		x	x			x
Isla Aguada-Xicalango-Victoria, Camp		x	x			x
Chenkan, Camp		x	x			x
Las Coloradas/Rio Lagartos, Yuc		x	x	x		
Xcacel, Quintana Roo		x		x		
Chemuyil, Q. Roo		x		x		
Xel Ha, Q. Roo		x		x		
Aventuras DIF (Previously) Puerto Aventuras, Q. Roo		x		x		
<b>Mexico – Pacific (12)</b>						
El Verde, Sin	x				x	
Platanitos, Nay					x	
Nuevo Vallarta, Nay					x	
Mismaloya, Jal					x	
Chalacatepec, Jal					x	
Mexiquillo, Mich	x	x			x	
Tierra Colorada, Gro	x	x			x	
Cahuitan, Oax	x					
Escobilla, Oax	x				x	
Barra de la Cruz, Oax	x	x			x	
Maruata, Mich		x				
Colola, Mich		x				

Name of beach	DC	CM	EI	CC	LO	LK
<b>United States – Atlantic (7)</b>						
Culebra Island, Puerto Rico	x					
Vieques Island, Puerto Rico	x	x	x			
Mona Island, Puerto Rico			x			
Buck Island National Mon.	x	x				
Sandy Point NWR, Virgin Is.	x	x	x			
Florida Index Beaches	x	x		x		
Texas (South Padre Island)						x
<b>United States – Pacific (2)</b>						
French Frigate Shoals (HI)		x				
Hawaii			x			
<b>Venezuela (13)</b>						
Querepare	x			x		
Cipara	x	x		x		
Macuro	x	x	x			
La Caracola (Edo. Nueva Esp.)	x					
Hotel Dunes (Edo. Nueva/Esp.)			x			
Cardon Beach (Edo. Nueva Es.)			x			
Parguito Beach (Edo. Nueva Es.)			x			
Hotel Portofino (Edo. Nueva Es)			x			
Beaches between Moron/ Yara			x	x		
RFS Isla de Aves		x	x			
Playa El Agua	x					
Playa El Humo	x					
Playa La Zaragoza	x					



## *Summary and Recommendations*

The goal of this report is to provide information on nesting beach abundance for all IAC countries that host sea turtle nesting activity. However, of the 13 total countries with nesting, data from only ten countries are included in this report. These data reflect nesting abundance for six sea turtle species that are distributed among 96 index nesting sites for which data were submitted. Graphical summaries of the data are provided by country, nesting beach, and species (Pages 8-34). Based on our preliminary analyses, we have developed a set of recommendations that we believe will help ensure that the IAC is best suited to recognize when changes in nesting abundance occur within the region that may have major conservation implications.

### List of Recommendations

1. The IAC Scientific Committee recommends that IAC Countries provide real number data rather than ranges for nesting beach abundance, as this is the best way to evaluate changes in population status. The IAC Secretariat *Pro Tempore* should continue to encourage IAC countries to do so when filling out the information in the IAC Annual Report.
2. The IAC Secretariat *Pro Tempore* should encourage each country to provide the methodology for how they arrived at their nesting abundance values. This may include a short description of how they collected data each year and if so, what changes in their techniques have taken place since the previous data report. In addition, it is encouraged that information is provided regarding the beginning, end, and peak months of the nesting season for each species at each beach. Any changes in monitoring effort at the beaches should be reported at the time that data are provided to IAC.
3. The IAC Scientific Committee recommends that countries report numbers of observed females or number of clutches, as these are the two most reliable data forms. Other data types such as estimated females or emergence/track counts based on incomplete survey effort should be avoided. See IAC Document [CIT-CC10-2013-Tec.5](#) for more information.
4. The IAC Scientific Committee recommends that countries maintain consistency in the index nesting beaches for which data are reported each year. See IAC Document [CIT-CC10-2013-Tec.5](#) for more information.
5. The IAC Secretariat *Pro Tempore* encourages all countries to provide data for all index beaches for each year. Provision of partial data or abundance counts that do not have a standardized collection technique should be avoided. See IAC Document [CIT-CC10-2013-Tec.5](#) for more information. When no data or only partial data are provided for any given index

## **CIT-CC15-2018-Tec.14**

site, the Reporting Countries should provide a clear explanation for why all data were not provided.

6. The IAC Scientific Committee recommends that an update to this Index Nesting Beach Report is conducted every 5 years, with a final report submitted upon completion to the IAC Consultative Committee and the Conference of the Parties.

7. The IAC Scientific Committee recommends that the trend of green turtles in Galapagos (Ecuador), Isla Aves (Venezuela) and Tortuguero (Costa Rica) are observed closely, along with the conditions in foraging areas.

**Analysis of Nesting Trends**

**Common Name:** Leatherback

**Scientific Name:** *Dermochelys coriacea*

**IUCN Red List Categories:**

Global: Vulnerable

East Pacific: Critically Endangered

Northeast Indian: Data Deficient

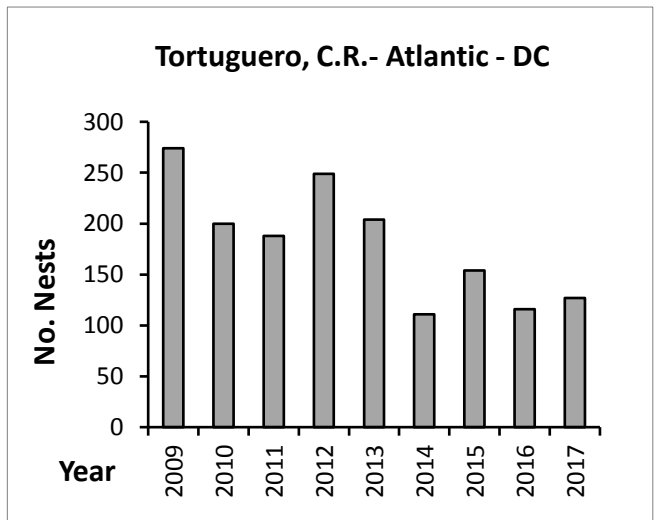
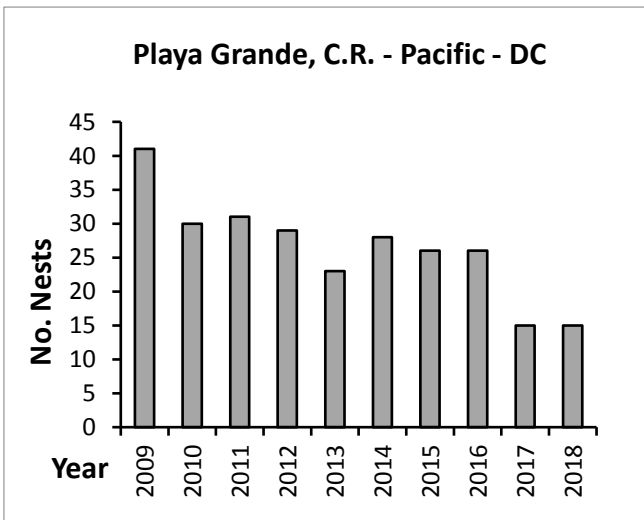
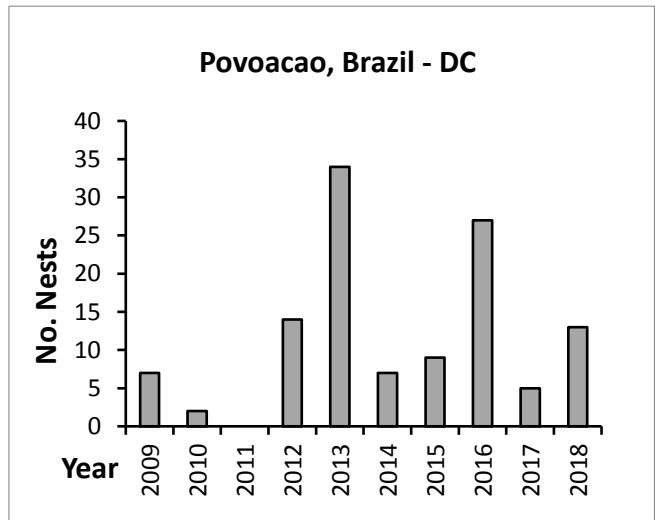
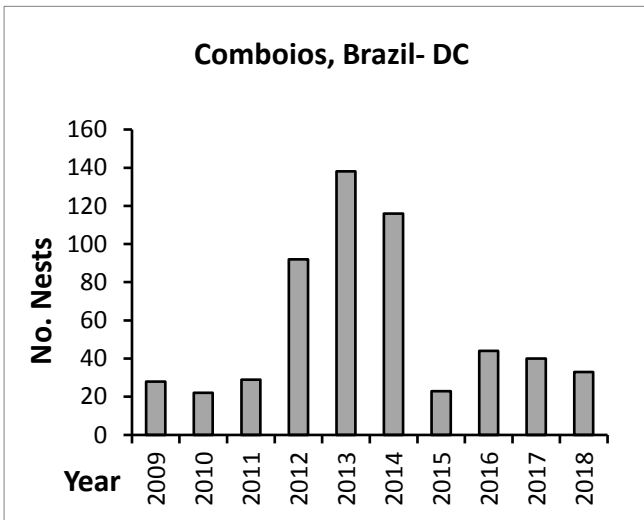
Northwest Atlantic: Least Concern

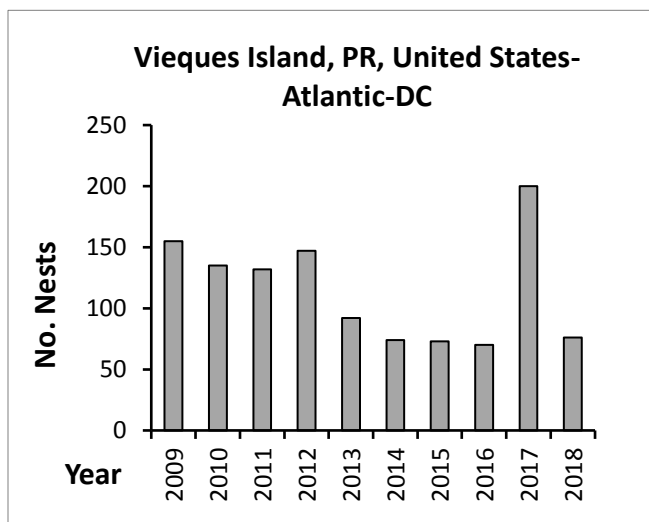
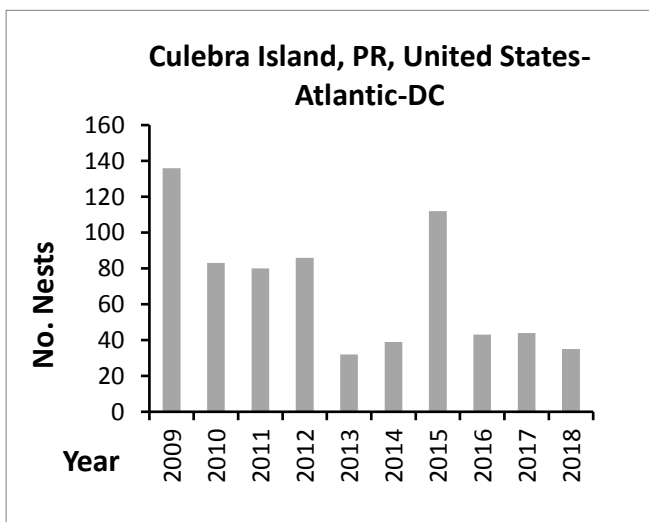
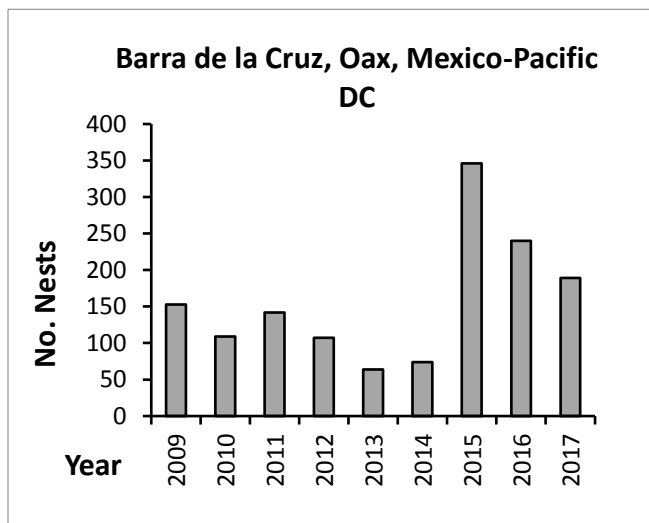
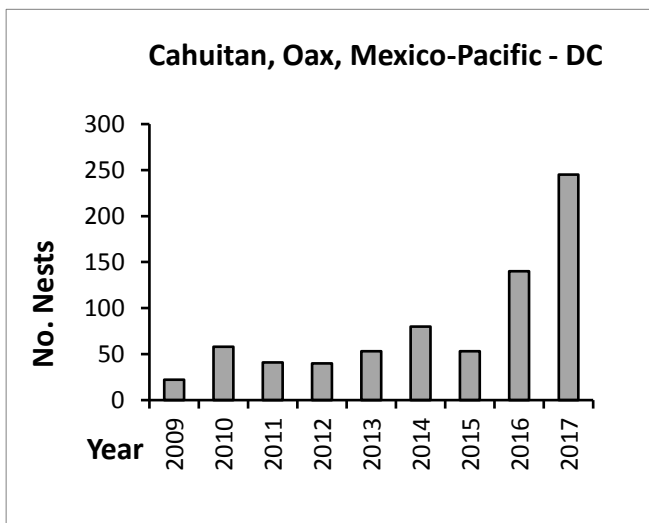
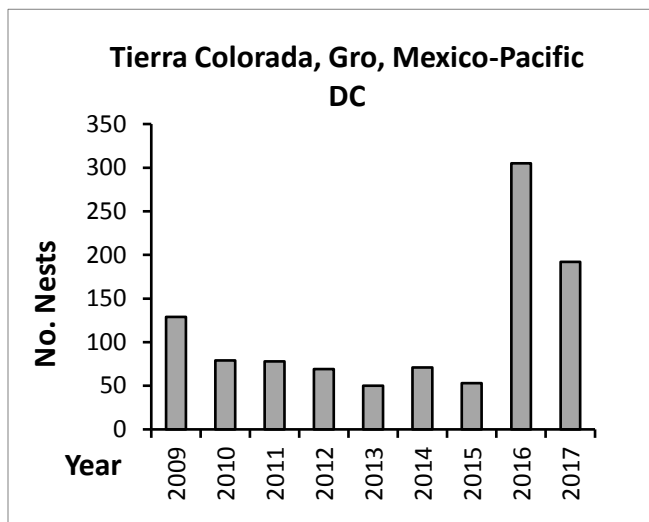
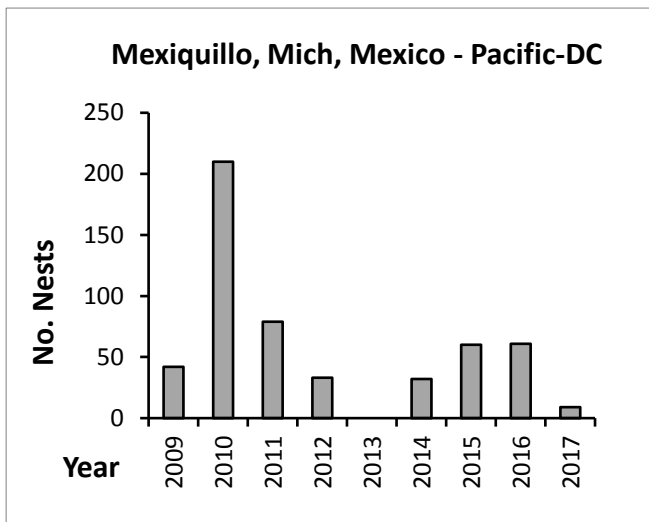
Southeast Atlantic: Data Deficient

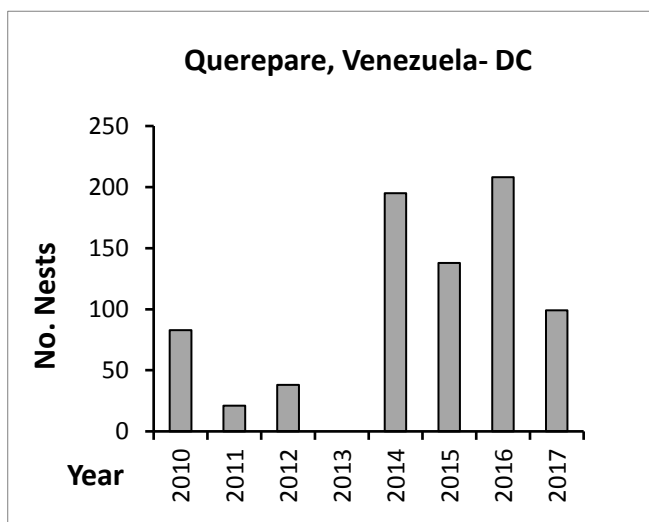
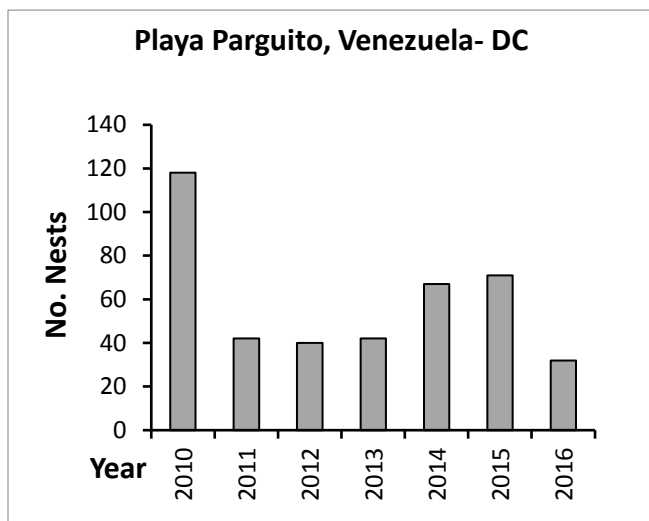
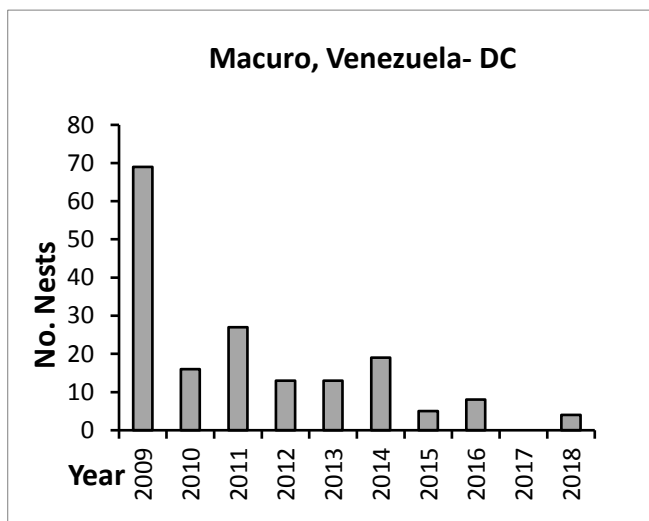
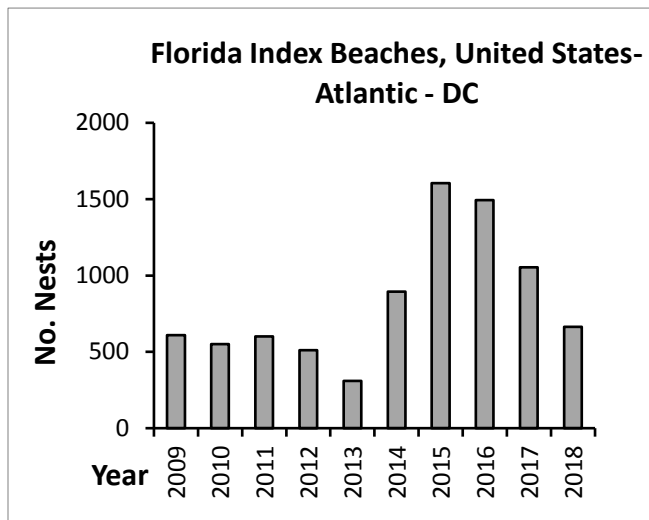
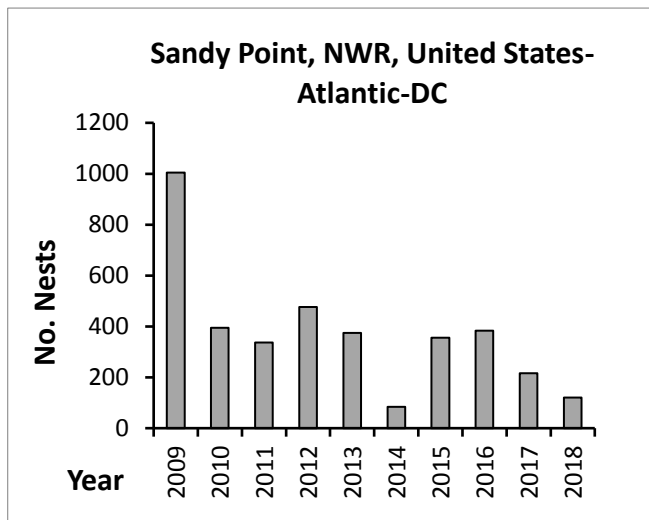
Southwest Atlantic: Critically Endangered

Southwest Indian: Critically Endangered

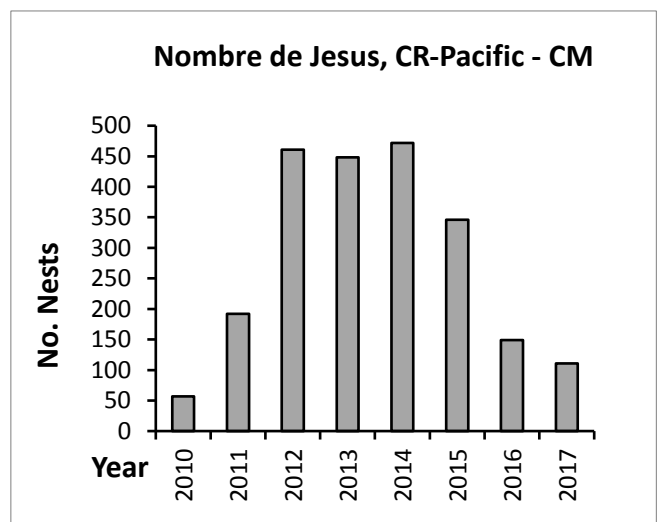
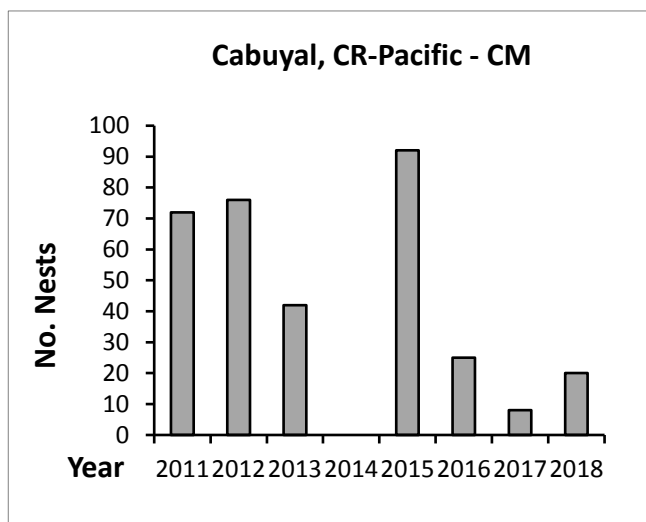
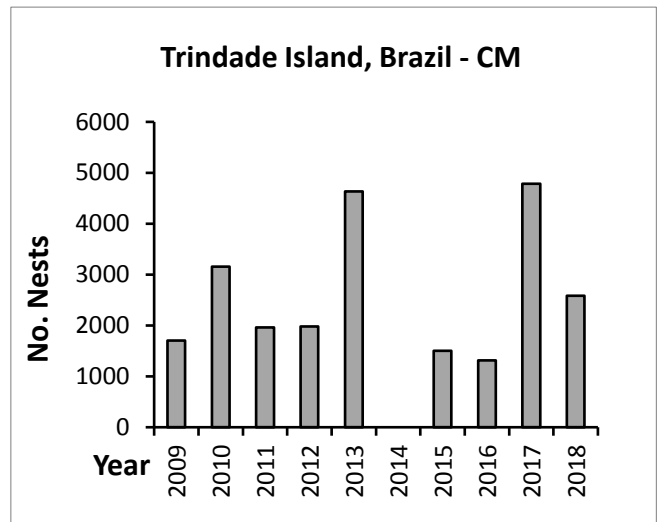
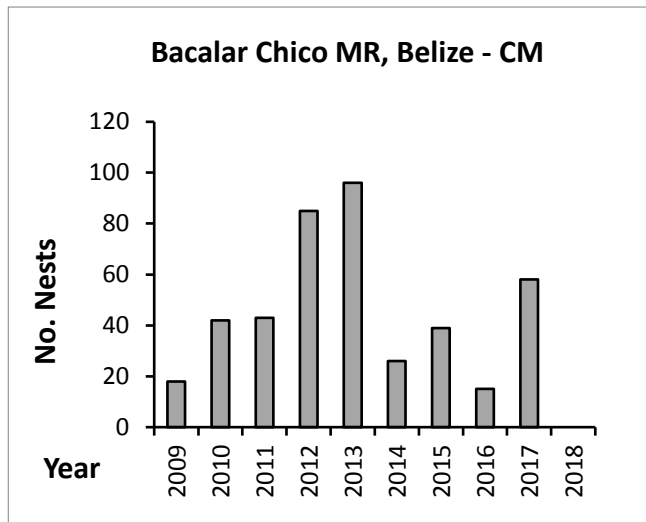
West Pacific: Critically Endangered

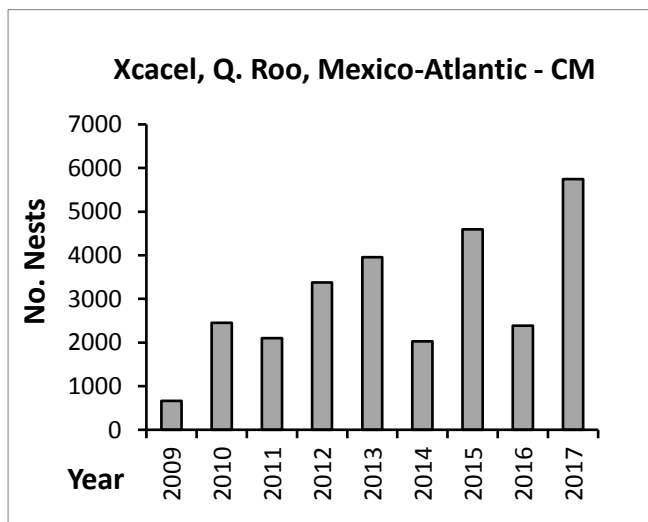
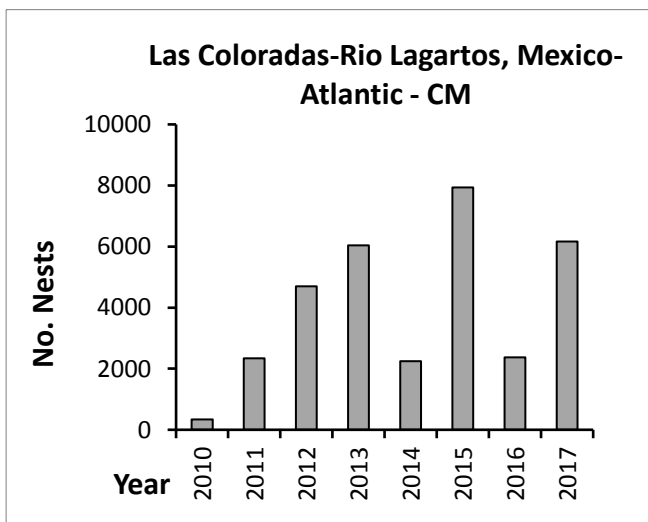
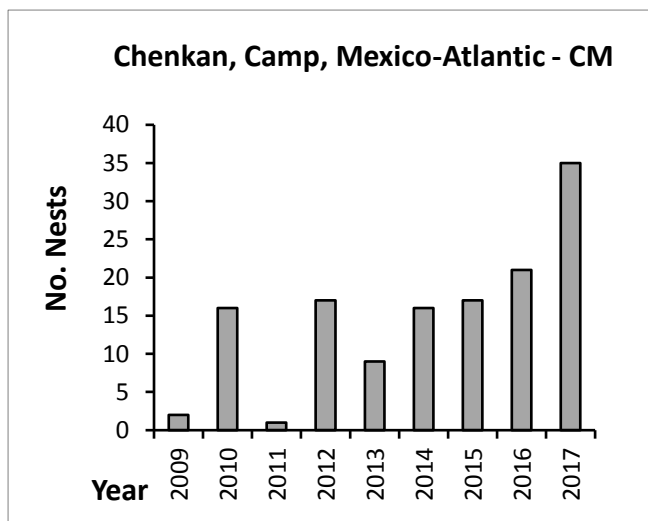
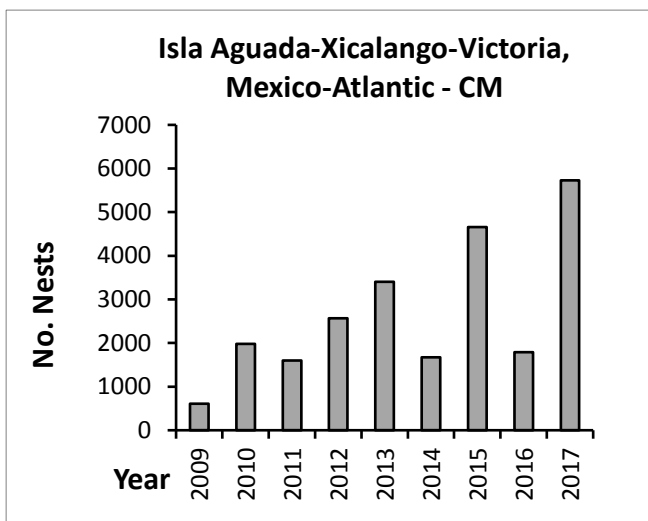
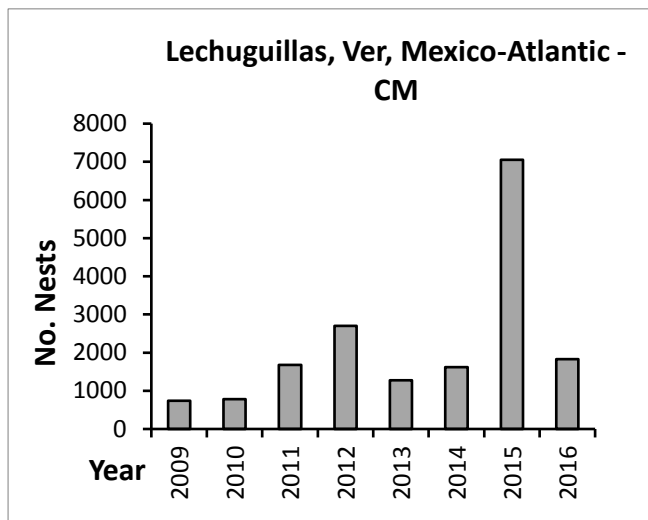
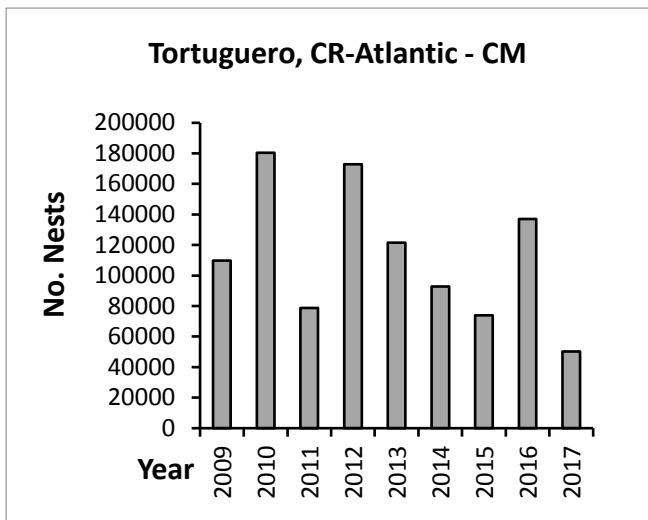


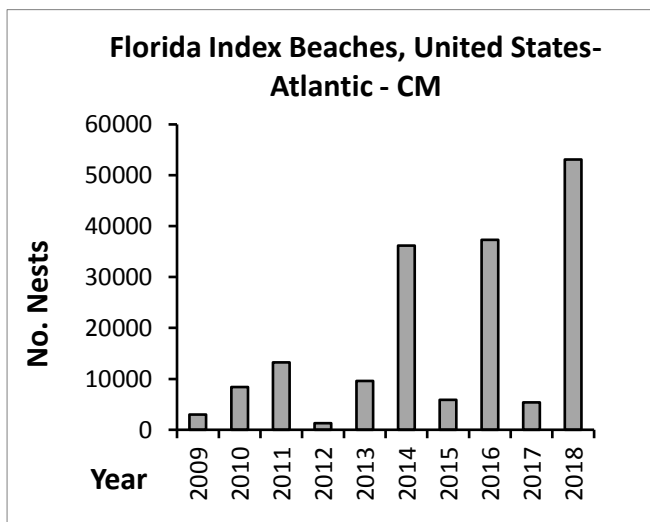
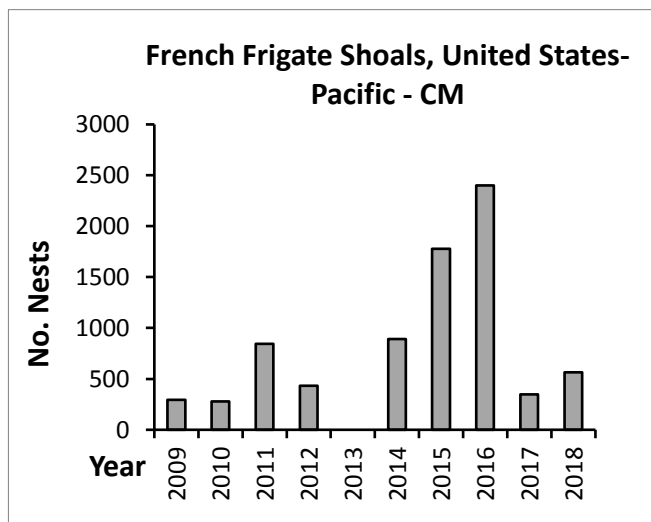
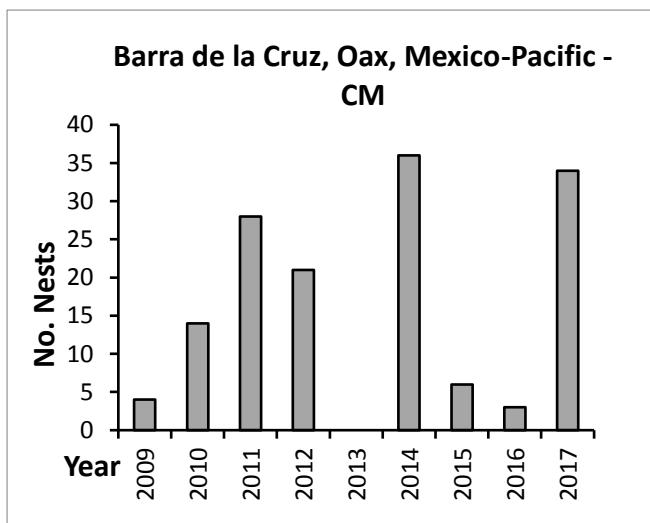
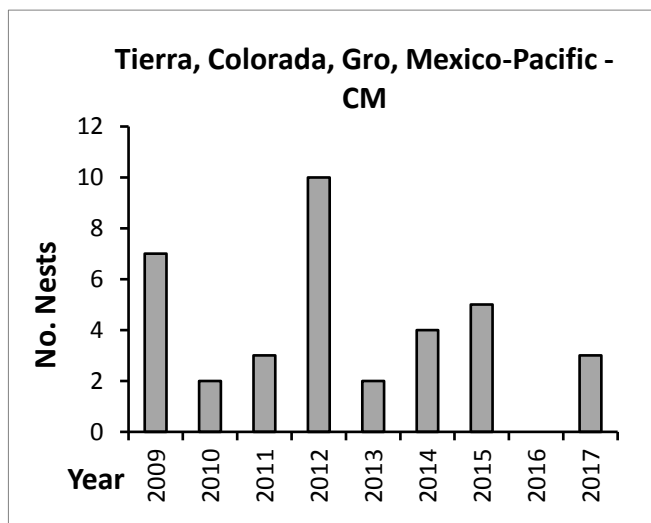
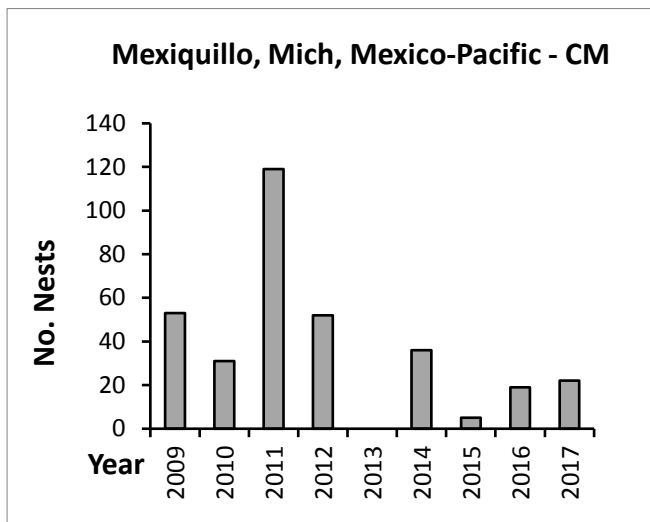
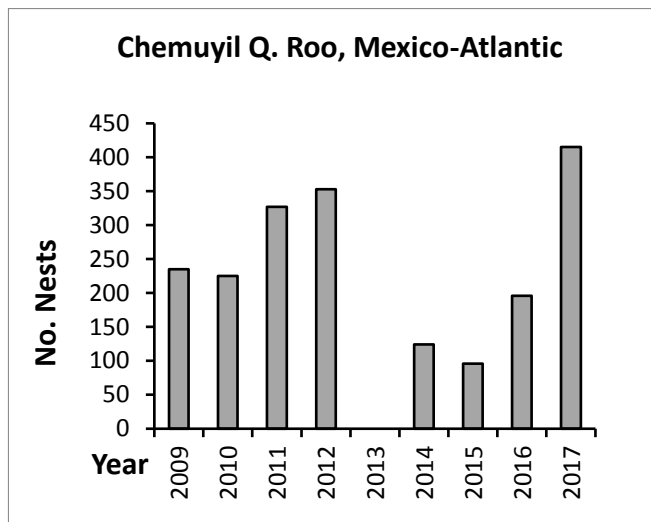




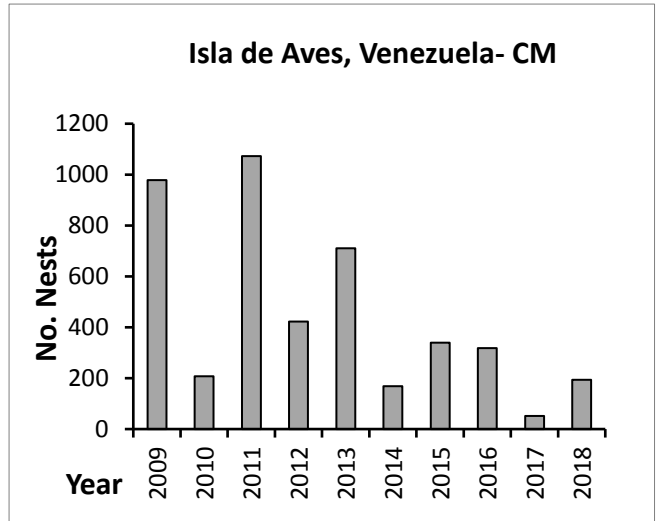
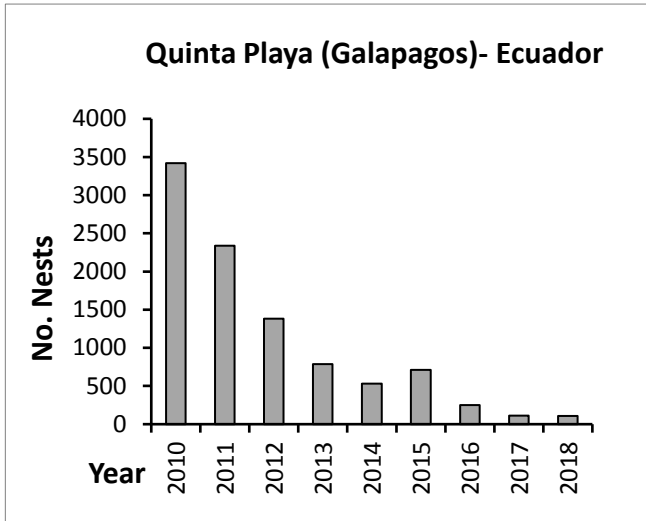
**Common Name:** Green Turtle  
**Scientific Name:** *Chelonia mydas*  
**IUCN Red List Categories:**  
 Global: Endangered  
 Hawaiian Subpopulation: Least Concern



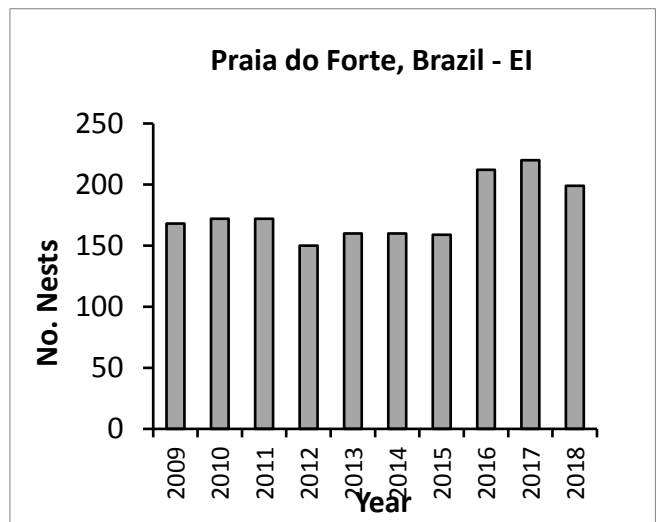
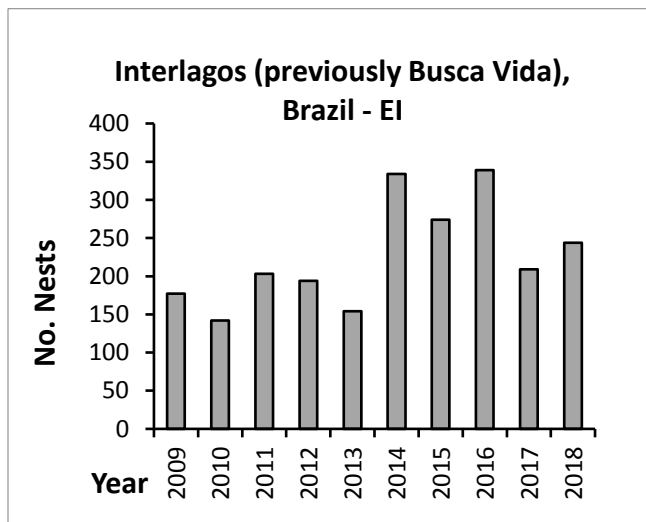
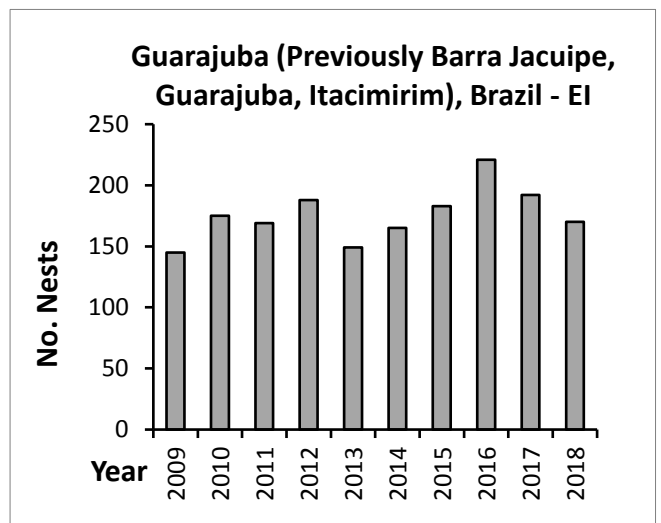
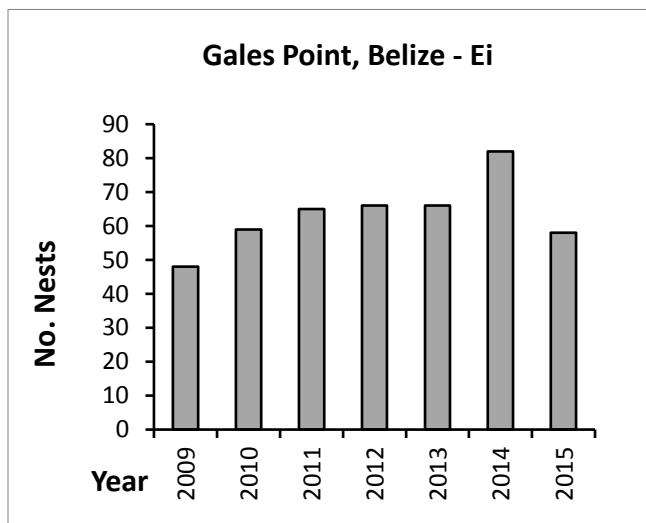


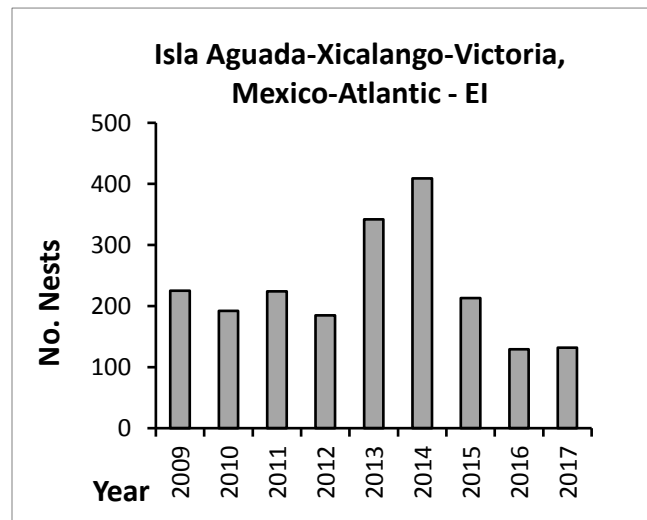
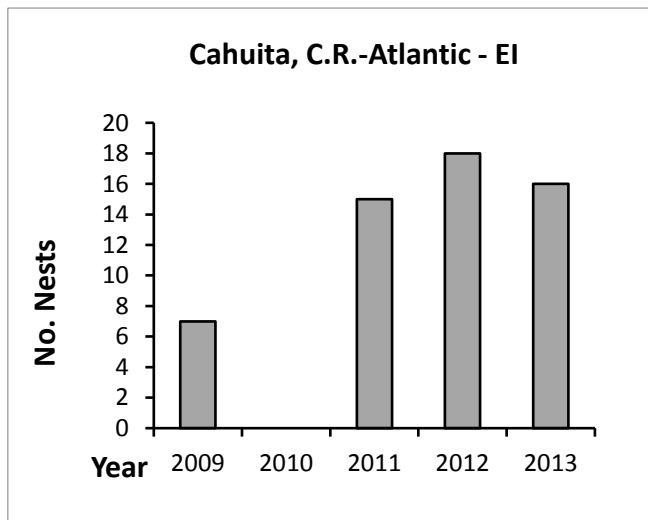
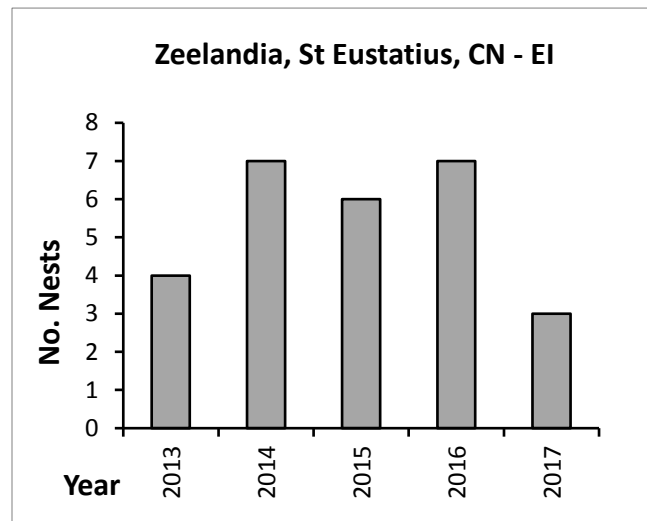
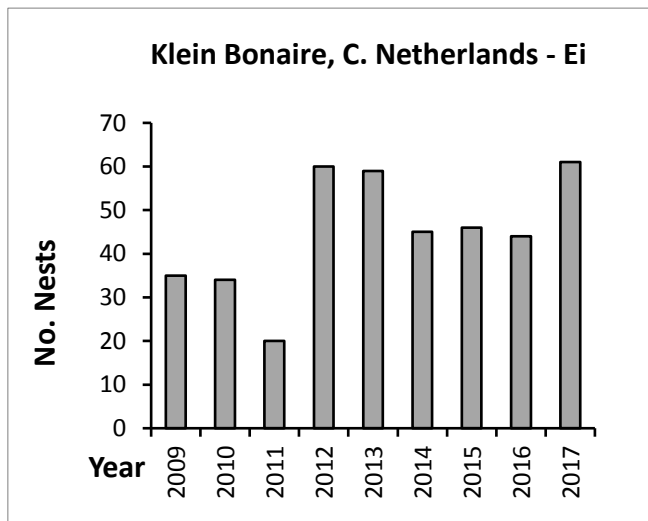
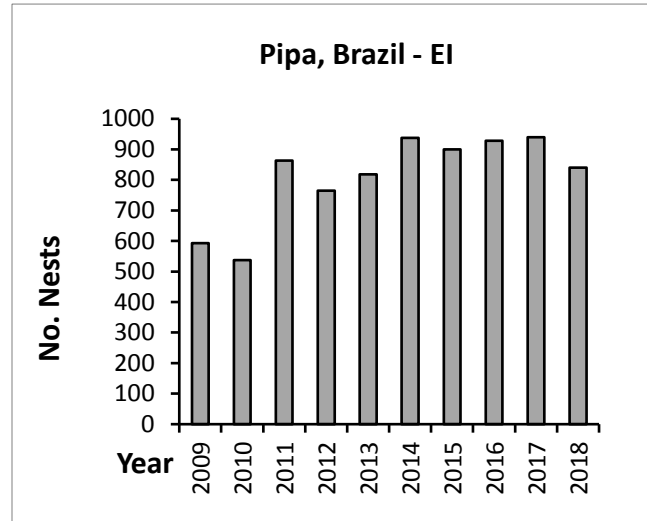
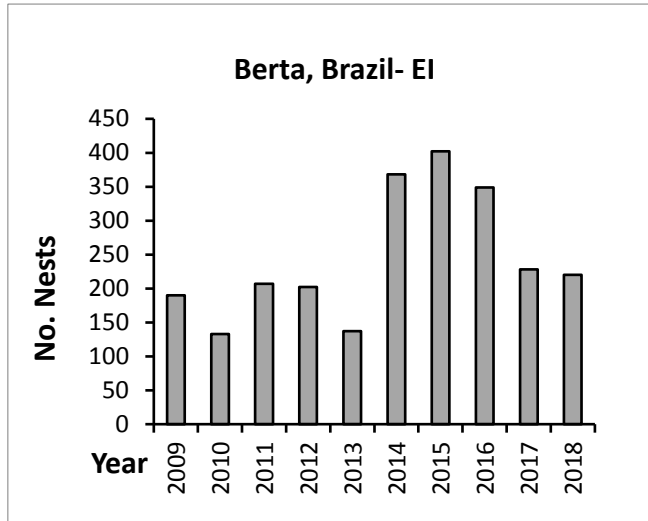


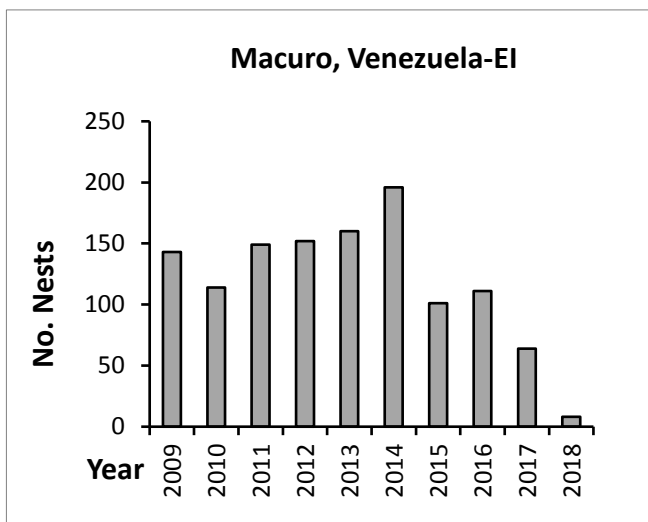
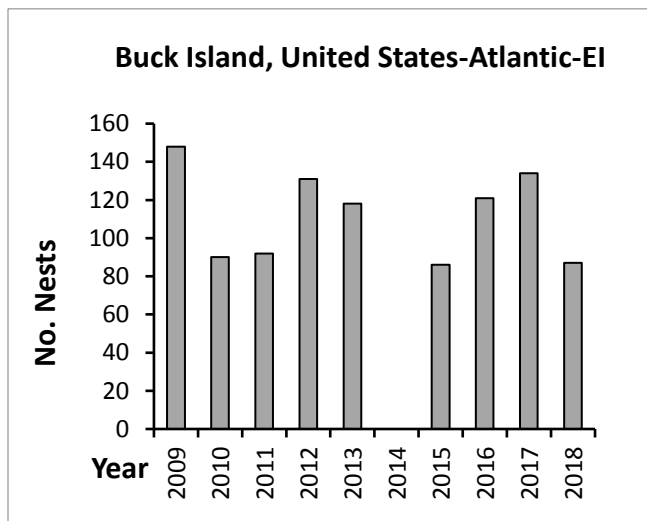
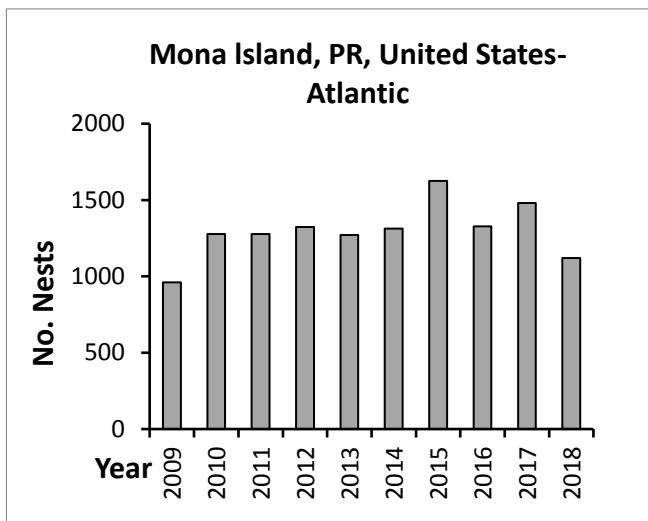
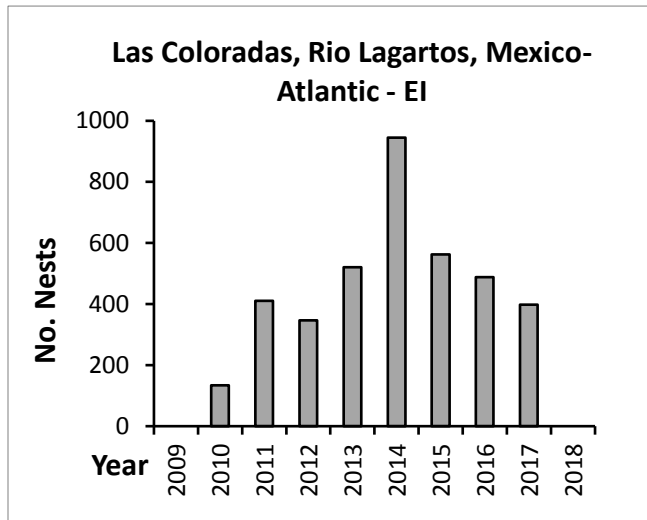
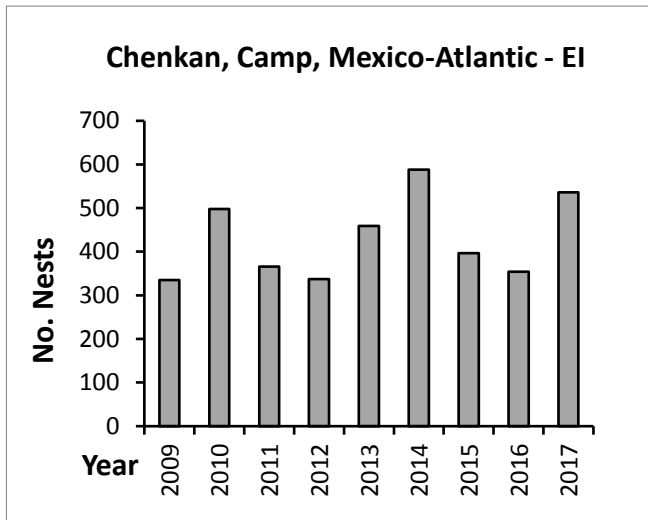




**Common Name:** Hawksbill Turtle  
**Scientific Name:** *Eretmochelys imbricata*  
**IUCN Red List Category:**  
 Global: Critically Endangered







**Common Name:** Loggerhead Turtle

**Scientific Name:** *Caretta caretta*

**IUCN Red List Categories:**

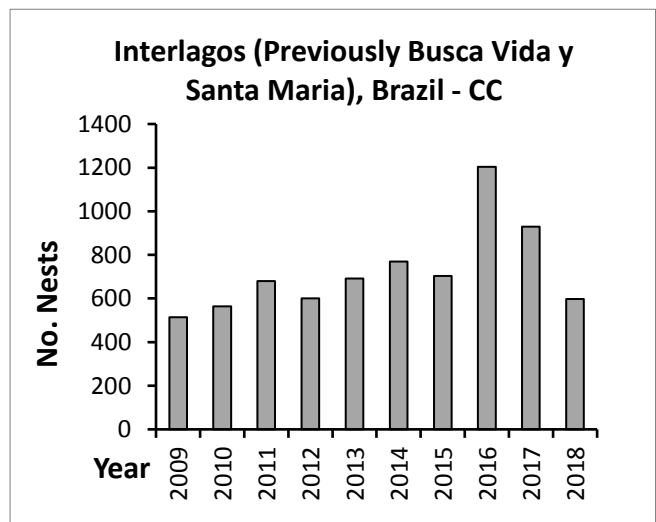
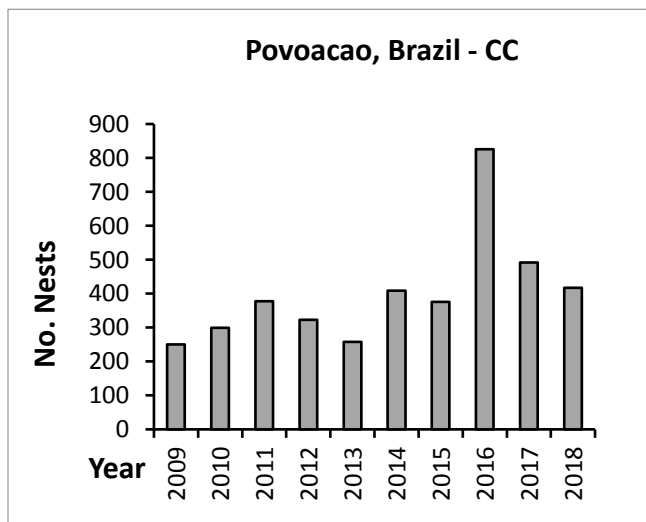
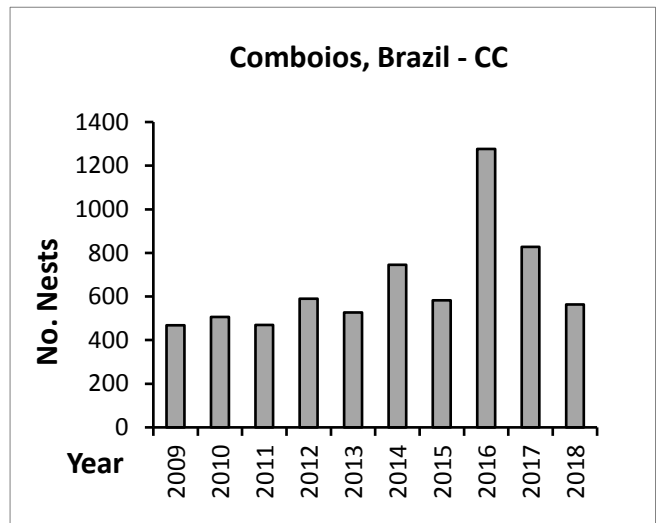
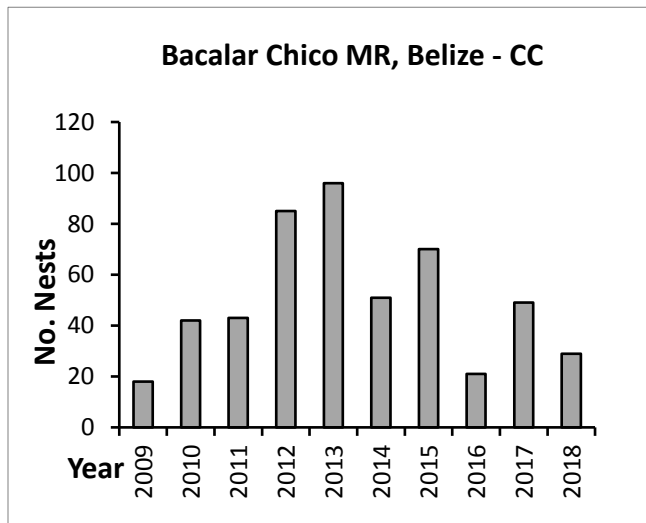
Global: Vulnerable

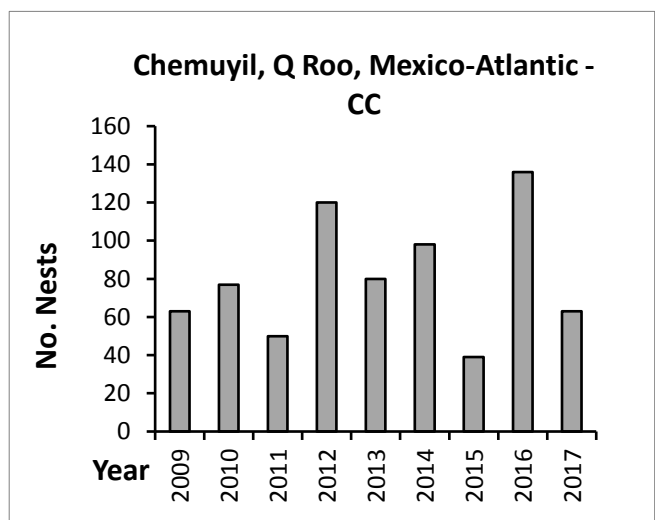
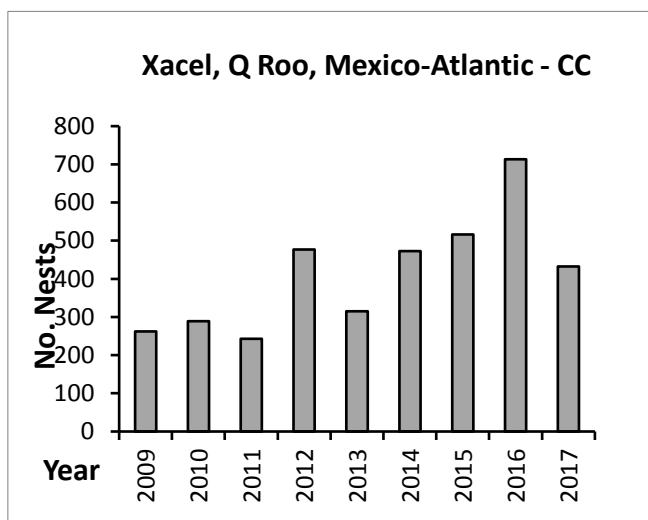
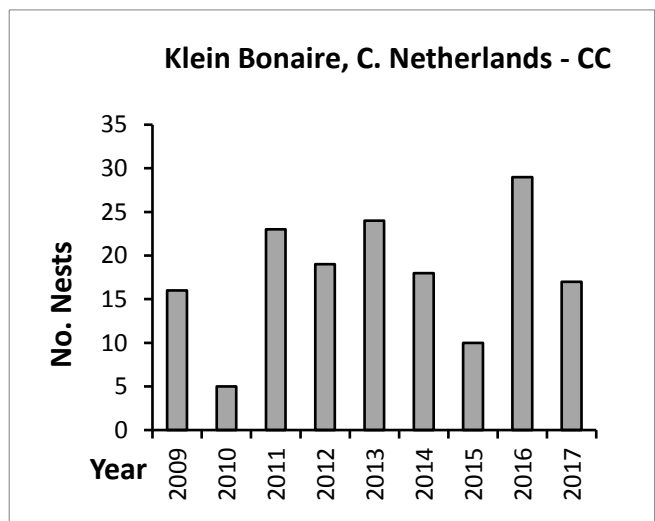
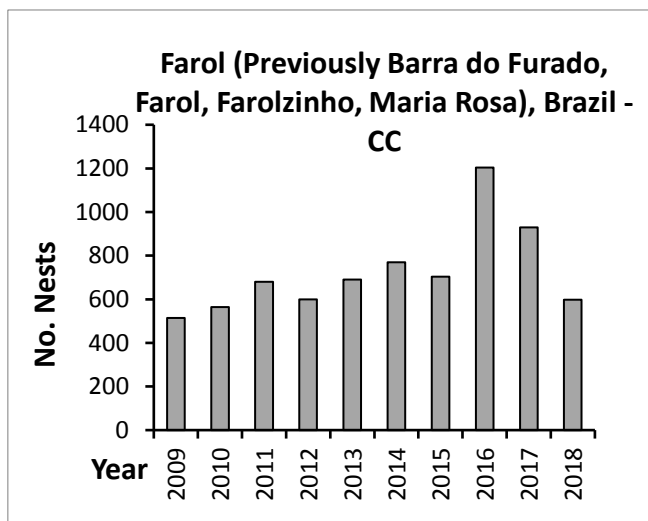
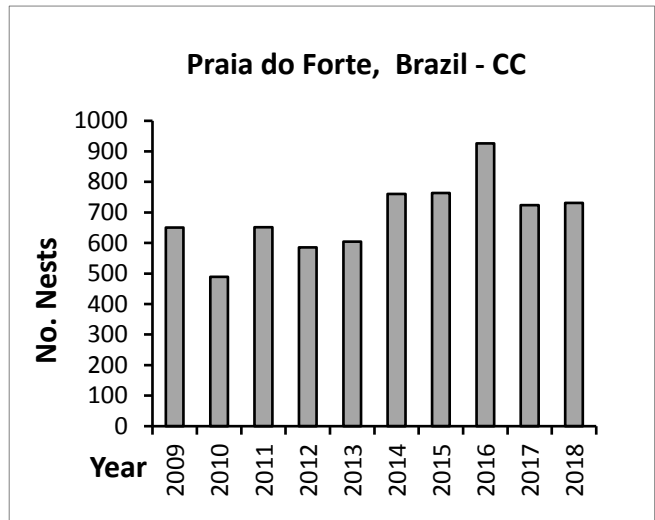
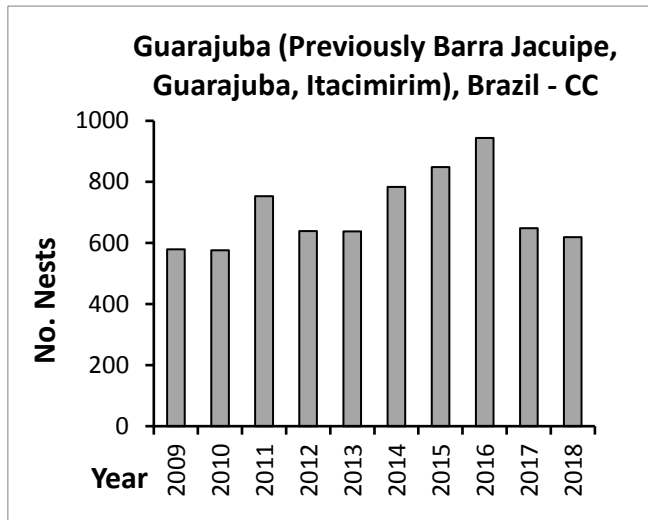
North Pacific: Least Concern

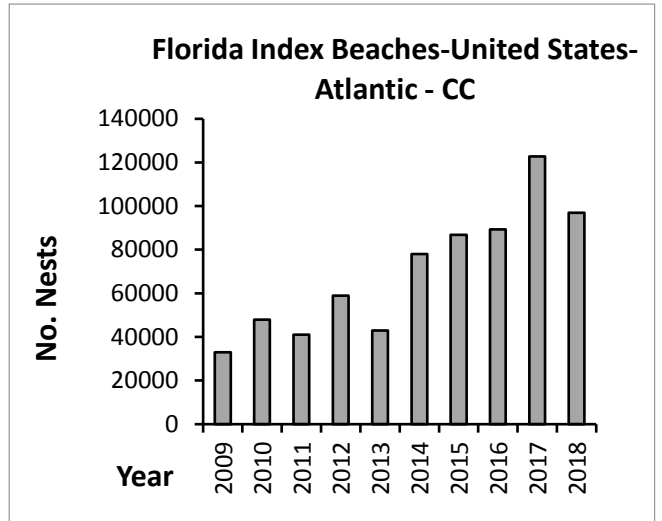
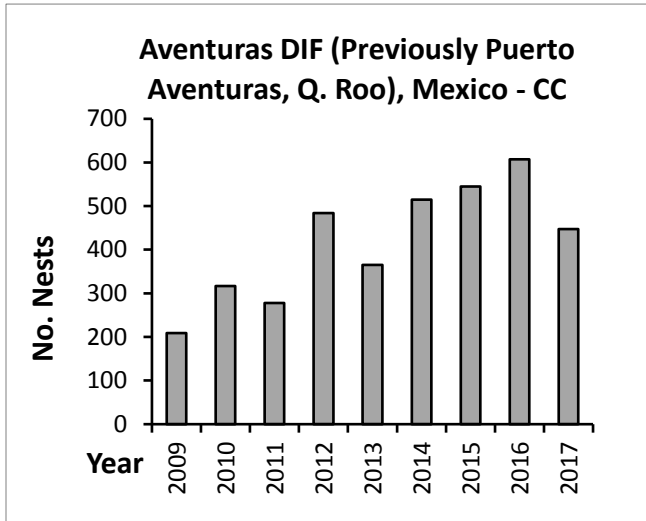
South Pacific: Critically Endangered

Northwest Atlantic: Least Concern

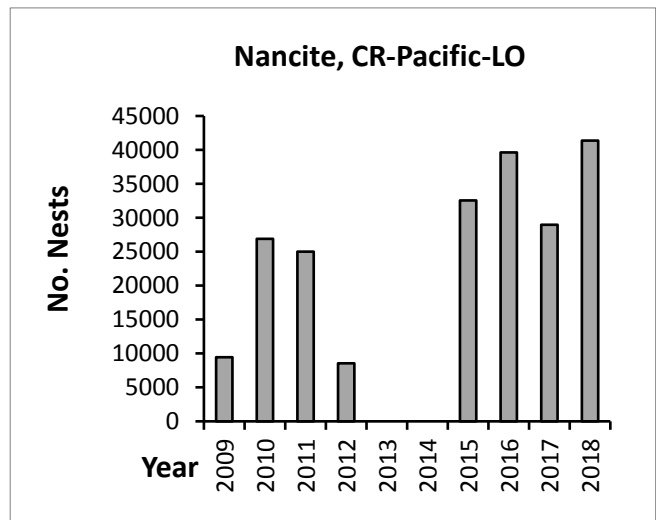
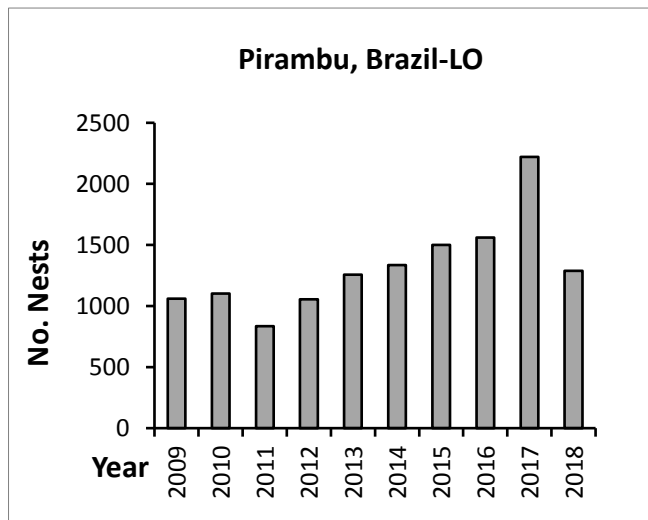
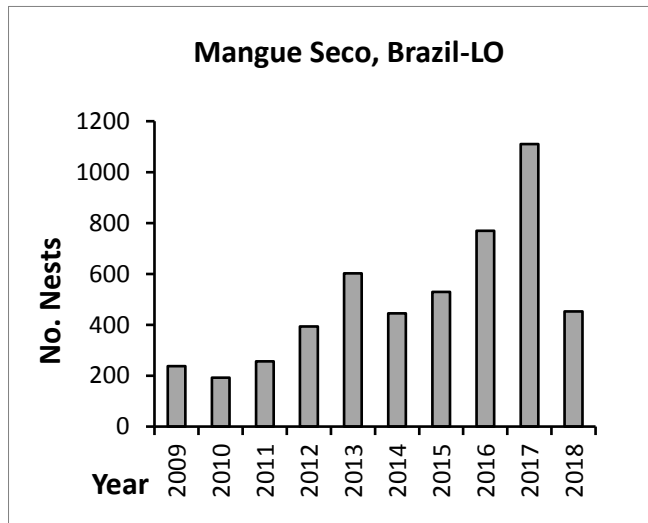
Southwest Atlantic Least Concern



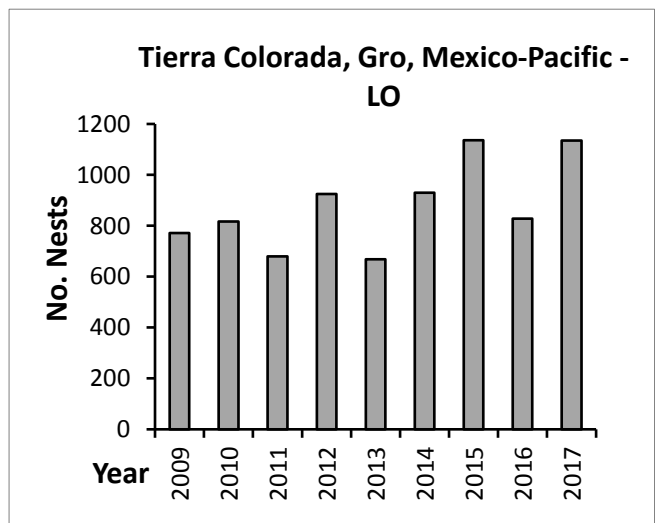
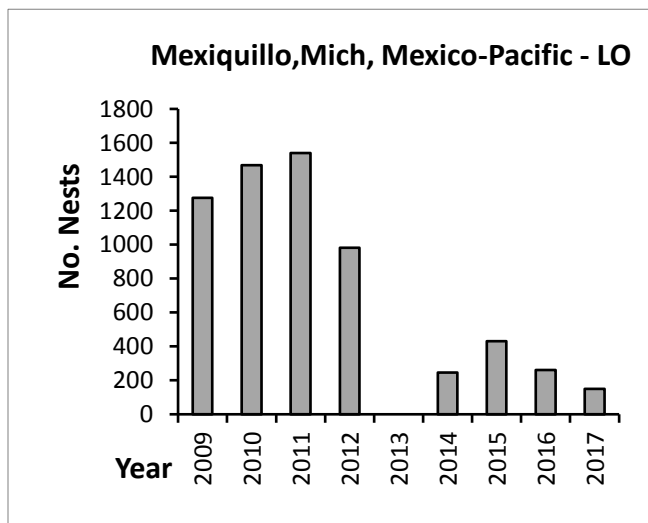
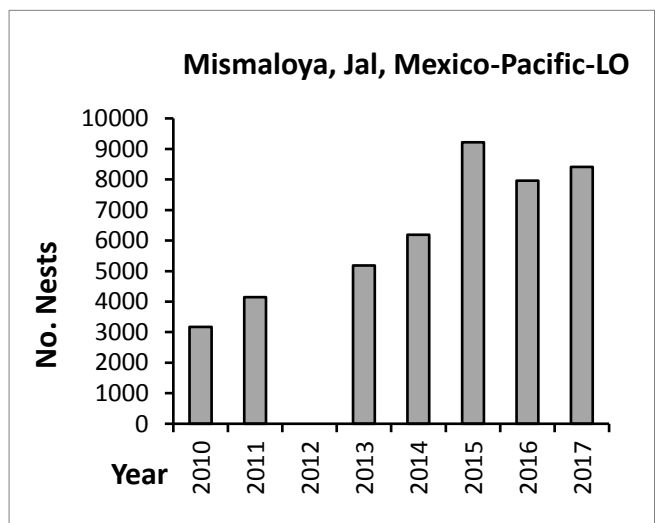
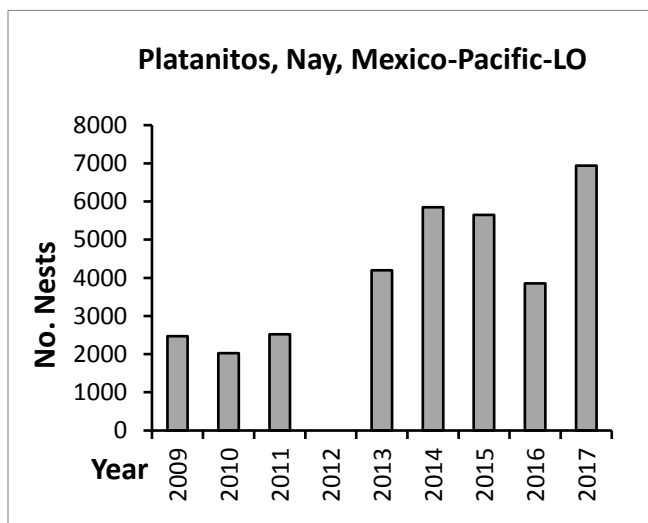
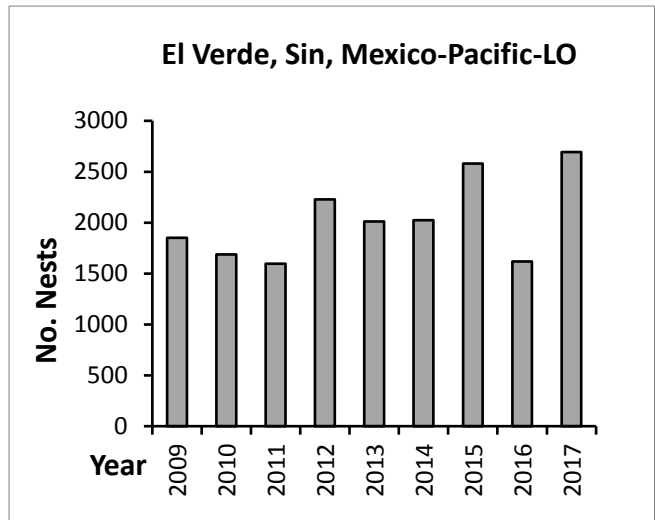
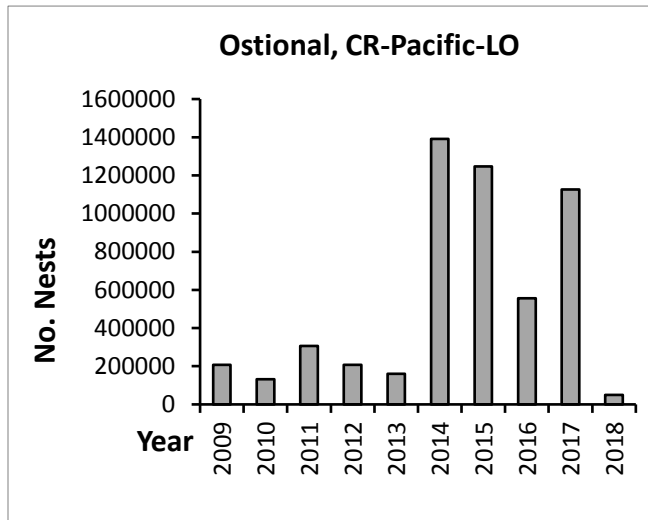


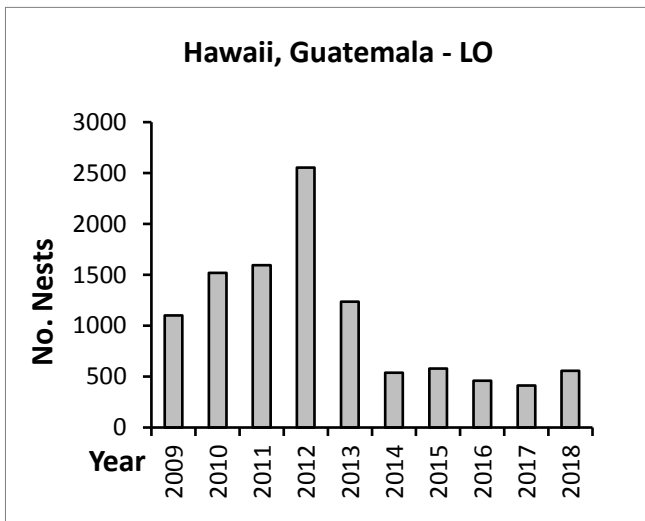
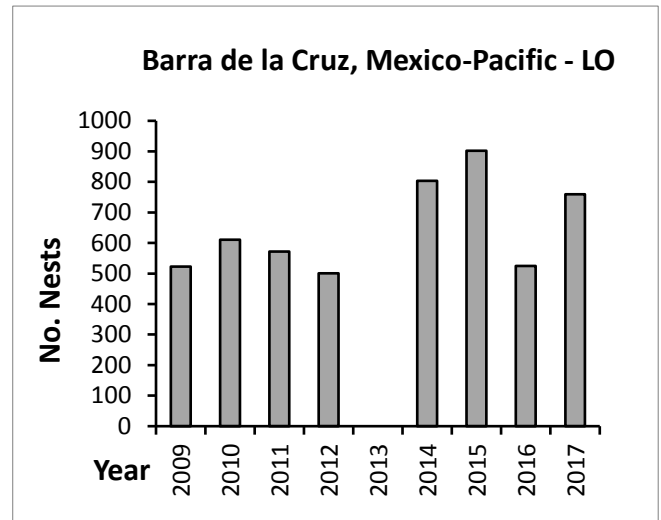
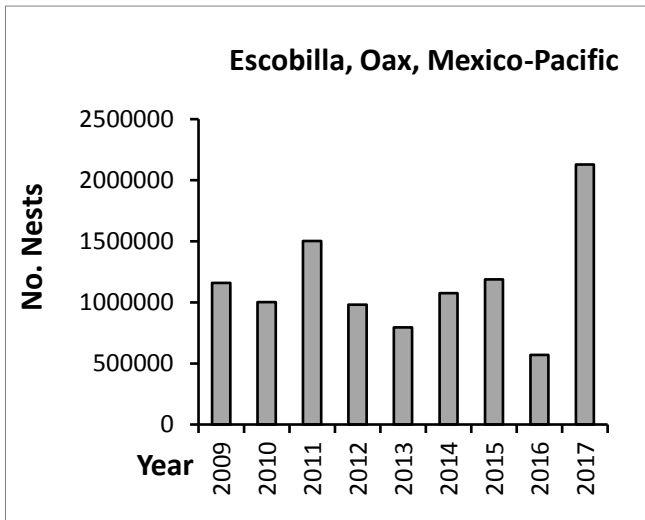


**Common Name:** Olive Ridley Turtle  
**Scientific Name:** *Lepidochelys olivacea*  
**IUCN Red List Category:**  
 Global: Vulnerable

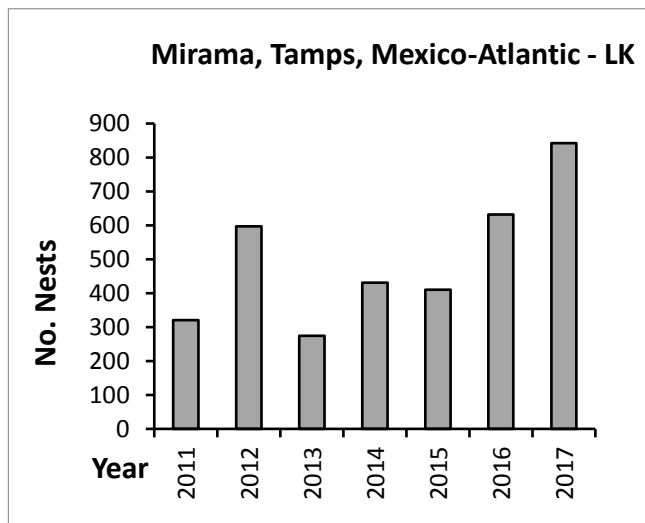
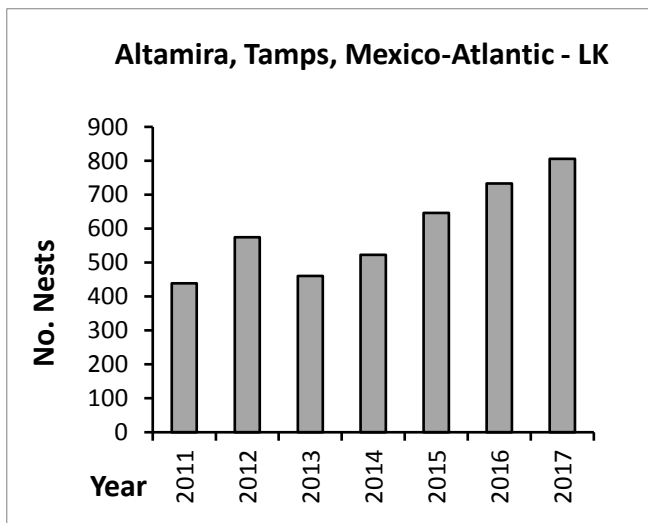
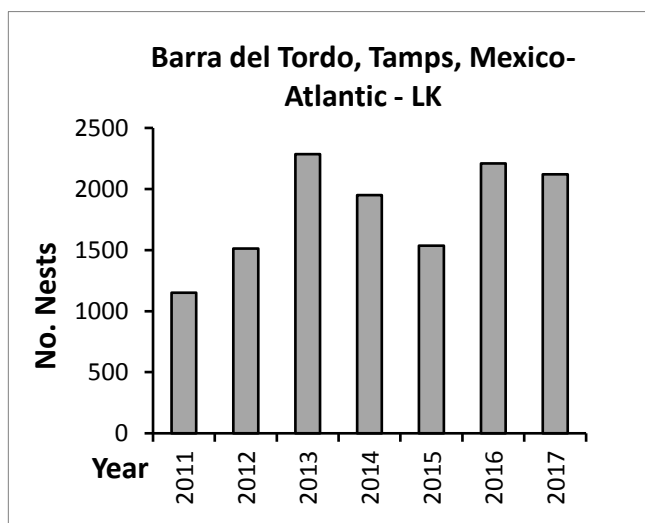
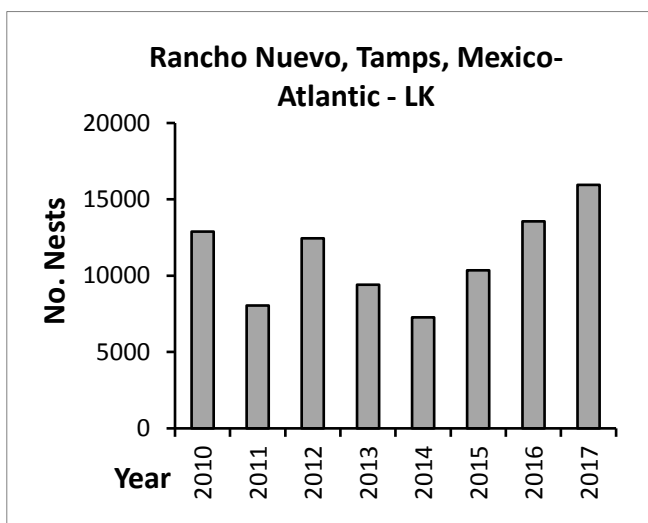


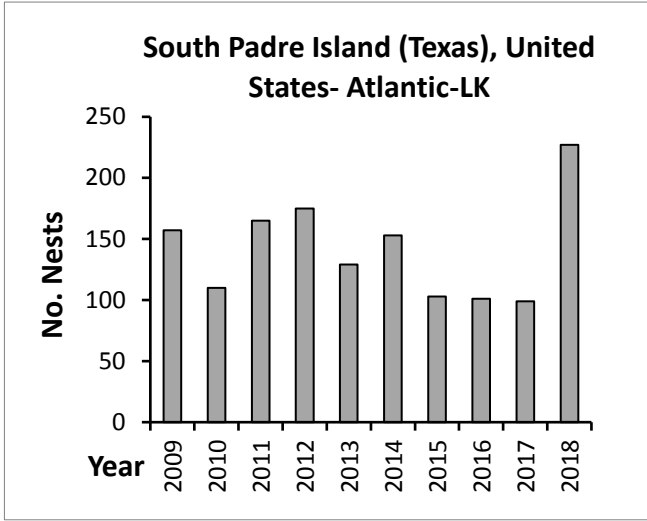
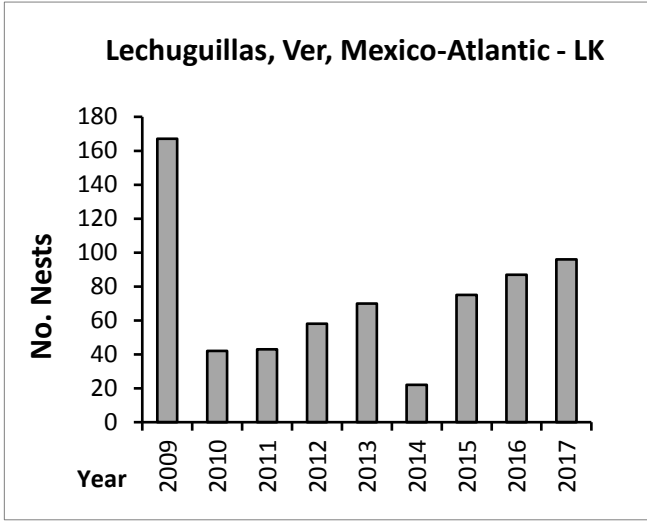




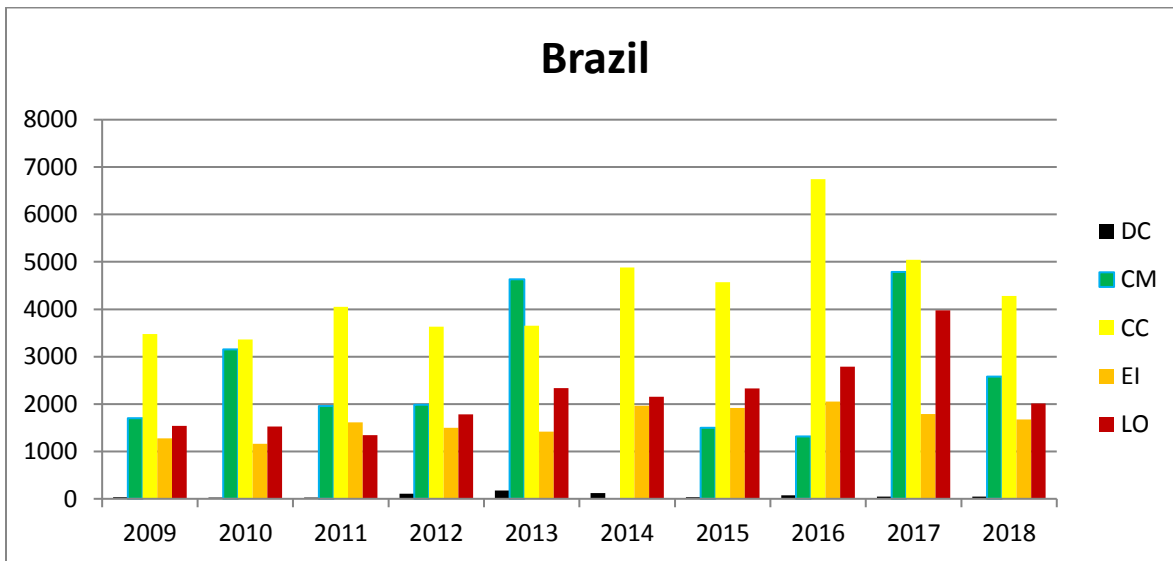
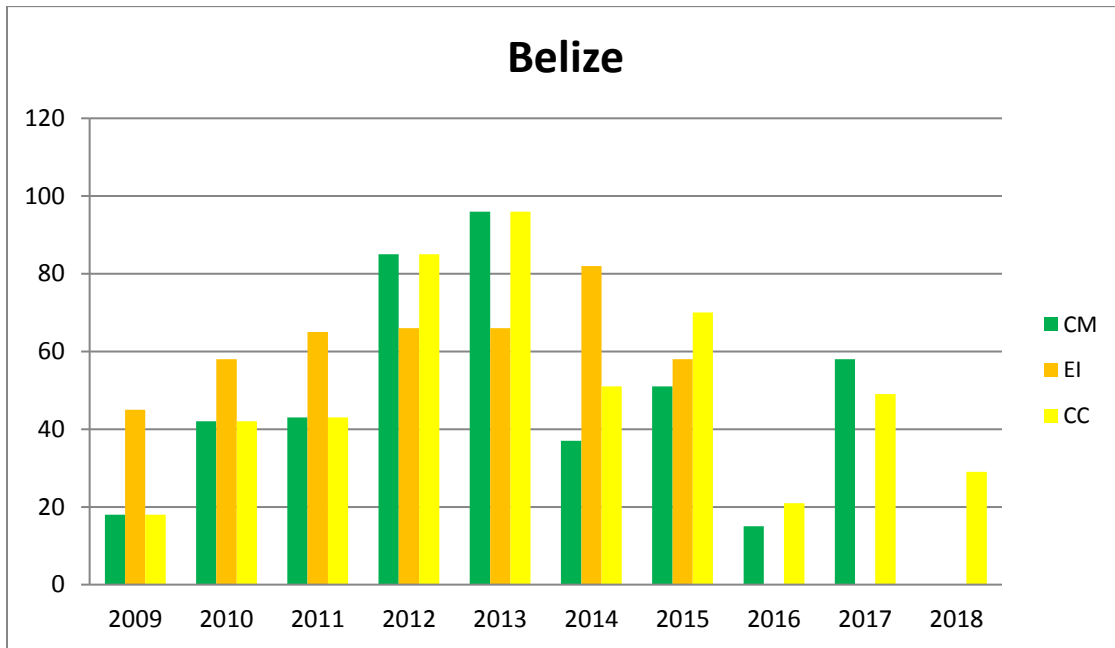


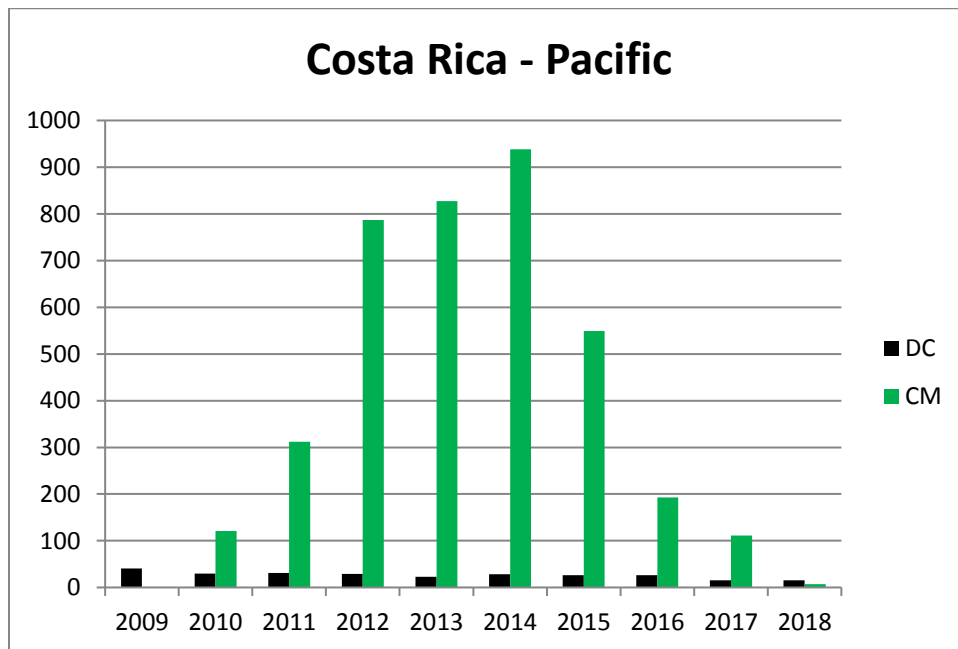
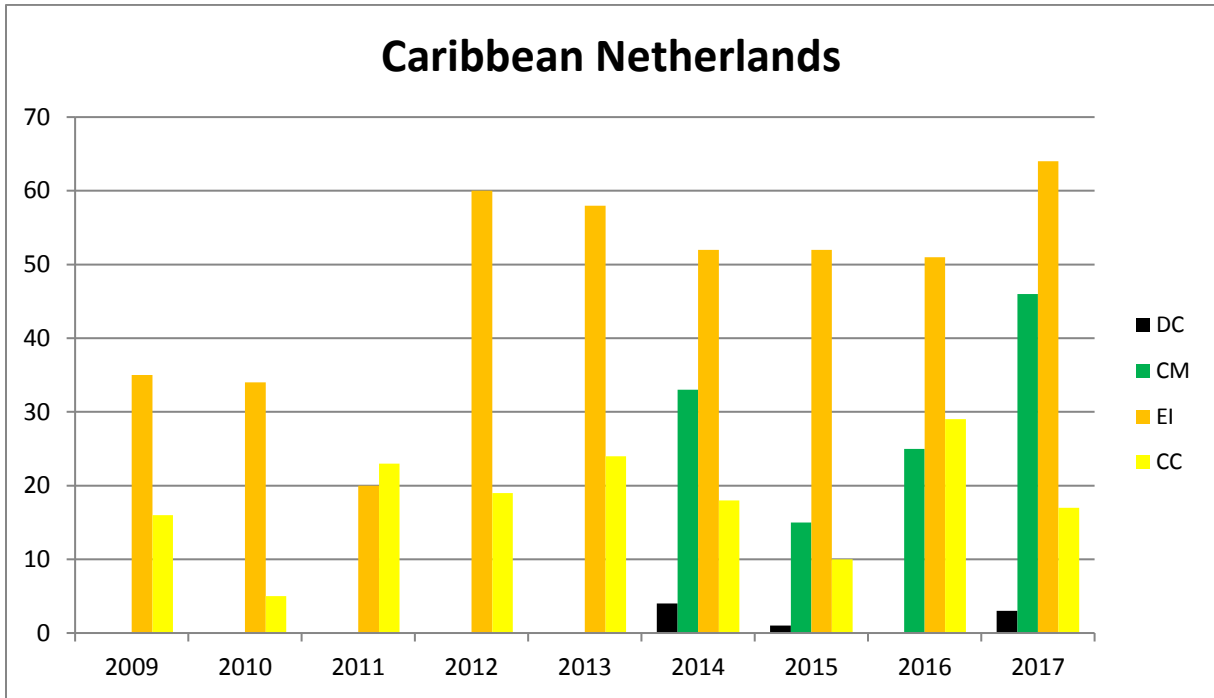
**Common Name:** Kemp's Ridley Turtle  
**Scientific Name:** *Lepidochelys kempii*  
**IUCN Red List Category:**  
 Global: Critically Endangered

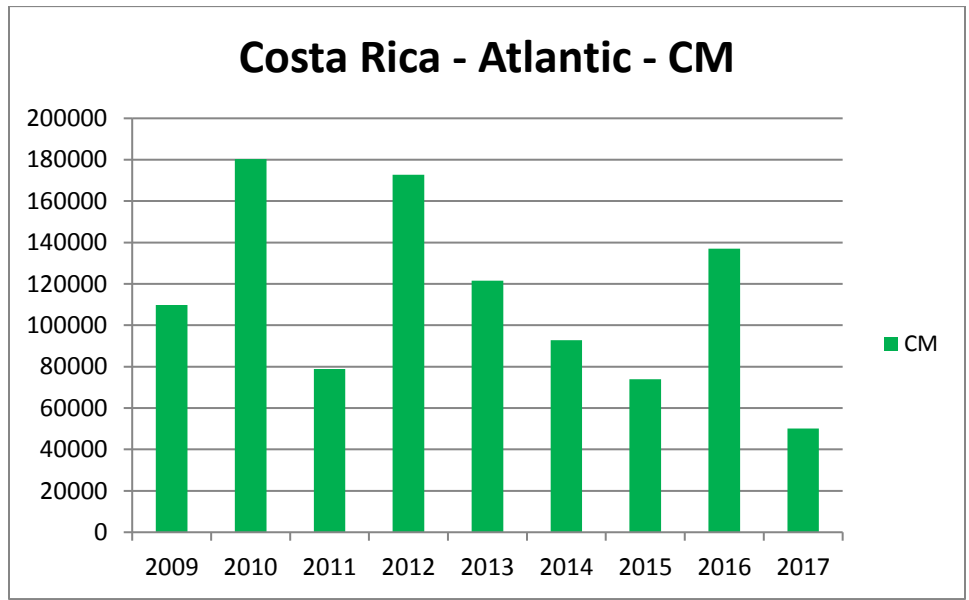
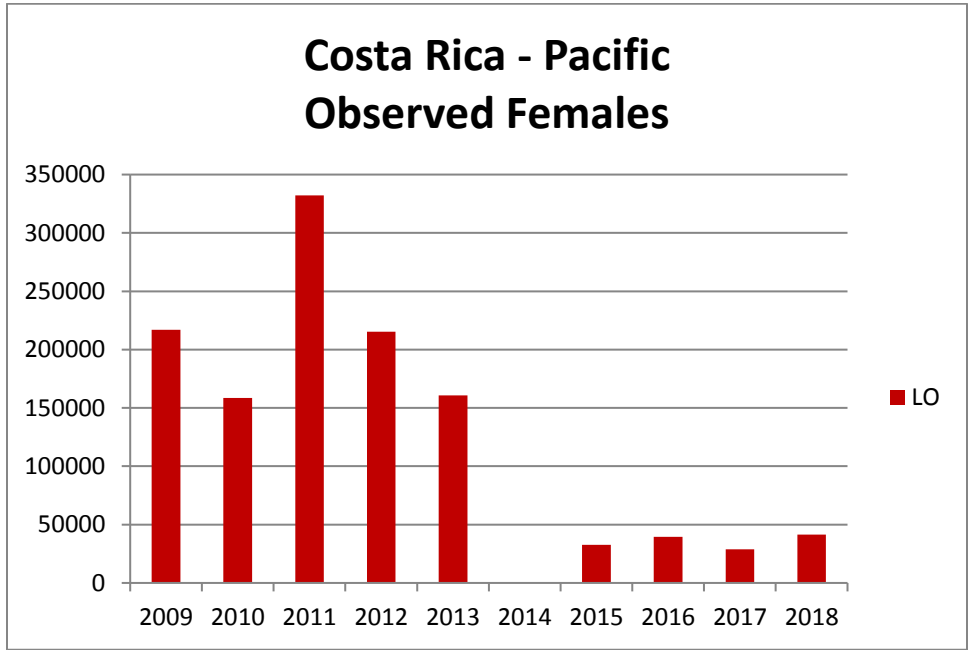


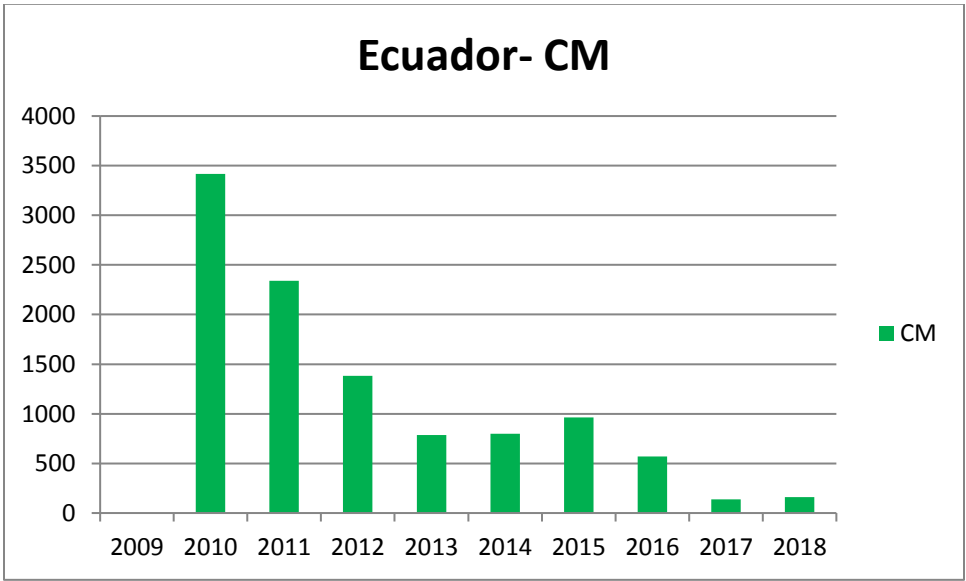
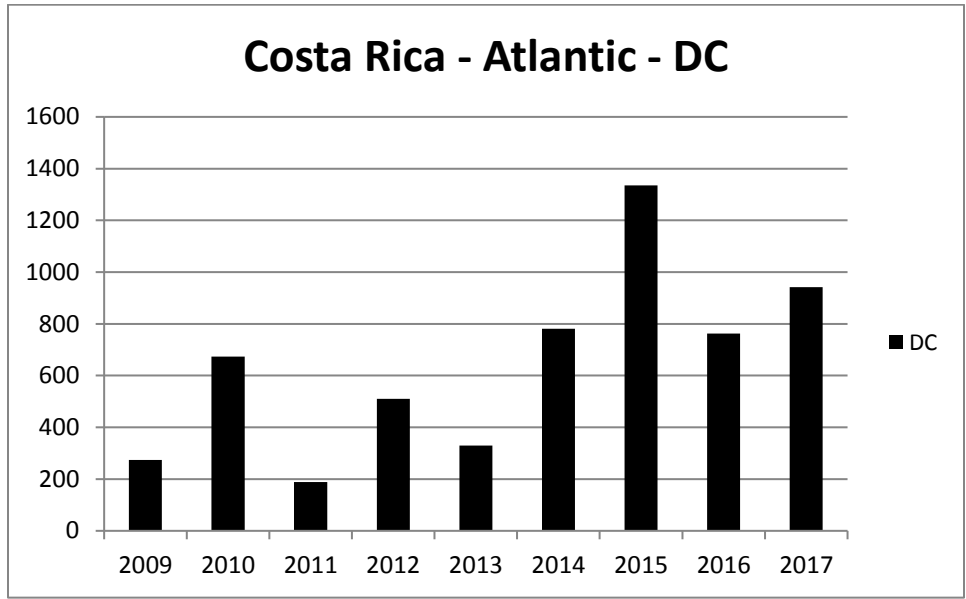


## DPS Regional Graphs

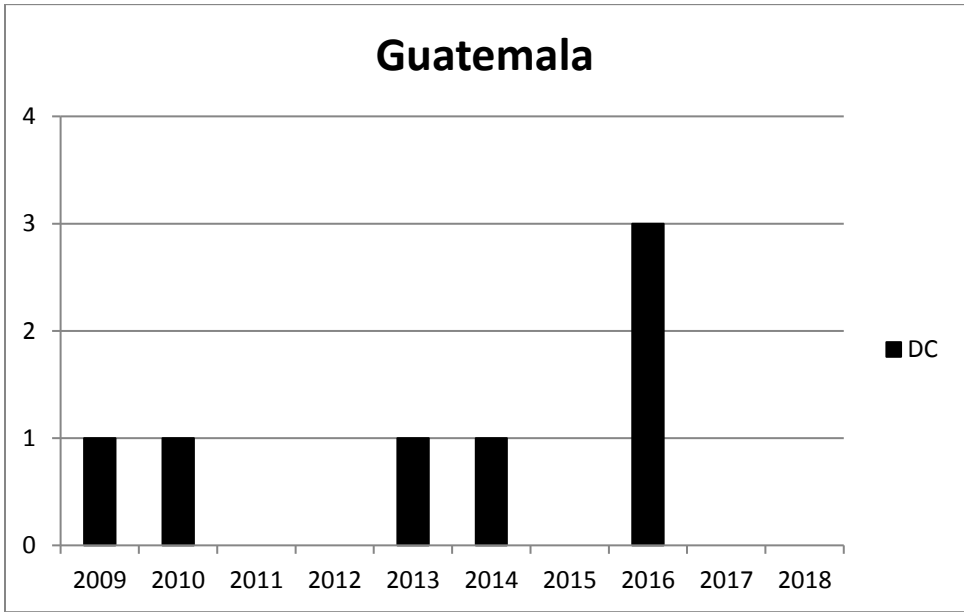
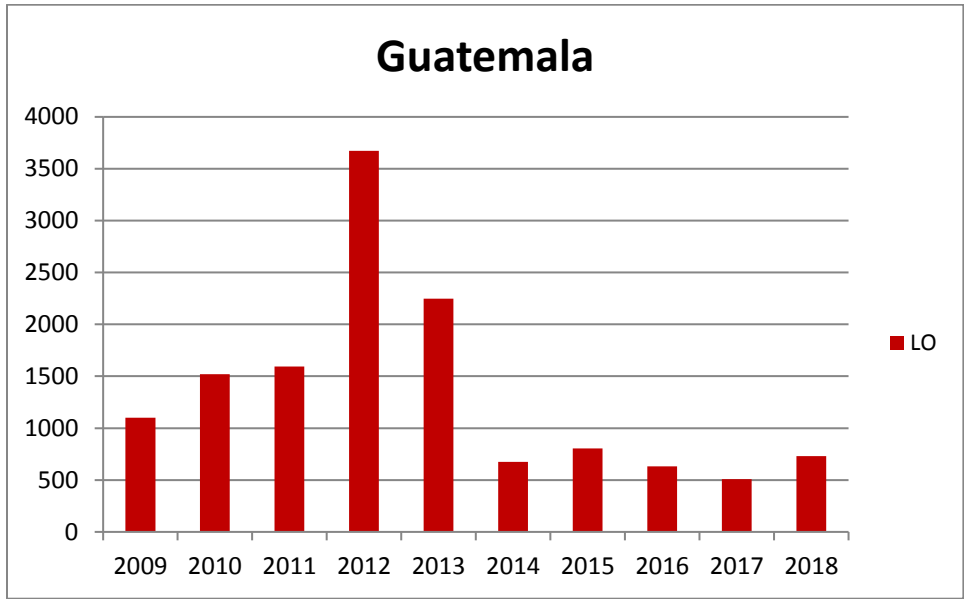


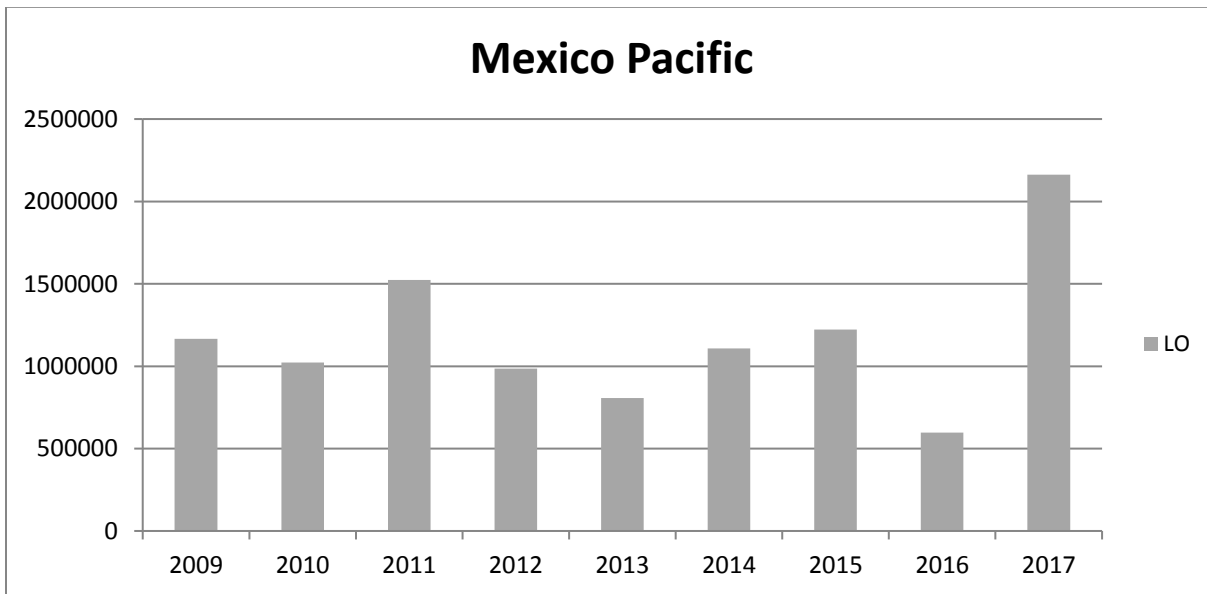
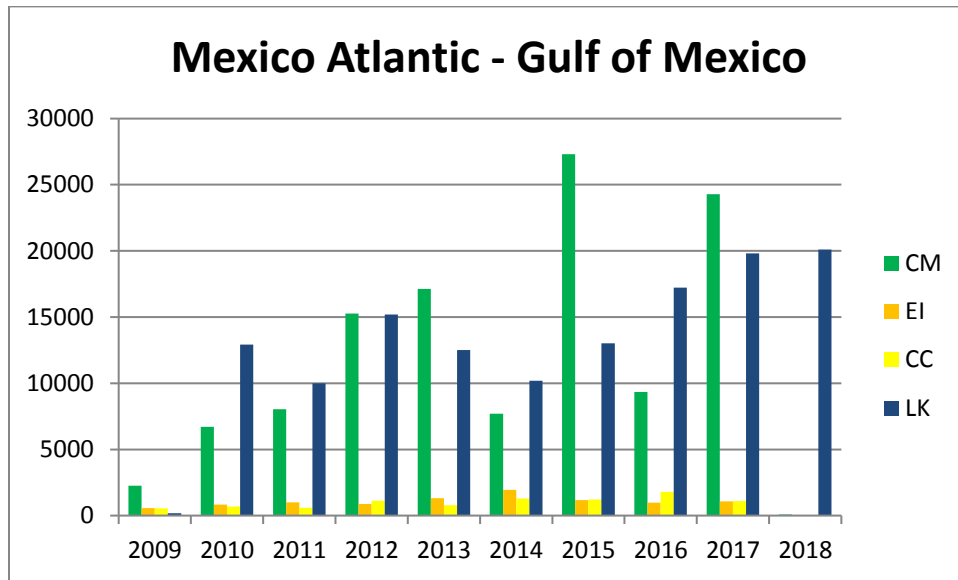




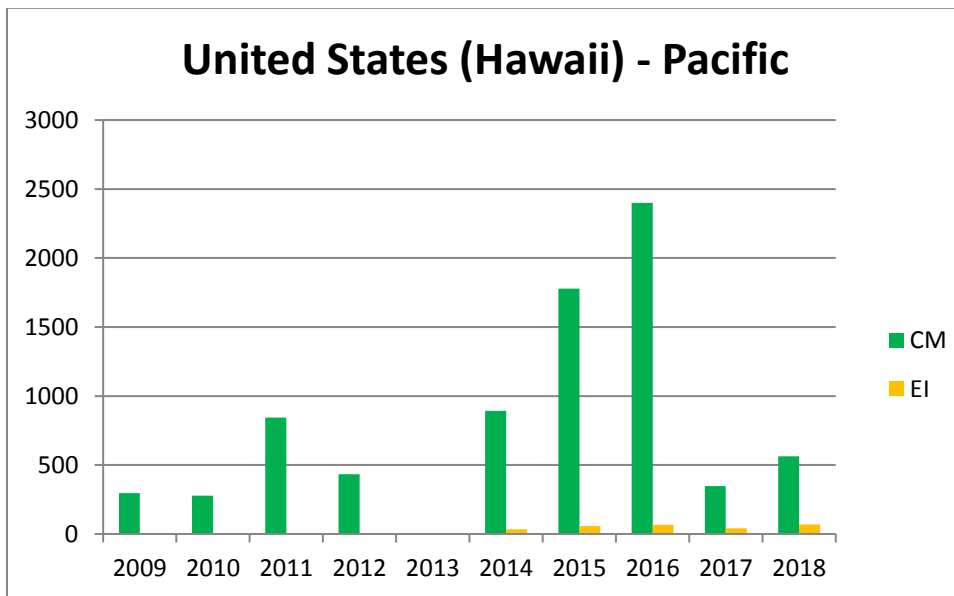
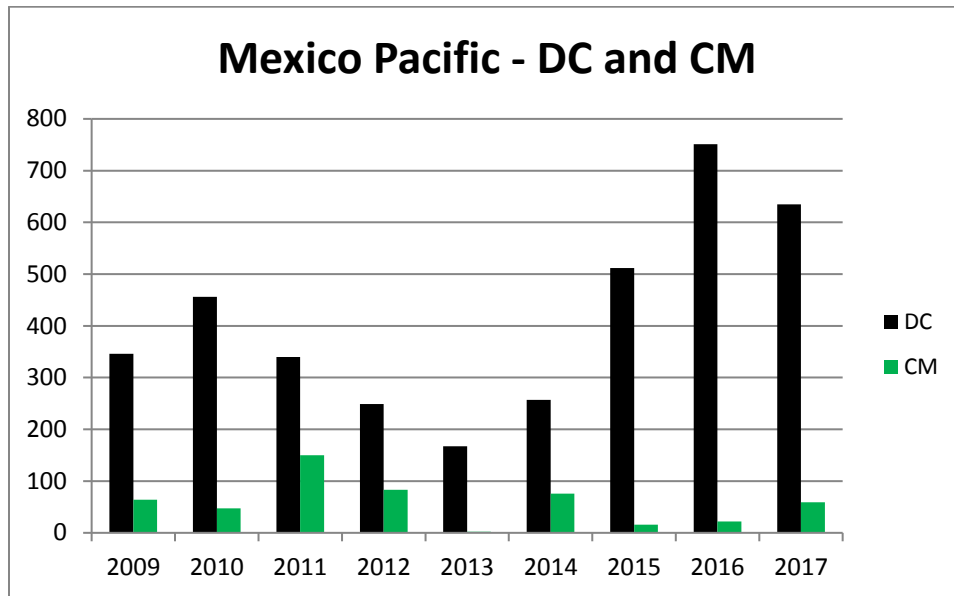


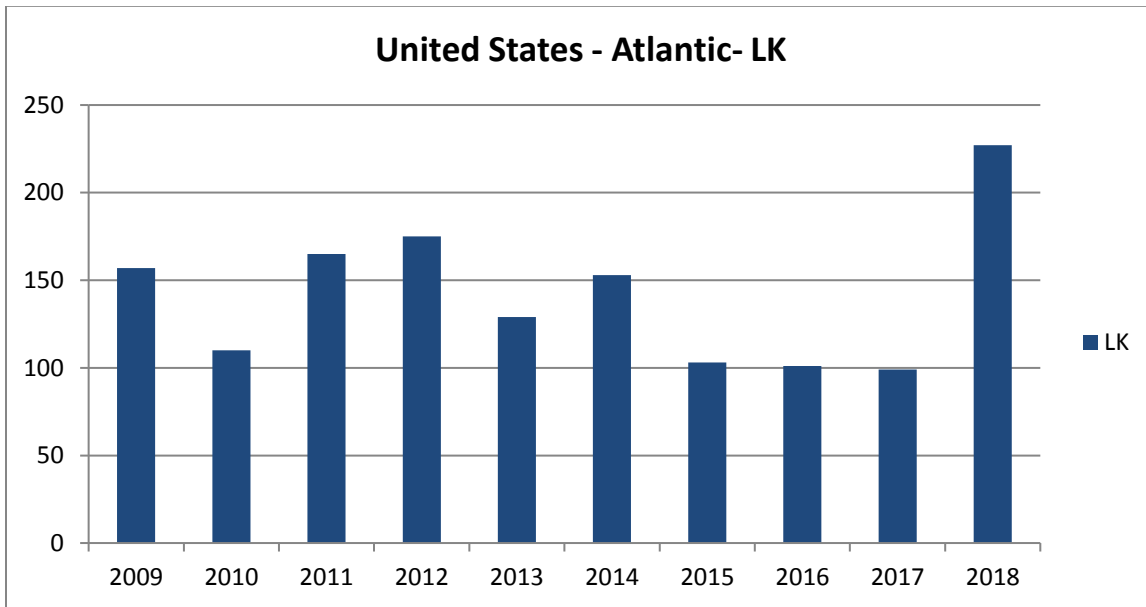
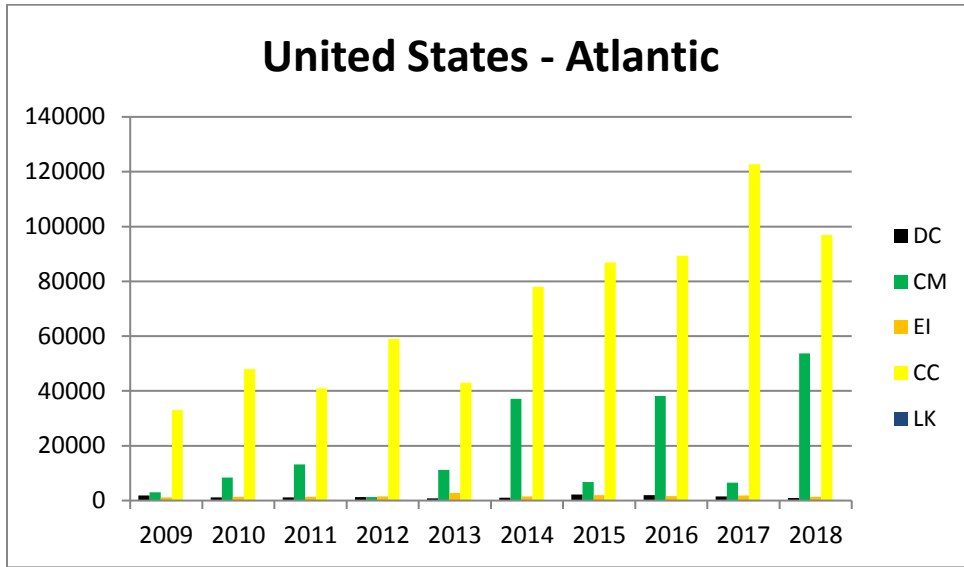


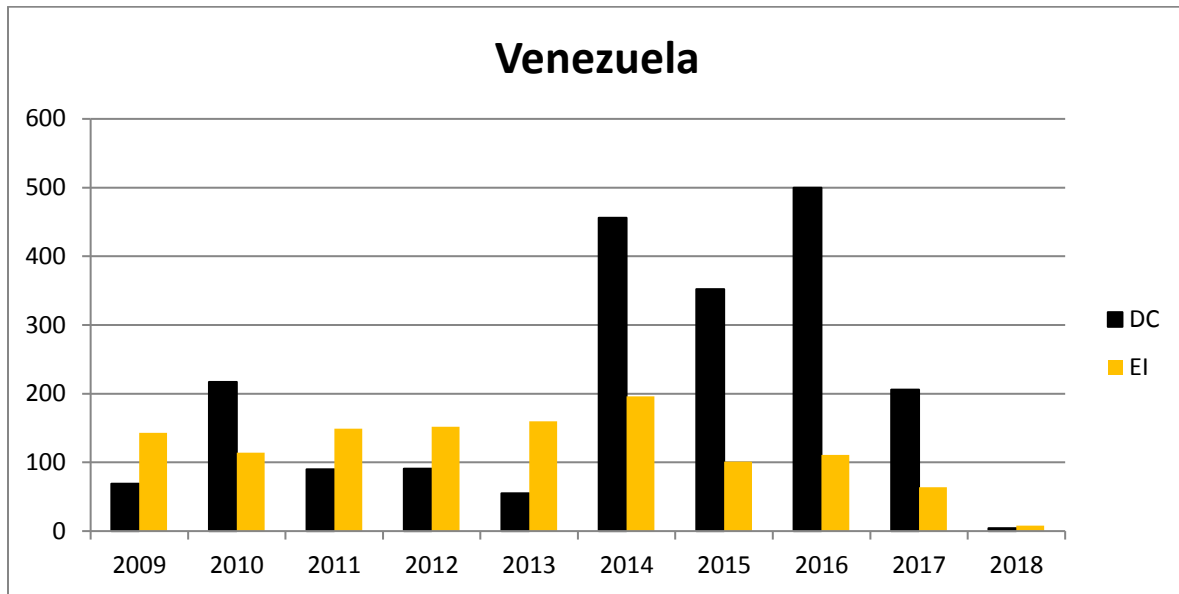




**\*Excludes Maruata and Colola beach**







The Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC) is an intergovernmental treaty which provides the legal framework for countries in the Americas to take actions in benefit of sea turtles. The IAC addresses the need to implement measures harmonized among nations, coordinate multilateral conservation and protection actions, and oversee the implementation of a regional agenda that will lead to the recovery of the six sea turtle species included in the treaty

For more information visit:

[www.iacseaturtles.org](http://www.iacseaturtles.org)



## Inter-American Convention for the Protection and Conservation of Sea Turtles

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**Tel.:** + (703) 358 -1828

**E-mail:** [secretario@iacseaturtle.org](mailto:secretario@iacseaturtle.org)