



An Atlas of Sea Turtle Nesting Habitat for the Wider Caribbean Region Revised Edition

Karen L. Eckert and Adam E. Eckert

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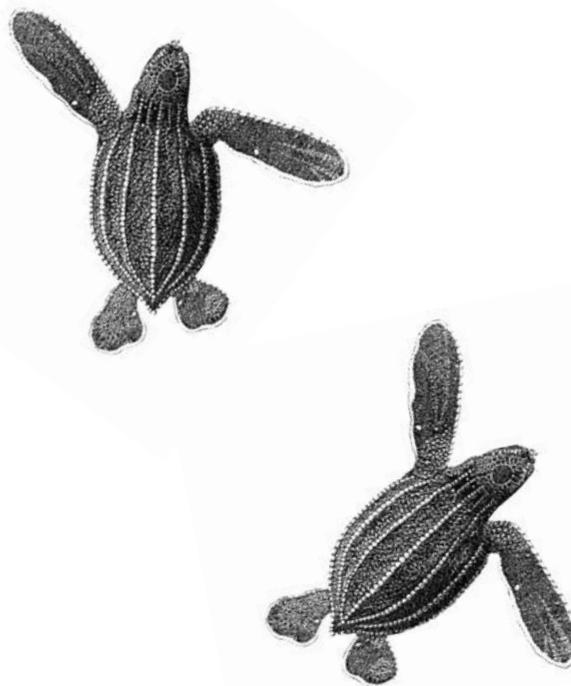
Copies of this publication may be obtained from:

Dr. Karen Eckert, Executive Director
Wider Caribbean Sea Turtle Conservation Network (WIDECAST)
6116 High Meadow Drive, Godfrey, Illinois 62035 USA
Tel: (314) 954-8571 / keckert@widecast.org
Online at www.widecast.org

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Karen L. Eckert
Adam E. Eckert



Generously supported by:



Preface and Intent

For more than 30 years the Wider Caribbean Sea Turtle Conservation Network (WIDECAST), with Country Coordinators in more than 40 Caribbean nations and territories, has linked scientists, conservationists, natural resource users and managers, policy-makers, industry groups, educators, and other stakeholders together in a collective effort to develop a unified management framework, and to promote a region-wide capacity to design and implement scientifically sound sea turtle conservation programs.

As a Partner Organization of the UNEP Caribbean Environment Programme and its Regional Programme for Specially Protected Areas and Wildlife (SPAW), WIDECAST is designed to address research and management priorities at national and regional levels, both for sea turtles and for the habitats upon which they depend. We focus on bringing the best available science to bear on contemporary management and conservation issues, empowering stakeholders to make effective use of that science in the policy-making process, and providing an operational mechanism and a framework for cooperation at all levels, both within and among nations.

Network participants are committed to working collaboratively to develop their collective capacity to manage shared sea turtle populations. By bringing people together and encouraging inclusive management planning, WIDECAST is helping to ensure that utilization practices, whether consumptive or non-consumptive, do not undermine sea turtle survival over the long term.

This Technical Report asks a deceptively simple question: “*Where do sea turtles nest in the Wider Caribbean Region?*” An accurate answer is critical to the recovery of depleted populations in that it relates directly to the setting of priorities for national and international conservation action, population monitoring and habitat protection, as well as larger issues of coastal zone management and land use policy. Taking advantage of modern spatial analysis methods, as well as the expertise of more than 200 Data Providers, we present a decadal update of our first comprehensive atlas (Dow et al. 2007), including new regional maps of the distribution and abundance of the annual reproductive effort for all six species of Caribbean-nesting sea turtles.

This landmark database – a collaborative effort between WIDECAST and the National Fish and Wildlife Foundation – identifies all known sea turtle nesting sites in the Wider Caribbean Region (inclusive of Bermuda and Brazil); 1,341 beaches in all. Because some sites host nesting by multiple species, 2,667 species-specific sites are named. In no case were data simply absorbed from other regional synthesis efforts. We traced each data point to its original source for verification and rating, discarding many existing records that did not meet our criteria. As a result, data characterized as “Low” quality comprise less than 10% of the database and improving information in these areas is an ongoing priority.

The database significantly expands our understanding of habitat use, while at the same time facilitates the creation of operational frameworks to census populations, monitor stock recovery, and safeguard important habitat. The entire database is accessible for interactive use through OBIS-SEAMAP at <http://seamap.env.duke.edu/> and at www.widecast.org. Our sincere gratitude is extended to the hundreds of colleagues (Data Providers and others) who made this project possible, and we hope it sets an example for other geographic regions to follow.

*Karen L. Eckert, Ph.D.
Executive Director
WIDECAST*



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A regional assessment of this magnitude could not have been accomplished without the support and active participation of the Wider Caribbean Region's sea turtle researchers, conservationists, and marine resource managers. In-depth, collaborative data exercises like this one are possible because of mutual trust and established partnerships among sea turtle workers, a reality defined and nurtured by the WIDECAST network for three decades. The concept of a network is eloquently described by Meadows and colleagues in *Beyond the Limits* (1992), as "a web of connections among equals" held together not by force, obligation, material incentive, or social contract, "but rather shared values and the understanding that some tasks can be accomplished together that could never be accomplished separately." This database is a unique example of such an accomplishment.

We are deeply grateful to the more than 200 Data Providers in 45 nations and territories who participated in this project, generously offering both their time and their expertise, principal among them being the following:

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These data and their assembled results and significance remain the property of the Data Providers who, in collaboration with staff, volunteers and supporters, are the sole reason these maps could be produced and shared for the benefit of us all. For further information, including Data Use Agreements, please contact the Data Provider(s) directly. See Appendix I of this Technical Report or our database host, OBIS-SEAMAP, at <http://seamap.env.duke.edu/>.

Finally, no progress would have been made without generous and timely financial support from the U.S. National Fish and Wildlife Foundation (NFWF). We are also grateful for the expertise and partnership of Duke University's OBIS-SEAMAP (Ocean Biogeographic Information System – Spatial Ecological Analysis of Megavertebrate Populations) program, which serves as the database host.



Monitoring leatherback turtle populations in **Carriacou, Grenada** (*photo by KIDO Foundation*)



Community youth releasing green sea turtle hatchlings at **Pacuare, Costa Rica** (*photo by Didiher Chacón, LAST*)



Young volunteers excavating a hawksbill nest in **Bonaire, Dutch Caribbean** (*photo by Sea Turtle Conservation Bonaire*)



Executive Summary

Six species of sea turtle nest in the Wider Caribbean Region (WCR). In partnership with more than 200 Data Providers, the spatial database of nesting habitat herein assembled is the most comprehensive for any region of the world, with 1,341 nesting beaches identified in 45 WCR nations and territories, inclusive of Bermuda to the north and Brazil to the south. Because some sites host nesting by multiple species, 2,667 species-specific sites are named. Of these, 91% can be categorized in terms of abundance: <25, 25-100, 100-500, 500-1,000, or >1,000 nesting crawls per year (including successful and unsuccessful nesting visits). Olive ridleys are the rarest of the region's sea turtles and the least known, with 17% of nesting sites associated with unknown crawl abundances. Excepting the olive ridley, the number of sites with unknown crawl numbers has declined by more than 40% across all species since Dow et al. (2007).

Sea turtle nesting naturally fluctuates from year to year, so each site was assigned a "bin" (as described above) based on typical nesting volume between 2007 (when our first comprehensive atlas was published: Dow et al. 2007) and 2018. We find that large nesting colonies continue to be rare. Nesting grounds receiving more than 1,000 crawls per year range from 1% (leatherback, hawksbill) to 5% (loggerhead, green, Kemp's ridley) to 22% (olive ridley) of all known species-specific sites. In contrast, 30% to 72% of known nesting sites (across all species) support fewer than 25 crawls (perhaps 3-10 reproductively active females, depending on the species) per year. While some nations are making exemplary progress in identifying and monitoring nesting stocks, consistent sea turtle population monitoring effort is still lacking in many areas and recent data are scarce in some jurisdictions; in particular, two archipelagic States (The Bahamas, St. Vincent and the Grenadines) have never been completely assessed.

The regulatory landscape remains fragmented; however, notable progress has been made since Dow et al. (2007). Today, 37 (82%) nations and territories prohibit sea turtle exploitation year-around; four of these (Colombia, Honduras, Nicaragua, Suriname) provide for legal exceptions related to "traditional" or "subsistence" exploitation. Turks and Caicos Islands sanction a seasonal fishery (hawksbill and green turtles only) bounded by minimum and maximum size limits; elsewhere, minimum size limits (by weight or shell length) are still the norm, targeting large juveniles and adults and disregarding the best available science on management and recovery for these long-lived species.

The data collected and assembled will allow for further research and analysis of sea turtle abundance (including population trends at index sites) and habitat use; for example, in conjunction with other datasets to determine areas of high biodiversity or areas in need of urgent protection. The database, archived and displayed online by OBIS-SEAMAP (<http://seamap.env.duke.edu/>), will be periodically updated and used to establish conservation and management priorities, and to inform and improve policy at national and regional levels.

Next steps will be to research and incorporate seagrass and coral reef distribution data, as well as sea turtle telemetry data (e.g., long distance movements and "hot spots"), to determine nationally and regionally significant foraging areas and migratory corridors, thus identifying management priority areas and contributing to the development of a network of population monitoring programs, including juvenile and adult age classes, at index sites region-wide.



Table of Contents

Preface and Intent	1
Acknowledgements	2
Executive Summary	5
Table of Contents	6
List of Figures and Tables	8
Introduction	10
Goals and Objectives	11
Methods	13
Results	16
Species Distribution: Summary of Findings	16
Protection Policies: Summary of Findings	26
Discussion	29
Policy Landscape	30
Next Steps	31
Literature Cited and Reviewed	32
Appendix I - Primary Data Providers and Contributors	58
Appendix II - Wider Caribbean Region Sea Turtle Habitat National Reports	68
Anguilla (GB)	
Antigua & Barbuda	
Aruba (NL)	
Bahamas	
Barbados	
Belize	
Bermuda (GB)	
Bonaire (NL)	
Brazil	

British Virgin Islands (GB)
Cayman Islands (GB)
Colombia
Costa Rica
Cuba
Curaçao (NL)
Dominica
Dominican Republic
French Guiana (FR)
Grenada
Guadeloupe (FR)
Guatemala
Guyana
Haiti
Honduras
Jamaica
Martinique (FR)
Mexico
Montserrat (GB)
Nicaragua
Panama
Puerto Rico (US)
Saba (NL)
Saint Barthélemy (FR)
Saint Kitts & Nevis
Saint Lucia
Saint Martin (FR)
Saint Vincent & the Grenadines
Sint Eustatius (NL)
Sint Maarten (NL)
Suriname
Trinidad & Tobago
Turks & Caicos Islands (GB)
United States Virgin Islands (US)
USA
Venezuela



List of Figures and Tables

Figure 1. Caribbean Marine Ecoregions (adapted from Spalding et al. 2007).	14
Figure 2. Sea turtles nest seasonally at 1,341 sites in 45 nations and territories of the Wider Caribbean Region, and including Bermuda and Brazil.	16
Figure 3. Frequency distribution of sea turtle species associated with the 2,667 species-specific nesting sites in the Wider Caribbean Region, and including Bermuda and Brazil.	18
Figure 4. All known nesting sites (n=395) for loggerhead sea turtles (<i>Caretta caretta</i>) in the Wider Caribbean Region, and including Bermuda and Brazil.	19
Figure 5. All known nesting sites (n=722) for green sea turtles (<i>Chelonia mydas</i>) in the Wider Caribbean Region, and including Bermuda and Brazil.	20
Figure 6. All known nesting sites (n=467) for leatherback sea turtles (<i>Dermochelys coriacea</i>) in the Wider Caribbean Region, and including Bermuda and Brazil.	21
Figure 7. All known nesting sites (n=1,004) for hawksbill sea turtles (<i>Eretmochelys imbricata</i>) in the Wider Caribbean Region, and including Bermuda and Brazil.	22
Figure 8. All known nesting sites (n=56) for Kemp's ridley sea turtles (<i>Lepidochelys kempii</i>) in the Wider Caribbean Region, and including Bermuda and Brazil.	23
Figure 9. All known nesting sites (n=23) for olive ridley sea turtles (<i>Lepidochelys olivacea</i>) in the Wider Caribbean Region, and including Bermuda and Brazil.	24

Figure 10.	25
Frequency distribution of the percentage of nesting sites (total: 2,667) with the indicated number of sea turtle crawls per year in the Wider Caribbean Region.	
Figure 11.	25
Frequency distribution of the percentage of nesting sites (total: 2,667) with the indicated number of crawls per sea turtle species per year in the Wider Caribbean Region.	
Figure 12.	26
Summary of legal regimes protecting sea turtles in the Wider Caribbean Region, and including Bermuda and Brazil.	
Table 1.	17
Presence of sea turtles in the Wider Caribbean Region, and including Bermuda and Brazil.	
Table 2.	18
Number of identified nesting sites in the Wider Caribbean Region, and including Bermuda and Brazil.	
Table 3.	27
National policies for the protection and conservation of sea turtles in the Wider Caribbean Region.	



Introduction

Sea turtles are late-maturing and long-lived, and are among the most migratory of all Caribbean fauna. Threats accumulate over long periods of time and can occur anywhere in a population's range; thus population declines have typically resulted from a combination of factors, both domestic and foreign.

In addition to centuries of largely unmanaged and unsustainable exploitation, sea turtles are accidentally captured in active or abandoned fishing gear, resulting in death to some tens (and perhaps hundreds) of thousands of turtles annually. Reef and seagrass degradation, oil spills, chemical waste, persistent plastic and other marine debris, high density coastal development, and an increase in ocean-based tourism have damaged or eliminated many Caribbean nesting beaches and feeding grounds (Bräutigam and Eckert 2006). International trade, banned for decades by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), remains an issue in some countries (CITES 2019). Finally, climate change exacerbates coastal erosion, making coastal systems less resilient (Hamann et al. 2013, Butt et al. 2016, Varela et al. 2018), rising temperatures exaggerate hatchling feminization (Laloë et al. 2016, Santidrián Tomillo et al. 2015) and weaken coral-based foraging grounds (Randall and van Woesik 2015, Spalding and Brown 2015), and shifting patterns of oceanic primary productivity bring unexpected threats, such as excessive Sargassum weed choking nesting beaches and critical nearshore habitats (Maurer et al. 2015).

For these reasons and more, all six sea turtle species native to the Wider Caribbean Region (WCR)¹ remain on the IUCN *Red List of Threatened Species* (IUCN 2019). In addition, all six species are listed on Annex 2 (full protection) of the Protocol concerning Specially Protected Areas and Wildlife (SPAW Protocol) to the UNEP Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention); Appendix 1 (full protection) of the Convention on Migratory Species (CMS); Appendix 1 of CITES; and recognized as being in need of "protection, conservation and recovery" throughout the hemisphere by the Interamerican Convention for the Protection and Conservation of Sea Turtles (IAC) (Hykle 1999, Wold 2002).

In general, and notwithstanding welcome signs of population increase at some protected nesting grounds (summarized globally by Mazaris et al. 2017), sea turtle populations throughout the WCR remain so severely depleted from historical levels as to be considered by Bjorndal and Jackson (2003) "virtually extinct" from the standpoint of their role in Caribbean marine ecosystems. Contemporary data, however, indicate that conservation policies have resulted in rising tendencies in some remnant colonies. Trends appear mixed for WCR hawksbills (Campbell 2014) and loggerheads (Ceriani and Meylan 2017), but long-term trajectories are positive for green turtles at the region's most significant nesting grounds in Florida and Costa Rica (Seminoff et al. 2015). Kemp's ridleys have also tended to rise at significant nesting

¹ The Wider Caribbean Region (see Figure 1) is defined as comprising the States and territories of the insular Caribbean (including the Bahamas), the north-eastern sector of South America (Colombia, Venezuela, the Guianas), Central America, Mexico and the USA to 30°N latitude, including the waters of the Caribbean Sea, the Gulf of Mexico, and the Atlantic Ocean adjacent to these States and territories (UNEP 1983). Because of shared sea turtle stocks, WIDECAST (and thus this report) also embraces Bermuda to the north and Brazil to the south (Frazer 1985).

grounds in the Gulf of Mexico, but nesting has declined more recently (since 2012) and overall numbers remain dwarfed by the 1947 baseline (NOAA and FWS 2015, Wibbels and Bevan 2019).

Leatherbacks offer the most worrisome tale, having appeared to be recovering (TEWG 2007) until recent field observations of declining trends prompted a quantitative regional assessment. Nesting data from 14 nations and territories with at least 10 years of nest count data collected using consistent within-site methodology revealed that “abundance-weighted trends were negative across temporal scenarios, and became more negative as the time series became shorter.” Most startling is the approximately 99% decline in Awala-Yalimapo, French Guiana (once ranked among the largest leatherback rookeries in the world) within the most recent leatherback generation (Northwest Atlantic Leatherback Working Group 2018).

Intergovernmental meetings devoted to addressing shared management concerns have been convening in the region for more than three decades (e.g., Bacon et al. 1984, Ogren 1989, Eckert and Abreu Grobois 2001, IUCN 2002, Conferences of the Parties to the IAC and to UNEP/SPAW). In November 1999, resource managers and scientists from 29 WCR nations and territories met in the Dominican Republic and unanimously recommended that “appropriate authorities, organizations, civic groups and other stakeholders promote scientific research, assessment and monitoring of marine turtles and their habitats, and standardize methods of data collection and analysis.” To this end, delegates agreed *inter alia* on the need to “identify (locate), characterize, and rank (as to intensity of use and importance for management) marine turtle nesting and foraging sites (*Santo Domingo Declaration*: Eckert and Abreu Grobois 2001).

The need to “identify, characterize, and rank” habitat necessary for sea turtle survival remains a fundamental management requirement, especially since the coastal zone is one of the least protected and most heavily utilized environments in the region. Emphasizing local partnerships and data-sharing opportunities enabled by the WIDECAST network, and taking advantage of modern spatial analysis methods, we developed the region’s first digital landscape of sea turtle nesting beaches (Dow et al. 2007, Dow Piniak and Eckert 2011) and we herein present a decadal update of that important work.

A comprehensive literature search and nearly three years of collaboration with more than 200 Data Providers (Appendix I) in 45 WCR nations and territories has produced National Reports (Appendix II) and supporting databases that identify, characterize and rank sea turtle nesting sites based on the most up-to-date information. The National Reports are available for public access at www.widecast.org, as well as in an interactive format at Duke University’s OBIS-SEAMAP (Ocean Biogeographic Information System – Spatial Ecological Analysis of Megavertebrate Populations, Halpin et al. 2006) website: <http://seamap.env.duke.edu/>.



Goals and Objectives

Recognizing that depleted and/or declining sea turtle stocks are in need of management and conservation attention is one thing; reversing population declines and monitoring sustained population recovery is another. Because sea turtles are highly migratory during all life history

stages, they rely on critical habitats in many nations and territories for dispersal, forage, refuge, mating, migration, and nesting. Consequently, what appears as a decline or a recovery in a local population may be a direct consequence of the activities of people living hundreds or thousands of kilometers away – so that effective management must occur cooperatively and collaboratively across range States.

Information gaps at local, national and regional levels can have significant consequences to management policy and conservation success at all levels. Chief among these gaps has been reliable and updated information concerning the location and status of critical habitat, as well as the distribution and abundance of the annual breeding effort. In the absence of such information, inter-jurisdictional collaboration in the conservation of shared sea turtle stocks – including attempts to cooperatively monitor the success of conservation actions by evaluating, in an integrated way, population trends at regionally important sites – is hindered.

Our first *Atlas of Sea Turtle Nesting Habitat for the Wider Caribbean Region* (Dow et al. 2007, Dow-Piniak and Eckert 2011) sought to address key recommendations of the *Santo Domingo Declaration* (Eckert and Abreu Grobois 2001) and to promote the survival of Caribbean turtles by increasing our understanding of their distribution and abundance. To that end, the stated objectives were to:

- Generate the first standardized and geographically comprehensive spatial database of active sea turtle nesting beaches in the central western Atlantic Ocean;
- Inform policy-making regarding the protection of critical habitat, in particular nesting habitat, by making population and spatial databases, including information on contemporary threats to sea turtle survival, publicly available in print and electronic formats;
- Contribute essential species and habitat data to the ecoregional planning processes of international organizations and intergovernmental entities; and
- Promote implementation of regional agreements that protect sea turtles and their habitat: Convention for the Protection and Development of the Wider Caribbean Region, and the Inter-American Convention for the Protection and Conservation of Sea Turtles.

With this decadal update, we remain committed to increasing our shared understanding of sea turtle population distribution and abundance in the central western Atlantic; in addition, our objectives are to:

- Develop an international population monitoring system designed to provide annual updates on the status of regional stocks based on Index Beach Monitoring Sites embracing a minimum of 40% of the annual reproductive effort for each species of sea turtle nesting in the central western Atlantic; and
- Design and operationalize a web-based interface at <http://www.widecast.org/> to display the annual nesting crawl count at all Index Sites, cumulatively, for each of six sea turtle species.



Methods

The original data spreadsheets produced by Dow et al. (2007) were circulated to WIDECAST Country Coordinators and other potential Data Providers in 45 nations and territories in January 2017. These included the name of every known nesting beach for each of six species of sea turtle, the location and length of each nesting beach, the number of nesting crawls (binned to 'X' [unknown abundance], <25, 25-100, 100-500, 500-1000 and >1000) made by each species at each nesting beach per year, the extent to which these sites are monitored for sea turtle egg-laying and/or hatching activity, and any supporting documentation (e.g., peer-reviewed literature, species synopses, annual project reports). More than 200 experts reviewed these spreadsheets and updated them based on nesting activity between 2007 and 2018.

"Nesting sites" for the purposes of this analysis are defined as operational management units, rather than strict geographic entities. The reason is that nesting sites are defined and monitored differently in different locations. Sometimes small beaches, proximal but physically separated, are viewed as a single "nesting beach" or management unit. Conversely, extensive beach strands, extending hundreds of kilometers in some cases, may, due to limited human resources or the logistics of beach access, be considered in smaller segments for the purpose of monitoring and management. In the former case multiple, typically small, habitats might be coalesced; in the latter case, extensive shorelines might be subdivided. We worked closely with Data Providers to be as consistent, as realistic, and as accurate as possible in every case.

To ensure a comparable landscape we focused on a binned estimate of nesting crawls per year – namely, fewer than 25 crawls per year, on average; 25 to 100 crawls per year, on average; and so on. Sea turtle nesting naturally fluctuates from year to year, so each site was assigned a bin based on typical nesting volume between 2007 (i.e., our last published atlas) and 2018. Not all sea turtle population monitoring efforts differentiate between successful and unsuccessful nesting, so standardizing on "crawls" (embracing both successful egg-laying and failed attempts) ensured that all countries could participate in a region-wide assessment and that data would be comparable across countries. Moreover, we did not want to impose on Data Providers for proprietary details on exactly how many nests are laid each year, knowing that in many cases these carefully collected numbers are more suitable for peer-reviewed publication.

Note: Depending on location, the number of nesting crawls may be 2 to 10 times higher than the number of actual nests. The number of these nests may, in turn, be 2 to 10 times higher than the number of individual females. Therefore, the number of crawls is a baseline metric not to be confused with the number of clutches laid, nor with the always much smaller number of gravid females.

We corresponded with Data Providers using a variety of electronic means (e.g., email, Skype, WhatsApp), as well as direct meetings during WIDECAST Annual Meetings and other international gatherings. Each Data Provider was asked to verify existing and provide new information about sea turtle presence, status, estimated annual crawl abundance, beach location and length, and legislation within the jurisdiction of their nation or territory. Data were compiled and annotated into a single Excel™ file with a separate worksheet for each country. Finally, a

thorough literature review was conducted to compile nesting site location information and analyze data from peer-reviewed literature, project reports, national recovery plans, regional assessments, and unpublished manuscripts.

The spatial organization of the data follows the concept of “Ecoregions” as articulated by Spalding et al. (2007) (Figure 1). For each country and territory the dataset includes nesting site data (beach name, latitude and longitude, approximate length, number of crawls for each species present, activity status [confirming that nesting is occurring; historical nesting beaches no longer in use were excluded], beach monitoring status [confirming whether nesting activity is recorded daily, weekly, irregularly, etc.], and the time period over which the data were collected), Data Provider affiliation and contact information, detailed notes on data points, and references for sources of data other than the primary Data Providers.



Figure 1. Caribbean Marine Ecoregions (adapted from Spalding et al. 2007).

Each data point was given a confidence rating of High, Moderate or Low. A High rating was assigned to data received and verified directly from WIDECAST Country Coordinators, active researchers, or other local experts, and to datasets derived from peer-reviewed published literature or published project reports less than 10 years old. A Moderate rating was assigned to datasets for which we were not personally familiar with the data source or how the data were collected, as well as to datasets 10 to 20 years old. A Low rating was given to datasets derived from non-expert or opportunistic observations, and to datasets more than 20 years old. In this

way we were able to include the most recent nesting data available, while also identifying areas characterized by outdated information that would benefit from population monitoring efforts.

Data for individual nations and territories were combined to generate regional point and line shapefiles for nesting habitat using ESRI ArcGIS™ Desktop v.10.6. Point shapefiles were generated using latitude and longitude coordinates for each nesting beach. When locations were known, such as from GPS-based studies, these latitudes and longitudes were used. When locations were not known, they were estimated with the assistance of Data Providers and maps. Nesting site coordinates should be considered approximate, as beach boundaries may change within and between years. Coordinates are located at the approximate midpoint of each beach.

Line shapefiles were created using nesting beach start and end coordinates, generating a box around the beach and clipping the beach from the GSHHS (Global, Self-consistent, Hierarchical, High-Resolution Shoreline) (Wessel and Smith 1996) shoreline shapefile. The GSHHS shoreline shapefile has varying resolution depending on geographic location, as it was generated by combining data in the World Data Bank (resolutions between 500-5000m) and the World Vector Shoreline (resolutions between 50-500m) (Wessel and Smith 1996). All shapefiles are projected using the World Geodetic System, Datum 1984 and are in units of decimal degrees.

After assembling and organizing all available data, draft maps, reports and database tables were closely and repeatedly reviewed and approved by the Data Providers over a period of two years. Each National Report (Appendix II) features maps of all known sea turtle nesting sites, including species-specific landscapes (historical nesting beaches are not included if nesting no longer occurs), and tables representing sea turtle status and protection policies.

National Reports and summary tables are organized by Ecoregion (TNC 2003, Spalding et al. 2007) and presented as follows: Bahamian, Greater Antilles, Eastern Caribbean, Guianan, Southern Caribbean, Southwestern Caribbean, Western Caribbean, Southern Gulf of Mexico, Northern Gulf of Mexico, and Floridian, followed by Bermuda and Brazil. Uniquely coded Beach Identification Numbers correspond to the underlying database compiled for each country.

Monitoring green turtles on **Mona Island, Puerto Rico** (photo by Scott Eckert, WIDECAST), Kemp's ridley turtles at **Padre Island National Seashore, USA** (photo by Jaime Pena, GPZ), and hawksbill turtles in **Nicaragua** (photo by Wildlife Conservation Society).





Results

Species Distribution: Summary of Findings

The assessment involved the active collaboration of more than 200 Data Providers and local experts, resulting in a digital inventory of all known sea turtle nesting sites, including geographic location, average annual nesting activity, and the degree of legal protection afforded nesting females and their young. Six species nest seasonally on the continental and island shorelines of the WCR (Table 1). Hawksbill and green turtles nest in virtually every country, followed by leatherbacks, loggerheads, olive ridleys and Kemp's ridleys, the latter restricted to nesting sites in the USA and Mexico. In total, 1,341 discrete nesting sites are identified in 45 nations and territories extending from Bermuda, a British Overseas Territory in the North Atlantic, south to Brazil (Figure 2). Because discrete sites are sometimes associated with multiple species, Table 2 reflects a total of 2,667 species-specific nesting sites.

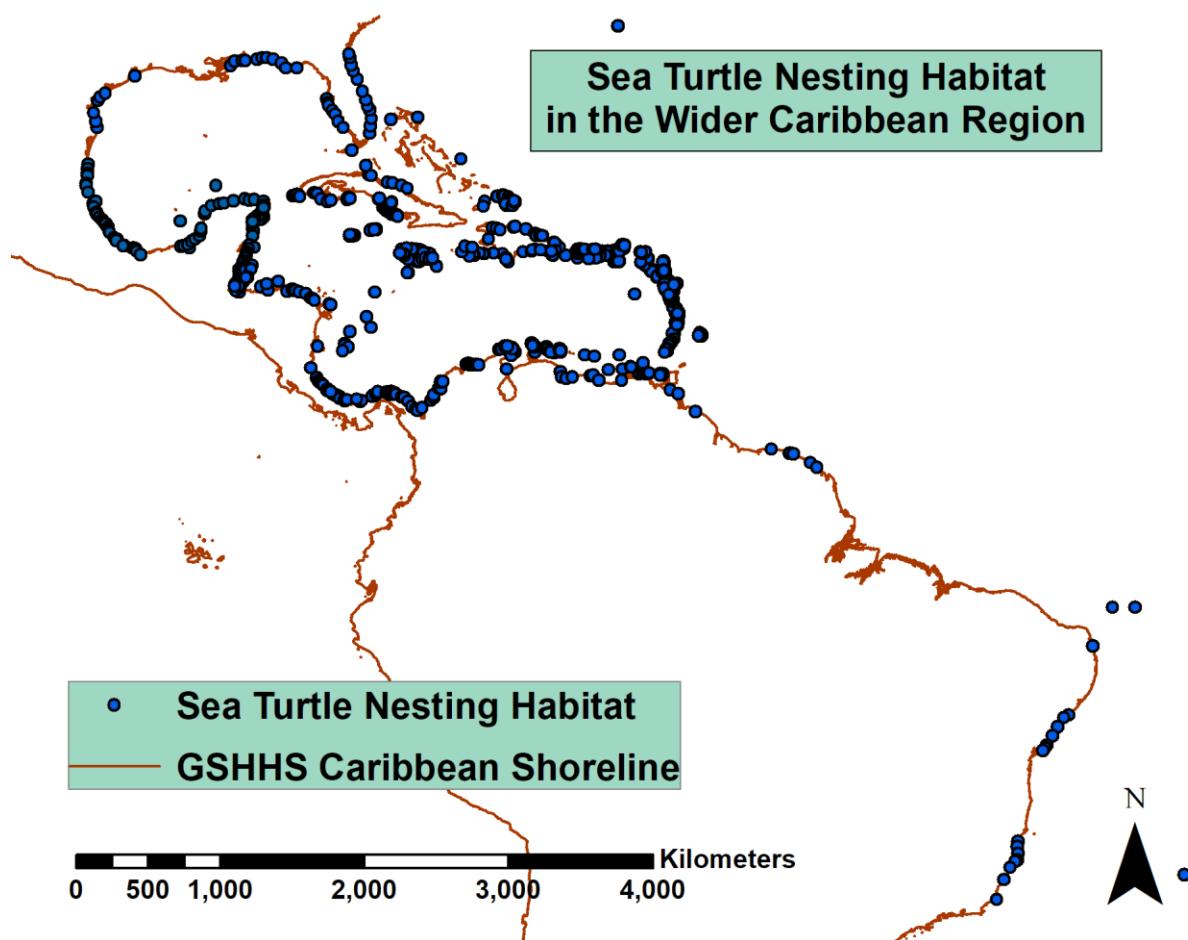


Figure 2. Sea turtles nest seasonally at 1,341 discrete sites in 45 nations and territories of the Wider Caribbean Region, and including Bermuda and Brazil.

Table 1. Presence of sea turtles in the Wider Caribbean Region.

Marine Ecoregions with Countries/Territories	Loggerhead Turtle	Green Turtle	Leatherback Turtle	Hawksbill Turtle	Kemp's Ridley Turtle	Olive Ridley Turtle
Bahamian						
Bahamas	N, F	N, F	N	N, F	A	I
Turks & Caicos Islands (GB)	IN, IF	N, F	I	N, F	A?	A?
Greater Antilles						
Cuba	N, F	N, F	IN, IF	N, F	A	I
Cayman Islands (GB)	N, IF	N, F	A	IN, F	A	A
Jamaica	IF	N, F	N	N, F	A	A
Haiti	N, F	N, F	N	N, F	A	A
Dominican Republic	I	N, F	N	N, F	A	A
Puerto Rico (US)	IF	N, F	N, F	N, F	A	IF
Eastern Caribbean						
British Virgin Islands (GB)	IF	N, F	N	N, F	A	A
US Virgin Islands (US)	I	N, F	N	N, F	A	A
Anguilla (GB)	I	N, F	N	N, F	A	I
Sint Maarten (AN)	I	N, F	N	N, F	A	A
Saba (AN)	I	IN, F	I	F	A	A
Sint Eustatius (AN)	A	N, F	N	N, F	A	A
Saint Kitts & Nevis	IF	N, F	N	N, F	A	A
Antigua & Barbuda	I	N, F	N	N, F	A	A
Montserrat (GB)	IN, F?	N, F	F?	N, F	A	A
Guadeloupe (FR)	F	N, F	N, IF	N, F	A	I
Saint Martin (FR)	I, IF?	N, F	N, F?	N, F	A	I, IF?
Saint Barthelemy (FR)	I, IF?	N, F	N, F?	N, F	A	I, IF?
Dominica	I	N, F	N	N, F	A	A
Martinique (FR)	F?	IN, F	N, F?	N, F	A	I
Saint Lucia	I	N, F	N	N, F	A	A
Barbados	I	N, F	N, IF	N, F	A	A
Saint Vincent & Grenadines	I	N, F	N	N, F	A	A
Grenada	F	N, F	N	N, F	A	I
Guianan						
French Guiana (FR)	I	N, F	N	IN	A	N, F?
Suriname	IF	N	N	IN	A	N, F
Guyana	I	N	N	IN	A	IN, F
Southern Caribbean						
Trinidad & Tobago	IN, IF	N, F	N, F	N, F	A	IN, F
Venezuela	N, F	N, F	N, F	N, F	A	F
Bonaire (AN)	N, IF	N, F	IN	N, F	A	I
Curacao (AN)	N	N, F	IF	N, F	A	I
Aruba (NL)	N, IF	N, F	N	N, F	A	I
Southwestern Caribbean						
Colombia	N, F	N, F	N	N, F	A	I
Panama	IN, F	IN, F	N	N, F	A	A
Costa Rica	N, F	N, F	N	N, F	A	A
Nicaragua	F	N, F	N, IF	N, F	A	A
Western Caribbean, Gulf of Mexico and Florida						
Honduras	IF, IN	N, F	N	N, F	A	A
Guatemala	F	F	N	N, F	A	A
Belize	N, F	N, F	I	N, F	A	I
Mexico	N, F	N, F	N, F	N, F	N, F	A(I)
US - Texas & Florida	N, F	N, F	N, F	IN, F	N, F	A
Bermuda						
Bermuda (GB)	IN, IF	IN, F	IF	F	I	A
Brazilian						
Brazil	N, F	N, F	N, F	N, F	A	N, F

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

Large nesting colonies are rare. With the exception of the olive ridley, sites receiving more than 500 crawls per year comprise 1% to 5% of species-specific totals (Table 2). The largest majority of sites host extremely small colonies characterized by fewer than 25 crawls per year (perhaps 3-10 individual turtles). A variable number (0-17%) of sites for each species are known to host nesting, but reliable census data pertaining to colony size remain unavailable (Table 2).

Table 2. Number of species-specific nesting sites in the Wider Caribbean Region, and including Bermuda and Brazil.

Species	Total	Number of crawls per year (proportion of total)					
		X	<25	25-100	100-500	500-1000	>1000
Loggerhead Turtle (<i>Caretta caretta</i>)	395	20 (.05)	282 (.71)	37 (.09)	27 (.07)	9 (.02)	20 (.05)
Green Turtle (<i>Chelonia mydas</i>)	722	69 (.10)	460 (.64)	89 (.12)	50 (.07)	20 (.03)	34 (.05)
Leatherback Turtle (<i>Dermochelys coriacea</i>)	467	58 (.12)	294 (.63)	60 (.13)	37 (.08)	12 (.03)	6 (.01)
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	1,004	83 (.08)	727 (.72)	128 (.13)	50 (.05)	6 (.006)	10 (.01)
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	56	0 (.00)	32 (.57)	9 (.16)	10 (.18)	2 (.04)	3 (.05)
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	23	4 (.17)	7 (.30)	4 (.17)	2 (.09)	1 (.04)	5 (.22)

* X = Presence, but unknown crawl abundance

Collectively, approximately one-third (38%) of species-specific nesting sites host hawksbill turtles, 27% green turtles, 18% leatherback, 15% loggerhead turtles, and considerably fewer host nesting by Kemp's ridley (2%) and olive ridley (<1%) turtles (Figure 3).

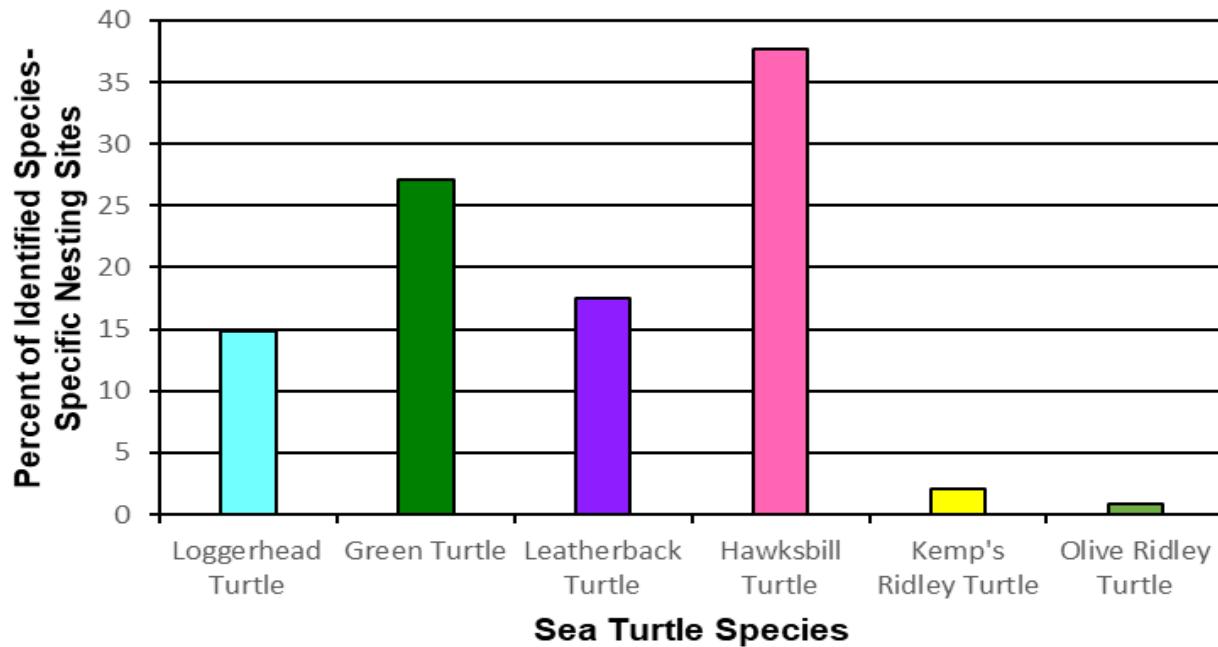


Figure 3. Frequency distribution of sea turtle species associated with the 2,667 species-specific nesting sites in the Wider Caribbean Region, and including Bermuda and Brazil.

Loggerhead turtles (*Caretta caretta*) generally nest in more temperate latitudes than do other sea turtle species. The Northwest Atlantic loggerhead nesting aggregation is considered to be the largest in the world (Casale and Tucker 2015), and Florida hosts ca. 90% of the nests associated with this aggregation (Ceriani and Meylan 2017).² Sixteen (81%) nesting beaches receiving more than 1,000 crawls per year are located in Florida; three (19%) are located in Brazil and one in Mexico. Similarly, sites reporting anywhere between 100 and 1,000 crawls per year are clustered in the USA (Florida), Brazil, and Mexico, with a single site (100-500 crawls) in The Bahamas and another in Cuba. Seventy-one percent (up from 41%: Dow et al. 2007) of all known nesting beaches support fewer than 25 crawls per year; in 5% of sites, data are insufficient to estimate annual abundance.³ Refer to Table 1 and Table 2 for additional detail, and the National Reports (see Appendix II) for more detail on the distribution and abundance of the annual nesting effort.

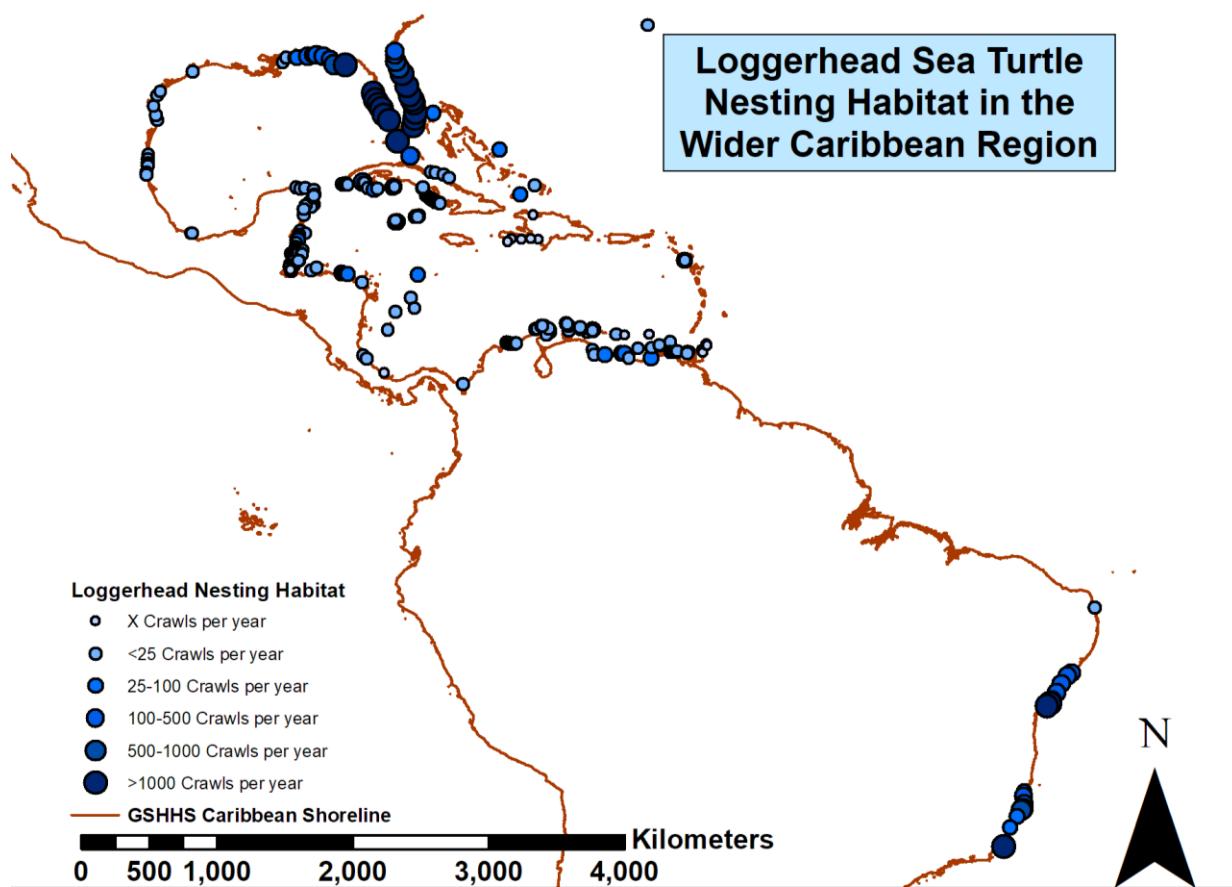


Figure 4. All known nesting sites (n=395) for loggerhead sea turtles (*Caretta caretta*) in the Wider Caribbean Region, and including Bermuda and Brazil.

² In all cases (Figures 4-9), in keeping with the defined northern boundary (30°N latitude) of the Wider Caribbean Region (UNEP 1983), only nesting beaches in Texas, Louisiana, Mississippi, Alabama and Florida were mapped and included in analyses. Nests deposited north of Florida comprise less than 10% of the nation's loggerhead nesting each year (NOAA and FWS 2007a, Ceriani and Meylan 2017).

³ The general view of local experts is that beaches where nesting is known to occur but where data are insufficient to estimate colony size (e.g., number of crawls per year), are low density sites most likely to fall in the "fewer than 25 crawls per year" category.

Green sea turtles (*Chelonia mydas*) nest throughout the Wider Caribbean Region (Figure 5). At Tortuguero Beach, Costa Rica, by far the largest nesting aggregation in the region, ca. 180,310 nests were laid during 2010, the highest level of green turtle nesting since surveys began in 1971 (Seminoff et al. 2015). The 54 beaches reporting more than 500 crawls per year are broadly distributed along the continental margins of the region, including Brazil, with significant nesting also reported from a handful of insular jurisdictions (Cuba, the Dominican Republic, Guadeloupe, U.S. Virgin Islands) and offshore islands of Brazil, Mexico, and Venezuela (Isla Aves).⁴ More than half (64%) of all known nesting beaches support fewer than 25 crawls per year; in 10% of sites, data are insufficient to estimate annual crawl abundance.⁵ Refer to Table 1 and Table 2 for additional detail, and the National Reports (see Appendix II) for the distribution and abundance of the annual nesting effort in individual Caribbean nations and territories.

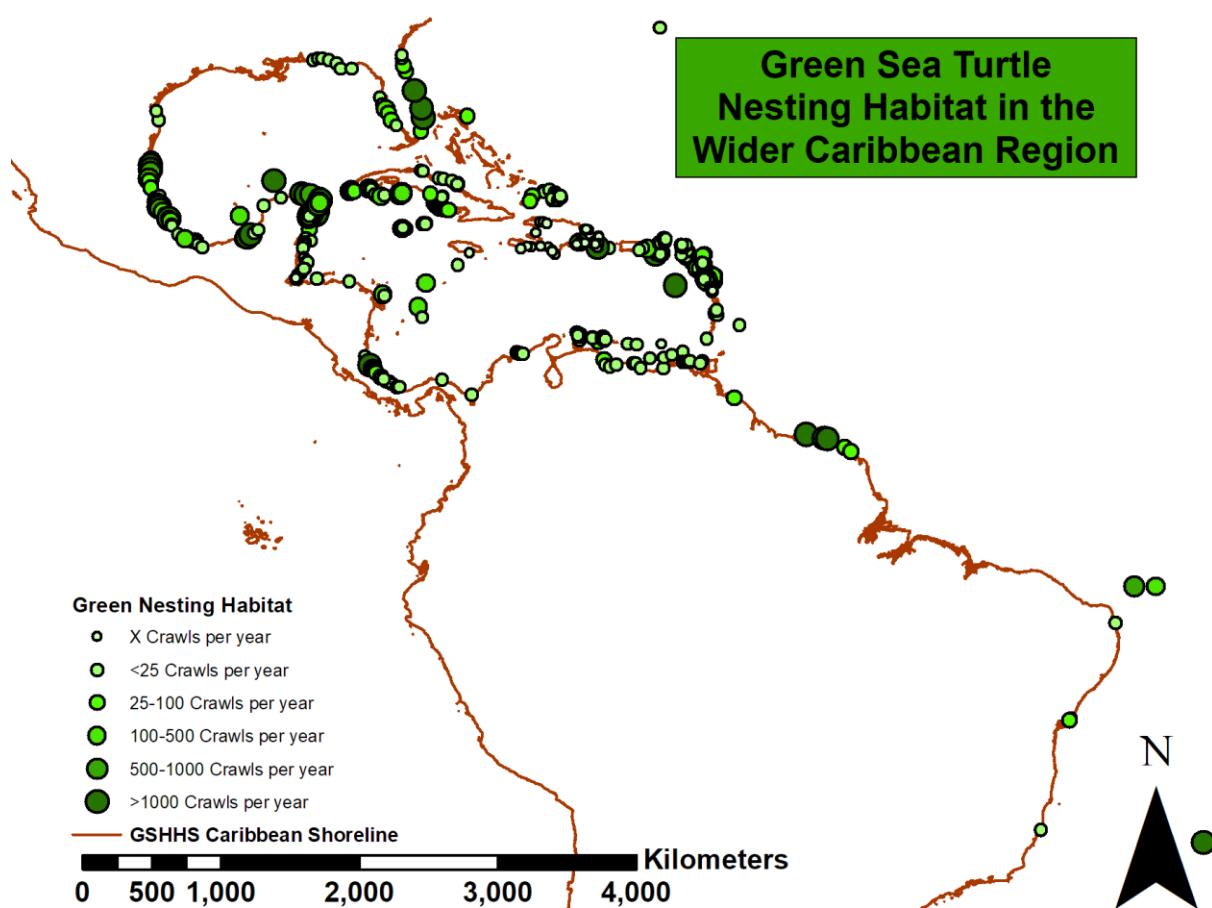


Figure 5. All known nesting sites (n=722) for green sea turtles (*Chelonia mydas*) in the Wider Caribbean Region, and including Bermuda and Brazil.

⁴ In keeping with the defined northern boundary (30°N latitude) of the Wider Caribbean Region (UNEP 1983), only nesting beaches in Texas, Louisiana, Mississippi, Alabama and Florida were mapped and included in analyses. Nesting is rarely reported north of Florida (Woodson and Webster 1999, Williams et al. 2006).

⁵ The general view of local experts is that beaches where nesting is known to occur but where data are insufficient to estimate colony size (e.g., number of crawls per year), are low density sites most likely to fall in the “fewer than 25 crawls per year” category.

According to the Northwest Atlantic Leatherback Working Group (2018), regional trends in annual leatherback sea turtle (*Dermochelys coriacea*) nest counts have declined significantly at site-level and regional scales, during long-term (1990-2017) and recent (2008-2017) time periods, with declines exceeding 90% at Awala-Yalimapo (French Guiana) and in Suriname since the 1990s. Only six colonies remain with more than 1,000 crawls per year, these are clustered in the southern latitudes (French Guiana, Panama, Trinidad). Twelve sites reporting 500-1,000 crawls per year are more broadly distributed in Colombia, Costa Rica, the Dominican Republic, French Guiana, Grenada, Panama, Puerto Rico, Suriname, Trinidad, and the USA (Florida) (Figure 6).⁶ More than half (63%) of all known nesting beaches support very small colonies, fewer than 25 crawls per year; 12% have unknown crawl abundances.⁷ Refer to Table 1 and Table 2 for additional detail, and the National Reports (see Appendix II) for the distribution and abundance of the annual nesting effort in individual Caribbean nations and territories.

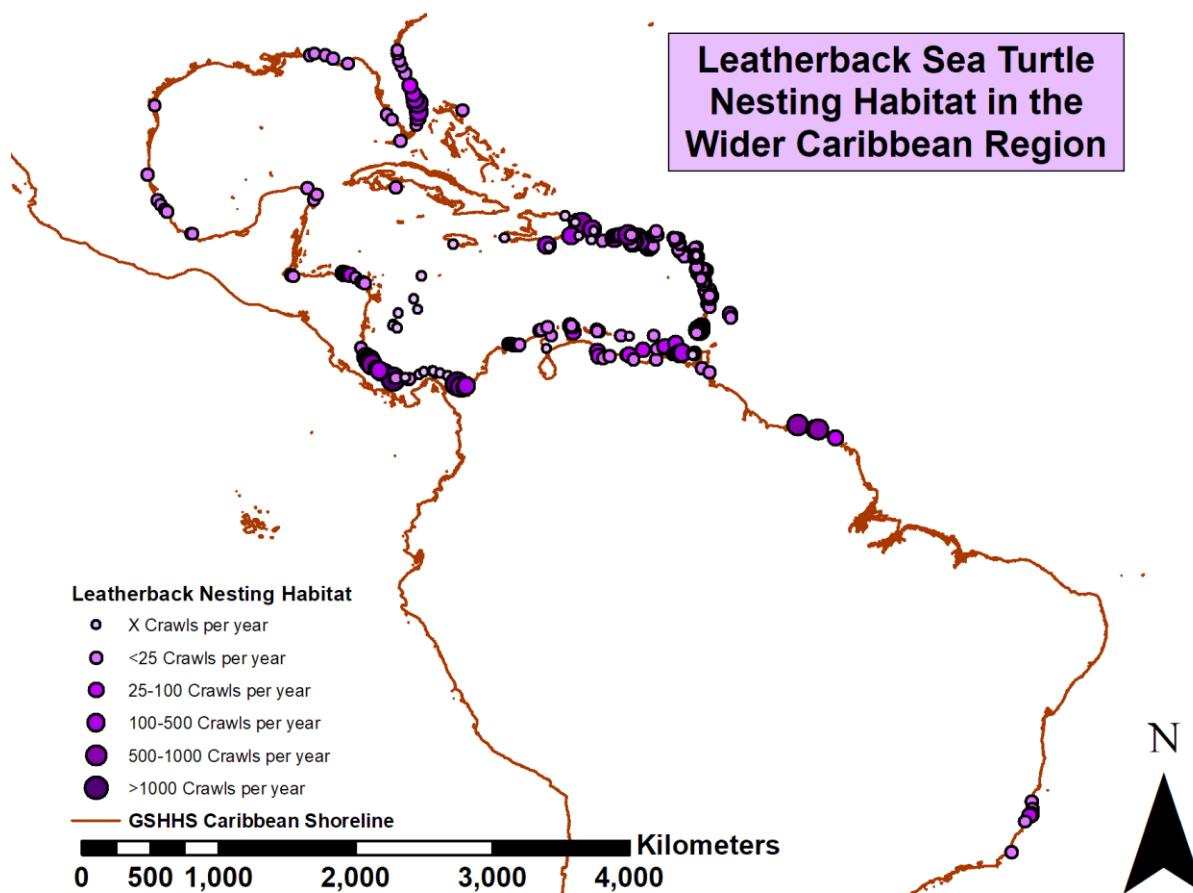


Figure 6. All known nesting sites (n=467) for leatherback sea turtles (*Dermochelys coriacea*) in the Wider Caribbean Region, and including Bermuda and Brazil.

⁶ In keeping with the defined northern boundary (30°N latitude) of the Wider Caribbean Region (UNEP 1983), only nesting beaches in Texas, Louisiana, Mississippi, Alabama and Florida were mapped and included in analyses. Occasional nesting is also reported in Georgia, South Carolina and North Carolina and a single nesting is known from Assateague Island National Seashore in Maryland (Rabon et al. 2003).

⁷ The general view of local experts is that beaches where nesting is known to occur but where data are insufficient to estimate colony size (e.g., number of crawls per year), are low density sites most likely to fall in the “fewer than 25 crawls per year” category.

Hawksbill sea turtles (*Eretmochelys imbricata*) nest in characteristically low densities throughout the Wider Caribbean Region. Ten sites (1% of the total) – Barbados (West Coast Beaches, Hilton Beach, South Coast Beaches), the Dominican Republic (Isla Catalina, Isla Soana), Guadeloupe (Terre de Bas, Trois Ilets, Folle Anse), Puerto Rico (Mona Island), and Panama (Playa Chiriquí) – support more than 1,000 crawls per year (Figure 7). Antigua (Jumby Bay), Brazil (Pipa), and four sites along the Yucatan Peninsula of Mexico (Punta Xen, Las Coloradas, El Cuyo, Holbox) report 500 to 1,000 crawls per year.

Only 6.6% of 1,004 known nesting beaches support more than 100 crawls per year (a welcome increase from 4.4%: Dow et al. 2007); in contrast, 72% receive fewer than 25 crawls per year and 8.8% have unknown crawl abundances.⁸ The data confirm that we know considerably more about the distribution and abundance of the annual nesting effort than we did a decade ago, when crawl numbers could not be estimated for 33% of all known nesting grounds (Dow et al. 2007). Refer to Table 1 and Table 2 for additional detail, and the National Reports (see Appendix II) for data at national scales.

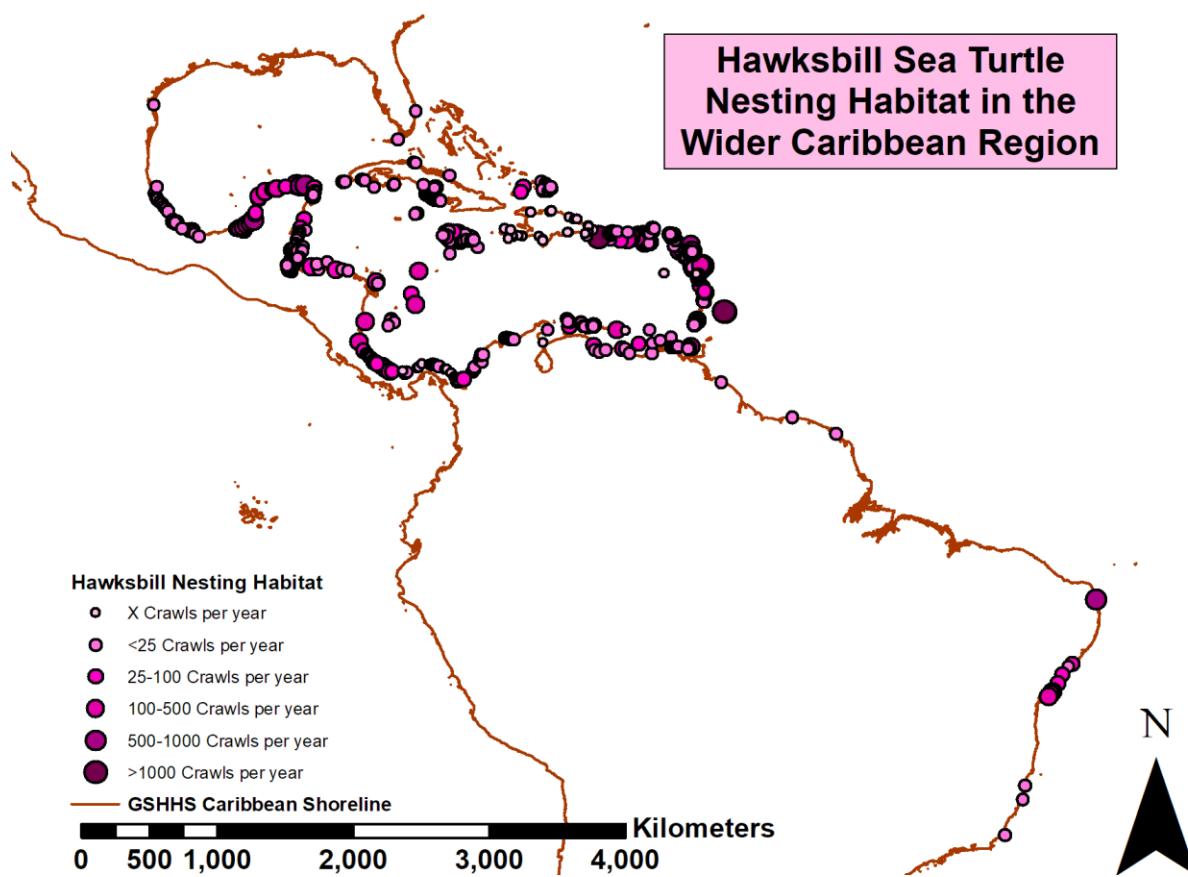


Figure 7. All known nesting sites (n=1,004) for hawksbill sea turtles (*Eretmochelys imbricata*) in the Wider Caribbean Region, and including Bermuda and Brazil.

⁸ The general view of local experts is that beaches where nesting is known to occur but where data are insufficient to estimate colony size (e.g., number of crawls per year), are low density sites most likely to fall in the “fewer than 25 crawls per year” category.

Kemp's ridley sea turtles (*Lepidochelys kempii*) are endemic to the Wider Caribbean Region and nest exclusively in its northern latitudes (Figure 8), primarily in Mexico and secondarily in the USA (Texas and Florida).⁹

Only three sites (5%) are known to receive more than 1,000 crawls per year. These sites (Tepehuajes-Ostional, Rancho Nuevo, and Playa Dos-Barra del Tordo in Mexico) have collectively received some 10,000 to 19,000 nests per year during the last decade, with declining numbers since 2012 (NOAA and FWS 2015).

Every known nesting ground can be characterized in terms of an estimated annual abundance, the majority (57%) of which receive fewer than 25 crawls per year. Refer to Table 1 and Table 2 for additional detail, and the National Reports (see Appendix II) for the distribution and abundance of the annual nesting effort in individual Caribbean nations and territories.

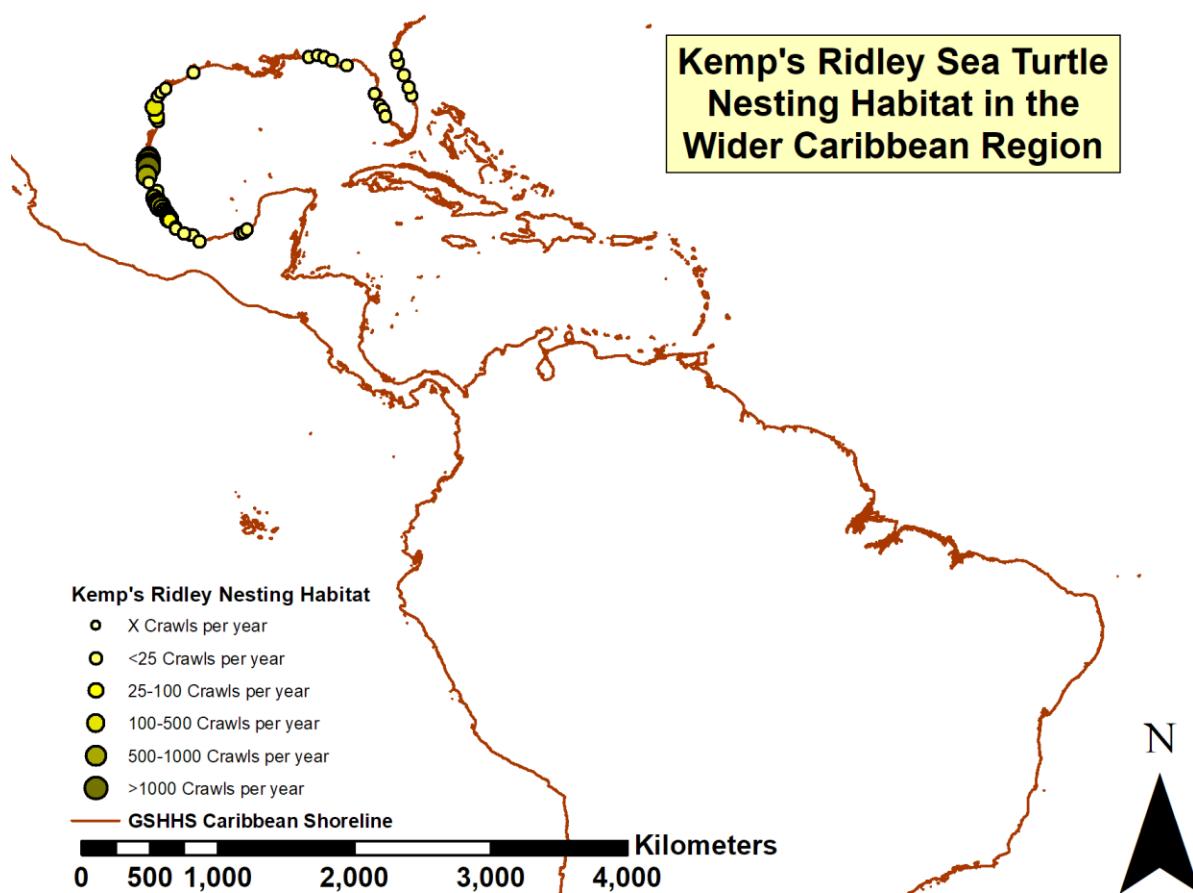


Figure 8. All known nesting sites (n=56) for Kemp's ridley sea turtles (*Lepidochelys kempii*) in the Wider Caribbean Region, and including Bermuda and Brazil.

⁹ In keeping with the defined northern boundary (30°N latitude) of the Wider Caribbean Region (UNEP 1983), only nesting beaches in Texas, Louisiana, Mississippi, Alabama and Florida were mapped and included in analyses. It is worth noting, in the context of the restricted reproductive range of this species, that nesting, while extremely rare, also occurs "occasionally" north of Florida in Georgia, South Carolina, and North Carolina (NOAA and FWS 2015).

Olive ridley sea turtles (*Lepidochelys olivacea*) nest primarily in Brazil, where four of five sites hosting more than 1,000 nesting crawls per year are located. The remaining major site is in eastern French Guiana, in the vicinity of Cayenne and Montjoly, and is comprised of three beaches known as Zéphyr-Montabo, Salines Montjoly, and Gosselin Apcat (Figure 9). Minor nesting occurs in Guyana, Suriname, and Trinidad.

Approximately 4% of known nesting sites cannot be characterized in terms of an estimated number of crawls per year. The majority of nesting sites host either fewer than 25 crawls per year (30%) or more than 1,000 crawls per year (22%).¹⁰ A decline of more than 90% in the number of breeding-age adults in Suriname, once the region's largest olive ridley nesting colony, is attributed to fisheries interactions (summarized by Reichart and Fretey 1993, Reichart et al. 2003). Refer to Table 1 and Table 2 for additional detail, and the National Reports (see Appendix II) for the distribution and abundance of the annual nesting effort in individual Caribbean nations and territories.

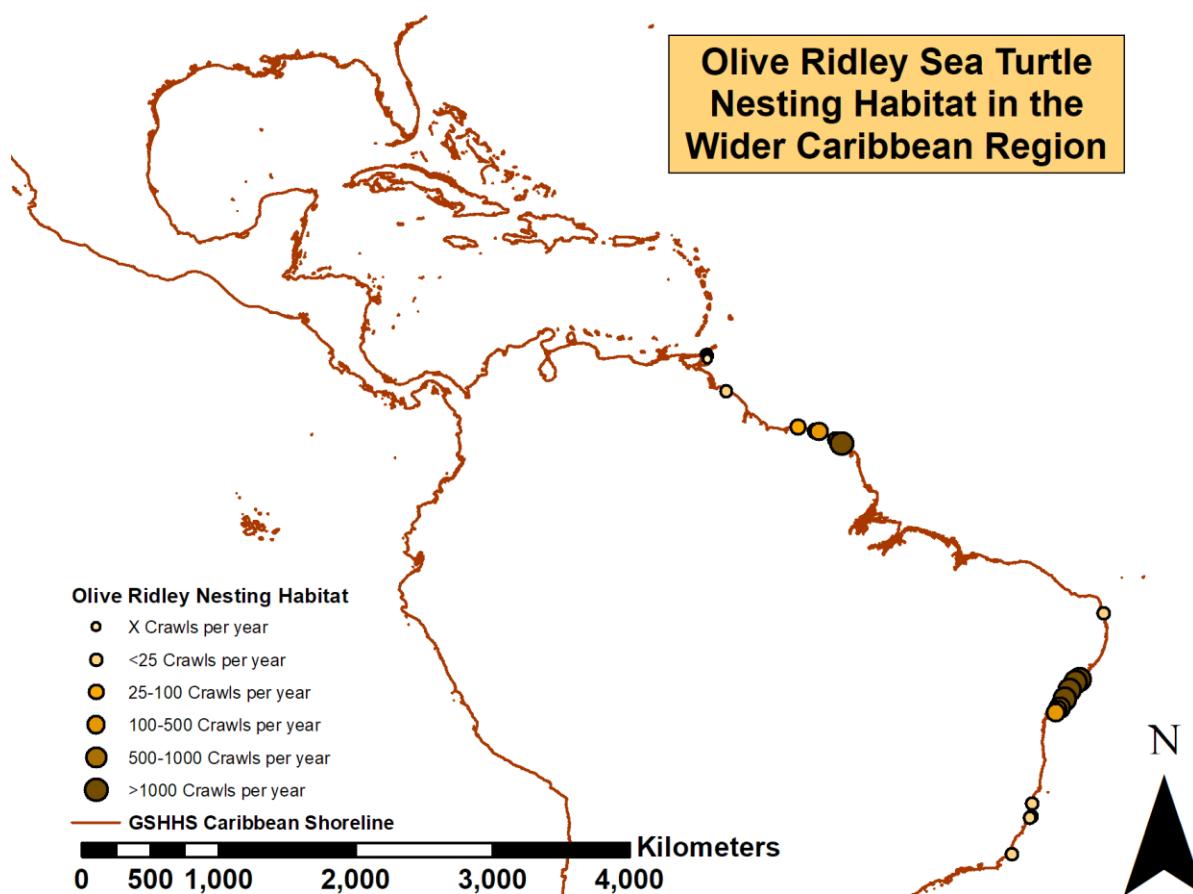


Figure 9. All known nesting sites (n=23) for olive ridley sea turtles (*Lepidochelys olivacea*) in the Wider Caribbean Region, and including Bermuda and Brazil.

¹⁰ The general view of local experts is that beaches where nesting is known to occur but where data are insufficient to estimate colony size (e.g., number of crawls per year), are low density sites most likely to fall in the "fewer than 25 crawls per year" category.

In summary, a large majority (67.5%) of nesting sites receive fewer than 25 crawls per year by any particular species (Figure 10), an increase from 50.6% reported by Dow et al. (2007). Only 8.8% of sites cannot, with the information available, be characterized and ranked by colony size, a significant improvement over the approximately one in four (23.4%) sites that could not be characterized by Dow et al. (2007). The frequency distribution for individual species illustrates a similar pattern, although species specific differences are evident (Figure 11).

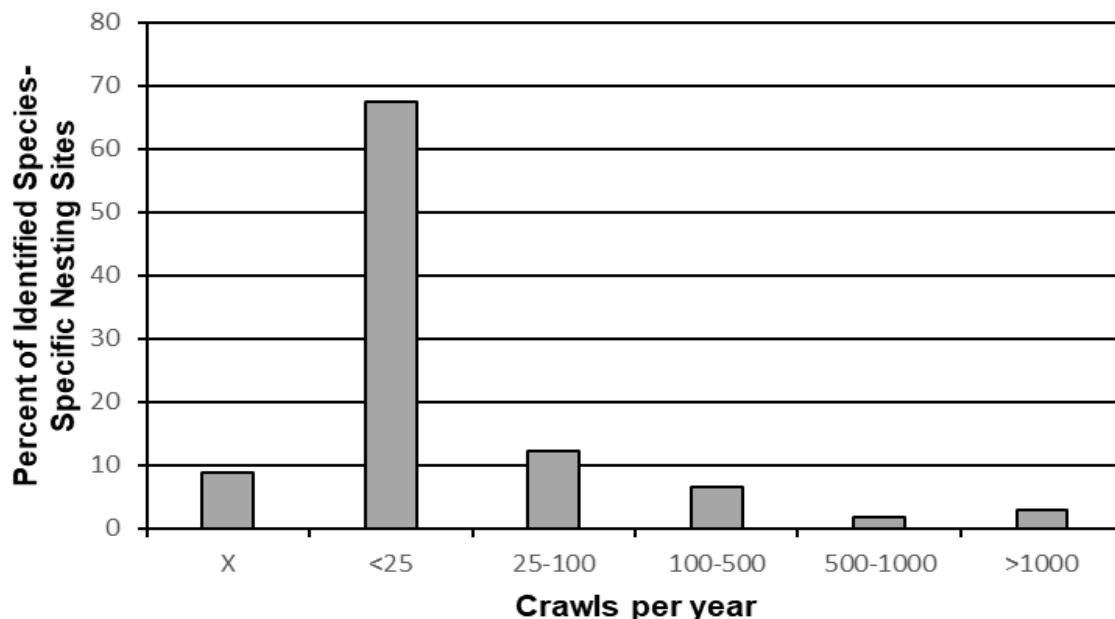


Figure 10. Frequency distribution of the percentage of nesting sites (total: 2,667) with the indicated number of sea turtle crawls per year in the Wider Caribbean Region.

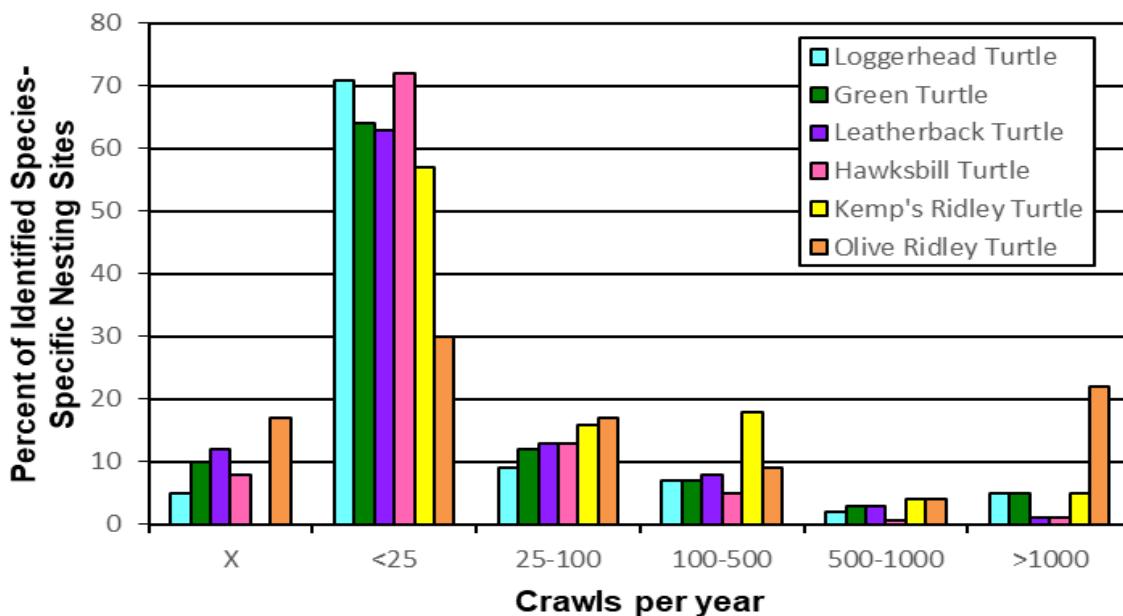


Figure 11. Frequency distribution of the percentage of nesting sites (total: 2,667) with the indicated number of crawls per sea turtle species per year in the Wider Caribbean Region.

Protection Policies: Summary of Findings

Of the 45 nations and territories examined, 37 (an increase from 29 a decade ago, Dow et al. 2007) have legislated complete and indefinite protection for sea turtles (Figure 12, Table 3). Four countries (Colombia, Honduras, Nicaragua, Suriname) where sea turtles are otherwise protected year-around, provide for legal exceptions related to “traditional” or “subsistence” exploitation.

Eight (17.8%) nations and territories still have regulatory regimes that leave one or more species subject to seasonal exploitation. A seasonal fishery for hawksbill and green turtles is bounded by minimum and maximum size limits in the Turks and Caicos Islands. Elsewhere, legal seasonal fisheries are defined by minimum size limits (weight or shell length), leaving reproductively valuable adult and sub-adult turtles vulnerable. Seasonal fisheries are largely unmonitored, unquantified and often unenforced (Bräutigam and Eckert 2006). Only seven countries describe enforcement of sea turtle protection laws as “adequate” (Table 3).

Thirty-eight (84.4%) of 45 nations and territories report “exploitation/sale nationally”. Twenty-six (57.8%) report “illegal trade internationally”, generally defined as primarily informal movement between adjoining territorial waters and/or land borders.

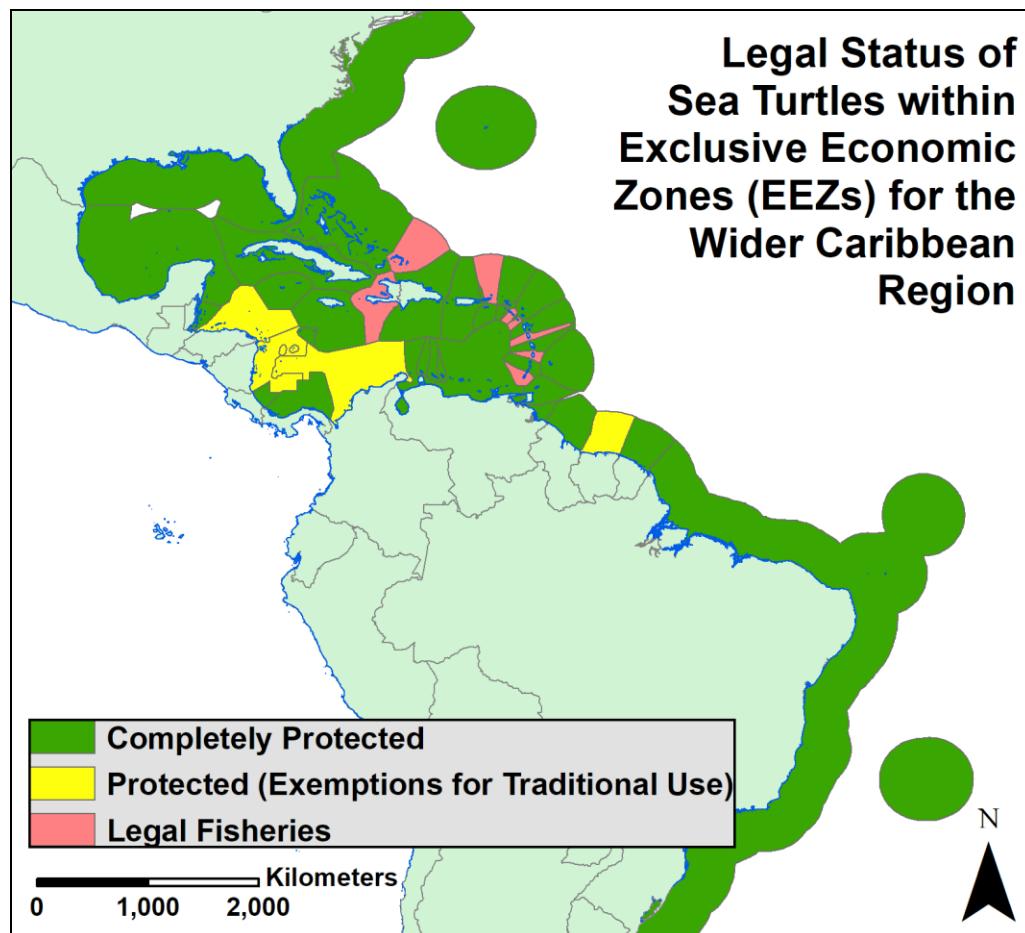


Figure 12. Summary of legal regimes protecting sea turtles in the Wider Caribbean Region, and including Bermuda and Brazil.

Table 3. National policies for the protection of sea turtles in the Wider Caribbean Region.							
Marine Ecoregions with Countries/Territories	Complete (indefinite) protection	Moratorium (fixed period)	Prohibition(s) on take	Closed season	Minimum size limits	Maximum size limits	Annual quota
Bahamian							
Bahamas	Yes	–	–	–	–	–	–
Turks & Caicos Islands (GB)	No*	No	E,N,NF;LB,LG	Yes*	Yes	Yes	No
Greater Antilles							
Cuba	Yes	–	–	–	–	–	–
Cayman Islands (GB)	Yes*	–	E, N, NF	Yes	Yes	Yes	Yes
Jamaica	Yes	–	–	–	–	–	–
Haiti	No	No	E, NF	No	No	No	No
Dominican Republic	Yes	–	–	–	–	–	–
Puerto Rico (US)	Yes	–	–	–	–	–	–
Eastern Caribbean							
British Virgin Islands (GB)	No	Yes (LB, LG)	E, LB, LG	Yes	Yes	No	No
US Virgin Islands (US)	Yes	–	–	–	–	–	–
Anguilla (GB)	Yes*	Yes*	–	–	–	–	–
Sint Maarten (AN)	Yes	–	–	–	–	–	–
Saba (AN)	Yes	–	–	–	–	–	–
Sint Eustatius (AN)	Yes	–	–	–	–	–	–
Saint Kitts & Nevis	No	No	E, N, NF	Yes	Yes	No	No
Antigua & Barbuda	Yes	–	–	–	–	Yes*	–
Montserrat (GB)	No	No	No	Yes	Yes	No	No
Guadeloupe (FR)	Yes	–	–	–	–	–	–
Saint Martin (FR)	Yes	–	–	–	–	–	–
Saint Barthelemy (FR)	Yes	–	–	–	–	–	–
Dominica	No	No	E, N, NF	Yes	Yes	No	No
Martinique (FR)	Yes	–	–	–	–	–	–
Saint Lucia	No*	No	E, N, NF	Yes	Yes	No	No
Barbados	Yes	–	–	–	–	–	–
Saint Vincent & Grenadines	Yes	–	–	–	–	–	–
Grenada	No	No	E, N, NF, LB	Yes	Yes	No	No
Guyana Shield							
French Guiana (FR)	Yes	–	–	–	–	–	–
Suriname	Yes*	–	–	–	–	–	–
Guyana	Yes	–	–	–	–	–	–
Southern Caribbean							
Trinidad & Tobago	Yes	–	–	–	–	–	–
Venezuela	Yes*	–	–	–	–	–	–
Bonaire (AN)	Yes	–	–	–	–	–	–
Curacao (AN)	Yes	–	–	–	–	–	–
Aruba (NL)	Yes	–	–	–	–	–	–
Southwestern Caribbean							
Colombia	Yes*	–	Yes*	–	–	–	–
Panama	Yes	–	–	–	–	–	–
Costa Rica	Yes*	–	–	–	–	–	–
Nicaragua	Yes*	–	Yes*	Yes (GT)	No	No	No
Western Caribbean, Gulf of Mexico and Florida							
Honduras	Yes*	–	–	–	–	–	–
Guatemala	Yes*	–	–	–	–	–	–
Belize	Yes*	–	–	–	–	–	–
Mexico	Yes	–	–	–	–	–	–
USA	Yes	–	–	–	–	–	–
Bermuda							
Bermuda (GB)	Yes	–	–	–	–	–	–
Brazilian							
Brazil	Yes	–	–	–	–	–	–

E = Eggs; N = Nests; NF = Nesting ♀; HB = Hawksbill; GT = Green Turtle; LB = Leatherback; LG = Loggerhead; I = Insufficient; * = see Country Report

Table 3. National policies for the protection of sea turtles in the Wider Caribbean Region (cont'd).								
Permits/ licenses required	Gear restrictions	Area closures	Reports of harvest/ sale nationally	Reports of illegal int'l trade	Public awareness of laws	Recent pro- secutions or penalties	Enforcement considered adequate	Penalty is adequate deterrent
-	Yes	Yes	Yes	Yes	No	Yes	No	No
Yes*	No	Yes	Yes	Yes	Improving	No	No	Unknown
-	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
-	No	Yes	Yes	No	Yes	Yes	No	No
Yes	No	Yes	Yes	Yes	No	Yes	No	No
-	No	Yes	Yes	Yes	No	No	No	No
Yes*	Yes	Yes	Yes	Yes	Yes	Yes	No	No
No*	Yes*	Yes	Yes	Yes	Yes	No	No	No
Yes*	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
-	-	-	Yes	No	Yes	Yes	No	Yes
-	No	Yes	No	No	Yes	No	Yes	Yes
-	Yes	Yes	No	No	Yes	No	Yes	Yes
-	No	No	No	No	Yes	No	Yes	Yes
No	Yes	No	Yes	Yes	Yes	Unknown	No	Yes
-	Yes	Yes	Yes	No	Yes	No	No	Yes
No	No	No	Yes	Yes	Yes	No	No	No
-	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Yes*	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Yes*	Yes	Yes	No	No	Yes	No	Yes	Yes
No	No	Yes	Yes	Yes	Yes	Yes	No	No
-	No	No	Yes	Unknown	Yes	Yes	No	Yes
Yes*	Yes*	Yes	Yes	Unknown	Yes	Yes	No	No
-	No	No	Yes	No	Yes	No	No	Yes
-	Yes	Yes	Yes	Yes	Yes	Unknown	No	Yes
Yes	Yes	Yes	Yes	Yes	Yes	No	No	Unknown
-	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Yes*	Yes	Yes	Yes (E)	No	Yes	Yes	No	No
-	Yes*	Yes	Unknown	Unknown	Yes	Unknown	I	Unknown
-	Yes	Yes	Yes	Yes	Yes	Yes	No*	Yes
-	Yes*	Yes	Yes	Yes	No	Yes	No	No
-	Yes	Yes	Yes	No	Yes	No	No	Yes
-	No	Yes	Yes	Yes	Yes	No	No	No
-	No	No	Yes	Yes	Yes	No	No	Unknown
Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
-	Yes	Yes	Yes*	Yes	Yes	Yes	No	No
Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Improving	Yes
No	No	No	Yes	Yes	No	No	No	No
No	Yes	Yes	Yes	Yes	No	Unknown	No	Unknown
Yes*	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Yes*	Yes	Yes	Yes	No	Yes	Yes	No	No
-	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Yes*	Yes*	Yes	No	No	Yes	No	Yes	Yes
-	Yes	Yes	No	No	Yes	No	Yes	Yes
-	Yes	Yes	Yes	No	Yes	No	No	No
-	Yes	Yes	Yes	No	Yes	No	No	No

E = Eggs; N = Nests; Nesting ♀; HB = Hawksbill; GT = Green Turtle; LB = Leatherback; LG = Loggerhead; I = Insufficient; * = see Country Report



Discussion

This assessment asks a deceptively simple question: “*Where do sea turtles nest in the Wider Caribbean Region?*” An accurate answer is critical to the recovery of depleted populations in that it relates directly to the setting of priorities for national and international conservation action, population monitoring and habitat protection, as well as to larger issues of coastal zone management and land use policy. Taking advantage of spatial analysis methods, and in collaboration with more than 200 Data Providers (Appendix I) and other experts, we have mapped the distribution and abundance of the annual reproductive effort for all six species of Caribbean-nesting sea turtles at national and Regional Management Unit (cf. Wallace et al. 2010) scales.

In all, 1,341 discrete nesting sites (generally but not always coincident with natural beach boundaries, see Methods) were identified in 45 nations and territories of the Wider Caribbean Region (WCR), inclusive of Bermuda to the north and Brazil to the south. Because some sites host nesting by multiple species, 2,667 species-specific sites were identified. In most countries the maps (see Appendix II) are deemed comprehensive, but major gaps are presumed to remain in nations (e.g., The Bahamas, St. Vincent and the Grenadines) where a systematic national sea turtle survey has yet to be documented.

Recent data are scarce in some jurisdictions, and consistent population monitoring is lacking at many sites, particularly in remote areas with low density nesting. Known but unsurveyed (or inconsistently surveyed) nesting sites are marked by an “X” for “unknown abundance” in the database, identifying gaps that should be filled before a complete landscape of critical habitat can be achieved, and before we can be assured that all major sites are included in integrated, inter-jurisdictional monitoring programs designed to characterize population trends over biologically relevant landscapes (remembering that sea turtles are migratory at all life stages) and evaluate the success or failure of management investment.

While some nations are making exemplary progress in identifying and monitoring nesting populations, others would benefit from renewed exposure to standardized procedures manuals (e.g., SWOT Scientific Advisory Board 2011, Eckert and Eckert 2012), peer-training, greater information exchange, and more consistent financial support. Notwithstanding, of the 2,667 species-specific nesting sites identified, only 8.8% (vs. 23.4% in Dow et al. 2007) could not be categorized with respect to annual reproductive effort (i.e., <25, 25-100, 100-500, 500-1,000, or >1,000 nesting crawls per year), confirming that our collective knowledge base is steadily improving with time – and reminding us that the allocation of human and financial resources should seek to balance the undisputed value of long-term population datasets with the necessity of acquiring baseline data in countries (and for species) for which the least is known.

Our findings mirror that of Dow et al. (2007) in demonstrating that large nesting colonies are rare. Nesting grounds receiving more than 1,000 crawls per year range from 1.0% (leatherback, hawksbill) to 5.0% (loggerhead, green turtle, Kemp’s ridley) to 22.0% (olive ridley) of species-specific nesting grounds. In some cases, compared to a decade ago (Dow et al. 2007), these large sites have declined (by about half in the case of the leatherback); in other cases these large sites have increased – indeed, they have more than doubled in the case of the hawksbill

and green turtle. Still, across the board, the far majority (88.6%) of sites receive fewer than 100 crawls per year, including both successful and unsuccessful egg-laying visits.

For all species, nesting remains heavily skewed toward “fewer than 25 crawls per year” (Table 11). The number (and proportion) of these very small populations has, across all species (excepting *Lepidochelys*), risen over the course of the last decade (see Dow et al. 2007). This introduces both a degree of risk, as very small populations, especially among species like sea turtles with high site fidelity, may be more vulnerable to acute threat (e.g., oil spill, hurricane, commercial development) and resulting habitat loss – and, at the same time, a degree of resiliency because the region’s eggs are quite literally not all in one basket.

Policy Landscape

The majority ($37/45 = 82.2\%$) of WCR nations and territories fully protect locally occurring sea turtles both on land and at sea, a laudable improvement over the 67.4% of jurisdictions that did so at the time of Dow et al. (2007). Among the recent changes are sea turtle fishery closures in multi-island States (e.g., Cuba: 2008; The Bahamas: 2009, Trinidad and Tobago: 2011, Antigua and Barbuda: 2013, Cayman Islands: 2013, Saint Vincent and the Grenadines: 2017) with expansive territorial seas that significantly increase the amount of protected space available to sea turtles resident within and migrating through the WCR.

Notwithstanding recent progress, a ‘patchwork’ remains that is less than ideal for these highly migratory species. To be effective, the legal framework protecting sea turtles should be consistent among range States; similarly, habitat protection policies should be geographically inclusive at the population level and embrace both nesting and foraging grounds in order to achieve conservation goals. That this is not presently the case carries consequences for individual turtles moving transiting among protected and unprotected jurisdictions, and, presumably, serves to diminish the effectiveness of moratoria and other national-scale conservation effort. Relatively recent summaries of WCR sea turtle legislation are available in Fleming (2001), Chacón (2002), Reichart et al. (2003), Godley et al. (2004), Bräutigam and Eckert (2006), and Dow et al. (2007).

Where turtles are not fully protected, legal fisheries typically mandate minimum size limits (by weight or shell length) – targeting large juveniles and adults in contradistinction to the best available science on population recovery. Frazer (1989) used the concept of reproductive value – a measure of the value to the population of an individual female turtle of a particular age – to emphasize the critical importance of ensuring that large turtles be protected, and noted that the regulatory framework in the WCR had been focusing sea turtle fisheries “incorrectly for over 350 years”. More contemporary mathematical treatments (e.g., Heppell et al. 1999, 2000, 2004) reinforce the conclusion that protecting large juvenile and adult turtles from exploitation is an essential component of any sustainable sea turtle management regime. While Caribbean fishery managers recognize that “understanding these [life-history] aspects is fundamental to the development of management programs” (*Santo Domingo Declaration* – Eckert and Abreu Grobois, 2001), the regulatory framework has, in a handful of countries, been slow to respond.

Integrated and holistic protection of critical habitat – nesting beaches, foraging grounds, migratory corridors – is underdeveloped. While many of the beaches that support the region’s largest remaining colonies are in managed or protected status (summarized by Eckert and Hemphill 2005), nesting beach protection alone is not enough to ensure population survival. This is clearly demonstrated by the collapse of (what was once) the world’s largest leatherback nesting colony (located on the Pacific coast of Mexico, where nesting females have been protected

since 1990) as a result of incidental capture and drowning in the distant gillnet fisheries of Peru and Chile (Eckert and Sarti 1997). Equally dramatic declines in WCR leatherbacks and olive ridleys in the Guianas are also attributed to fisheries interactions (Reichart and Fretey 1993, Reichart et al. 2003, Northwest Atlantic Leatherback Working Group 2018). Leatherbacks are unique in that they nest but do not reside in the WCR, rendering this species particularly vulnerable to extraregional threats, particularly on the high seas (Eckert et al. 2012).

Next Steps

The alas database will be used to generate a portfolio of index¹¹ nesting sites able to monitor sea turtle population trends at biologically relevant scales, using gravid females as a proxy. Next steps will include collaborating with Data Providers to develop a framework for reporting from beaches committed to maintaining internally consistent population monitoring methods from year to year, thereby providing a useful index of metapopulation trends at a Regional Management Unit (RMU) scale. This collective effort will serve as a ‘first alert’ system, both inviting celebration of rising trends and identifying species that may be failing to thrive. Results will be featured at <http://www.widecast.org/management/population-monitoring/>.

Our hope is that the information collected during the project, and archived and displayed in the online database (<http://seamap.env.duke.edu/>), will be ever-improving, updated regularly by Data Providers in each country or territory, and used to establish conservation and management priorities, inform local and national land use decisions, generate species-specific regional trend lines based on index beach monitoring, and improve policy at national and regional levels.

Through this project, all nations in the WCR have been and will continue to be encouraged to attain higher levels of data quality, completeness, and compatibility by increasing their efforts to identify and monitor nesting and foraging sites. Improvement in these areas will also strengthen implementation of regionally negotiated agreements aimed at sustainably managing shared marine resources; specifically, the Convention for the Protection and Development of the Wider Caribbean Region (and its Protocol on Specially Protected Areas and Wildlife, SPAW) and the Inter-American Convention for the Protection and Conservation of Sea Turtles.

Future goals are to research and incorporate seagrass and coral reef data to determine nationally and regionally significant foraging areas, thus identifying marine areas in need of management attention and contributing to the development of an expanded network of population monitoring programs, including juvenile and adult age classes, at index sites. Similarly, there is a need to research and incorporate genetic and telemetry-based movement data into the database in order to highlight linkages between nesting and foraging grounds, create a dialogue on the need to ensure the survival both of large colonies and a representative landscape of genetic diversity present in widely distributed remnant stocks, and support efforts to harmonize management policies among range States.

¹¹ According to Bräutigam and Eckert (2006), “characterizing a site, whether foraging or nesting, as an ‘Index’ site implies the consistent and long-term application of standardized population monitoring protocols to ensure the data are suitable for trend analysis. Survey boundaries are specifically set and adhered to from year to year, and the survey area is representative (i.e. it should attempt to represent a range of threat and protection levels, a variety of turtle life stages, and a range of turtle population densities). The emphasis of this protocol is on establishing index methods for measuring trends in relative abundance at fixed locations; therefore, the sampling strategies at each Index site should ideally be structured in a manner that allows inference to a larger area of interest.”



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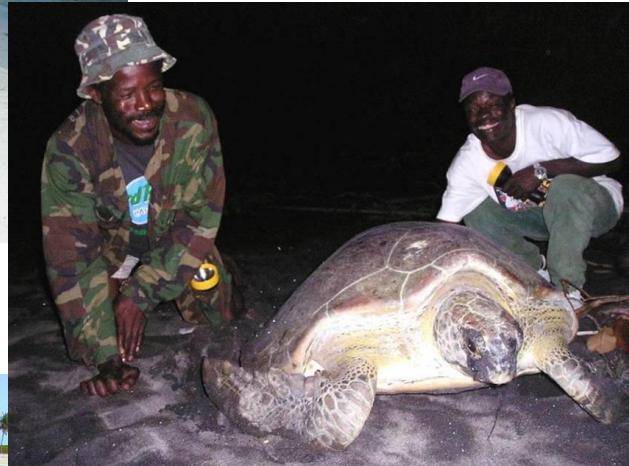
APPENDIX I



Primary Data Providers and Contributors



Monitoring hawksbill and green sea turtle populations at **Jumby Bay, Antigua** (*photo by Martha Gilkes*); **Rosalie Bay, Dominica** (*photo by Rowan Byrne*); and **Mona Island, Puerto Rico** (*photo by Chelonia, Inc.*)



ANGUILLA (GB):

Farah Mukhida
Executive Director
Anguilla National Trust
P.O. Box 1234
The Valley AI-2640
Anguilla, British West Indies

Randall Richardson
Research Officer
Department of Fisheries and
Marine Resources
P.O. Box 60
The Valley AI-2640
Anguilla, British West Indies

ANTIGUA & BARBUDA:

Ian Horsford
Chief Fisheries Officer (Ag.)
Ministry of Agriculture,
Fisheries & Barbuda Affairs
Fisheries Complex, Pt Wharf
St. John's, Antigua

Cheryl Appleton (retired)
Chief Fisheries Officer
Ministry of Agriculture,
Fisheries & Barbuda Affairs
Fisheries Complex, Pt Wharf
St. John's, Antigua

Tricia Lovell
Deputy Chief Fisheries
Officer (Ag.)
Ministry of Agriculture,
Fisheries & Barbuda Affairs
Fisheries Complex, Pt Wharf
St. John's, Antigua

Mykl Clovis Fuller
Coordinator
Antigua Sea Turtle Project
Environ. Awareness Group
Long Street
St. John's, Antigua

Dr. Seth Stapleton
Principle Investigator
Jumby Bay Hawksbill Project
c/o 530 Fremont Ave
Mendota Heights
Minnesota 55118 USA

Kate Levasseur
Research Collaborator

Jumby Bay Hawksbill Project
c/o Dept. Biological Sciences
University of South Carolina
715 Sumter St, CLS 401
Columbia, South Carolina
29205 USA

ARUBA (NL):

Dr. Richard van der Wal
Turtugaruba Foundation
C. Huygensstraat #8
Oranjestad, Aruba

Edith van der Wal
Turtugaruba Foundation
C. Huygensstraat #8
Oranjestad, Aruba

Sietske van der Wal
Manager
Conservation Education
Aruba National Park
Foundation
Bringamosa #3
Santa Cruz, Aruba

BAHAMAS:

Indira Brown
Assistant Fisheries Officer
Dept of Marine Resources
Ministry of Agriculture and
Marine Resources
P. O. Box N 3028
Nassau, Bahamas

Lakeshia Anderson
Parks Planner
The Bahamas National Trust
P.O. Box N-4105
Nassau, The Bahamas

BARBADOS:

Dr. Julia A. Horrocks
Director, Barbados Sea
Turtle Project
Professor, Department of
Biol. and Chem. Sciences
University of the West Indies
Cave Hill Campus
P.O. Box 64, Bridgetown
BB11000, Barbados

Carla Daniel
Director
Awareness and Education

Barbados Sea Turtle Project
c/o University of the West
Indies - Cave Hill Campus
P.O. Box 64, Bridgetown
BB11000, Barbados

BELIZE:

Linda Searle
Director
ECOMAR
St George's Caye
P.O. Box 1234
Belize City, Belize

*Through Linda Searle, the
following agencies and
organizations contributed
data:*

Belize Audubon Society
Belize Fisheries Department
Gales Point Wildlife
Sanctuary Management
Committee
Hol Chan Marine Reserve
Southern Environmental
Association
Toledo Institute for Develop-
ment and the Environment
University of Belize,
Environmental Research
Institute

BERMUDA (GB):

Jennifer Gray
Director
Bermuda Turtle Project
Bermuda Zoological
Society
P.O. Box FL 145
Flatts, FLBX Bermuda

BONAIRE (NL):

Mabel Nava
Manager
Sea Turtle Conservation
Bonaire
Kaya Korona #53
Kralendijk, Bonaire

Kaj Schut
Communications and
Fundraising Officer

Sea Turtle Conservation
Bonaire
Kaya Korona #53
Kralendijk, Bonaire

BRAZIL:

Maria Angela Marcovaldi
National Coordinator of
Research and Conservation
Fundação Pró-TAMAR /
Projeto TAMAR
Caixa Postal 2219
Rio Vermelho
CEP: 41950-970
Salvador-Bahia, Brazil

The following persons also contributed data from TAMAR research programs:

Alexsandro S. dos Santos
Paulo H. Lara
Frederico Tognin
Daniella T. de Almeida
Ana Cláudia J. Marcondes
Jaqueline C. de Castilhos
Armando Barsante

BRITISH VIRGIN

ISLANDS (GB):
Mervin Hastings
Ag. Deputy Conservation & Fisheries Officer
Conservation and Fisheries Department
Ministry of Natural Resources
P.O. Box 3323
Road Town, Tortola
British Virgin Islands VG1110

Dr. Shannon Gore
Managing Director
Association of Reef Keepers
P.O. Box 3252 PMB 2106
Road Town, Tortola
British Virgin Islands VG1110

CAYMAN ISLANDS (GB):
Gina Ebanks-Petrie
Director
Department of Environment
P.O. Box 10202
Grand Cayman KY1-1002
Cayman Islands

Dr. Janice Blumenthal
Research Officer
Department of Environment
P.O. Box 10202
Grand Cayman KY1-1002
Cayman Islands

COLOMBIA:

Cristian Ramírez Gallego
Executive Director
Fundación Tortugas del Mar
Calle 46 A Sur # 40
A 31 INT 103
Antioquia, Colombia

Karla G. Barrientos Muñoz
Scientific Director
Fundación Tortugas del Mar
Calle 46 A Sur # 40
A 31 INT 103
Antioquia, Colombia

COSTA RICA:

Didiher Chacón-Chaverri
Executive Director
Latin American Sea Turtles
Apdo: 496-1100, Tibás
Costa Rica, América Central

Through Didiher Chacón, the following organizations contributed data:

ASTOP
EWT, Estación Las Tortugas
Pacuare Reserve
Sea Turtle Conservancy
Tortuga Feliz

CUBA:

Dr. Félix Moncada G.
Biólogo Pesquero y Jefe
Programa de Tortugas
Marinas
Centro de Investigaciones
Pesqueras (CIP)
5ta. y 248, Barlovento, Playa
Ciudad de La Habana, Cuba

Dr. Julia Azanza Ricardo
Instituto Superior de
Tecnologías
y Ciencias Aplicadas

Universidad de La Habana
Ciudad de La Habana, Cuba

Yanet Forneiro Martín-Viaña
Empresa Nacional para la
Conservación de la Flora y
la Fauna
Calle 42 # 514 Esq. 7ma.
Ciudad de La Habana, Cuba

CURAÇAO (NL):

Sabine Berendse
Director
Sea Turtle Conserv. Curaçao
Kaya Andira 4, Curaçao

Brian Leysner
Manager
Curaçao Underwater Park
Caribbean Research and
Management of Biodiversity
(CARMABI)
P.O. Box 2090, Curaçao

Paul Hoetjes
Senior Policy Advisor
Department of Environment and Nature (MINA)
Ministry of Public Health, Environment and Nature
Schouwburgweg 26
APNA Building, Curaçao

DOMINICA:

Errol Harris
Director
Dominica Sea Turtle
Conservation Organization
(DomSeTCO)
Morne Daniel (P.O. Box 939)
Commonwealth of Dominica

Marcella Harris
Project Coordinator
Dominica Sea Turtle
Conservation Organization
(DomSeTCO)
Morne Daniel (P.O. Box 939)
Commonwealth of Dominica

Jacob ('Jake') Levenson
Scientific Advisor
Dominica Sea Turtle
Conservation Organization
(DomSeTCO)

c/o Oceans Forward
17 Hamilton Street
Plymouth, MA 02360

DOMINICAN REPUBLIC:

Christina de la Rosa
Ministerio de Medio Ambiente y Recursos Naturales
Santo Domingo
Distrito Nacional
República Dominicana

Dr. Yolanda M. León
Dept. de Ciencias Básicas y Ambientales,
Universidad INTEC
and, Grupo Jaragua
Santo Domingo
Distrito Nacional
República Dominicana

Jesus Tomas
Grupo Jaragua
Calle El Vergel 33
Ensanche El Vergel
Santo Domingo
Distrito Nacional
República Dominicana

Data compiled by:
Didiher Chacón-Chaverri
Executive Director
Latin American Sea Turtles
Apdo: 496-1100, Tibás
Costa Rica

FRENCH GUIANA (FR):

Rachel Berzins
Cheffe de la cellule technique de Guyane
Office National de la Chasse et de la Faune Sauvage (ONCFS)
Kourou, Guyane française

Nicolas Paranthoën
Coordinateur du Plan National d'Actions Tortues Marines en Guyane
Office National de la Chasse et de la Faune Sauvage (ONCFS)
Kourou, Guyane française

Johan Chevalier
Réserve Naturelle de l'Amana (RNA)
Maison de la Réserve
31 rue François Arago
BP 539, 97344 Cayenne Cedex
Guyane française

Dr. Benoît de Thoisy
Institut Pasteur de la Guyane, and KWATA
BP 672, F-97335 Cayenne cedex
Guyane française

Laurent Kelle
WWF Guianas
Bat B, 2 avenue Gustave Charleray
97300 Cayenne
Guyane française

Dr. Damien Chevallier
Researcher
Centre National de Recherche Scientifique – Inst. Pluridisciplinaire
Hubert Curien (CNRS-IPHC)
3 rue Michel-Ange
Délégation Alsace
23 rue du Loess – BP20
Strasbourg, France

GRENADE:

Kate Charles
Project Manager
Ocean Spirits
P.O. Box 1373, Grand Anse St Georges, Grenada

Kester Charles
Field Manager
Ocean Spirits
P.O. Box 1373, Grand Anse St Georges, Grenada

Crafton J. Isaac (retired)
Chief Fisheries Officer
Ministry of Agriculture, Lands, Forestry and Fisheries
Ministerial Complex
Botanical Gardens
St. Georges, Grenada

Dr. Marina Fastigi
Director
YWF-Kido Foundation
Kido Ecol. Research Station
Sanctuary, Carriacou
Grenadines of Grenada

GUADELOUPE (FR):

Sophie Le Loc'h
Animatrice des PNA Iguane des Petites Antilles et Tortues Marines pour la Guadeloupe et St Martin
ONF International
Jardin botanique
97101 Basse Terre
Guadeloupe

Sophie Lefevre
ONF Guadeloupe-Mission PNA
Chargée de mission PNA
Tortues marines et Iguane des Petites Antilles
BP648 - Route de Saint Phy
97109 Basse Terre
Guadeloupe

Caroline Cremades
ONF Guadeloupe-Mission PNA
Chargée de mission PNA
Tortues marines et Iguane des Petites Antilles
BP648 - Route de Saint Phy
97109 Basse Terre
Guadeloupe

Eric Delcroix
Chargé de missions
Association Titè
Réserves Naturelles de la Désirade
Basse Terre, Guadeloupe

GUATEMALA:

Tannia Sandoval G.
Asesora de Vida Silvestre
CONAP Nororiente
17 calle, 4ta - 5ta Avenida Puerto Barrios Izabal, Guatemala

GUYANA:

Denise Fraser
Commissioner

Protected Areas Commission National Park, Thomas Lands Georgetown Guyana	c/o Loma Linda University Loma Linda, California USA	Comisión Nacional de Áreas Naturales Protegidas
Odacy Davis Deputy Commissioner Protected Areas Commission National Park, Thomas Lands Georgetown Guyana	JAMAICA: Andrea Donaldson Manager, Projects Branch National Environment and Planning Agency (NEPA) 10 & 11 Caledonia Avenue Kingston 5, Jamaica	Veracruz: Raúl de Jesús González Díaz Mirón Acuario de Veracruz-Grupo Tortuguero del Estado
Aiesha Williams Country Manager WWF- Guianas, Guyana 285 Irving Street Queenstown Georgetown Guyana	Damany Calder Environmental Officer Fauna Unit, Ecosystems Management Branch National Environment and Planning Agency (NEPA) 10 & 11 Caledonia Avenue Kingston 5, Jamaica	Adriana Laura Sarti M. Dirección de Especies Prioritarias Comisión Nacional de Áreas Naturales Protegidas
Sopheia Edghill Marine Conservation Officer WWF- Guianas, Guyana 285 Irving Street Queenstown Georgetown Guyana	MARTINIQUE (FR): Fabian Rateau ONF Martinique Animateur territoriale des PNAs Tortues marines et Iguanes des Petites Antilles Mission PNA BP578 route de Moutte 97207 Fort de France Cedex	Blanca Mónica Zapata N. Directora, Área de Protección de Flora y Fauna Sistema Arrecifal Lobos- Tuxpan Comisión Nacional de Áreas Naturales Protegidas
Romeo De Freitas Guyana Marine Turtle Conservation Society Georgetown, Guyana	MEXICO: <i>Tamaulipas:</i> Adriana Laura Sarti M. National Coordinator Sea Turtle Conserv. Program Comisión Nacional de Áreas Naturales Protegidas Ejército Nacional 223, CP11320 CDMX Mexico	Christian Noe Absalon Torres Reserva de la Biosfera Los Tuxtlas Comisión Nacional de Áreas Naturales Protegidas
HAITI: Jean W. Wiener Director Fondation pour la Protection de la Biodiversité Marine 7 rue Bas Saline Caracol, Haiti	MVZ Alejandro García Peña Comisión de Parques y Biodiv. de Tamaulipas Gobierno del Estado de Tamaulipas	Xóchitl Peralta Jiménez Sistema Arrecifal Lobos- Tuxpan Comisión Nacional de Áreas Naturales Protegidas
HONDURAS: Lidia Salinas National Coordinator Protective Turtle Ecology Center for Training, Outreach, and Research, (ProTECTOR, Inc.) Tegucigalpa, Honduras	Héctor Hugo Acosta Sánchez Santuario Playa de Rancho Nuevo Comisión Nacional de Áreas Naturales Protegidas	Tomás Camarena Luhrs Sistema Arrecifal Veracruzano Comisión Nacional de Áreas Naturales Protegidas
Dr. Stephen Dunbar Founder/President ProTECTOR, Inc.	Martha Lopez Hernandez Santuario Playa de Ro Nuevo	Rosa Ciria Martínez Portugal Sistema Arrecifal Veracruzano Comisión Nacional de Áreas Naturales Protegidas
		<i>Campeche:</i> Jorge Berzunza Chío Secretaría de Medio Ambiente y Recursos Naturales de Campeche
		Alfonso Díaz Molina Presidente

Comité Estatal de Conservación de Tortugas Marinas	Ciudad del Carmen Campeche, Mexico C.P. 24180 Jonatan A. Ravell Ley Secretaría de Medio Ambiente y Desarrollo Urbano Gobierno de Yucatán	Héctor González Fundación de Parques y Museos de Cozumel Leonel Gomez Nieto Flora, Fauna y Cultura de México, A.C.
Vicente Guzmán Hernández Jefe de Proyecto Tortugas Marinas Comisión Nacional de Áreas Naturales Protegidas Área de Protección de Flora y Fauna Laguna de Términos Av López Mateos x Av. Héroes del 21 de abril s/n col. Playa Norte Cd. del Carmen, Campeche México. C.P. 24120	Melania López Castro Pronatura Península de Yucatán, A.C. Cristóbal Cáceres G. Cantón Director, Reserva de la Biosfera Ría Lagartos Santuario Tortugas Marinas Playa Río Lagartos Parque Nacional Arrecife Alacranes	Armando Lorences Camargo H. Municipio de Solidaridad Hector Lizarraga Cubedo Centro Ecológico Akumal
<i>Through Vicente Guzmán Hernández, the following agencies and organizations contributed data:</i>	Quintana Roo: Miriam Tzeek Tuz Presidenta Comité Estatal para la Conservación de Tortugas Marinas en Quintana Roo	Katia Cordourier Real Fundación Bahía Príncipe Roberto Herrera Pavón El Colegio de la Frontera Sur Unidad Chetumal
Asociación Ecológica Laguna de Términos Delfines A.C. Canan Aak Alche S.C. Desarrollo Sustentable S.C.R.L. Enlaces con tu Entorno A.C. Fileteras del Petén S.C. Grupo Ecologista Quelonios A.C. Grupo Tortuguero de la Laguna A.C. Secretaría de Medio Ambiente y Recursos Naturales de Campeche Universidad Autónoma de Campeche Universidad Autónoma del Carmen Yuumtsil Kaak Naab A.C. <i>Yucatán:</i> Dr. Eduardo Cuevas Research Professor CONACYT-Universidad Autónoma del Carmen Calle 56 #4 Esq. Av. Concordia Col. Benito Juárez	María del Carmen García R. Parque Nacional Arrecifes de Puerto Morelos Parque Nacional Isla Contoy Comisión Nacional de Áreas Naturales Protegidas Erika Jasmin Hernández O. Parque Nacional Arrecifes de Puerto Morelos Parque Nacional Isla Contoy Comisión Nacional de Áreas Naturales Protegidas Deline G. García Canto H. Municipio Isla Mujeres Tortugranja Lorena Flores H. Municipio Benito Juárez Blanca Quiroga García Parque Nacional Arrecifes de Cozumel Comisión Nacional de Áreas Naturales Protegidas	Argelia E. Flores Rivera H. Municipio de Tulum Gerardo Castañeda Ramírez Fundacion Palace Resorts IAP Ana Isabel Erosa Solana Hard Rock Hotel Cancún Melania López Castro Pronatura Península de Yucatán, A.C.
MONTSERRAT (GB):		Alwyn Ponteen Chief Fisheries Officer Fisheries and Ocean Governance Unit Ministry of Agriculture, Trade, Lands, Housing and the Environment-MATLHE Grove Botanic Station P.O. Box 272 Montserrat
NICARAGUA:		Dr. Cynthia Lagueux Adjunct Assistant Scientist Archie Carr Center for Sea Turtle Research Department of Biology University of Florida Gainesville, Florida 32611 USA

Dr. Cathi Campbell
Adjunct Assistant Scientist
Archie Carr Center for Sea
Turtle Research
Department of Biology
University of Florida
Gainesville, Florida
32611 USA

PANAMÁ:
Argelis Ruiz (retired)
Smithsonian Tropical
Research Institute
Apartado Postal 0843-03092
Panamá
República de Panamá

Dr. Anne Meylan (retired)
Florida Fish & Wildlife
Conservation Commission
Fish & Wildlife Research Inst.
100 8th Avenue SE
St. Petersburg, Florida
33701 USA

Dr. Peter Meylan
Natural Sciences
Eckerd College
4200 54th Avenue South
St. Petersburg, Florida
33711 USA

Marino Eugenio Abrego
Ministerio de Ambiente
Jefe, Departamento de
Conservación de Recursos
Costeros y Marinos
Dirección Nacional de Costas
y Mares
Calle Diego Domínguez
Edif. 804 Albrook, Ancón
Panamá
República de Panamá

Cristina Ordoñez
Coordinadora de
Investigación
Sea Turtle Conservancy
Bocas del Toro, Panamá
República de Panamá

Arcadio Castillo
Centro de Desarrollo
Ambiental y Humano
(CENDAH)
Yandub-Nargana

Comarca Guna Yala
Panamá
República de Panamá

PUERTO RICO (US):
Carlos E. Diez
Coordinador Nacional del
Programa de Tortugas
Marinas DRNA-PR
P.O. Box 366147
San Juan
Puerto Rico 00936

*Through Carlos Diez, the
following agencies and
organizations contributed
data:*

Sheila M. Bonet Muñiz
(Mayaguez, Anasco, Isabela,
Aguada, Rincon, Cabo Rojo)
Coordinadora del Proyecto
de Tortugas Marinas del
Área Oeste - "Vida Marina"
Centro de Restauración y
Conservación
Costera-UPR-Aguadilla
P.O. Box 6150
Aguadilla, Puerto Rico 00604

Myrna Concepción
(Hatillo, Arecibo Barceloneta,
Manati, Vega Baja)
Coordinadora Yo Amo el
tinglar (playas del norte)
HC 01 Box 10885
Arecibo, Puerto Rico 00612

Luis Crespo
(Yabucoa, Maunabo, Patillas)
Director, ATMAR
Tortugas del Sur-este
HC 1 Box 2027
Maunabo, Puerto Rico 00707

Samerith Sanchez
(Humacao)
Project Leader
Reserva Natural de Humacao
DRNA-PR
P.O. Box 366147
San Juan, Puerto Rico 00936

Rosaly Ramos
(Luquillo y Fajardo)
Project Leader

Reserva Natural del Noreste
(CEN), DRNA-PR
P.O. Box 366147
San Juan, Puerto Rico 00936

Hilda Benitez
(San Juan)
Presidenta
Grupo Tortuguero 7 Quillas
P.O. BOX 6527
San Juan, Puerto Rico 00914

Raymond Flores
(Dorado)
Director, Chelonia, Inc.
Investigacion y Conservacion
de Tortugas Marinas
P.O. Box 9020708
San Juan, Puerto Rico 00902

Suki Bermudez
(Vieques)
Project Leader
TICATOVE-Vieques
P.O. Box 741
Vieques, Puerto Rico 00765

SABA (NL):
Kai Wulf
Parks Manager
Saba Conservation Foundation
Saba Bank Natl Marine Park
P.O. Box 18
The Bottom, Saba

SINT EUSTATIUS (NL):
Jessica Berkel
Marine Park Manager
Sea Turtle Program
Coordinator
St Eustatius National Parks
Foundation (STENAPA)
Gallows Bay z/n
Lower Town, St. Eustatius

Dr. Nicole Esteban
Research Fellow
Prifysgol Abertawe/ Swansea
University
Coleg Gwyddoniaeth/College
of Science
141 Vivian, Parc Singleton/
Singleton Park Abertawe
Swansea, Wales, UK
Cymru, DU SA2 8PP

SINT MAARTEN (NL):

Tadzio Bervoets
Manager
Nature Foundation Sint
Maarten
Wellsburg Street
1A Apt. 25+26
Cole Bay, Sint Maarten

Melanie Meijer zu
Schlochtern
Project Officer, Nature
Foundation Sint Maarten
Wellsburg Street
1A Apt. 25+26
Cole Bay, Sint Maarten

ST. BARTHELEMY (FR):

Claire Saladin DVM, PhD
Wildlife Project Adviser
Agence Territoriale
de l'Environnement de
St Barthélemy
Rue de la République
Gustavia
97133 Saint Barthélemy
French West Indies

Olivier Raynaud
Director
Agence Territoriale
de l'Environnement de
St Barthélemy
Rue de la République
Gustavia
97133 Saint Barthélemy
French West Indies

ST. KITTS & NEVIS:

Kimberly Stewart, DVM
Director
St. Kitts Sea Turtle
Monitoring Network
and, Assistant Professor
Ross University School of
Veterinary Medicine
Main Street (P.O. Box 334)
Basseterre, St. Kitts

Emile Pemberton
President and Founder
Nevis Turtle Group
Webbe's Ground
Gingerland, Nevis
St. Kitts and Nevis

ST. LUCIA:

Allena Joseph
Fisheries Biologist
Department of Fisheries
Ministry of Agriculture,
Fisheries, Physical
Planning, Natural Res.
and Cooperatives
Pointe Seraphine
Castries, St. Lucia

Vincent 'Jeg' Clarke
Head, Turtle Patrol Team
Saint Lucia National Trust
South Office, Sandy Beach
Pointe Sable Environmental
Protection Area
Vieux Fort, Saint Lucia

ST. MARTIN (FR):

Claire Saladin DVM, PhD
Wildlife Project Adviser
Reserve Naturelle de St
Martin
Hope Estate rue Barbuda
97 150 Saint Martin
French West Indies

Nicolas Maslach
Director
Reserve Naturelle de St
Martin
Hope Estate rue Barbuda
97 150 Saint Martin
French West Indies

Julien Chalifour
Charge de mission
scientifique
Reserve Naturelle de St
Martin
Hope Estate rue Barbuda
97 150 Saint Martin
French West Indies

**ST. VINCENT & THE
GRENADES:**

Raven Hoflund
Director
The Turtle Project - Mustique
Mustique Island
c/o KCCU Financial Centre
Grandby Street
Kingstown VC 0100
St. Vincent & the Grenadines

Roseman Adams
Environmental Attackers –
Union island
Clifton, Union Island
St. Vincent & the Grenadines

SURINAME:

Hanneke van Lavieren
Oceans and Wildlife
Coordinator
WWF Guianas
Henck Arronstraat 63
Paramaribo, Suriname

Michael Hiwat
Oceans and Wildlife Officer
WWF Guianas
Henck Arronstraat 63
Paramaribo, Suriname

Claudine Sakimin
Ministry of Spatial Planning,
Land and Forest
Management
Nature Conservation Division
Cornelis Jongbawstraat 8 -12
Paramaribo, Suriname

Patricia Sewpersad
Ministry of Spatial Planning,
Land and Forest
Management
Nature Conservation Division
Cornelis Jongbawstraat 8 -12
Paramaribo, Suriname

TRINIDAD & TOBAGO:

Tanya Clovis
President
Save Our Sea Turtles (SOS)
P.O. Box 27
Scarborough, Tobago

Giancarlo Lalsingh
President
Save Our Sea Turtles (SOS)
P.O. Box 27
Scarborough, Tobago

Dr. Michelle Cazabon-
Mannette
Technical Advisor
Save Our Sea Turtles (SOS)
P.O. Box 27
Scarborough, Tobago

Renardo Daniel Game Warden I Department of Natural Resources & Environment Tobago House of Assembly Montessori Drive Glen Road (P.O. Box 5566) Scarborough, Tobago	Lormeka Williams Director Department of Environment and Coastal Resources Pond Street, Grand Turk Turks and Caicos Islands	Silver Spring Maryland 20910 USA
Suzan Lakhan-Baptiste Managing Director Nature Seekers POB 4536 Sangre Grande Matura, Trinidad	Kathleen Wood Turks & Caicos Reef Fund c/o Ocean Club West Providenciales Turks and Caicos Islands	Dr. Donna Shaver Chief Division of Sea Turtle Science and Recovery Padre Island Natl Seashore U. S. National Park Service P. O. Box 181300 Corpus Christi Texas 78480 USA
Turtle Village Trust (TVT) P.O. Box 1109 Wrightson Road Port of Spain, Trinidad	Heidi Hertler School for Field Studies South Caicos Turks and Caicos Islands	Ann Marie Lauritsen Southeast Sea Turtle Coordinator U.S. Fish and Wildlife Service 600 4th Street South Saint Petersburg Florida 33701 USA
<i>Through TVT, the following community organizations contributed data:</i>	Amdeep Sanghera UK Overseas Territories' Conservation Officer Marine Conservation Society United Kingdom	Mary Kay Skoruppa U.S. Geological Survey Columbia Environmental Research Center Texas Gulf Coast Field Research Station 6300 Ocean Drive, Unit 5838 Corpus Christi, Texas 78412 USA
Blanchisseuse Environment & Community Organisation Fishing Pond Turtle Conservation Group Grande Riviere Nature Tour Guide Association Las Cuevas Eco-friendly Association Nature Maintenance & Verdant Conservation Group PAWI Sports Culture and Eco Club SAD for Toco Sans Souci Wildlife Tours St. David Empowerment Development Organisation Wildlife Watch and Environmental Group Manzanilla	Thomas B. Stringell Senior Marine Mammal Ecologist Natural Resources Wales United Kingdom	Jackie Sablan Wildlife Biologist Bon Secour National Wildlife Refuge 12295 State Highway 180 Gulf Shores, Alabama 36542 USA
TURKS & CAICOS (GB): Katharine Hart Marine Biologist Turks and Caicos Islands Turtle Project Grand Turk Turks and Caicos Islands	U.S.A.: Dr. Simona A. Ceriani Research Scientist Marine Turtle Nesting Program Florida Fish and Wildlife Conservation Commission Fish & Wildlife Research Inst. 100 8th Ave Southeast St Petersburg Florida 33701 USA	U.S. VIRGIN ISL (US): Rafe Boulon Board of Directors Friends of VI National Park 5000 Estate Enighed PMB #68, St. John U.S. Virgin Islands 00830
	Dr. Anne Meylan (retired) Florida Fish & Wildlife Conservation Commission Fish & Wildlife Research Inst. 100 8th Avenue SE St. Petersburg Florida 33701 USA	Dr. Renata Platenberg Assistant Professor Natural Resource Mgmt Univ. of the Virgin Islands #2 John Brewer's Bay St. Thomas U.S. Virgin Islands 00802
	Barbara Schroeder National Sea Turtle Coordinator NOAA / National Marine Fisheries Service Protected Resources 1315 East West Hwy	

Claudia Lombard
Wildlife Biologist
U.S. Fish & Wildlife Service
Federal Building
3013 Estate Golden Rock
Christiansted, St. Croix
U.S. Virgin Islands 00820

VENEZUELA:
Hedelvy J. Guada
Directora
Centro de Investigación
y Conservación de
Tortugas Marinas
(CICTMAR)
and, Instituto de Zoología y
Ecología Tropical
Facultad de Ciencias
Univ. Central de Venezuela
Av. Paseo Los Ilustres
Los Chaguaramos, AP 47058
Caracas 1041-A. Venezuela

*Through Hedelvy Guada, the
following agencies and
organizations contributed
data:*

CICTMAR
Beatriz Alcalá
María José Cisnero
María Fernanda González R.
Celin Guevara Cortez

Francisco Velásquez
Dirección General de
Diversidad Biológica,
Ministerio del Poder Popular
para el Ecosocialismo (MINEC)

Graciela Hernández
Clemente Balladares C.
Juan Carlos Figuera
Marvin Jiménez
Vicente Vera

Parque Nacional San
Esteban, INPARQUES
Luis Hernández
Edward Rodríguez

María de Los Angeles
Rondón-Médicci
Univ. Nacional Experimental
“Francisco de Miranda”

Angela Arias-Ortiz
GTTM-NE
Instituto Venezolano de
Investigaciones Científicas

Héctor Barrios-Garrido
GTTM-GV
Departamento de Biología
Facultad de Ciencias
La Universidad del Zulia

Génesis Cardozo
Proyecto Forpus

Eneida Fajardo
Proyecto de conservación de
tortugas marinas AKUPARA

Alejandro Gallardo
PROVITA

Marco García-Cruz
Centro de Ecología
Instituto Venezolano de
Investigaciones Científicas

Aurimar Pérez
Fundación Neotropical
Cuenca

Ernesto Pulgar Hahn, DVM
Fundación Ecodiversa

Genaro Solé
FUDENA

Pedro D. Vernet P.
GTTM-Nueva Esparta
Fundación Avista

Verónica de los Llanos

APPENDIX II



Wider Caribbean Region Sea Turtle Habitat National Reports



For ease of reference, the National Reports are presented in alphabetic order and then color-coded according to their Ecoregion (cf. Spalding et al. 2007). Brazil (not featured in Spalding et al. 2007), is color-coded in this volume as gray.

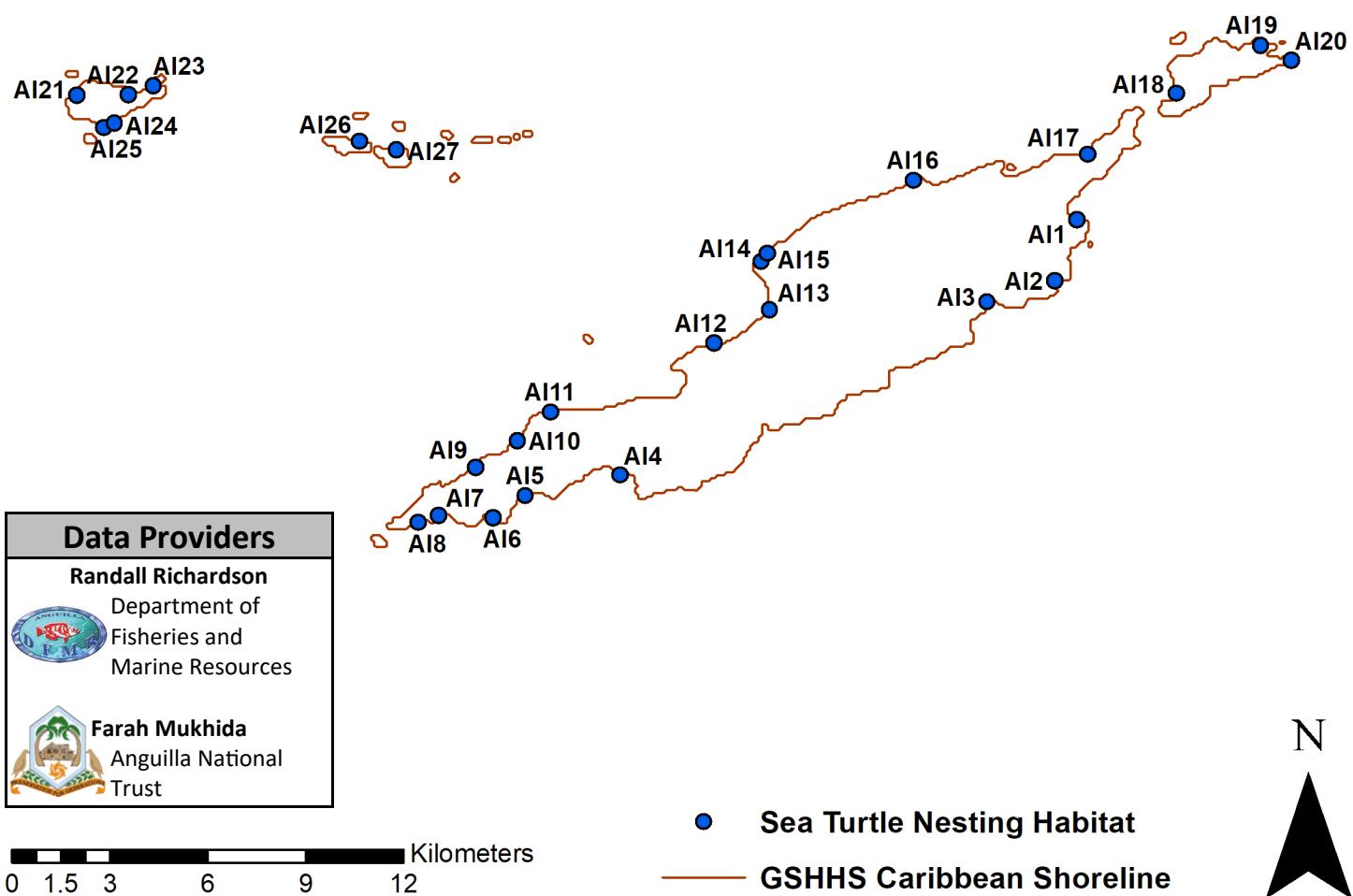
Anguilla Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

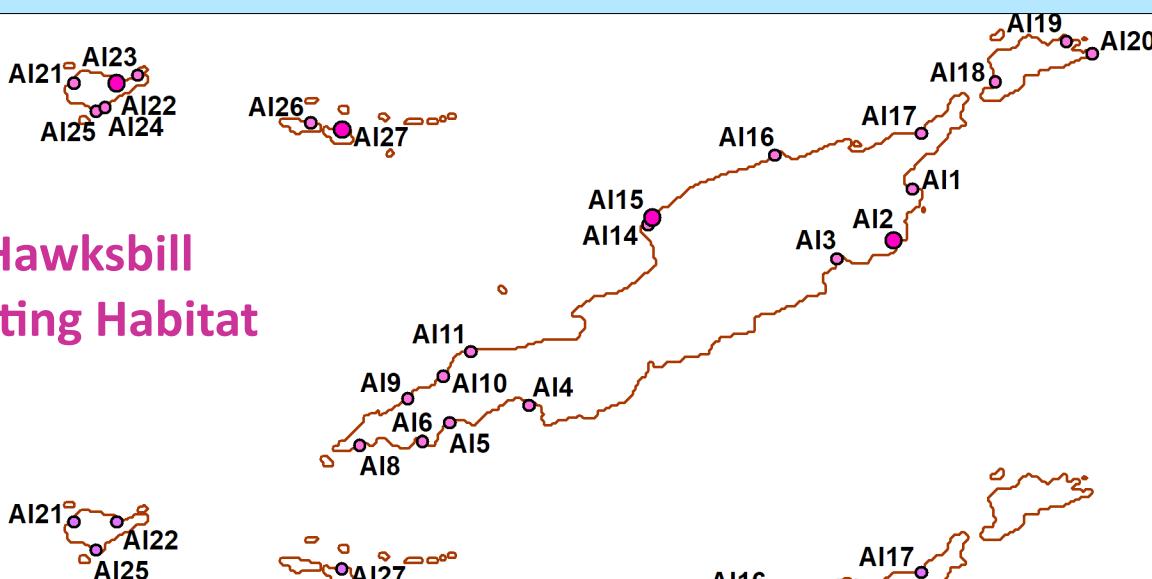
National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	Yes**
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	-
Area closures (MPA, park, reserve)	-
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

* Full protection: Biodiversity & Heritage Conservation Act. ** Moratorium (to 2020): Fisheries Protection Act

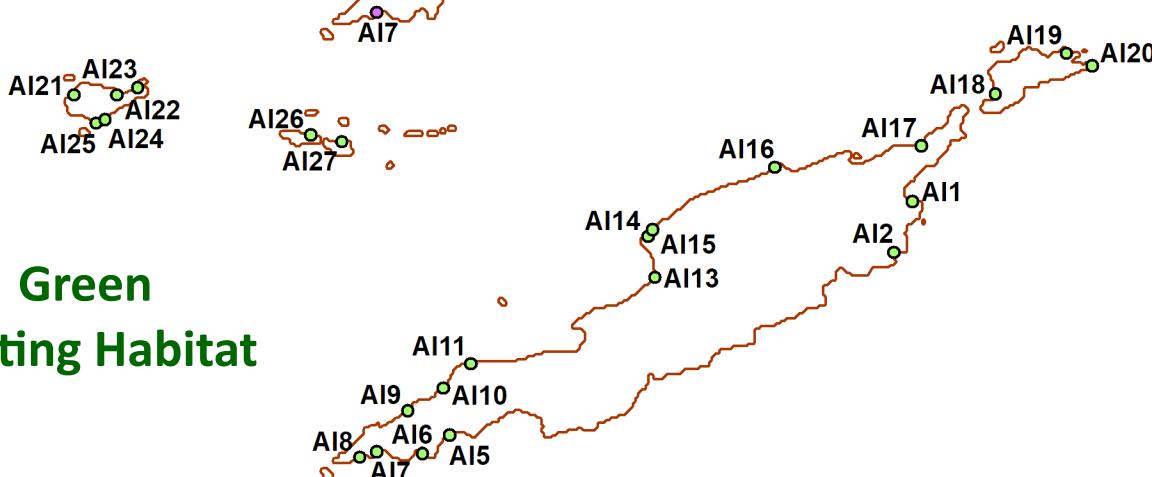


Anguilla Sea Turtle Habitat

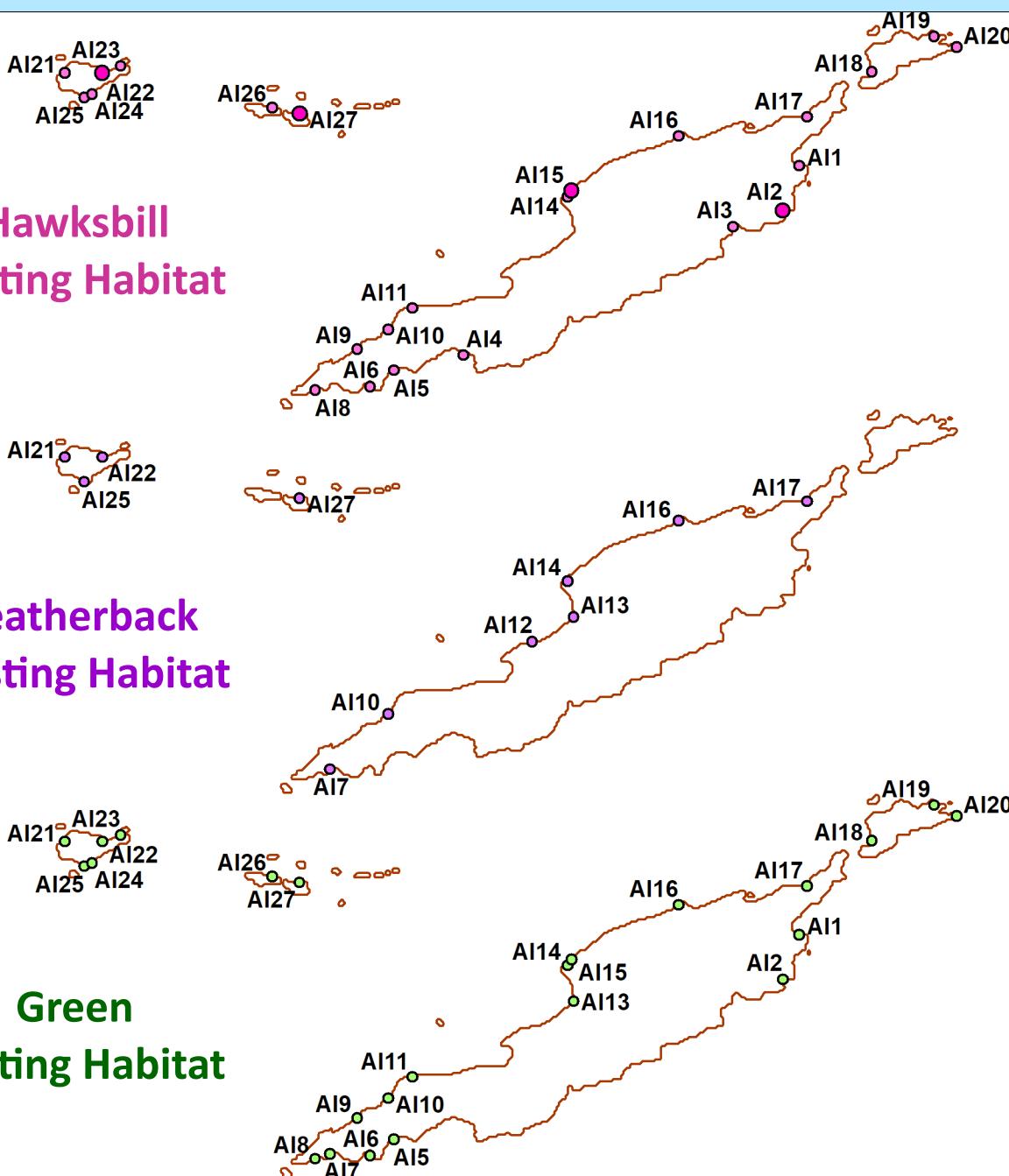
Hawksbill
Nesting Habitat



Leatherback
Nesting Habitat



Green
Nesting Habitat



Hawksbill Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Green Nesting Habitat

- <25 Crawls per year
- GSHHS Caribbean Shoreline

Leatherback Nesting Habitat

- <25 Crawls per year

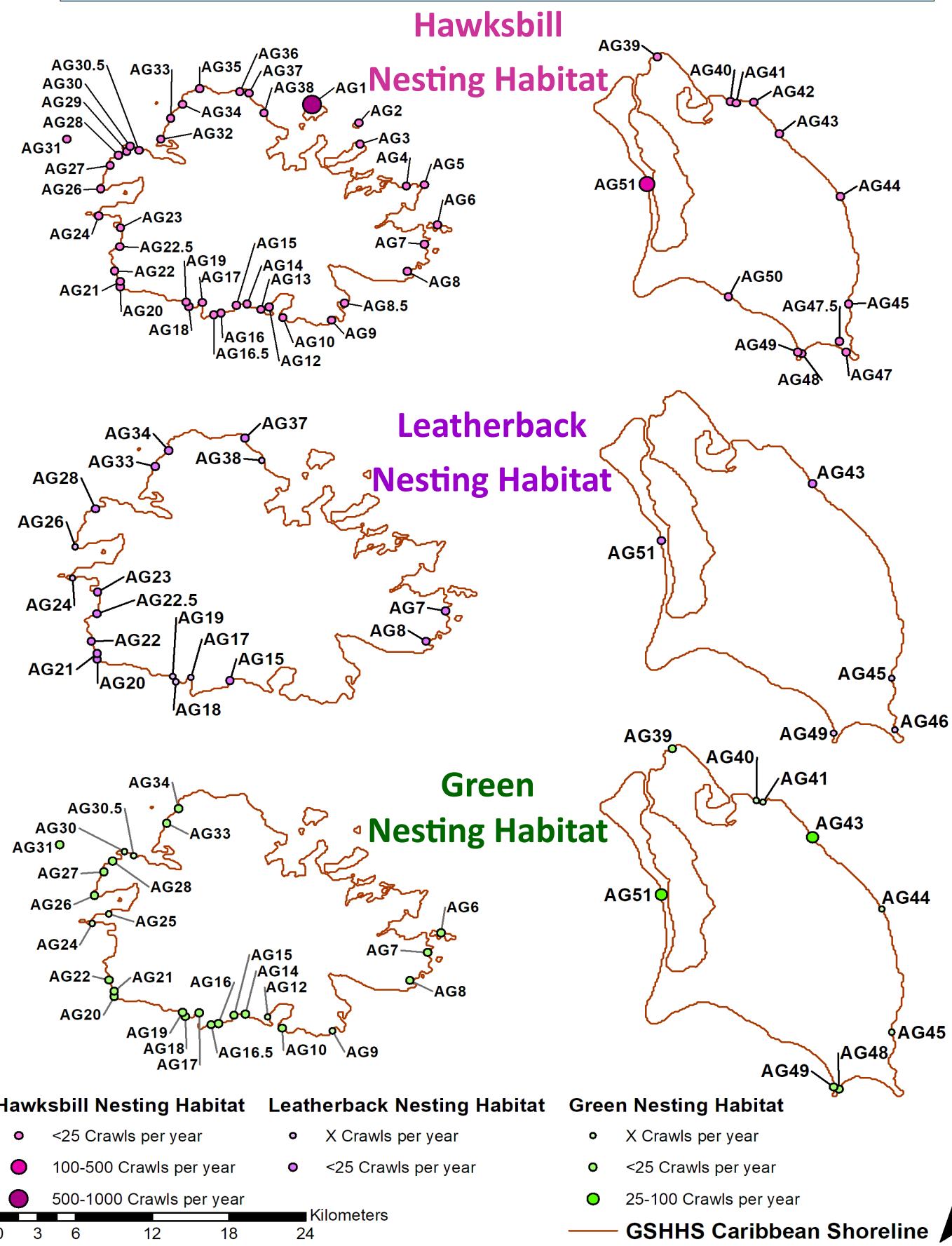
Kilometers
0 1.5 3 6 9 12



Anguilla Sea Turtle Habitat

Beach Identification Codes with Beach Names			
AI1	Savannah and Junk's Hole Bay	AI15	Blackgarden Bay
AI2	Mimi Bay	AI16	Shoal Bay East
AI3	Sandy Hill	AI17	Captain's Bay
AI4	Rendezvous Bay	AI18	Scrub Island Bay (Scrub Island)
AI5	Cove Bay	AI19	Graftin's Point (Scrub Island)
AI6	Maundays Bay	AI20	Deadmans Bay (Scrub Island)
AI7	Shoal Bay West	AI21	Spring Bay (Dog Island)
AI8	Sherricks Bay	AI22	Savannah Bay West (Dog Island)
AI9	Barnes Bay	AI23	Savannah Bay East (Dog Island)
AI10	Meads Bay	AI24	Stoney Bay (Dog Island)
AI11	Long Bay	AI25	Great Bay (Dog Island)
AI12	Katouche Bay	AI26	Prickly Pear West (Prickly Pear Cays)
AI13	Crocus Bay	AI27	Prickly Pear East (Prickly Pear Cays)
AI14	Limestone Bay		

Antigua & Barbuda Sea Turtle Habitat



Antigua & Barbuda Sea Turtle Habitat

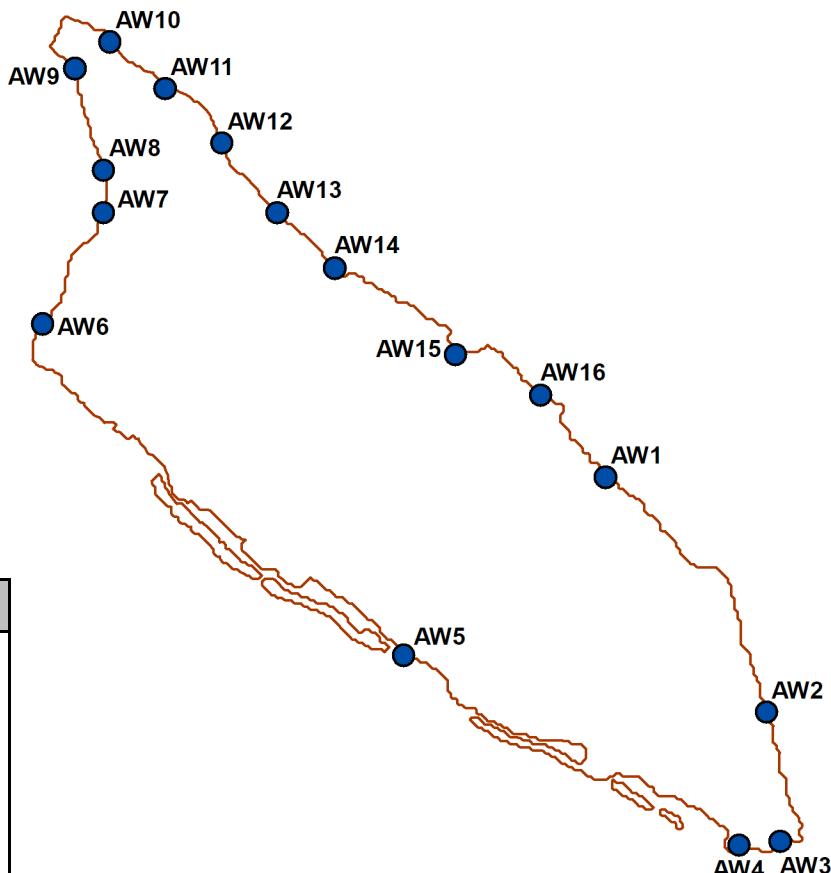
Beach Identification Codes with Beach Names—Antigua			
AG1	Jumby Bay—Pasture Bay Beach	AG20	Johnson's Point/Crabbs
AG2	Great Bird Island	AG21	Darkwood Beach
AG3	Guiana Island	AG22	Fryes Bay
AG4	Long Bay	AG22.5	Valley Church
AG5	Devil's Bridge Beach	AG23	Jolly Beach/ Lignumvitae Bay
AG6	Green Island	AG24	Pearn's Point Beaches
AG7	Mill Reef Beaches	AG25	Hermitage Bay/Two Foot Bay/Royal Bay
AG8	Half Moon Bay	AG26	Pinching Bay
AG8.5	St. James/Mamora Bay	AG27	Hawksbill/Eden Beaches
AG9	Indian Creek Beach	AG28	Galley Bay
AG10	Windward Bay	AG29	Deep Bay
AG11	Pigeon Point Beach	AG30	Hog John Bay
AG12	Dieppe Bay	AG30.5	Yepton Beach
AG13	Turtle Bay	AG31	Sandy Island
AG14	Little Rendezvous Bay	AG32	Ft. James Beach
AG15	Big Rendezvous Bay	AG33	Runway Bay
AG16	Tuck's Beach	AG34	Dickenson Bay
AG16.5	Old Road Bluff Fisher Hill Beaches	AG35	Soldier Bay Beaches
AG 17	Carlisle Bay	AG36	White Sand Beaches
AG18	Curtain Bluff Beach	AG37	Jabberwock Beach
AG19	Morris Bay	AG38	Dutchman Bay

Beach Identification Codes with Beach Names—Barbuda			
AG39	North Beach to Cobb Cove	AG46	Bleaky Bay Beaches
AG40	Kid Island Beach	AG47	Spanish Point Beach
AG41	Fishing Creek Beach	AG47.5	Gravenor Bay
AG42	Hog Point to Sea View	AG48	Coco Point East
AG43	Two Feet Bay	AG49	Coco Point Beach
AG44	Pigeon Cliff to Welch's Point	AG50	Coral Group Beaches
AG45	Welch's VPoint to Griffin Point	AG51	Continuous Beach from River to Billy Point

Aruba Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	No
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	Unknown



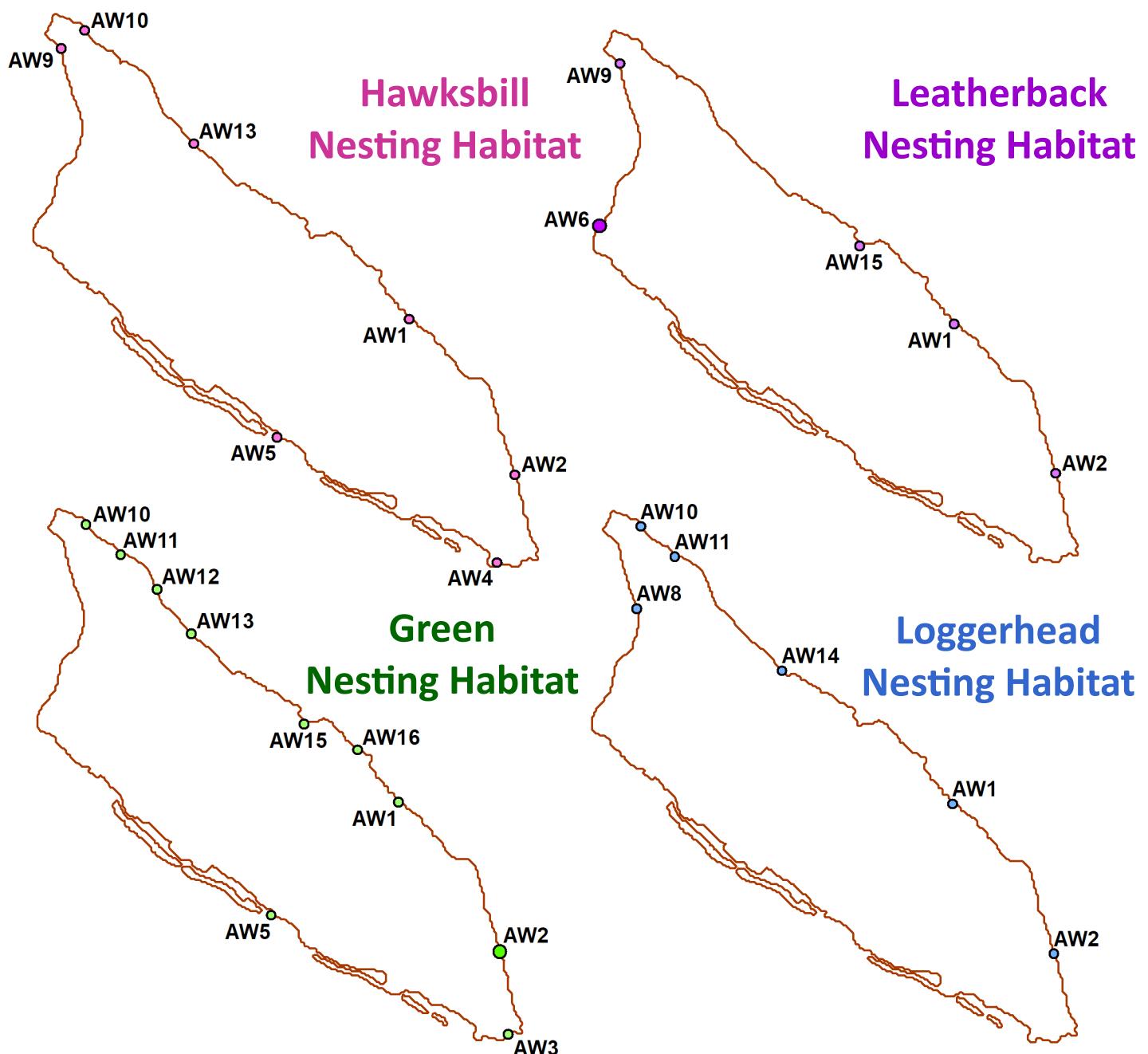
Data Providers
Dr. Richard van der Wal Edith van der Wal  Turtugaruba Foundation
Sietske van der Wal  Parque Nacional ARIKOK ARUBA
Aruba National Park Foundation

0 1.5 3 6 9 12 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Aruba Sea Turtle Habitat



Hawksbill Nesting Habitat

- <25 Crawls per year

Green Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Leatherback Nesting Habitat

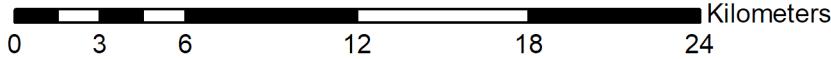
- <25 Crawls per year

- 25-100 Crawls per year

Loggerhead Nesting Habitat

- <25 Crawls per year

— GSHHS Caribbean Shoreline



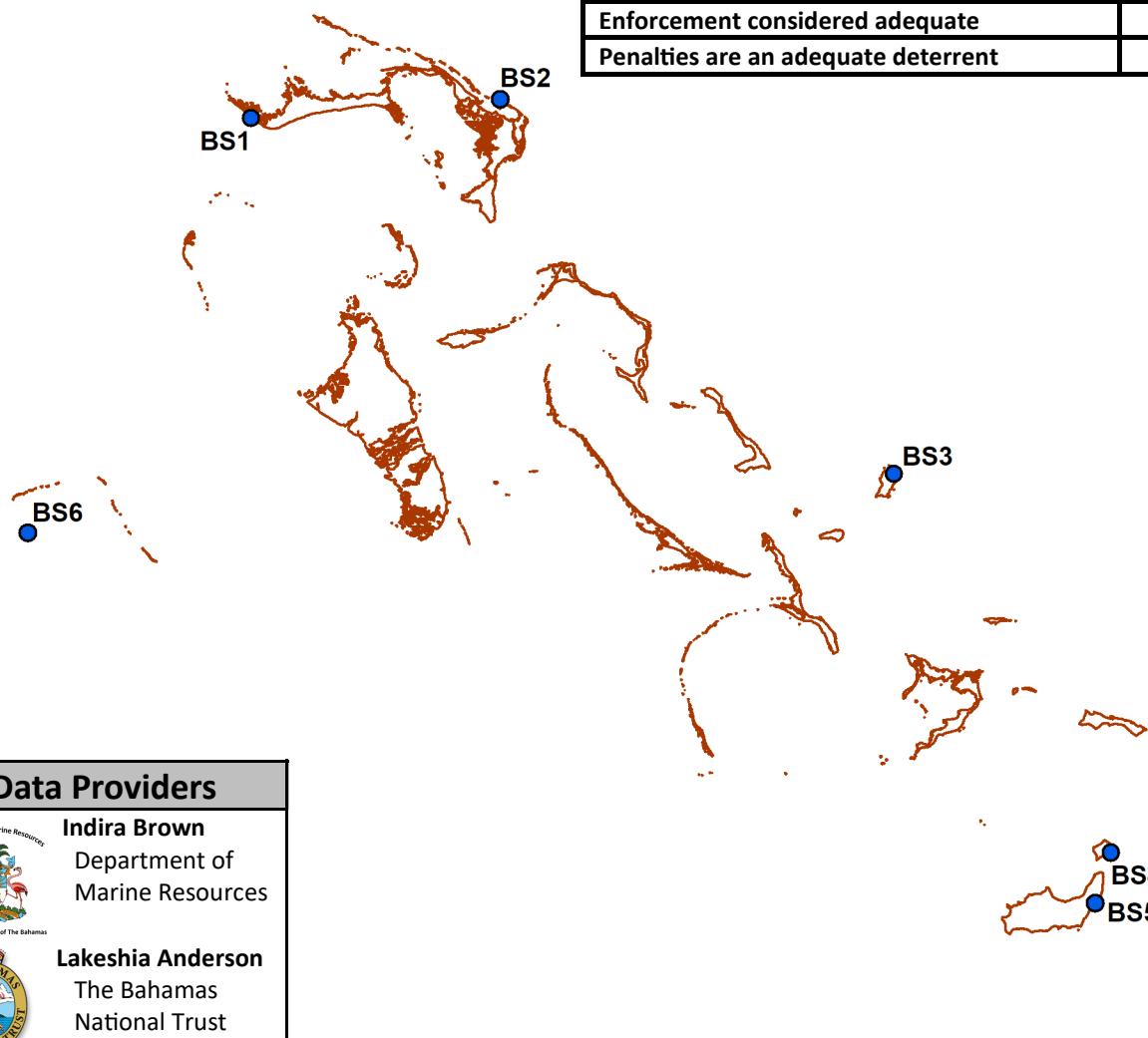
Aruba Sea Turtle Habitat

Beach Identification Codes with Beach Names			
AW1	Dos Playa	AW9	Arashi Beach
AW2	Boca Grandi-Grapefield	AW10	California
AW3	Pets Cemetery	AW11	Druif
AW4	Baby Beach	AW12	Urirama
AW5	Pos Chiquito	AW13	Pos di Noord
AW6	Eagle	AW14	Wariruri
AW7	Palm Beach	AW15	Andicuri
AW8	Fisherman's Huts	AW16	Boca Ketu

Bahamas Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No
Moratorium (fixed period)	No
Prohibition(s) on take	E, NF, Hawksbill
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	No
Annual quota	No
Permits/licenses required	No
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



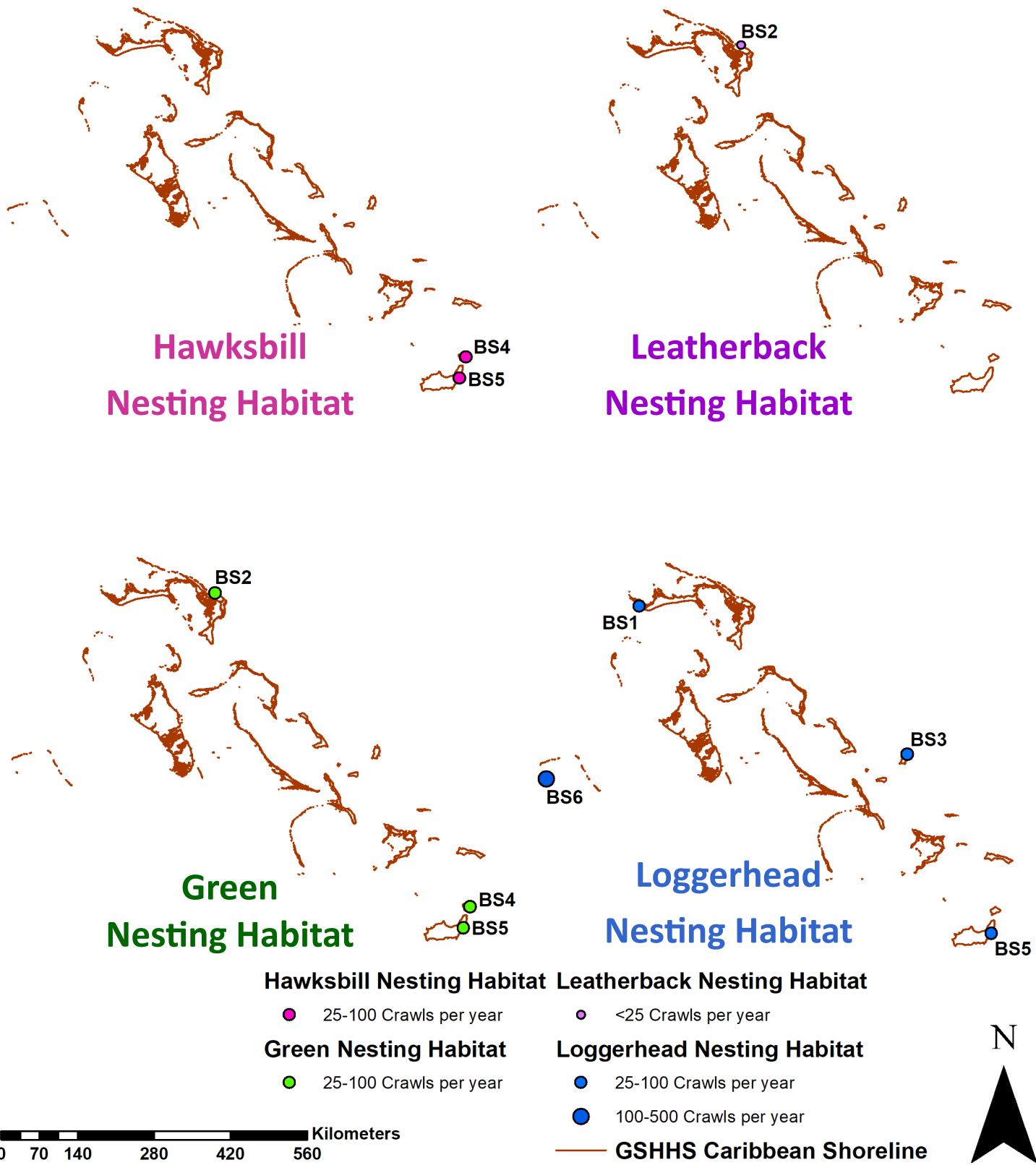
Data Providers	
	Indira Brown Department of Marine Resources
	Lakeshia Anderson The Bahamas National Trust

0 40 80 160 240 320 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Bahamas Sea Turtle Habitat



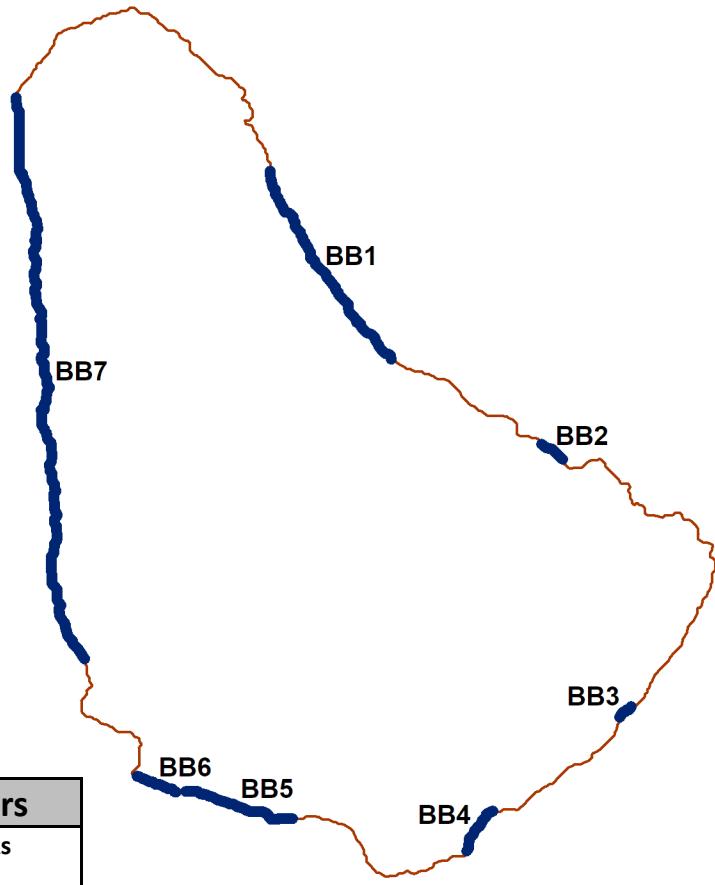
Bahamas Sea Turtle Habitat

Beach Identification Codes with Beach Names			
BS1	Grand Bahama	BS4	Little Inagua
BS2	Great Abaco (east coast and Cays)	BS5	Great Inagua
BS3	San Salvador	BS6	Cay Sal Bank

Barbados Sea Turtle Habitat

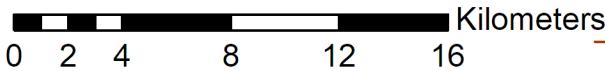
Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, IF
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	No
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes



Data Providers
Dr. Julia Horrocks
Carla Daniel

 Barbados Sea Turtle Project

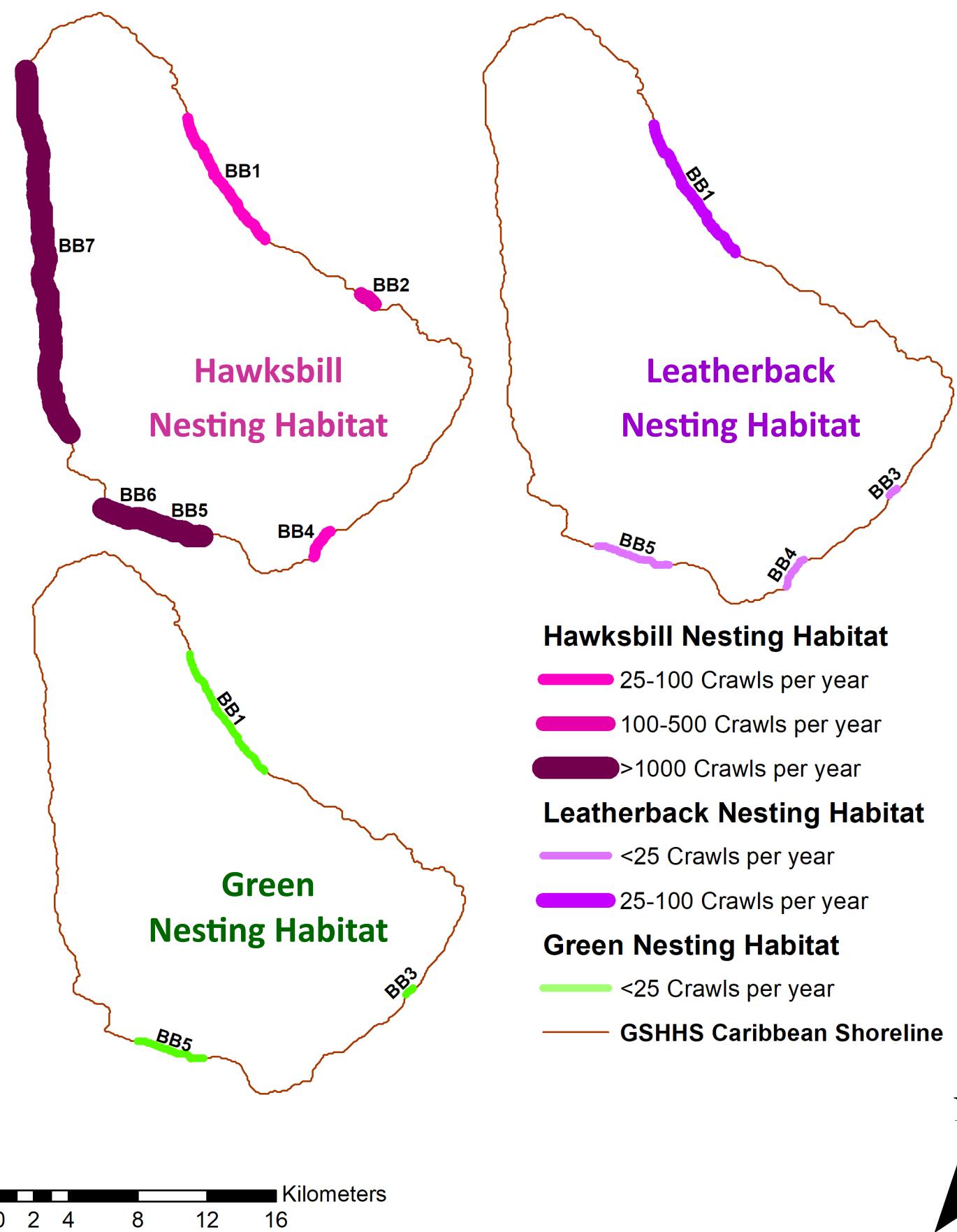


— Sea Turtle Nesting Habitat

— GSHHS Caribbean Shoreline



Barbados Sea Turtle Habitat



Barbados Sea Turtle Habitat

Beach Identification Codes with Beach Names

BB1	East Coast Beaches	BB5	South Coast Beaches
BB2	Bath Beach	BB6	Hilton Beach
BB3	Foul Bay	BB7	West Coast Beaches
BB4	Long Beach		

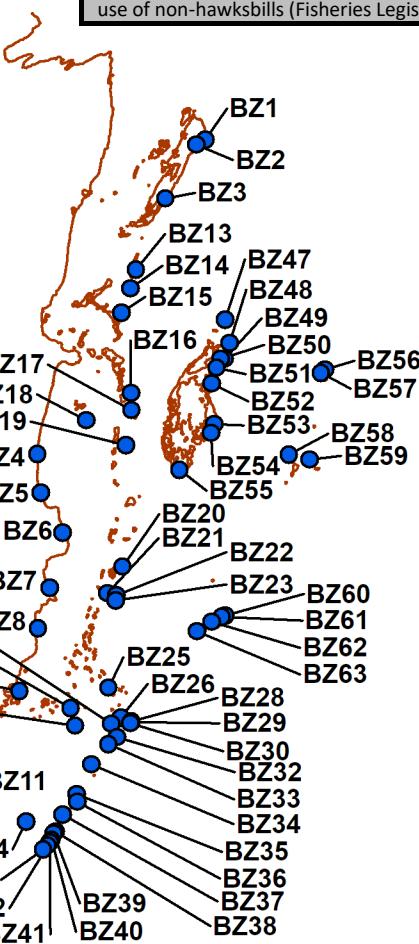
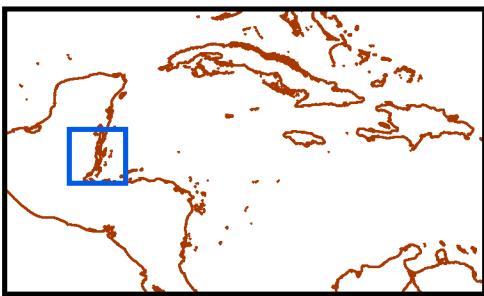
Belize Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	I
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes**
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

* Hawksbills completely protected. ** Exemption options for traditional or cultural use of non-hawksbills (Fisheries Legislation Chapter 210: Section 13)



Data Providers
Linda Searle ECOMAR
BELIZE FISHERIES DEPARTMENT
HOL CHAN MARINE RESERVE
BELIZE AUDUBON SOCIETY
AMBERGRIS CAYE, BELIZE
SALES POINT WILDLIFE SANCTUARY
TIDE
UB
ERI

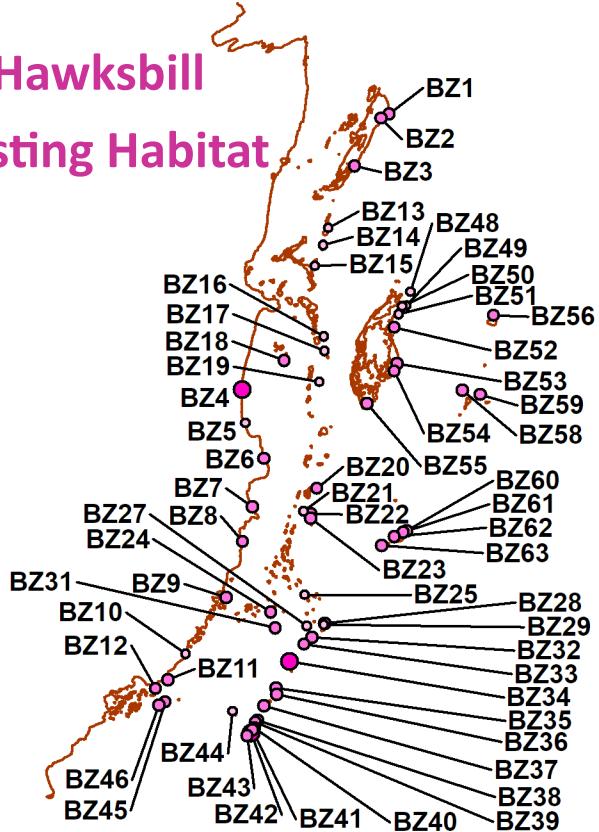
0 15 30 60 90 120 Kilometers

— GSHHS Caribbean Shoreline

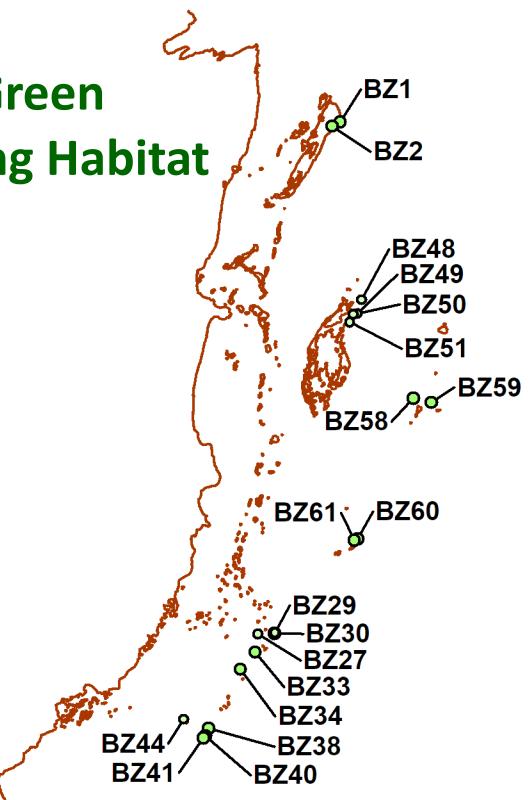


Belize Sea Turtle Habitat

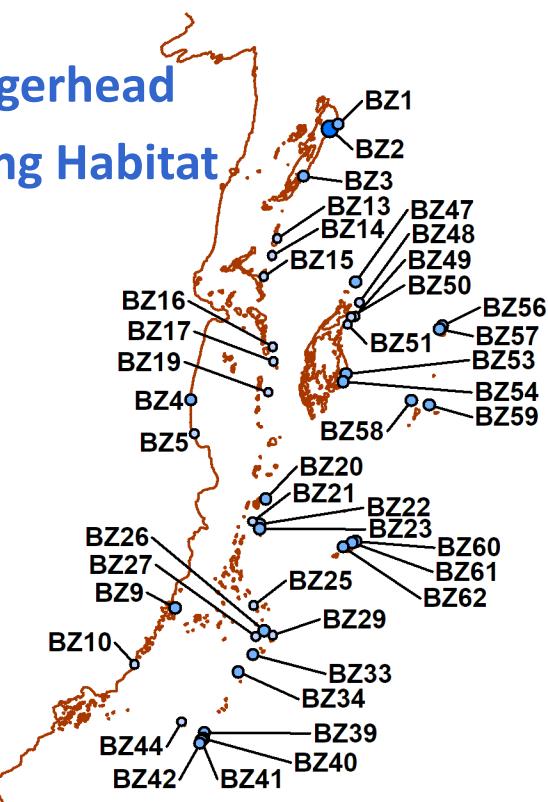
Hawksbill Nesting Habitat



Green Nesting Habitat



Loggerhead Nesting Habitat



Hawksbill Nesting Habitat

- X Crawls per year
- ● <25 Crawls per year
- ■ 25-100 Crawls per year

Green Nesting Habitat

- X Crawls per year
- ■ <25 Crawls per year

Loggerhead Nesting Habitat

- X Crawls per year
- ● <25 Crawls per year
- ■ 25-100 Crawls per year

— GSHHS Caribbean Shoreline

0 20 40 80 120 160 Kilometers



Belize Sea Turtle Habitat

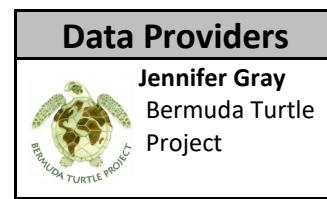
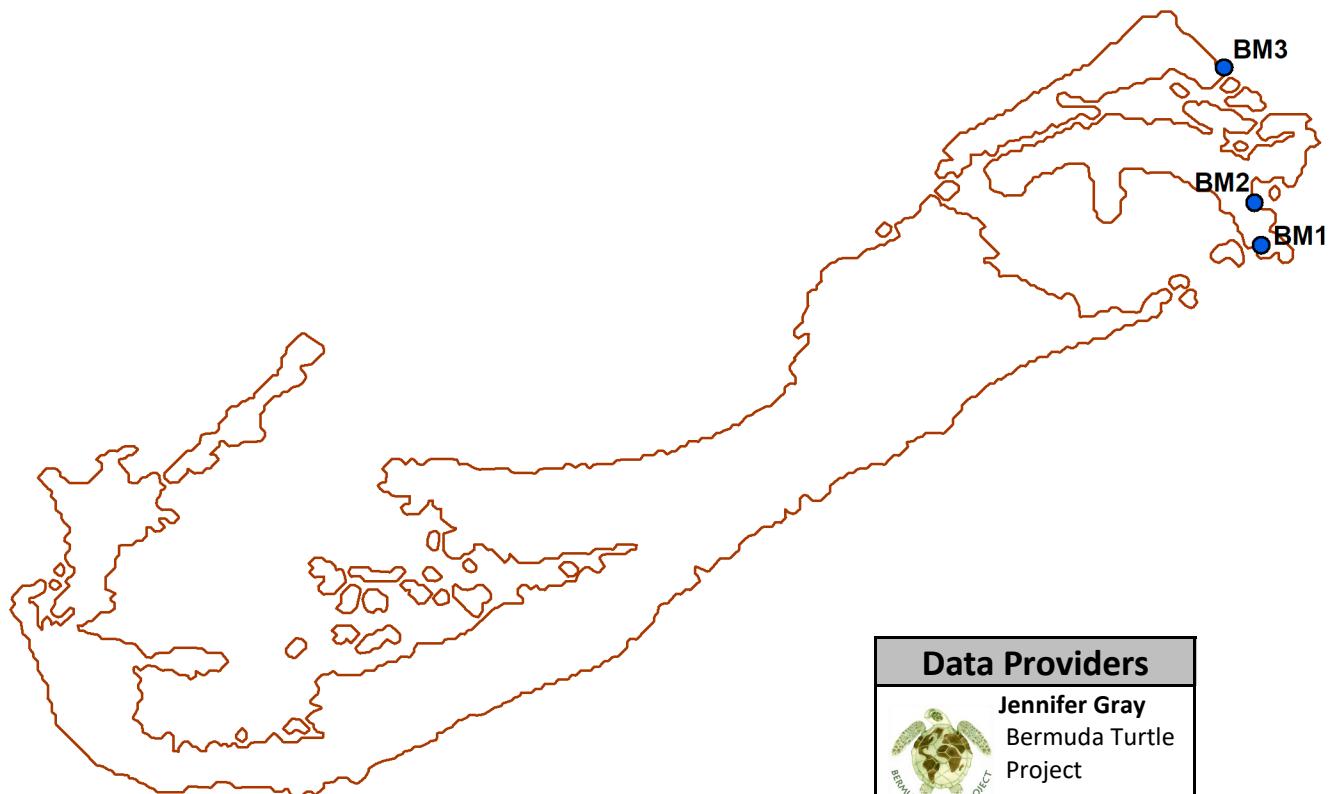
Beach Identification Codes with Beach Names			
BZ1	Rocky Point - BCMR	BZ33	Pompion Caye
BZ2	Robles Point - BCMR	BZ34	Ranguna Caye
BZ3	Ambergris Caye	BZ35	North Spot
BZ4	Manatee Bar/Gales Point	BZ36	Red Rock Sandbore
BZ5	Mullin's River	BZ37	Tom Owens Caye—SCMR
BZ6	North Stann Creek	BZ38	Northeast Caye - SCMR
BZ7	Hopkins	BZ39	Franks Caye - SCMR
BZ8	South Stann Creek	BZ40	Nicholas Caye - SCMR
BZ9	Rum Point (Placencia Peninsula Central)	BZ41	Hunting Caye- SCMR
BZ10	Monkey River - PHMR	BZ42	Lime Caye - SCMR
BZ11	Punta Negra—PHMR	BZ43	Ragged Caye - SCMR
BZ12	Punta Ycacos—PHMR	BZ44	Seal Caye - SCMR
BZ13	Caye Caulker	BZ45	Middle Snake Caye - PHMR
BZ14	Caye Chapel	BZ46	West Snake Caye - PHMR
BZ15	Long Caye—Belize District	BZ47	Mauger Caye - TAMR
BZ16	Sergeant's Caye	BZ48	Three Corner Caye - TAMR
BZ17	Goff's Caye	BZ49	Cockroach Caye - TAMR
BZ18	Holme's Caye (Robinson Point)	BZ50	Cockroach Caye Bogue - TAMR
BZ19	Rendezvous Caye—Belize District	BZ51	Grassy Cayes - TAMR
BZ20	Tobacco Caye - SWCMR	BZ52	Blackbird Caye North - TAMR
BZ21	Twin Cayes - SWCMR	BZ53	Blackbird Caye South - TAMR
BZ22	South Water Caye - SWCMR	BZ54	Calabash Caye -TAMR
BZ23	Carrie Bow Caye - SWCMR	BZ55	Caye Bokel - TAMR
BZ24	Long Coco Caye	BZ56	Sandbore Caye
BZ25	Rendezvouse Caye—Gladden	BZ57	Northern Two Cayes
BZ26	Hatchet Caye	BZ58	Long Caye—Lighthouse
BZ27	Little Water Caye	BZ59	Half Moon Caye - HMCNM
BZ28	North Silk Caye - GSSCMR	BZ60	Northeast Caye - GRMR
BZ29	Middle Silk Caye - GSSCMR	BZ61	Long Caye - GRMR
BZ30	South Silk Caye - GSSCMR	BZ62	Middle Caye - GRMR
BZ31	Laughing Bird Caye - LBCMR	BZ63	Southwest Caye - GRMR
BZ32	Round Caye		

Bermuda Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IN, IF
Green Turtle (<i>Chelonia mydas</i>)	IN, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	IF
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	I
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	No
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes



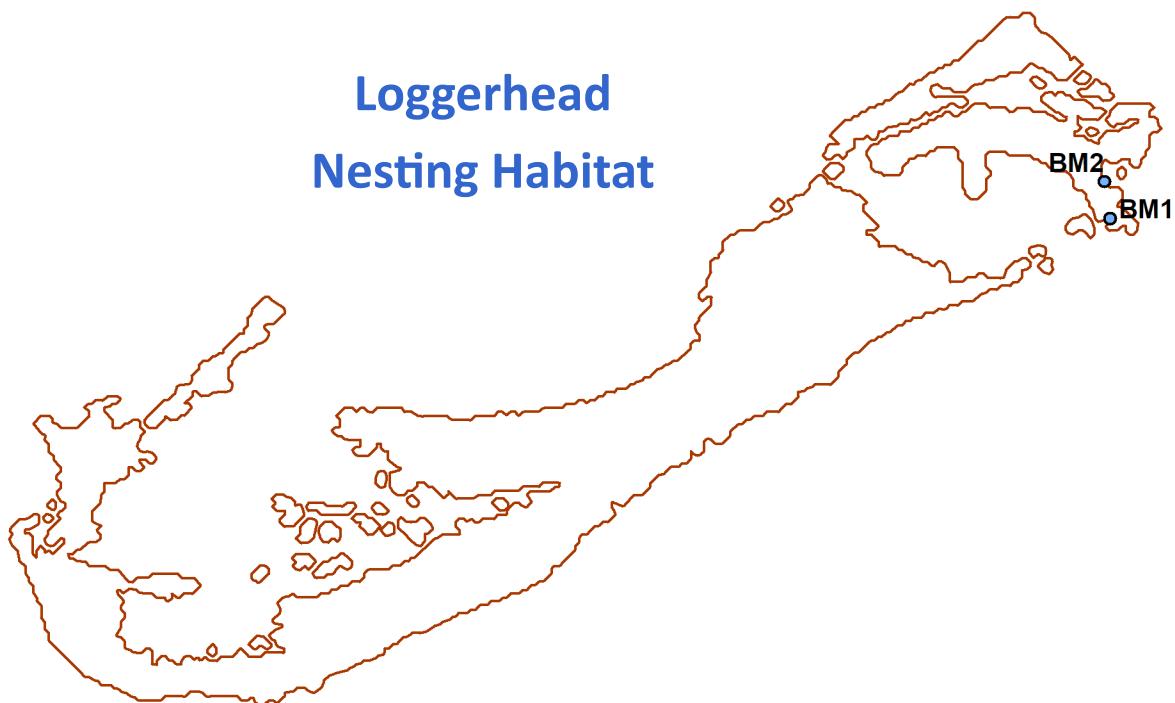
0 1 2 4 6 8 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Shoreline



Bermuda Sea Turtle Habitat

Loggerhead
Nesting Habitat



Green
Nesting Habitat



Loggerhead Nesting Habitat Green Nesting Habitat

● <25 Crawls per year

○ <25 Crawls per year

Kilometers

0 1 2 4 6 8

GSHHS Shoreline



Bermuda Sea Turtle Habitat

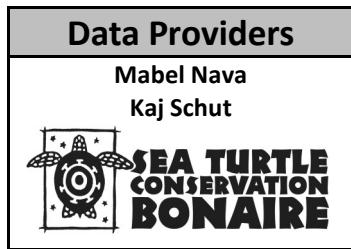
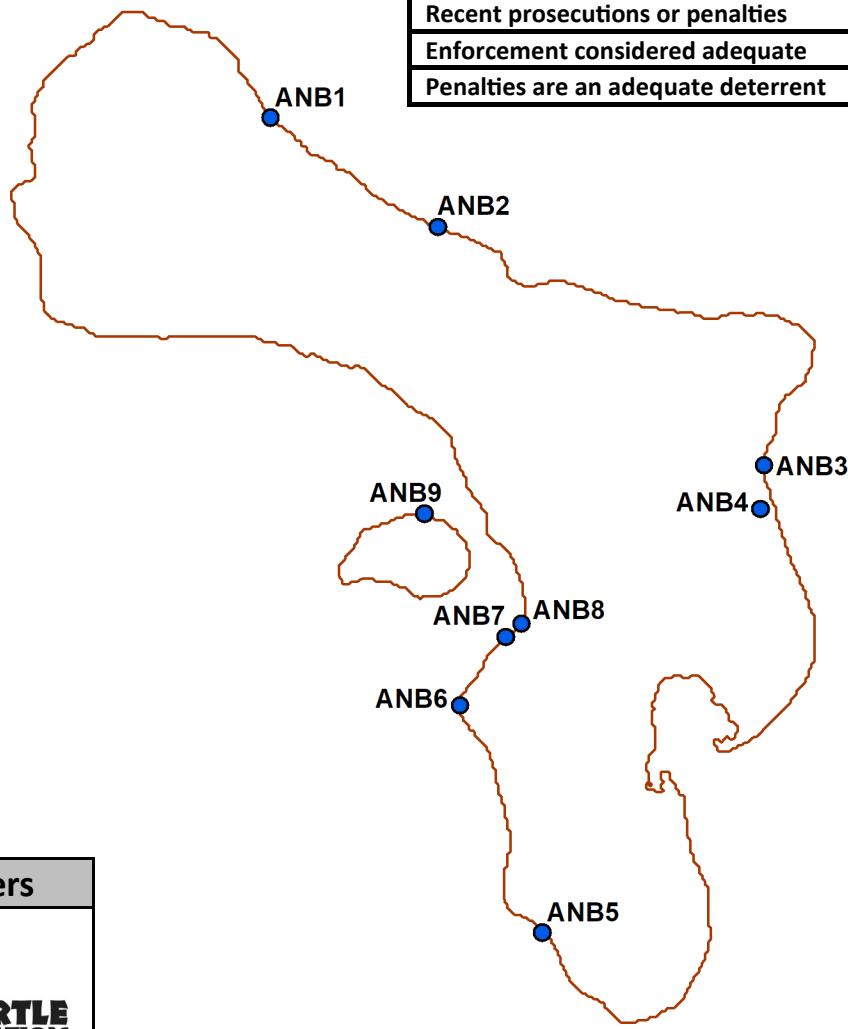
Beach Identification Codes with Beach Names			
BM1	Well Bay	BM3	Buildings Bay
BM2	Clearwater Beach		

Bonaire Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	IN
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

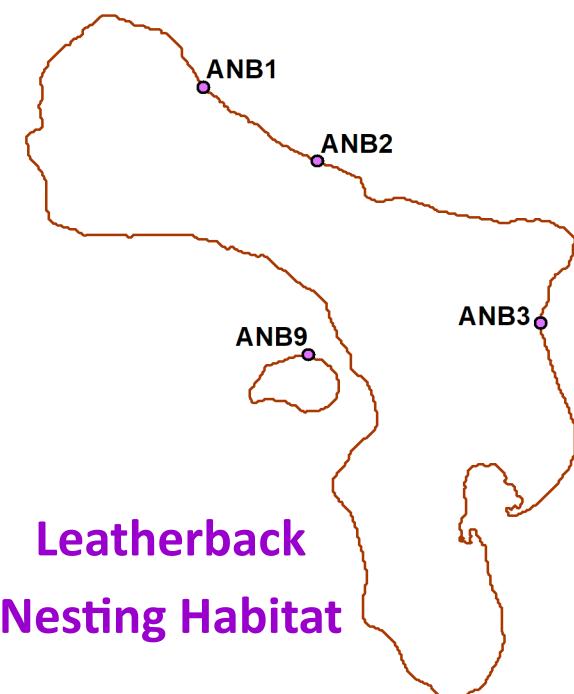
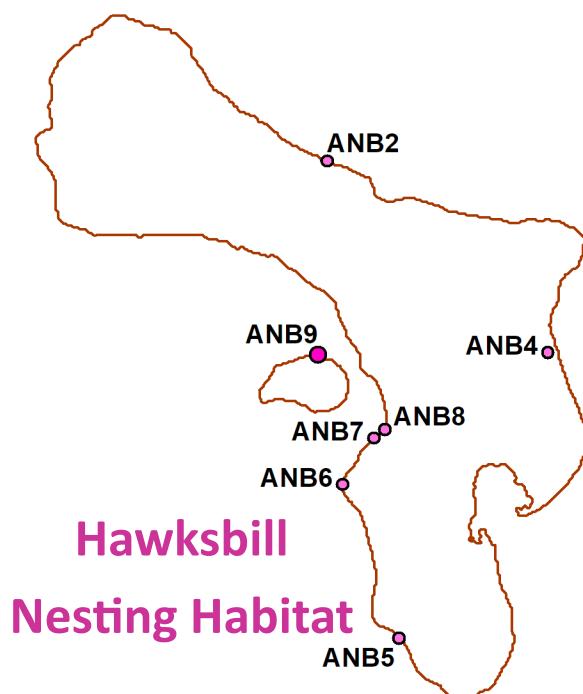


0 1.5 3 6 9 12 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Bonaire Sea Turtle Habitat

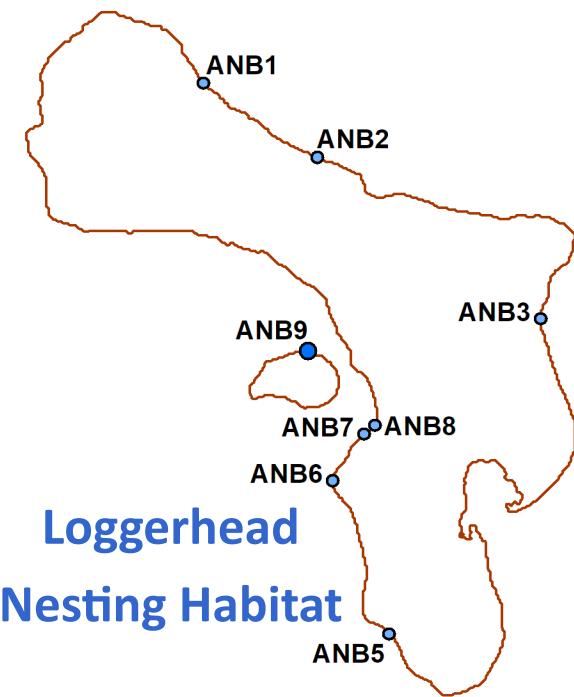


Hawksbill Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Leatherback Nesting Habitat

- <25 Crawls per year



Green Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Loggerhead Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

0 2.5 5 10 15 20 Kilometers

GSHHS Caribbean Shoreline



Bonaire Sea Turtle Habitat

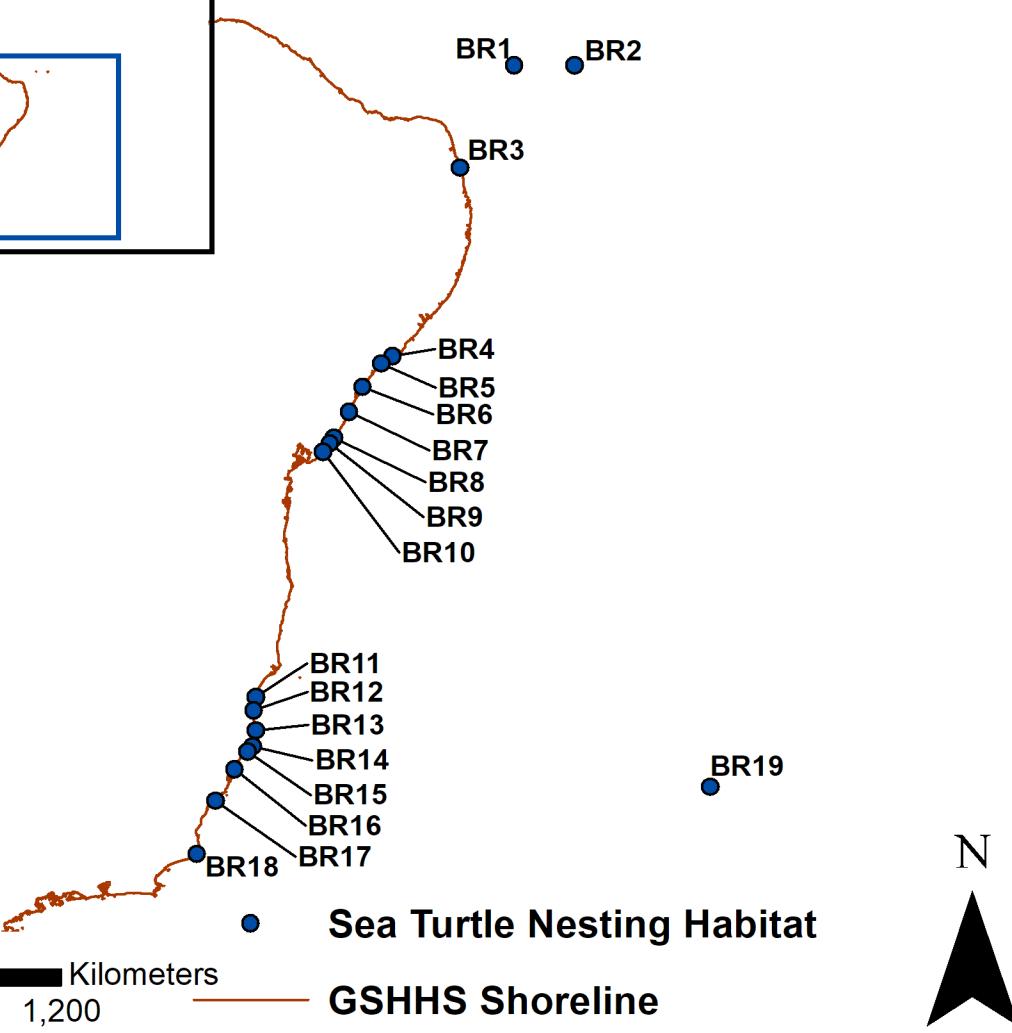
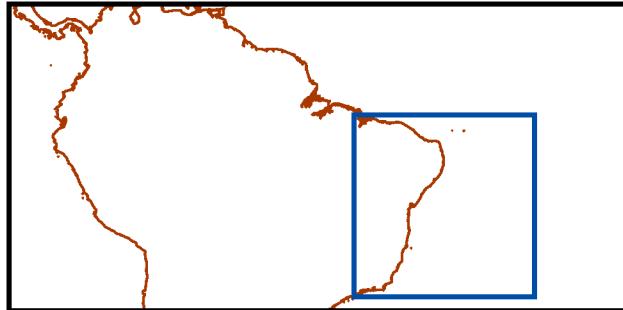
Beach Identification Codes with Beach Names			
ANB1	Playa Chikitu	ANB6	Light House Beach Resort
ANB2	Boca Onima	ANB7	Donkey Beach
ANB3	Lagun	ANB8	Te Amo
ANB4	Washikemba	ANB9	No Name Beach (Klein Bonaire)
ANB5	Southern Beaches		

Brazil Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	N, F

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

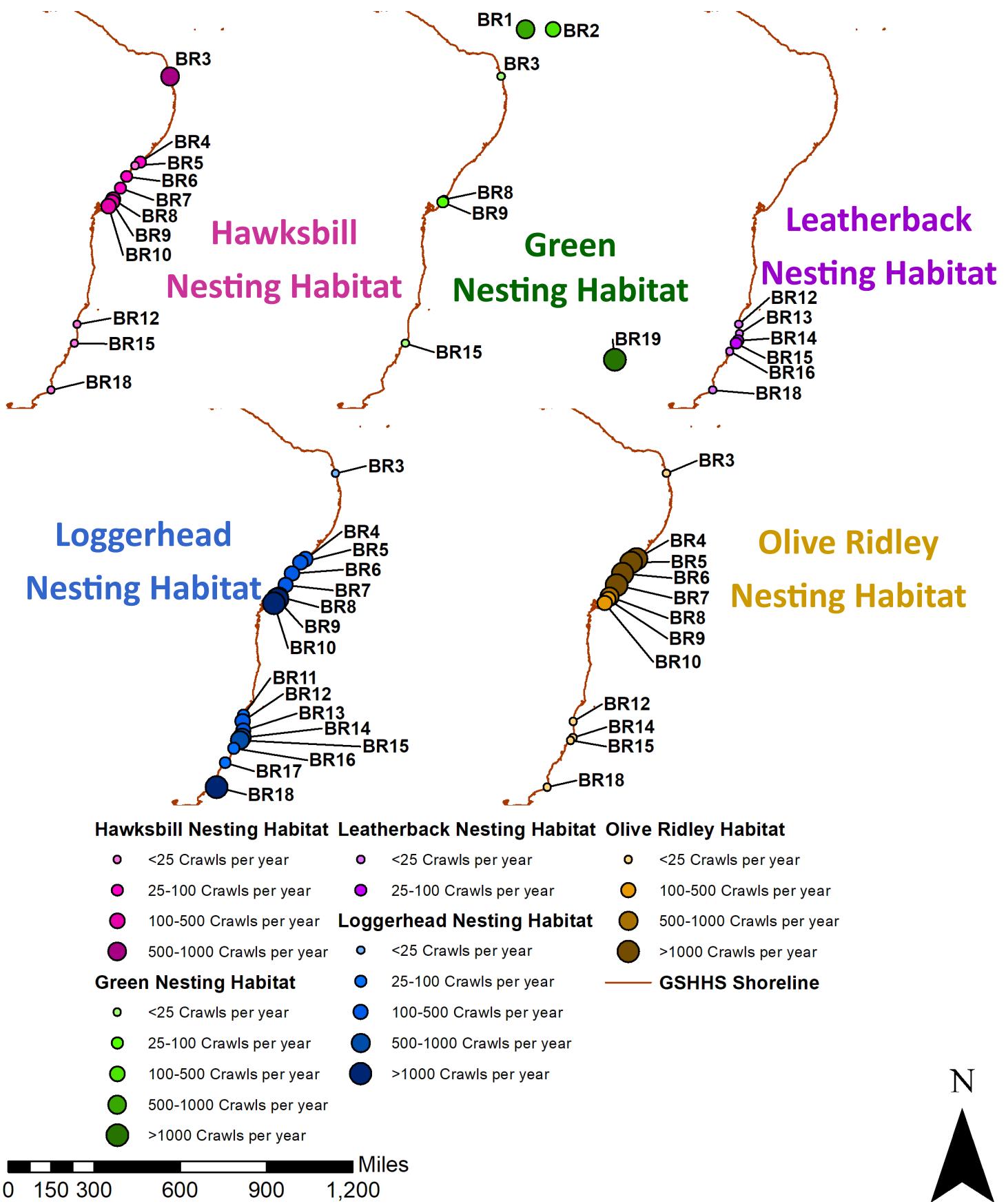
National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



0 150 300 600 900 1,200 Kilometers

GSHHS Shoreline

Brazil Sea Turtle Habitat



Brazil Sea Turtle Habitat

Beach Identification Codes with Beach Names			
BR1	Atol das Rocas	BR11	Itaúnas
BR2	Fernando de Noronha	BR12	Guriri
BR3	Pipa	BR13	Pontal do Ipiranga
BR4	Ponta dos Mangues	BR14	Povoação
BR5	Pirambu	BR15	Comboios
BR6	Abais	BR16	Vitória
BR7	Sítio do Conde	BR17	Anchieta
BR8	Sauípe	BR18	Bacia de Campos
BR9	Praia do Forte	BR19	Ilha da Trindade
BR10	Arembepe		

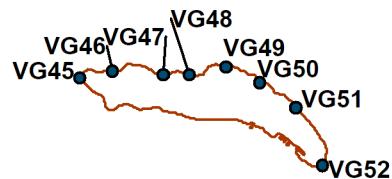
British Virgin Islands Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

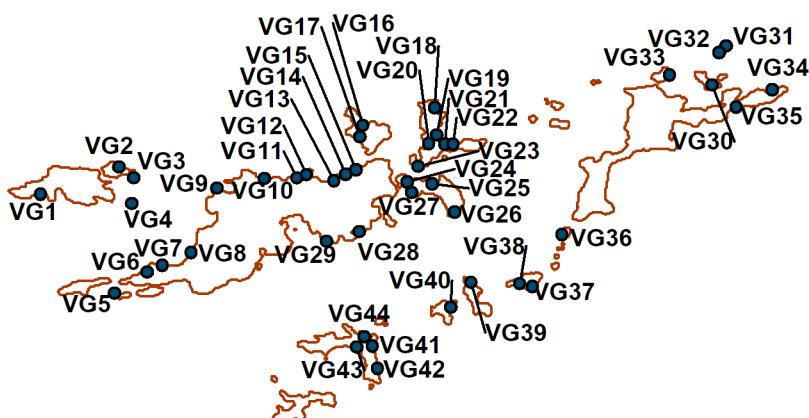
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No
Moratorium (fixed period)	Yes (LB,LG)
Prohibition(s) on take	E, LB, LG
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	No
Annual quota	No
Permits/licenses required	No*
Gear restrictions	Yes**
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

* License is required for fishing, but not for sea turtles specifically. ** Turtles cannot be caught using SCUBA.



Data Providers	
Mervin Hastings	Ministry of Natural Resources, Labor, and Immigration
Shannon Gore	Association of Reef Keepers
Department of Environment, Food & Rural Affairs	
Foreign & Commonwealth Office	

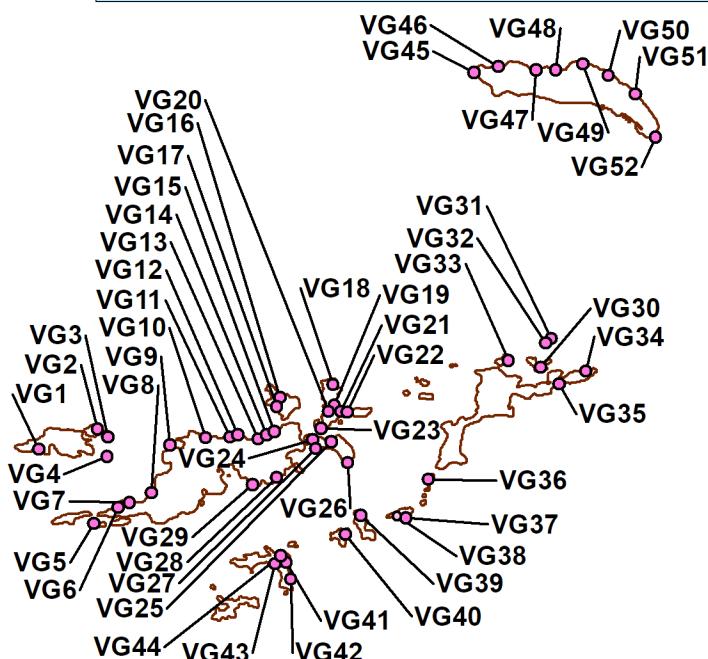


0 3 6 12 18 24 Kilometers

• Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



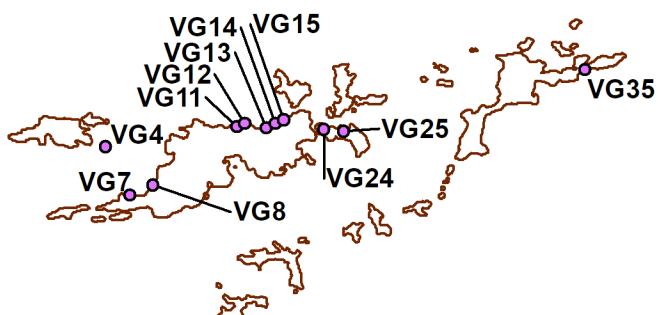
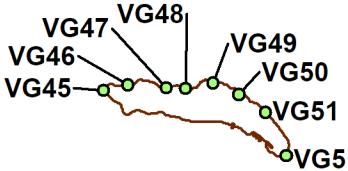
British Virgin Islands Sea Turtle Habitat



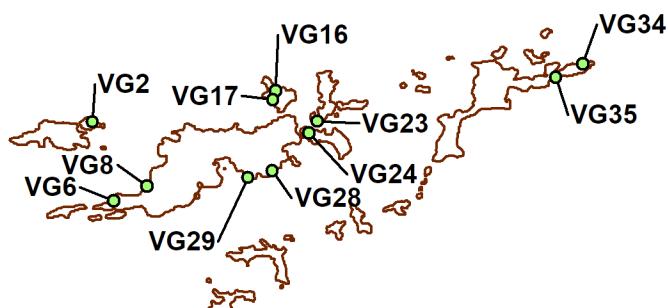
Hawksbill
Nesting Habitat



Leatherback
Nesting Habitat



Green
Nesting Habitat



Hawksbill Nesting Habitat Leatherback Nesting Habitat Green Nesting Habitat

- X Crawls per year
- <25 Crawls per year

- <25 Crawls per year

- <25 Crawls per year

— GSHHS Caribbean Shoreline

0 5 10 20 30 40 Kilometers



British Virgin Islands Sea Turtle Habitat

Beach Identification Codes with Beach Names			
VG1	White Bay – Jost Van Dyke	VG27	Well Bay – Beef Island
VG2	Crawl Beach – Little Jost Van Dyke	VG28	Halfmoon Bay – Tortola
VG3	Sandy Spit Beach – Sandy Spit	VG29	Sophie Bay – Tortola
VG4	Sandy Cay Beach – Sandy Cay	VG30	East Bay – Prickly Pear
VG5	Northwest Coast - Little Thatch Island	VG31	North Beach – Necker Island
VG6	Smuggler's Cove – Tortola	VG32	West Beach – Necker Island
VG7	Long Bay – Belmont – Tortola	VG33	North East Beach – Moskito
VG8	Capoon's Bay – Tortola	VG34	Oil Nut Bay – Virgin Gorda
VG9	Brewer's Bay – Tortola	VG35	Bercher's Bay – Virgin Gorda
VG10	Larmer's Bay – Tortola	VG36	North Lee Bay – Fallen Jerusalem
VG11	Trunk Bay – Tortola	VG37	Wedego Bay – Ginger Island
VG12	Rogues Bay – Tortola	VG38	South Bay – Ginger Island
VG13	Josiah's Bay – Tortola	VG39	Coral Bay – Cooper Island
VG14	Lambert Beach - Tortola	VG40	Sound Beach – Salt Island
VG15	Little Bay – Tortola	VG41	Big Reef Bay – Peter Island
VG16	North Beach – Guana Island	VG42	Little Reef Bay – Peter Island
VG17	White Bay Beach – Guana Island	VG43	White Bay – Peter Island
VG18	North Bay – Great Camanoe	VG44	Deadman's Bay – Peter Island
VG19	Cam Bay – Great Camanoe	VG45	West End - Anegada
VG20	Lee Bay – Great Camanoe	VG46	Walkover Set Bay (Cow Wreck) - Anegada
VG21	West End Beaches – Scrub Island	VG47	Bones Bight
VG22	North Bay – Scrub Island	VG48	Windless Bight
VG23	East End/South Bay – Little Camanoe	VG49	Soldier Point
VG24	Long Bay – Beef Island	VG50	Loblolly Bay — Anegada
VG25	Trellis Bay – Beef Island	VG51	Cooper Bay
VG26	Bluff Bay – Beef Island	VG52	East Point – Anegada

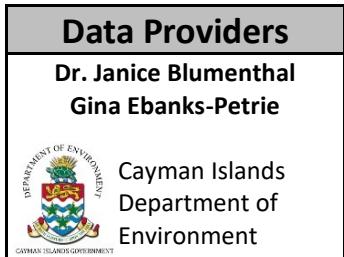
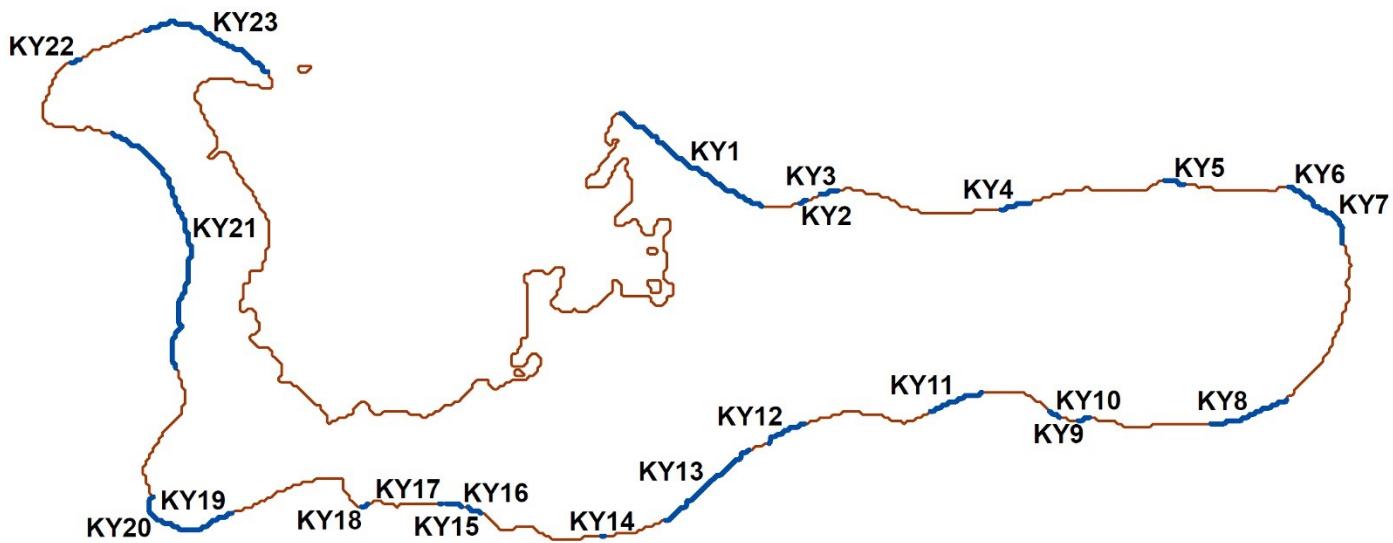
Cayman Islands Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	A
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	IN, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	E, N, NF
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	Yes
Annual quota	Yes
Permits/licenses required	Yes
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes

* Licenses are available for *bona fide* turtle fishers (none granted since 2008)



Kilometers
0 1 2 4 6 8

— Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



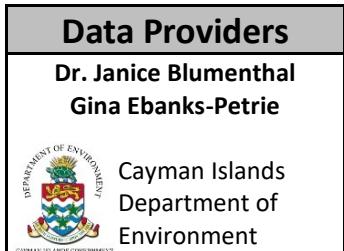
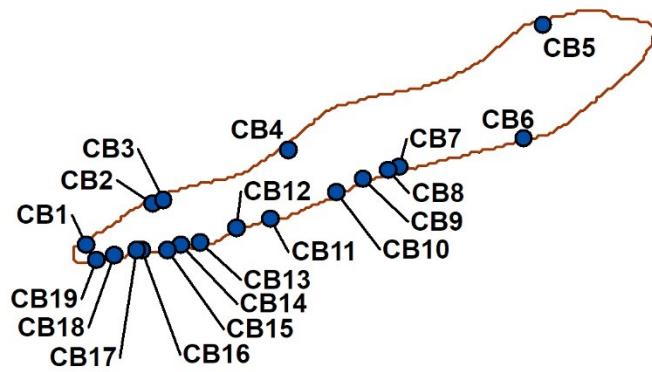
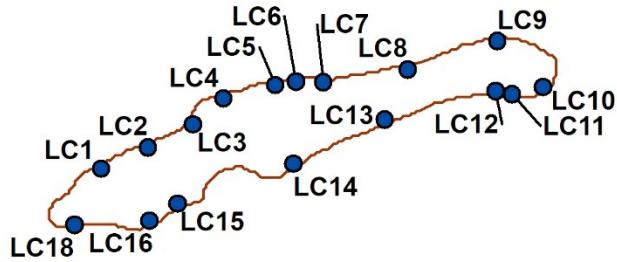
Cayman Islands Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	A
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	IN, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	E, N, NF
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	Yes
Annual quota	Yes
Permits/licenses required	Yes
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes

* Licenses are available for *bona fide* turtle fishers (none granted since 2008)

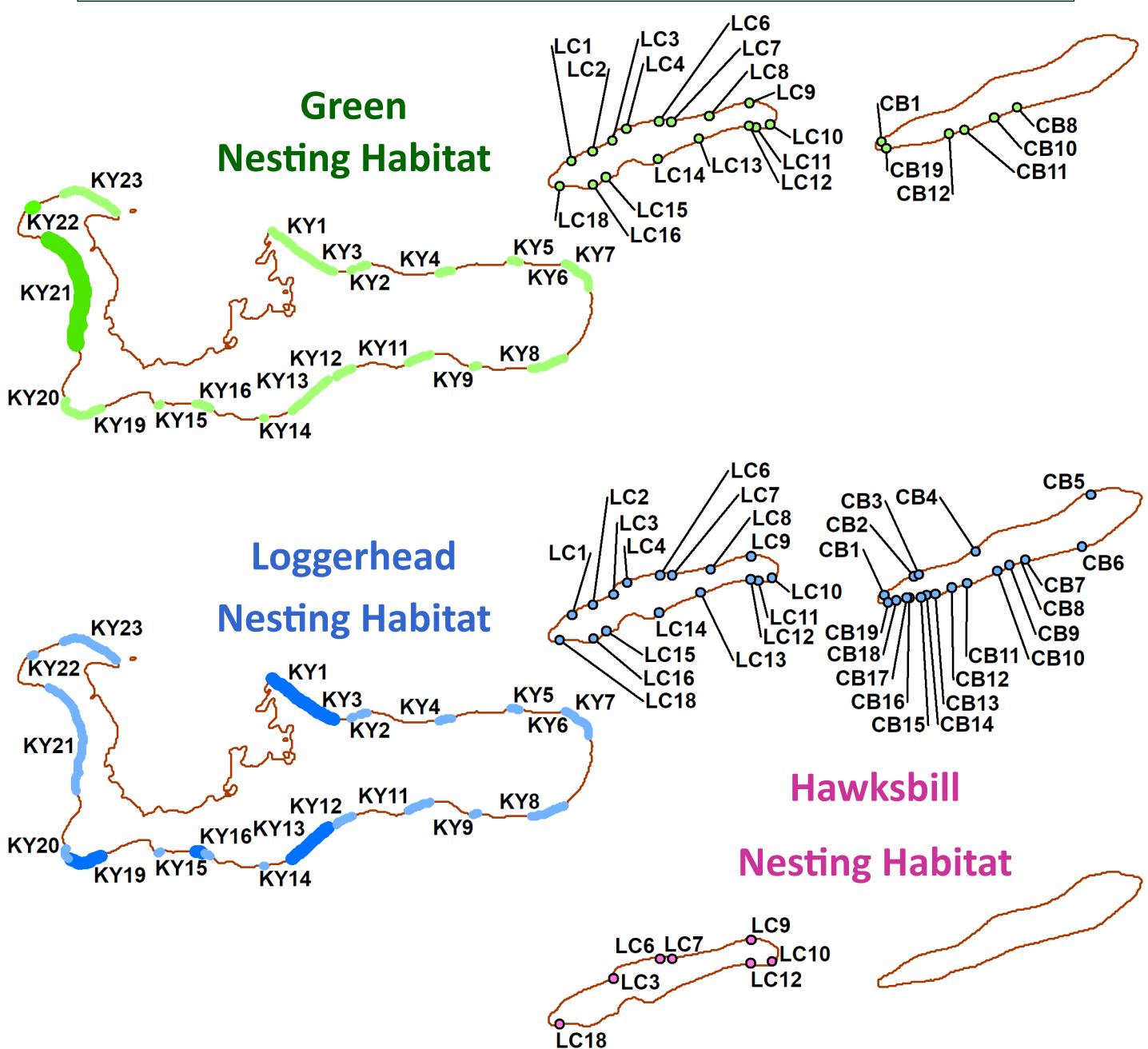


0 1 2 4 6 8 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Cayman Islands Sea Turtle Habitat



Green Nesting Habitat

<25 Crawls per year

25-100 Crawls per year

100-500 Crawls per year

○ <25 Crawls per year

Loggerhead Nesting Habitat

<25 Crawls per year

25-100 Crawls per year

○ <25 Crawls per year

Hawksbill Nesting Habitat

○ <25 Crawls per year

— Cayman Islands Shoreline

0 2.5 5 10 15 20 Kilometers

NOTE: Distance between
islands not to scale



Cayman Islands Sea Turtle Habitat

Beach Identification Codes with Beach Names - Grand Cayman			
KY1	Rum Point	KY13	Bodden Town
KY2	Miller's Beach	KY14	Beach Bay
KY3	Chrisholm Road	KY15	Bat Cave Beach
KY4	Little Spotts	KY16	Spotts Beach
KY5	Barefoot Gardens	KY17	Spots Dock
KY6	Spotters Way	KY18	Prospect Point
KY7	Morrits Tortuga	KY19	South Sound
KY8	East End	KY20	SS808
KY9	Half Moon Bay	KY21	Seven Mile Beach
KY10	Cottage	KY22	Sand Hole Road
KY11	Frank Sound	KY23	Barkers
KY12	Pease Bay		

Beach Identification Codes with Beach Names - Little Cayman			
LC1	(Unnamed)	LC10	(Unnamed)
LC2	(Unnamed)	LC11	(Unnamed)
LC3	(Unnamed)	LC12	(Unnamed)
LC4	(Unnamed)	LC13	(Unnamed)
LC5	(Unnamed)	LC14	(Unnamed)
LC6	(Unnamed)	LC15	(Unnamed)
LC7	(Unnamed)	LC16	(Unnamed)
LC8	(Unnamed)	LC18	(Unnamed)
LC9	(Unnamed)		

Beach Identification Codes with Beach Names - Cayman Brac			
CB1	(Unnamed)	CB11	(Unnamed)
CB2	(Unnamed)	CB12	(Unnamed)
CB3	(Unnamed)	CB13	(Unnamed)
CB4	(Unnamed)	CB14	(Unnamed)
CB5	(Unnamed)	CB15	(Unnamed)
CB6	(Unnamed)	CB16	(Unnamed)
CB7	(Unnamed)	CB17	(Unnamed)
CB8	(Unnamed)	CB18	(Unnamed)
CB9	(Unnamed)	CB19	(Unnamed)
CB10	(Unnamed)		

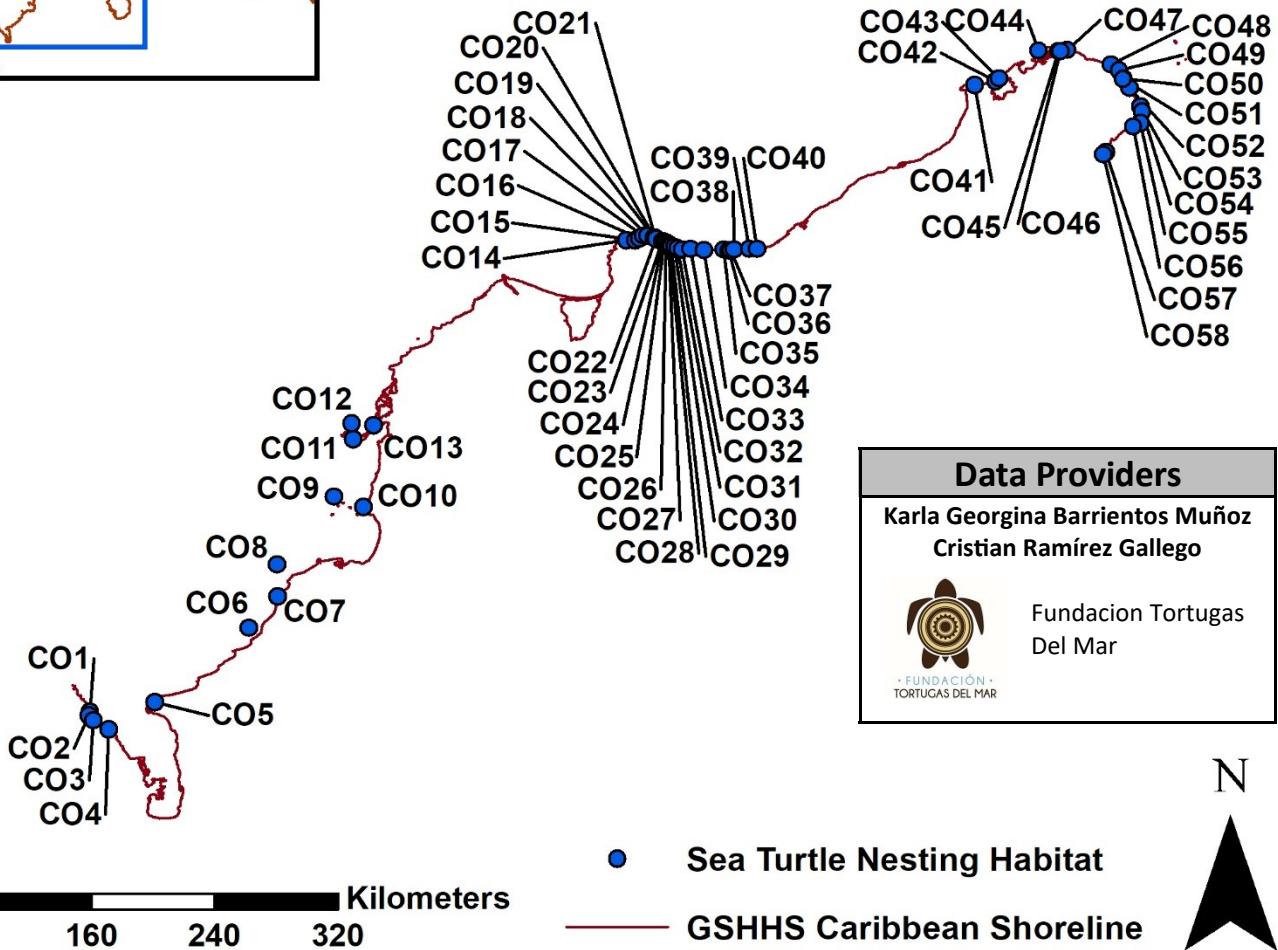
Colombia Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

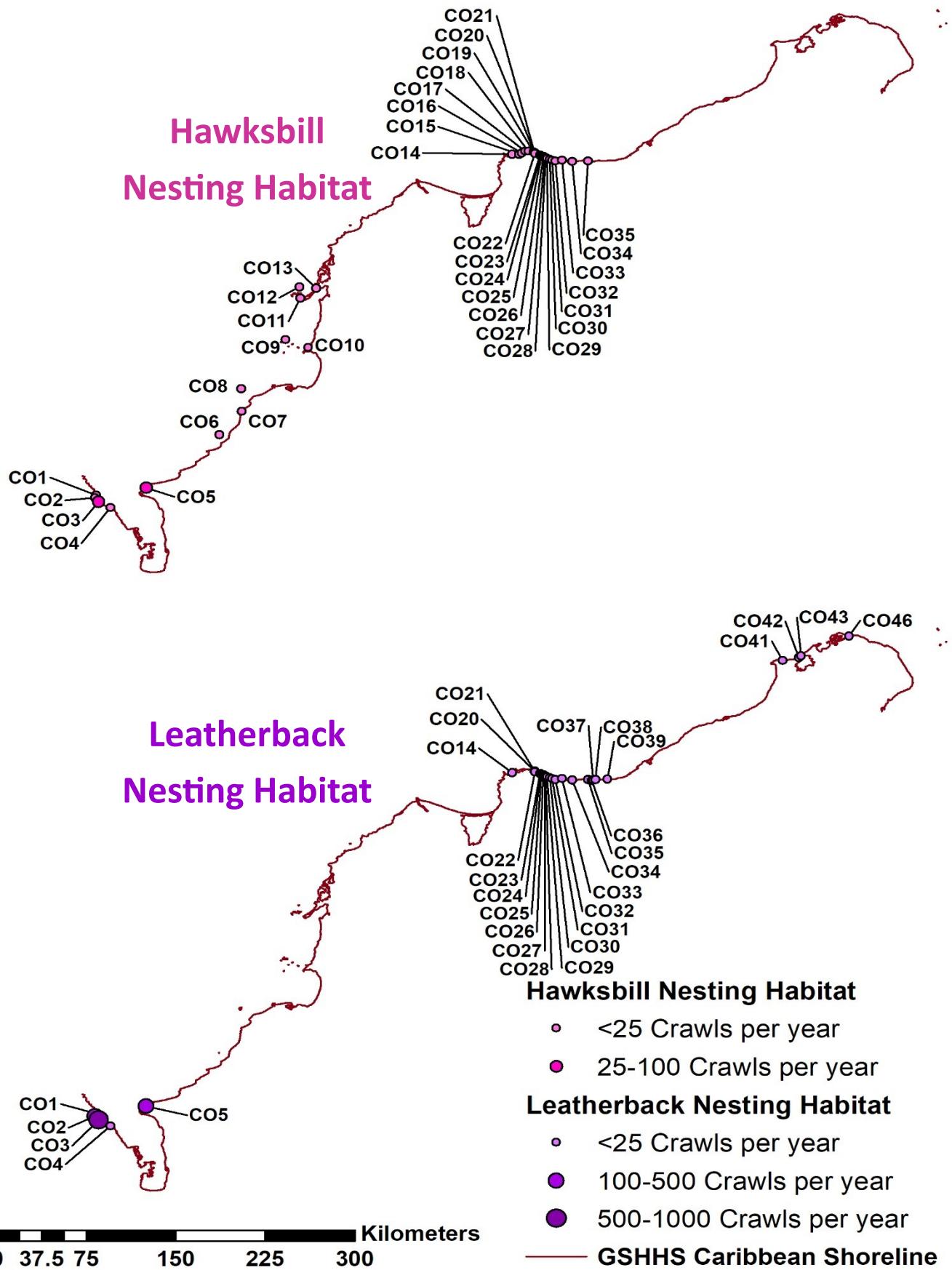
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	Yes**
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

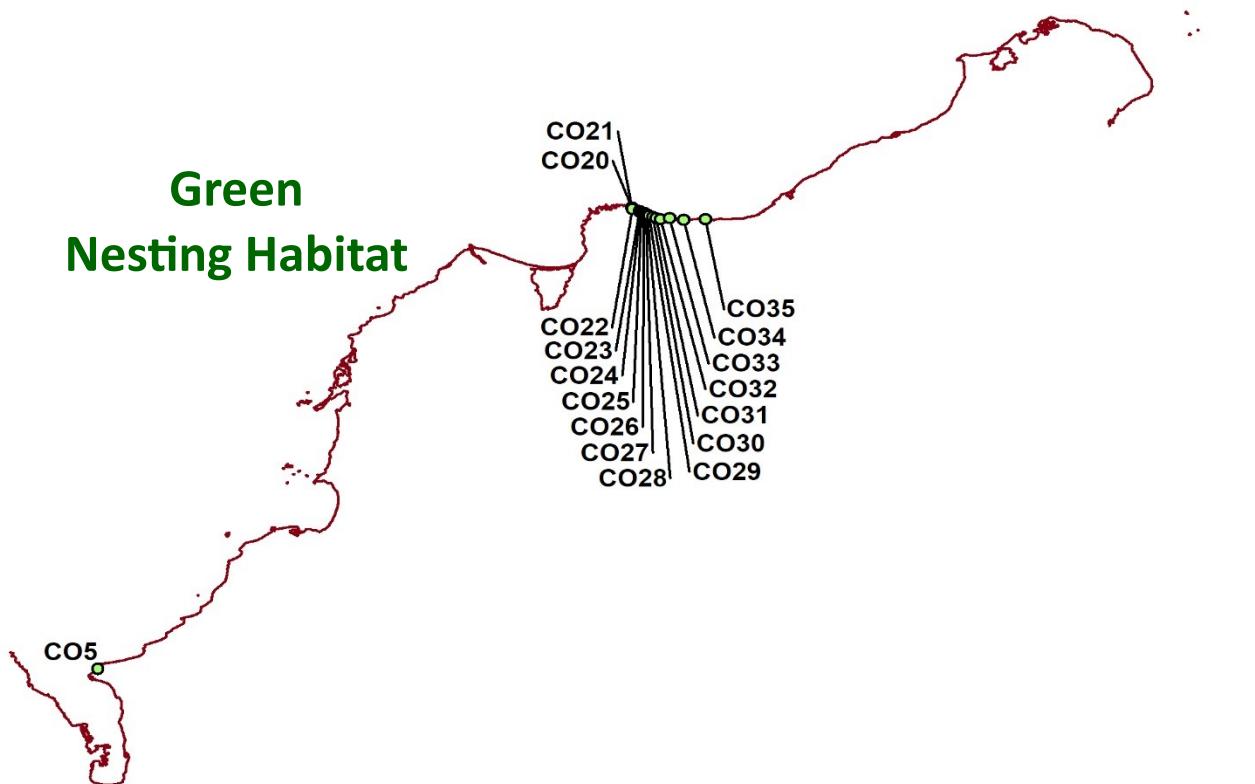
* Ley 599 (2000) art. 328 protects all sea turtles. ** Ley de Pesca 13 (1990) allows unrestricted "subsistence" fishing "undertaken without intent to profit and for providing food for the fisher and his family".



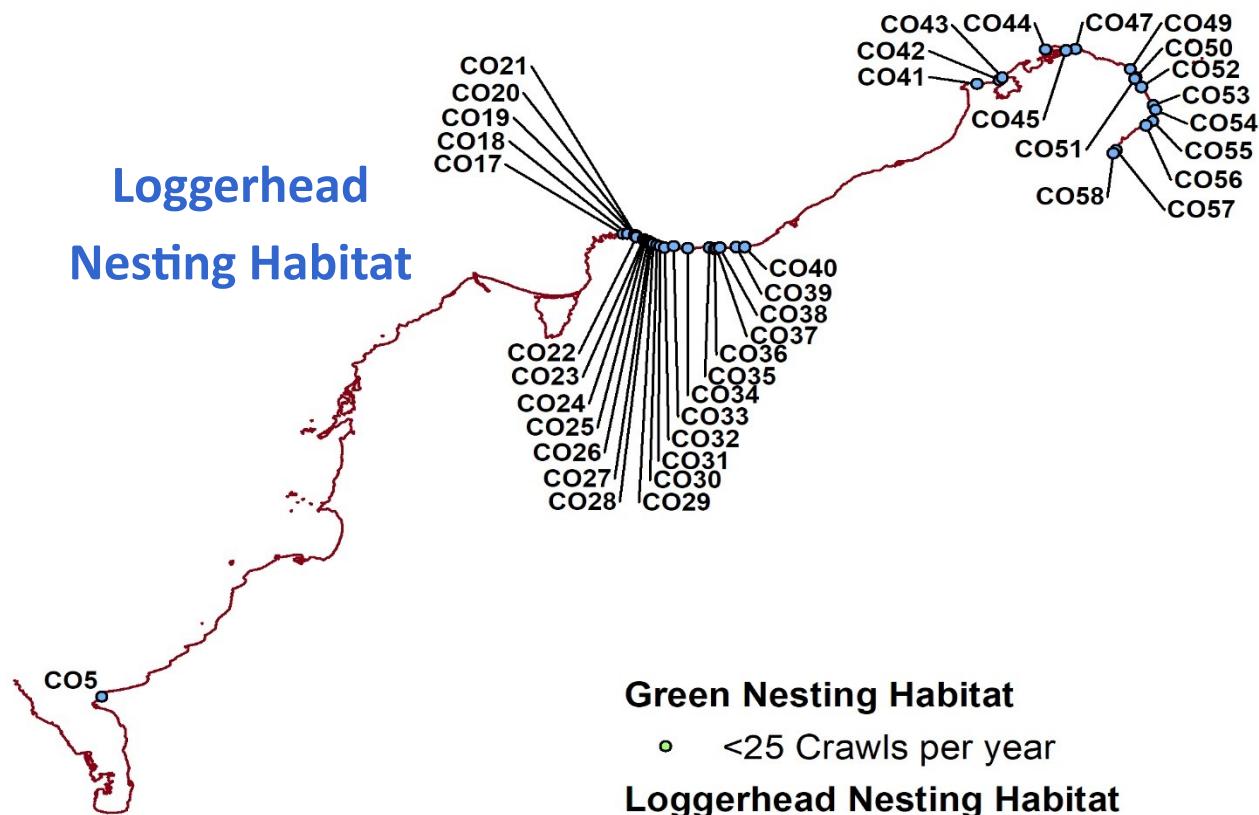
Colombia Sea Turtle Habitat



Colombia Sea Turtle Habitat



Loggerhead
Nesting Habitat



Green Nesting Habitat

- <25 Crawls per year

Loggerhead Nesting Habitat

- <25 Crawls per year

— GSHHS Caribbean Shoreline

0 37.5 75 150 225 300 Kilometers



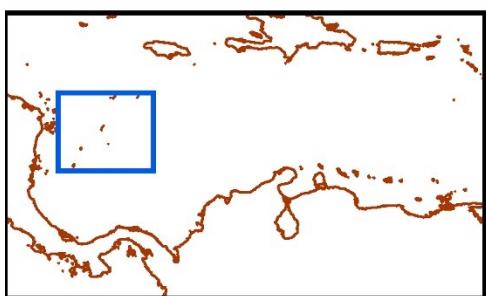
Colombia Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	Yes**
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

* Ley 599 (2000) art. 328 protects all sea turtles. ** Ley de Pesca 13 (1990) allows unrestricted "subsistence" fishing "undertaken without intent to profit and for providing food for the fisher and his family".



CO67

CO66

CO65

CO64

CO63

CO62

CO60

Kilometers

0 30 60 120 180 240

● Sea Turtle Nesting Habitat

— GSHHS Caribbean Shoreline

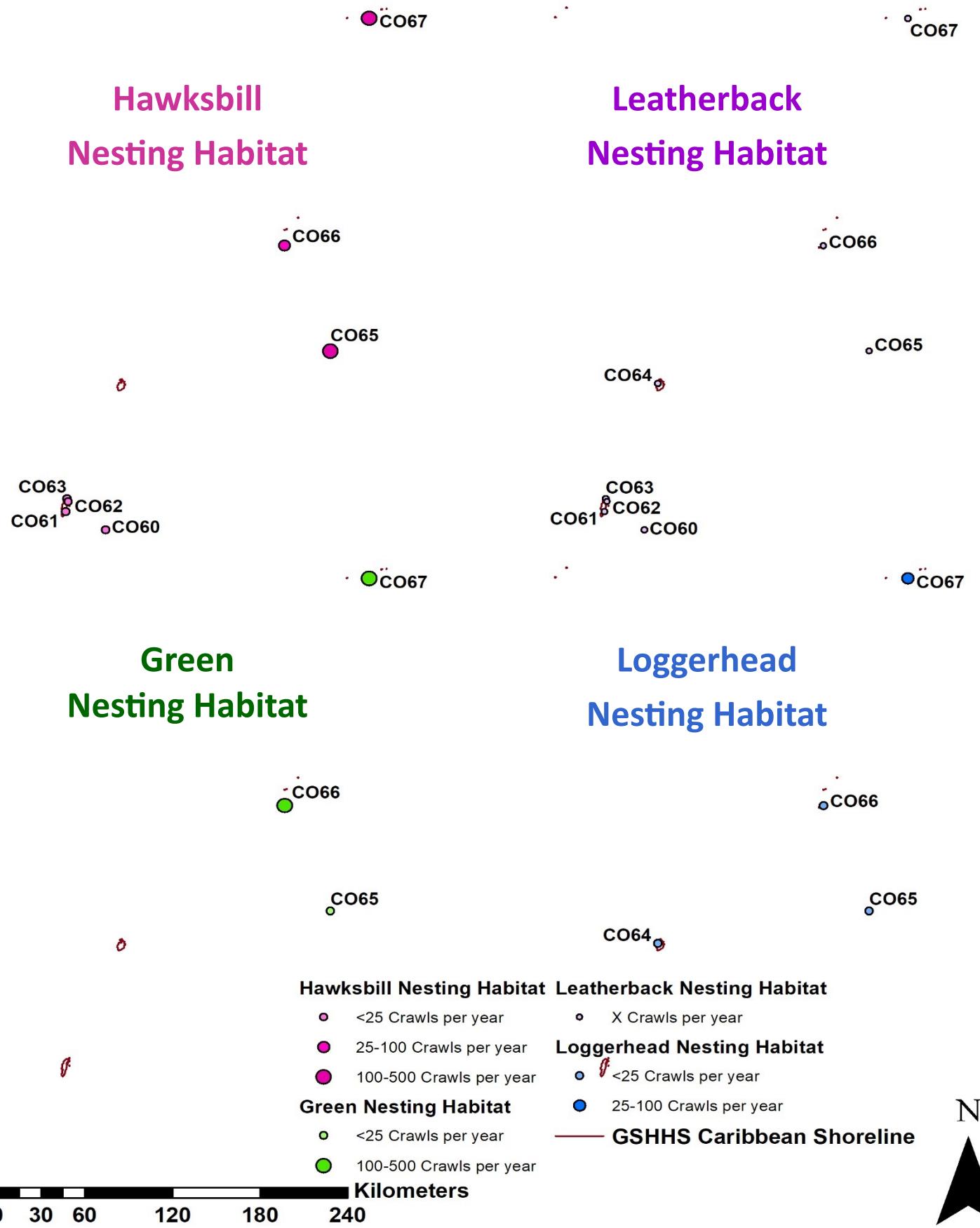
Data Providers
Karla Georgina Barrientos Muñoz Cristian Ramírez Gallego
Fundacion Tortugas Del Mar



Fundacion Tortugas
Del Mar



Colombia Sea Turtle Habitat



Colombia Sea Turtle Habitat

Beach Identification Codes with Beach Names			
CO1	Acandi	CO35	Palomino
CO2	Chilingos	CO36	San Salvador
CO3	La Playona	CO37	Playa Larga
CO4	Goleta	CO38	Rio Ancho
CO5	Playa Bobalito	CO39	Corelca
CO6	Isla Tortuguilla	CO40	Caño Lagarto
CO7	La Playeta, I. Baru	CO41	Boca del Apure
CO8	Isla Fuerte	CO42	Media Lunas
CO9	Isla Tintipan	CO43	Los Cocos
CO10	Balsilla	CO44	Bahia Hondita
CO11	Isla Arena	CO45	Playa Iporoimao
CO12	Isla Tesoro	CO46	Playa Utareo
CO13	Pl. Blanca, I. Baru	CO47	Taroita
CO14	Chengue	CO48	Neimao
CO15	Neguanje	CO49	Puerto Lodo
CO16	Cinto	CO50	Chichibacoa
CO17	Guachaquita	CO51	Maasimay
CO18	Palmarito	CO52	Santa Cruz
CO19	Boca del Saco	CO53	Playa Rocosa
CO20	El Cabo	CO54	Punta Espada
CO21	Arrecifes	CO55	Parajimaru
CO22	Gumarra	CO56	Puerto Ingles
CO23	Piscinita	CO57	Puerto Lopez
CO24	Canaveral	CO58	Punta Castilletes
CO25	Castilletes	CO59	Albuquerque
CO26	Naranjo	CO60	Isla Cayos de Bolívar
CO27	Mata de Platano	CO61	Sound Bay
CO28	Mendihuaca	CO62	Spratt bight
CO29	Guachaca	CO63	Johnny Cay
CO30	Valencia	CO64	Providencia
CO31	Buritaca	CO65	Isla Cayo Roncador
CO32	Don Diego	CO66	Isla Cayos de Serrana
CO33	Quintana	CO67	Isla Cayos de Serranilla
CO34	Los Achotes		

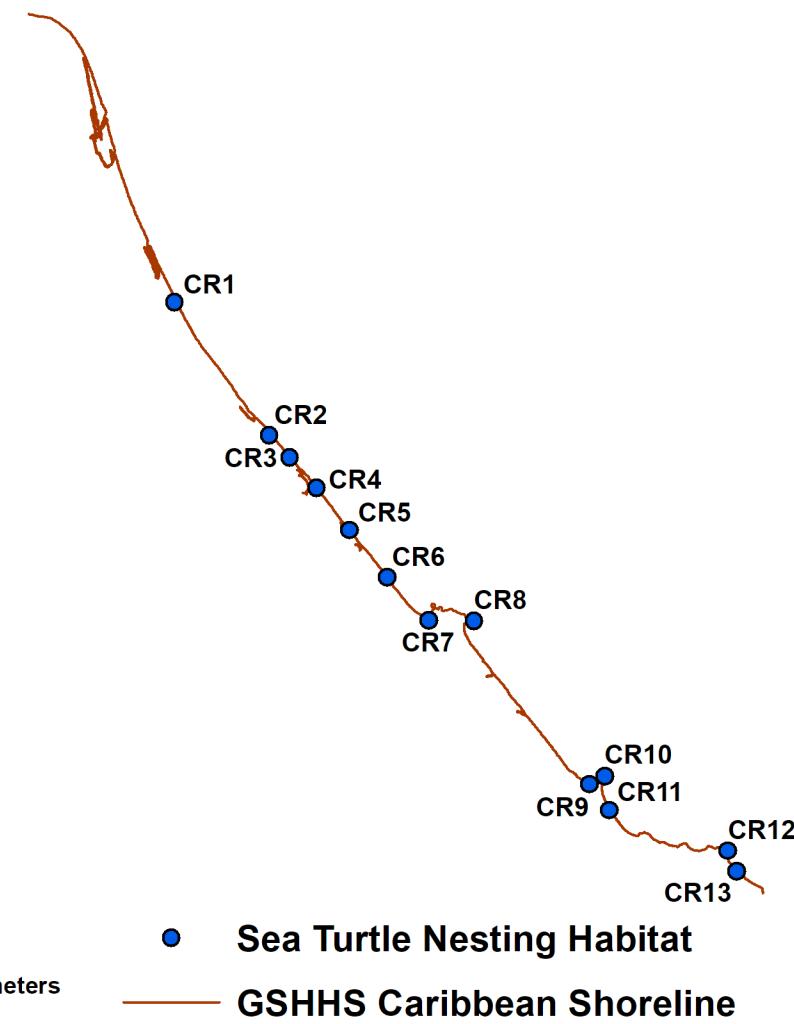
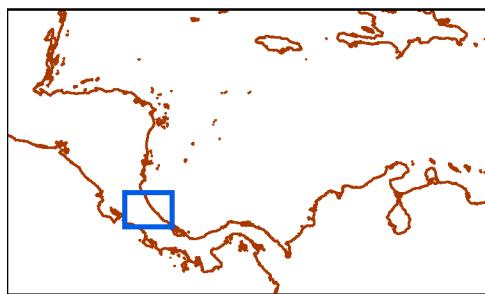
Costa Rica Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N,F
Green Turtle (<i>Chelonia mydas</i>)	N,F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N,F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes**
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	Improving
Penalties are an adequate deterrent	Yes

* Completely protected on the Caribbean coast; *Pacific* olive ridley egg take is managed by license. **Permits are required by law for any research on sea turtles.

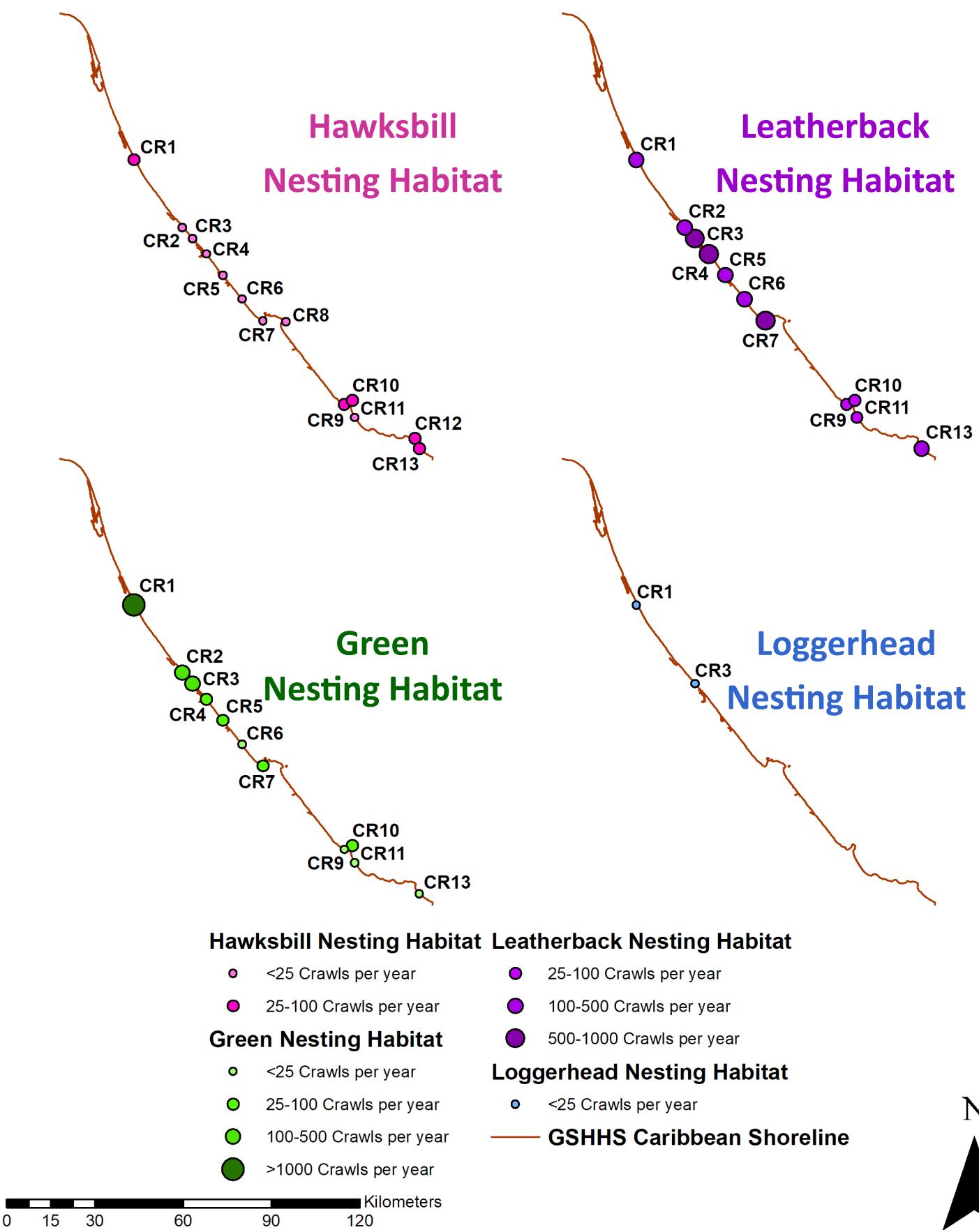


Data Providers
Didiher Chacón-Chaverri LAST Latin American Sea Turtles

0 10 20 40 60 80 Kilometers



Costa Rica Sea Turtle Habitat



Costa Rica Sea Turtle Habitat

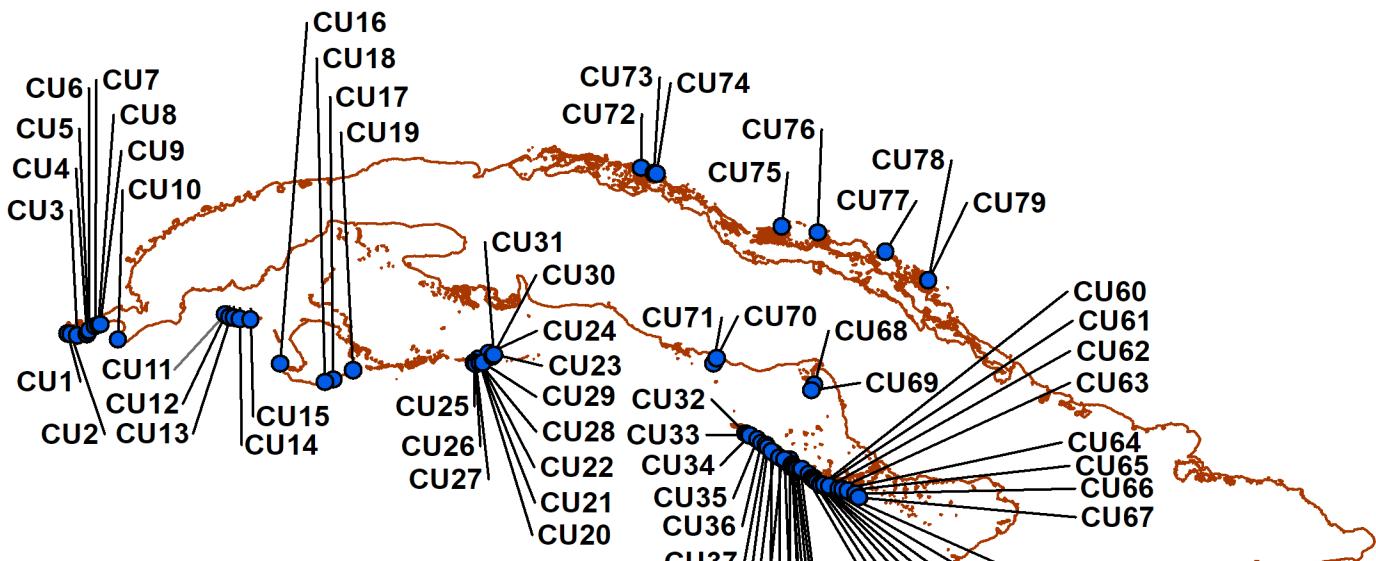
Beach Identification Codes with Beach Names			
CR1	Tortuguero	CR7	Isla Uvita
CR2	Parismina	CR8	Cahuita Long Beach
CR3	North Pacuare	CR9	Cahuita National Park (Negra)
CR4	Pacuare	CR10	Erlin
CR5	Matina	CR11	Gandoca
CR6	Moin		

Cuba Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	IN, IF
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



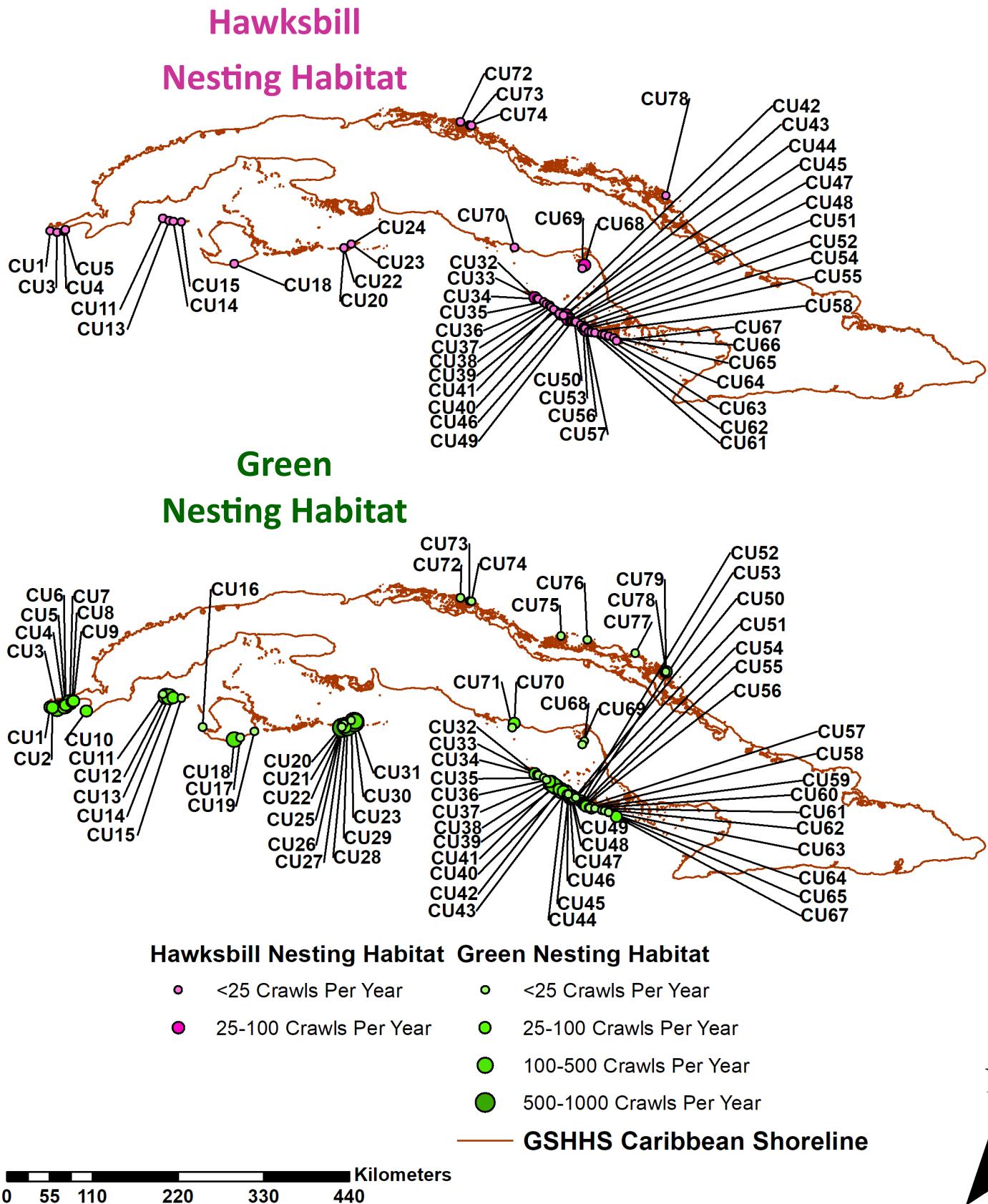
Data Providers	
	Dr. Félix Moncada Programa de Tortugas Marinas Centro de Investigaciones Pesqueras (CIP)
	Dr. Julia Azanza Ricardo Universidad de La Habana Centro Nacional de Áreas Protegidas (CNAP)
	Yanet Forneiro Martín-Viaña Nacional para la Conservación de la Flora y la Fauna

0 55 110 220 330 440 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline

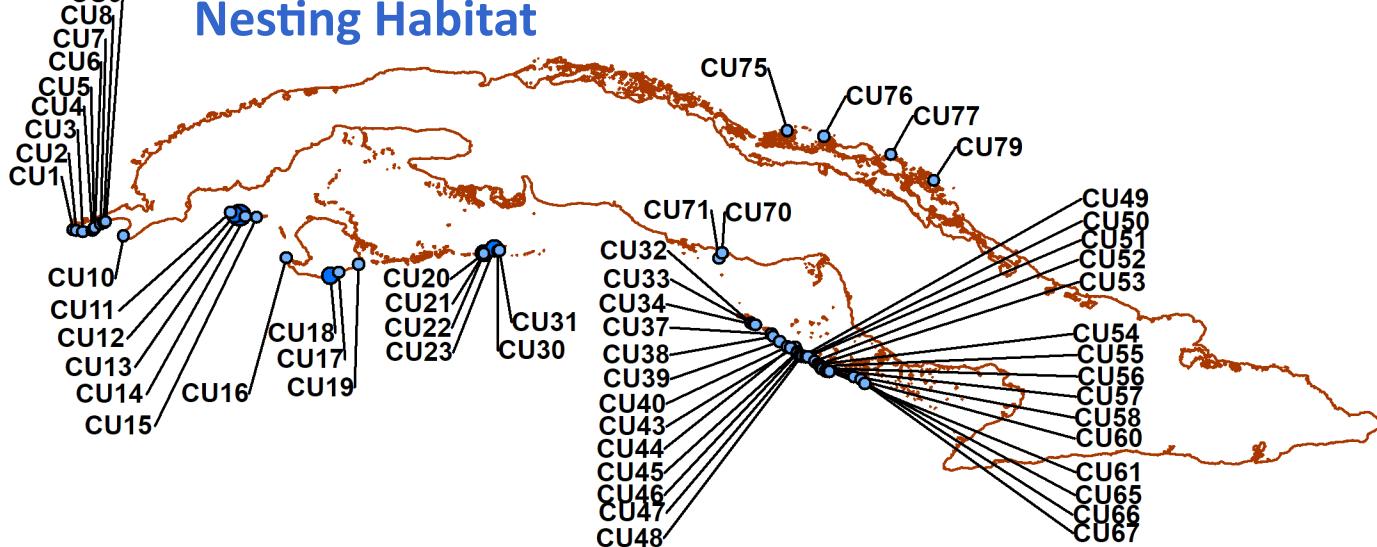


Cuba Sea Turtle Habitat

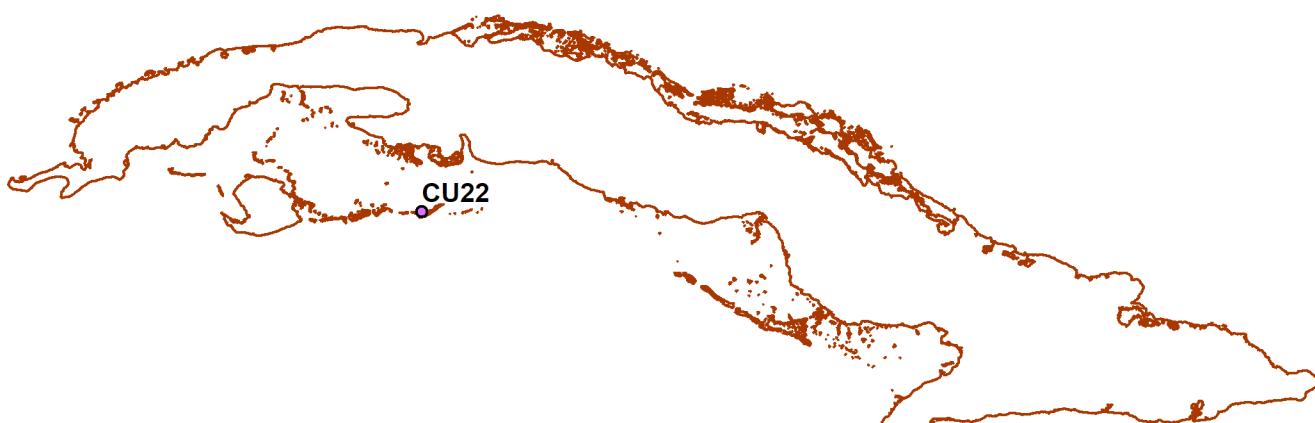


Cuba Sea Turtle Habitat

Loggerhead Nesting Habitat



Leatherback Nesting Habitat



Loggerhead Nesting Habitat Leatherback Nesting Habitat

- <25 Crawls Per Year
- 25-100 Crawls Per Year
- 100-500 Crawls Per Year

- <25 Crawls Per Year
- GSHHS Caribbean Shoreline

0 55 110 220 330 440 Kilometers



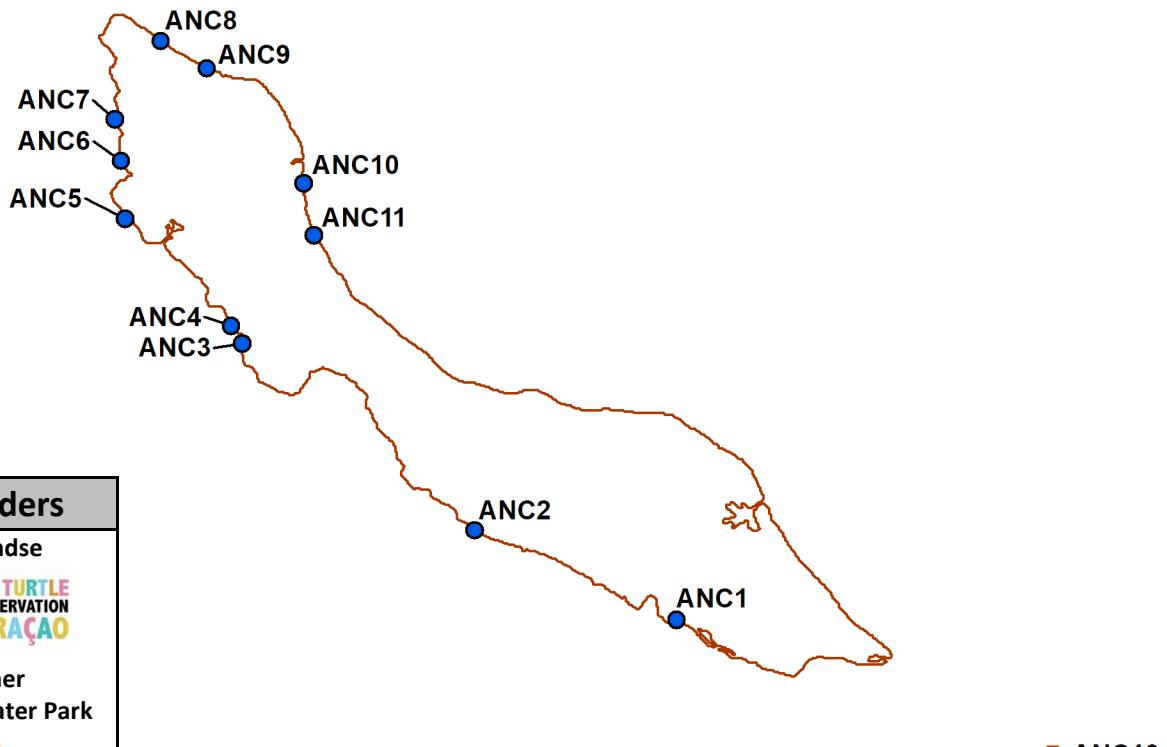
Cuba Sea Turtle Habitat

Beach Identification Codes with Beach Names			
CU1	Los Cayuelos	CU41	La Piedra
CU2	Caleta Larga	CU42	P. Bonita
CU3	Caleta de los Piojos	CU43	Caballones Oeste
CU4	El Holandés	CU44	La Yana
CU5	La Barca	CU45	Caballones Este
CU6	Las Cadenas	CU46	El Dátil
CU7	Perjuicio	CU47	Los Pinos
CU8	Resguardo	CU48	La Canita
CU9	Antonio	CU49	La Cana
CU10	Las Canas	CU50	El Manchado
CU11	Juan García	CU51	El Partio
CU12	Real Oeste	CU52	B.P Chiquita
CU13	Real Este	CU53	Las Cruces
CU14	El Sijú	CU54	Crucesitas
CU15	El Coco	CU55	Cachiboca
CU16	Punta Francés	CU56	El Faro
CU17	Playa Lqrga	CU57	La Ballena
CU18	El Guanal	CU58	Indio Grande
CU19	Punta del Este	CU59	Indio Chiquito
CU20	Cayo Campos	CU60	Los Hierros
CU21	Cayo Estopa	CU61	Carabineros
CU22	Cayo Rosario	CU62	Bártula
CU23	Rico Peraces	CU63	Juan Grin
CU24	Los Majaes	CU64	Boca Seca
CU25	Sirena	CU65	Boca Rica
CU26	Paraíso	CU66	Campo Santo
CU27	Mal Tiempo	CU67	Caguama
CU28	Lindamar	CU68	Tío Joaquín
CU29	P. Blanca	CU69	Las Canas
CU30	Los Cocos	CU70	Majahuevo
CU31	Tortuga	CU71	Cayo Blanco
CU32	Cinco Balas	CU72	Obispo
CU33	Alcatracito	CU73	Mulata
CU34	Alcatraz	CU74	Roteño
CU35	Boca Grande	CU75	Cayo Santa María
CU36	El Almendron	CU76	Cayo Guillermo
CU37	Boca de Guano	CU77	Cayo Peredon Grande - Cayo Coco
CU38	Los Cocos	CU78	La Quebrada Punta Cocina
CU39	Los Bayameses	CU79	Cayo Fragoso
CU40	El Guincho		

Curaçao Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	IF
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



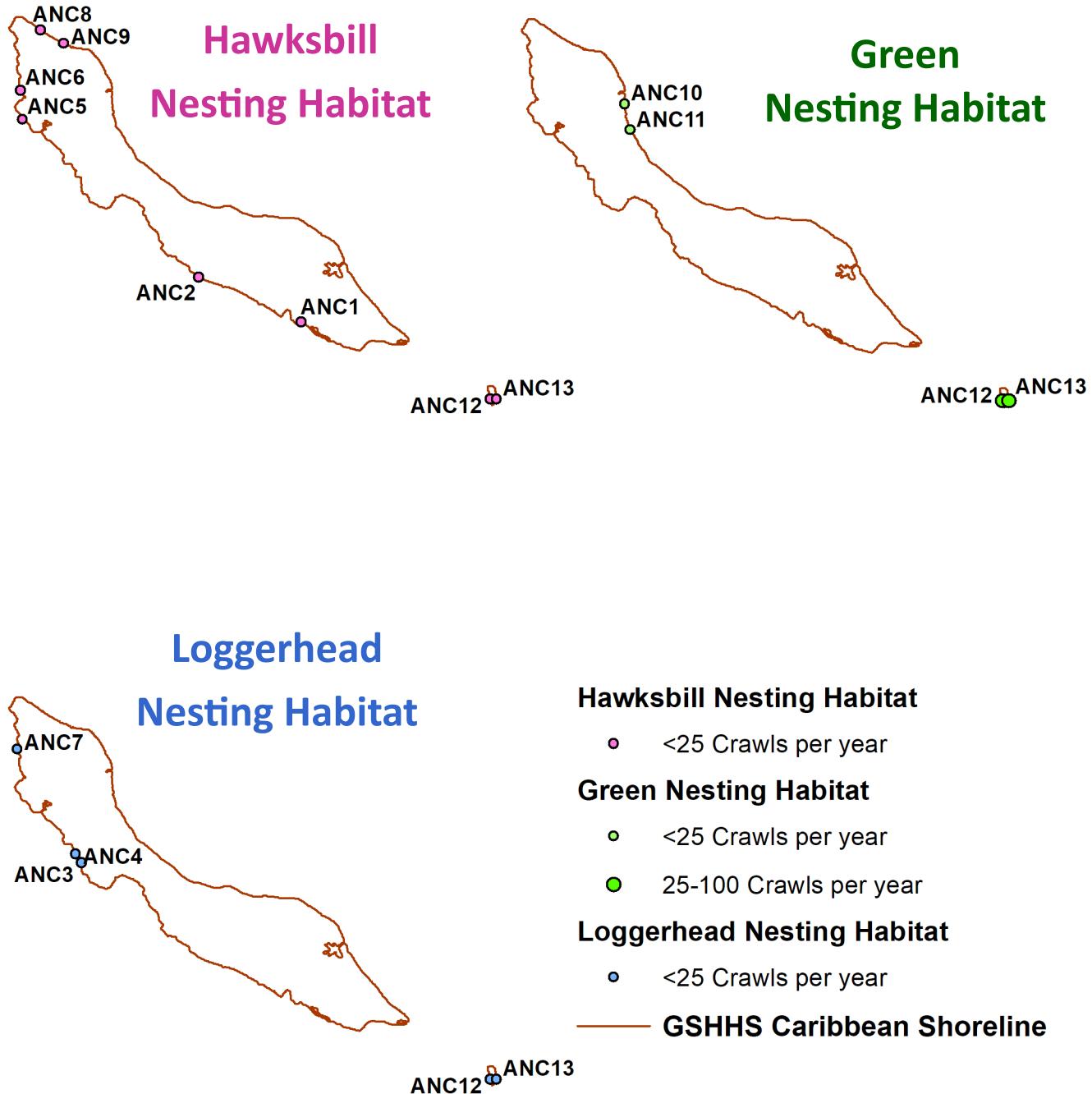
Data Providers
Sabine Berendse 
Brian Leysner Curaçao Underwater Park 
Paul Hoetjes 

0 3 6 12 18 24 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Curaçao Sea Turtle Habitat



0 4 8 16 24 32 Kilometers



Curaçao Sea Turtle Habitat

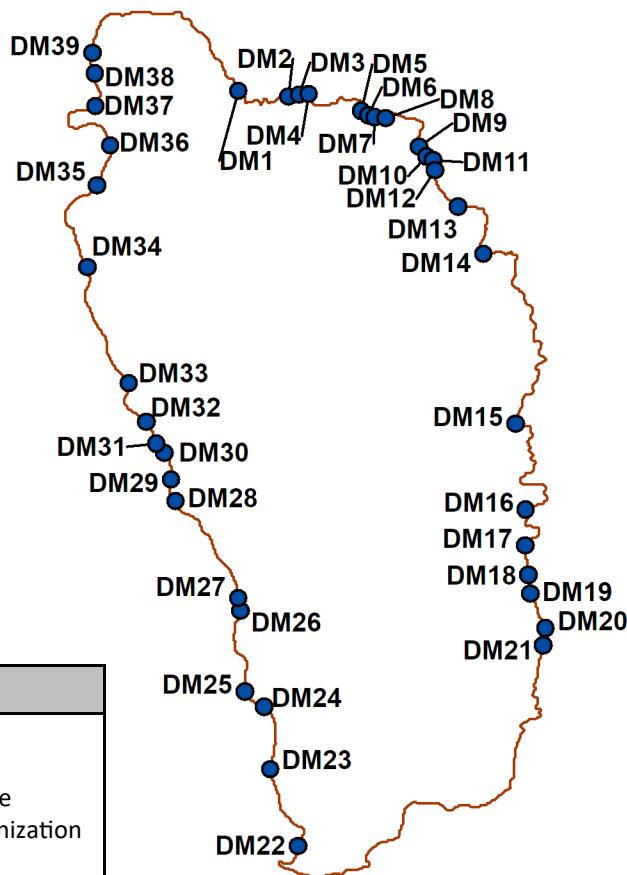
Beach Identification Codes with Beach Names			
ANC1	Barbara Beach	ANC8	Boka Mansalina
ANC2	Koredor	ANC9	Boka Braun
ANC3	Porto Marie	ANC10	Boka Barthol
ANC4	Kas Abou	ANC11	Boka Ascencion
ANC5	Boka Hulu	ANC12	Leeward Side
ANC6	Lagun	ANC13	Windward Side
ANC7	Kleine Knip		

Dominica Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No
Moratorium (fixed period)	No
Prohibition(s) on take	E, N, NF
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	No
Annual quota	No
Permits/licenses required	No
Gear restrictions	No
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



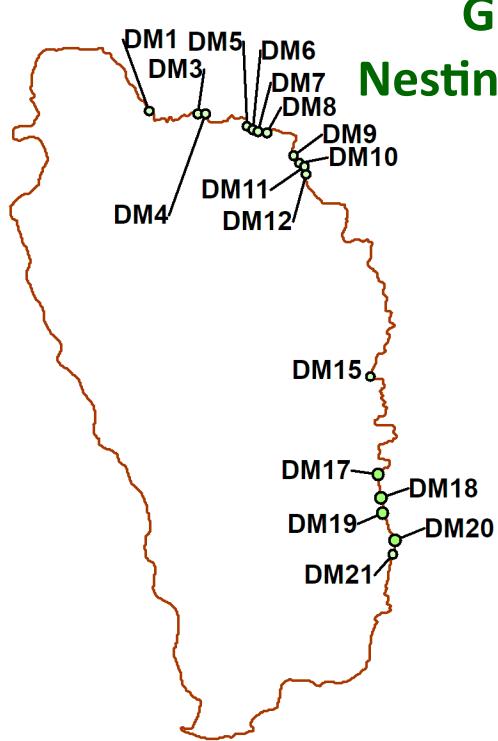
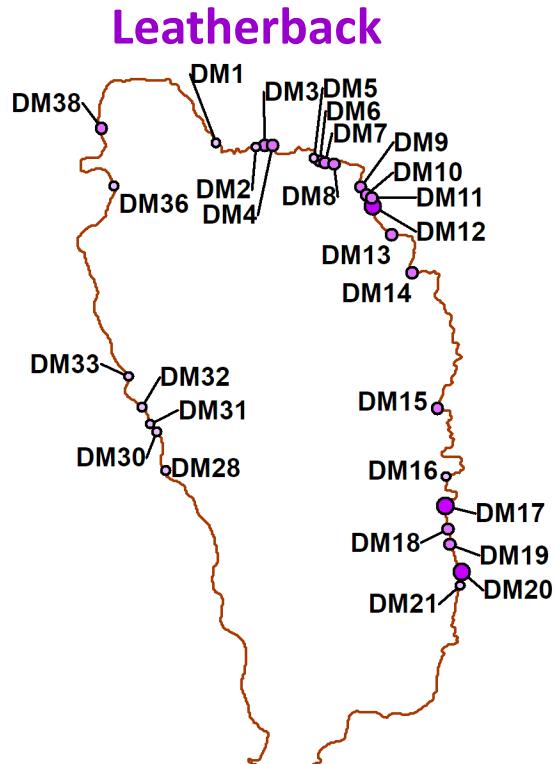
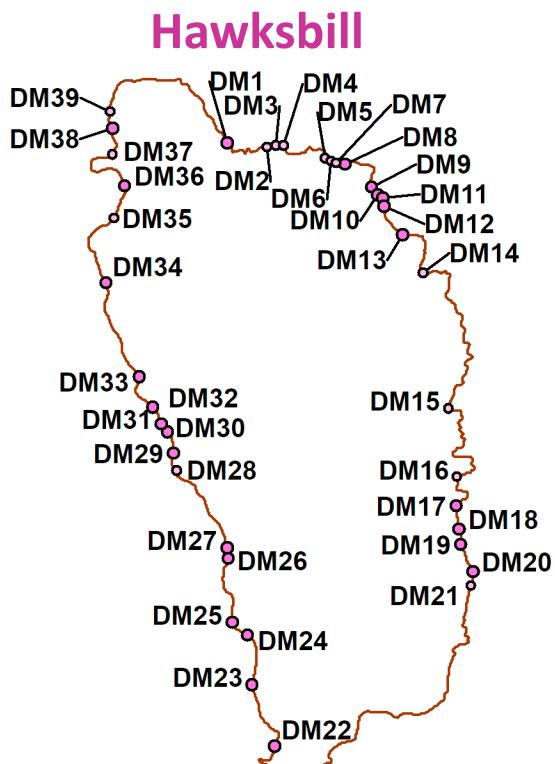
Data Providers	
	Errol Harris Marcella Harris Dominica Sea Turtle Conservation Organization
	Jake Levenson Oceans Forward

0 3 6 12 18 24 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Dominica Sea Turtle Habitat



Hawksbill Nesting Habitat

- X Crawls per year
- <25 Crawls per year

Leatherback Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year

Green Nesting Habitat

- X Crawls per year
- <25 Crawls per year

— GSHHS Caribbean Shoreline

Kilometers
0 3 6 12 18 24



Dominica Sea Turtle Habitat

Beach Identification Codes with Beach Names			
DM1	Thibaud	DM21	Plaisance Bay
DM2	Batibou	DM22	Soufriere Bay/Scotts Head
DM3	Swainer	DM23	Point Michael
DM4	Hampstead	DM24	New Town
DM5	Hodges Bay	DM25	Roseau
DM6	L'anse Noir	DM26	Canefield Airport
DM7	L'anse Tortue	DM27	Massacre
DM8	Woodford Hill Bay	DM28	Layou
DM9	Big Bottom	DM29	Saint Joseph
DM10	Walker's Rest Bay	DM30	Mero
DM11	Jimmy's Bay	DM31	Macoucherie
DM12	Londonderry Bay (Cabana)	DM32	Salisbury
DM13	Marigot	DM33	Batalie
DM14	Pagua Bay (Hatten Garden)	DM34	Dublanc
DM15	St. David Bay (Castle Bruce)	DM35	Coconut Beach
DM16	Petite Soufriere Bay	DM36	Prince Rupert Bay/Portsmouth
DM17	Rosalie Bay	DM37	Douglas Bay
DM18	Ravine Cyrique	DM38	Toucari
DM19	Secret Beach	DM39	Cottage Bay
DM20	La Plaine/Point Girand		

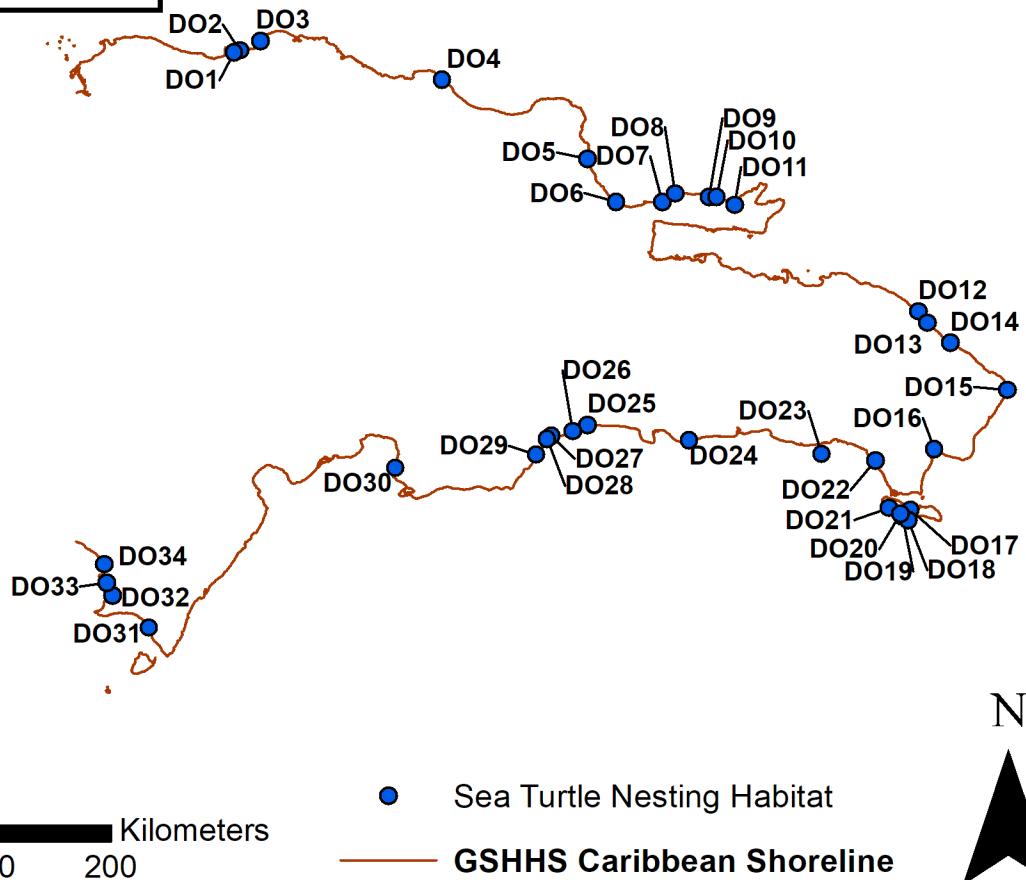
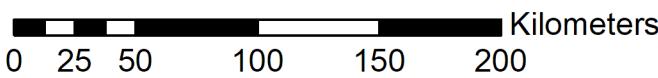
Dominican Republic Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

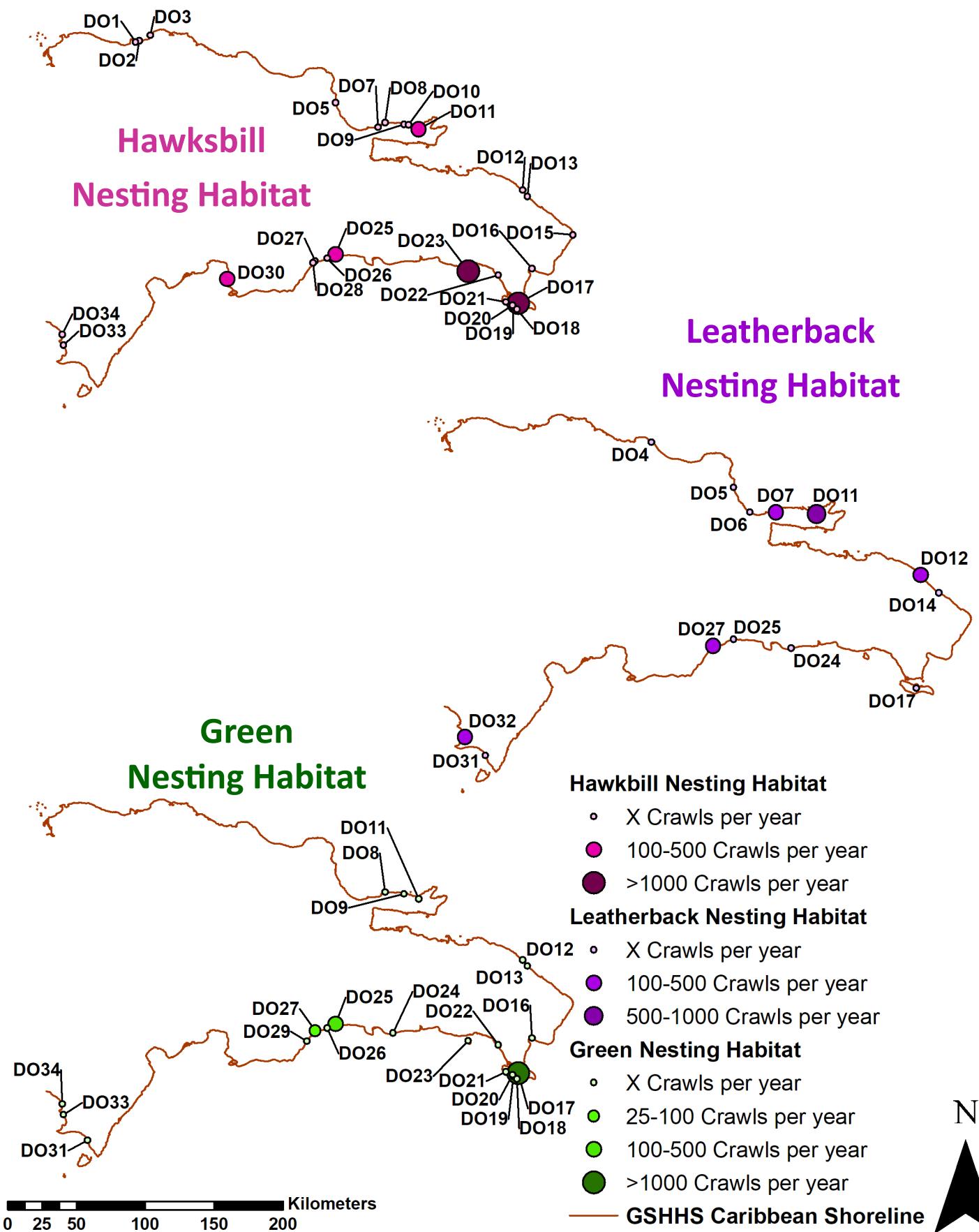
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

Data Providers	
	Christina de la Rosa Ministerio de Medio Ambiente y Recursos Naturales
	Yolanda Leon, Jesus Tomas Grupo Jaragua Inc.
	Instituto Tecnológico De Santo Domingo
	University of Valencia



Dominican Republic Sea Turtle Habitat



Dominican Republic Sea Turtle Habitat

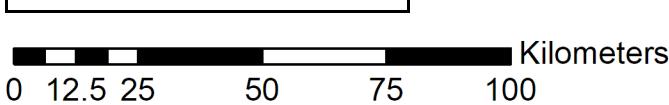
Beach Identification Codes with Beach Names			
DO1	Playa Maritza	DO2	Estero Hondo
DO3	Debhora Isabela	DO4	Cabarete
DO5	Playa Boba	DO6	Los Yayailes
DO7	Playa Cosón	DO8	Los Pescadores
DO9	El Limón	DO10	El Morón
DO11	Playa El Valle	DO12	Playa La Vacama
DO13	Boca de Nisibon	DO14	Macao
DO15	Punta Cana	DO16	El Farolito
DO17	Isla Soana	DO18	Canto de la Playa
DO19	Boca Chica	DO20	Cementerio
DO21	El Toro	DO22	Playa tortuga
DO23	Isla Catalina	DO24	Playa Caribe
DO25	Sans Souci	DO26	Güibia
DO27	Playa Manresa	DO28	Playa Gringo
DO29	Playa Los Cañones	DO30	Palmar de Ocoa
DO31	Parque Nacional Jaragua	DO32	Bahía de Las Águilas y Mosquea
DO33	Colita	DO34	Cabo Rojo

French Guiana Sea Turtle Habitat

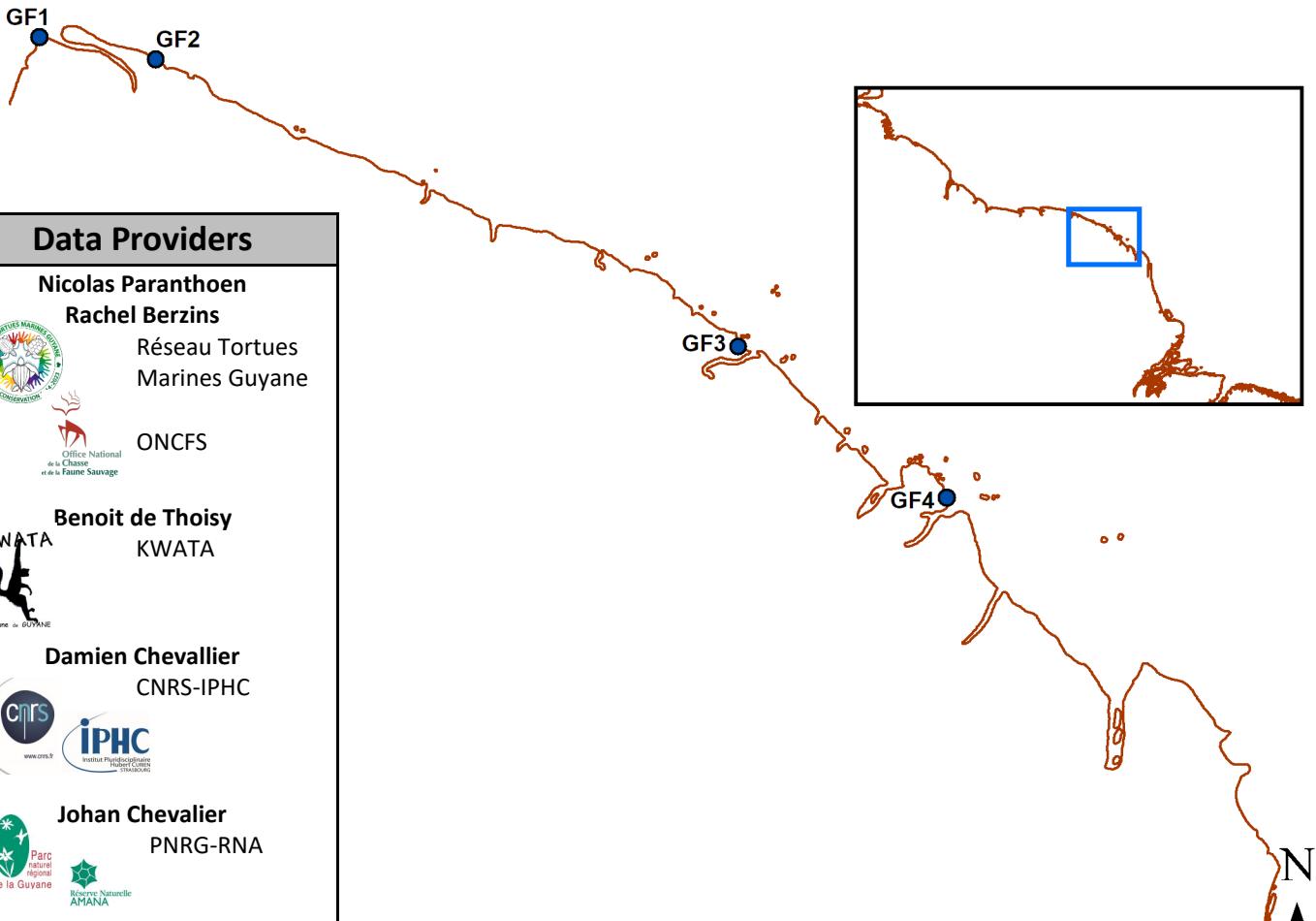
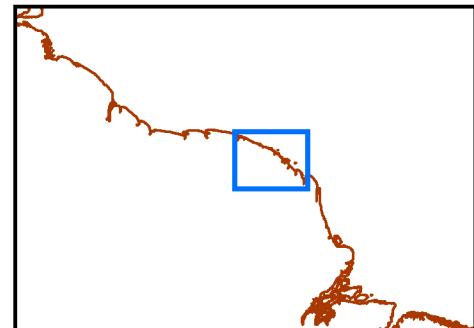
Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	IN
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	N, F?
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

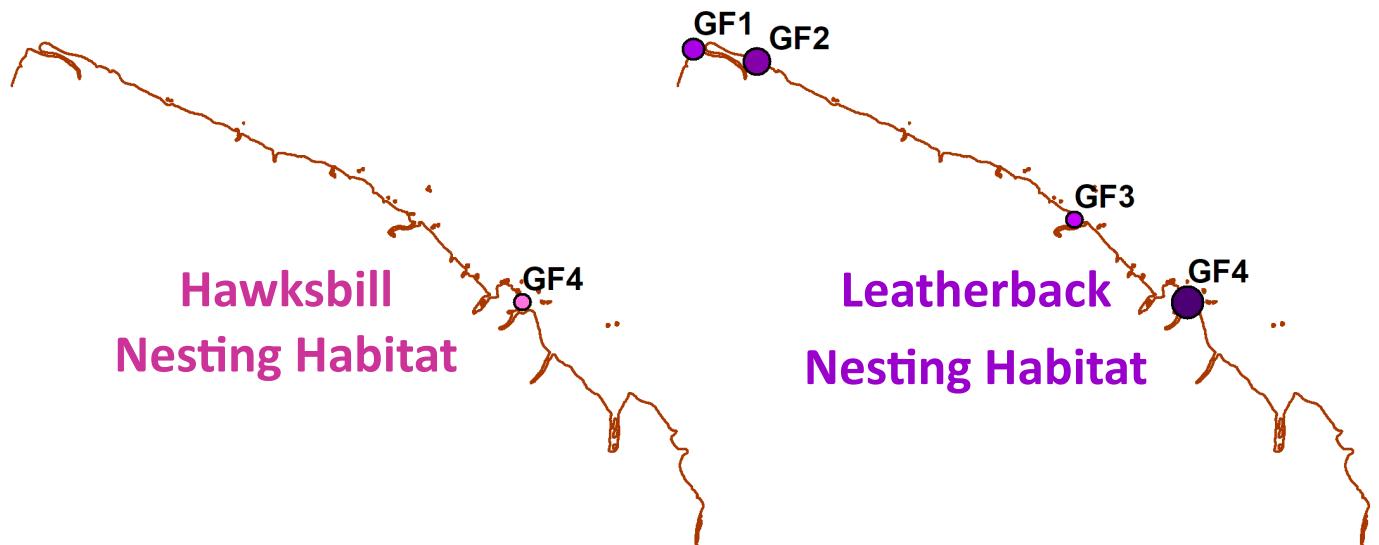
Data Providers	
Nicolas Paranthoen	
Rachel Berzins	Réseau Tortues Marines Guyane
	ONCFS
	Benoit de Thoisy KWATA
	Damien Chevallier CNRS-IPHC
	Johan Chevalier PNRG-RNA
	 Parc naturel régional de la Guyane
	



● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



French Guiana Sea Turtle Habitat



Hawksbill Nesting Habitat Leatherback Nesting Habitat Olive Ridley Nesting Habitat

Green Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year
- >1000 Crawls per year

Leatherback Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year
- >1000 Crawls per year

Olive Ridley Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year
- >1000 Crawls per year

Kilometers
0 20 40 80 120 160

N
GSHHS Caribbean Shoreline

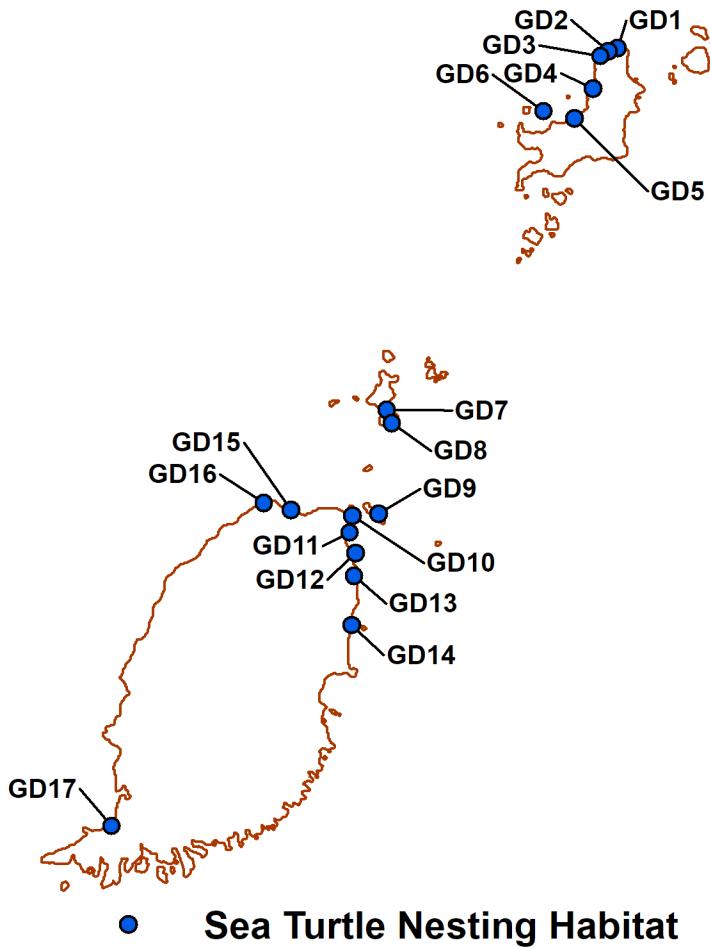
French Guiana Sea Turtle Habitat

Beach Identification Codes with Beach Names			
GF1	Awala Yalimapo	GF3	Kourou Beach
GF2	Azteque	GF4	Cayenne, Montjoly

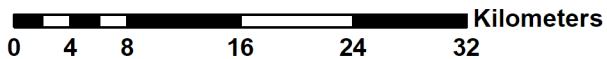
Grenada Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No
Moratorium (fixed period)	No
Prohibition(s) on take	E, N, NF, LB
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	No
Annual quota	No
Permits/licenses required	Yes
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	Unknown



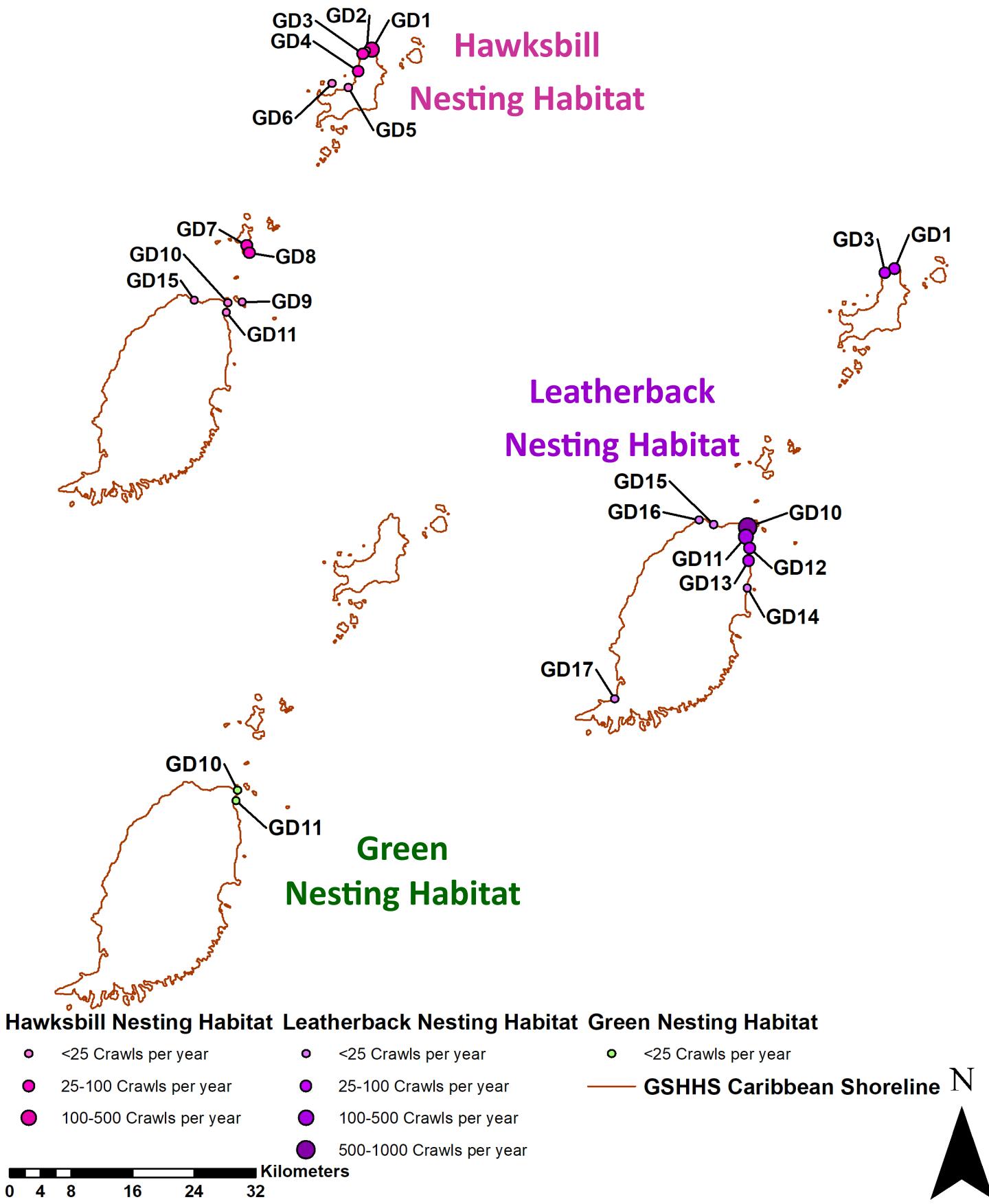
Data Providers	
	Kate Charles Kester Charles Ocean Spirits Inc. Ocean Spirits
	Dr. Marina Fastigi KIDO Foundation A Life for Nature



Kilometers —————— GSHHS Caribbean Shoreline



Grenada Sea Turtle Habitat



Grenada Sea Turtle Habitat

Beach Identification Codes with Beach Names - Carriacou			
GD1	Petite Carenage	GD4	Sparrow Bay (Craigston, Bogles)
GD2	Big Field	GD5	Lauriston
GD3	Anse La Roche	GD6	Sandy Island—Carriacou

Beach Identification Codes with Beach Names - Grenada			
GD7	Isle de Rhonde	GD13	River Antione
GD8	Caille Island	GD14	Conference
GD9	Sandy Island	GD15	Sauteurs Bay
GD10	Levera Beach	GD16	David Bay
GD11	Bathway Beach	GD17	Grand Anse Beach
GD12	Savon Swayzee		

Guadeloupe Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, IF
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

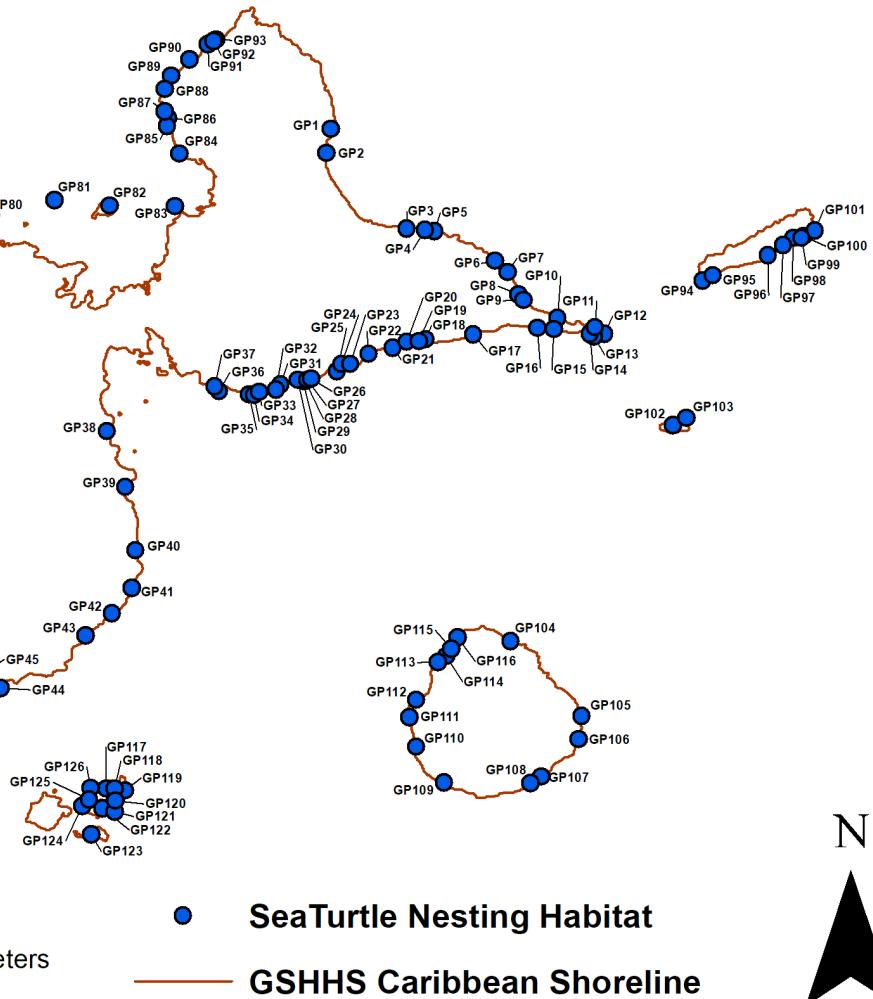
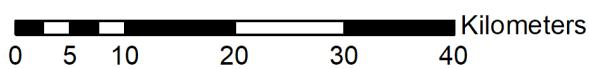
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

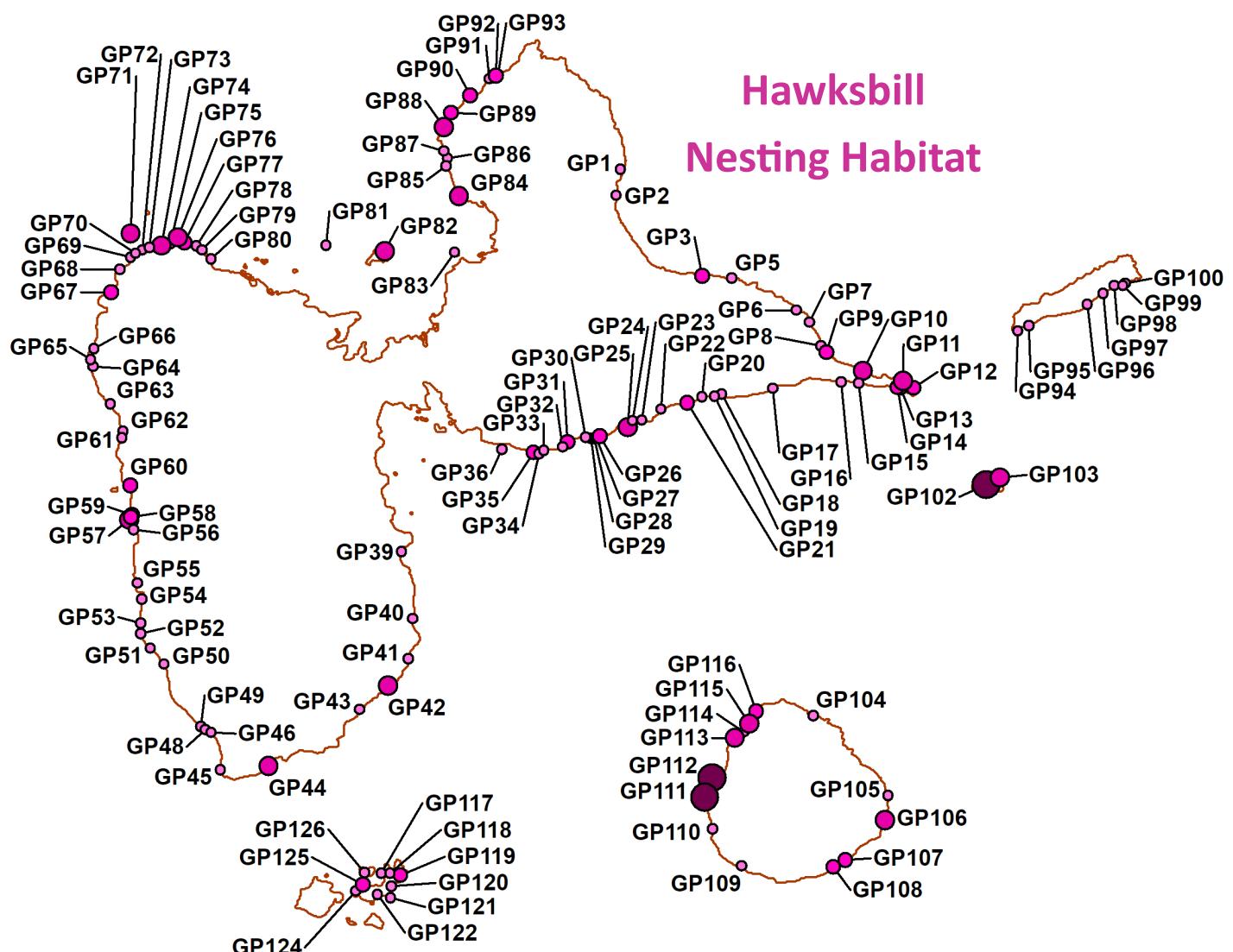
Data Providers
Sophie Lefèvre, Caroline Cremades, Sophie Le Loc'h
Office National des Forêts
REGION GUADELOUPE
s'engage en Guadeloupe avec le FEDER

Eric Delcroix
Réserves Naturelles de la Désirade

Réserve Naturelle LA DESIRADE



Guadeloupe Sea Turtle Habitat



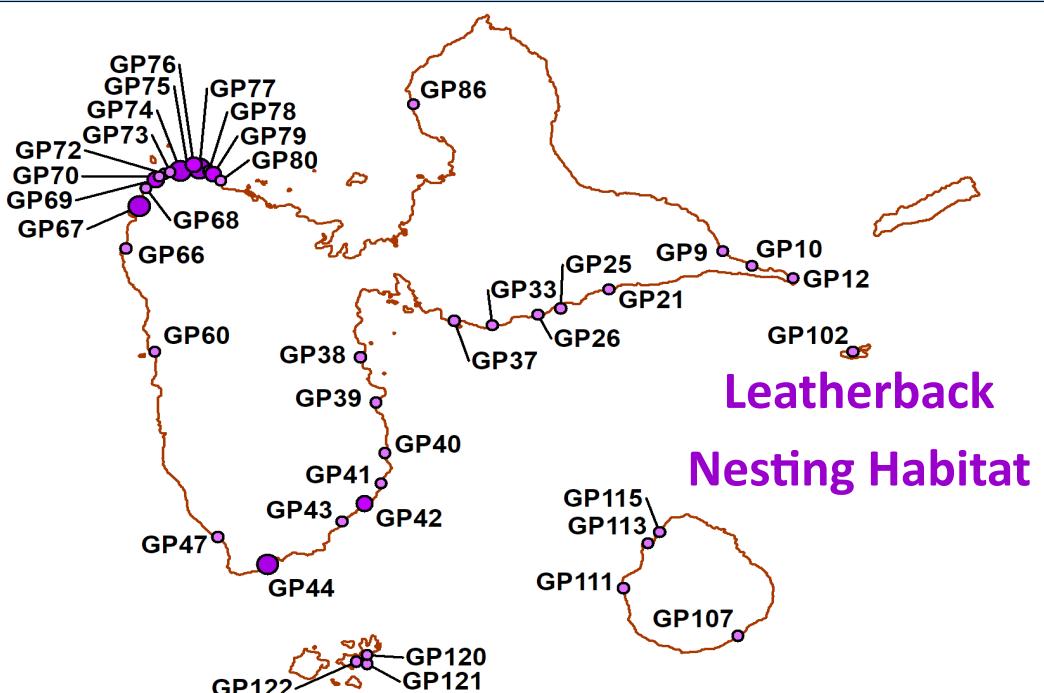
Hawksbill Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- >1000 Crawls per year

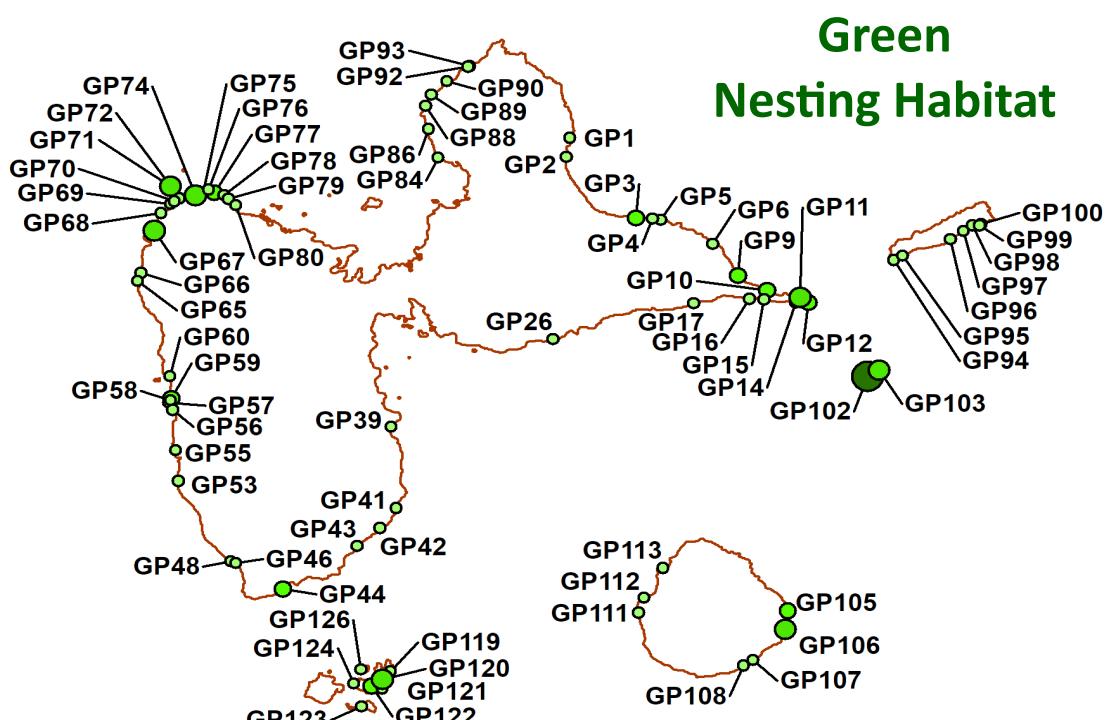
GSHHS Caribbean Shoreline



Guadeloupe Sea Turtle Habitat



Leatherback
Nesting Habitat



Green
Nesting Habitat

Leatherback Nesting Habitat Green Nesting Habitat

- | | |
|---------------------------|---------------------------|
| ● <25 Crawls per year | ● <25 Crawls per year |
| ● 25-100 Crawls per year | ● 25-100 Crawls per year |
| ● 100-500 Crawls per year | ● 100-500 Crawls per year |
| ● >1000 Crawls per year | ● >1000 Crawls per year |

0 4.5 9 18 27 36 Kilometers

GSHHS Caribbean Shoreline



Guadeloupe Sea Turtle Habitat

Beach Identification Codes with Beach Names

GP1	Anse des Corps	GP47	CNBT
GP2	Anse Maurice	GP48	Plage des pecheurs
GP3	Plage de l'Autre Bord (Alizes)	GP49	Embouchure
GP4	Anse Montal (Dauphins)	GP50	Plessy
GP5	Anse Conchou	GP51	Rocroy
GP6	Anse a l'Eau	GP52	Simaho
GP7	Anse a la Croix	GP53	l'Etang_Pointe des Habitants
GP8	Baie Olive (Anse a la Baie)	GP54	La Voute
GP9	Rouleaux (Baie Sainte Marie)	GP55	Petite Anse
GP10	Anse a La Gourde	GP56	Bois flotte
GP11	Anse des Salines	GP57	Anse Machette
GP12	Anse des Chateaux	GP58	Galets Rouges
GP13	La Chaise	GP59	Anse a Sable
GP14	La Grotte	GP60	Malendure
GP15	Anse Kahouanne	GP61	Anse de la Grande Plaine
GP16	Km 7	GP62	Anse Caraibe
GP17	Raisins Clairs	GP63	Anse Marigot
GP18	Anse a la Barque	GP64	Anse de Baillargent
GP19	Pierre et vacances	GP65	Petite Anse
GP20	Le Helleux (Gros Sable)	GP66	Leroux
GP21	Bois Jolan	GP67	Grande Anse
GP22	Anse du Belley	GP68	Rifflet
GP23	Plage de Sainte Anne	GP69	Anse de La Perle
GP24	Les Galbas	GP70	Fort Royal
GP25	la Caravelle	GP71	Ilet Kahouanne
GP26	Anse a Saint	GP72	Anse Tillet
GP27	Pointe Lariette	GP73	Plage naturiste
GP28	Anse Patate	GP74	Cluny
GP29	Anse a Jacques	GP75	Anse des Iles
GP30	Riviere Sens	GP76	Pointe Allegre
GP31	Sainte Claire	GP77	Anse de Nogent
GP32	Plage ouest Pointe de la Saline	GP78	Anse Vinty
GP33	Saint Felix	GP79	les Amandiers
GP34	Pointe Canot est	GP80	Manbia
GP35	Canot ouest	GP81	Ilet Caret
GP36	Ilet Gosier	GP82	Ilet Fajou
GP37	la Datcha	GP83	Ilet Macou
GP38	Plage de Viard	GP84	Port Louis Sud
GP39	Plage des Salines	GP85	Bourg
GP40	La Madeleine (Doyon)	GP86	Anse du Souffleur
GP41	Anse du Grand Marigot (Cayenne)	GP87	Pointe d'Antigue_cimetiere
GP42	Esclaves (Anse de la Fontaine)	GP88	Anse Lavolvaine
GP43	Anse salee (Bananier)	GP89	Pointe de la fontaine - pointe plate
GP44	Grande Anse	GP90	la Chapelle
GP45	Anse Dupuy	GP91	Anse Laborde
GP46	Petit Havre	GP92	Trou Madame Louis

Guadeloupe Sea Turtle Habitat

Beach Identification Codes with Beach Names			
GP93	Anse Castalia	GP110	Grande Anse (Anse Ballet)
GP94	Plage a Galets	GP111	Trois Ilets
GP95	Plage de l'aerodrome	GP112	Folle Anse
GP96	Plage du Souffleur	GP113	Anse de Mays
GP97	Petites Anses	GP114	Anse Canot
GP98	Anse Petite Riviere	GP115	Vieux Fort
GP99	Pointe de Montreuil	GP116	Anse l'Eglise
GP100	Baie Mahault	GP117	Anse Mire
GP101	Plages de la RNN de la Desirade	GP118	Baie du Marigot
GP102	Terre de Bas	GP119	Baie de Pompierre
GP103	Terre de Haut	GP120	Grande Anse
GP104	Anse du Coq	GP121	Anse Rodrigue
GP105	Anse Feuillard	GP122	Anse Figuier
GP106	Anse des Galets	GP123	Grand Ilet
GP107	Feuillere	GP124	Anse Crawen
GP108	Petite Anse	GP125	Pain de sucre
GP109	Plage de Grand Bourg	GP126	Ilet Cabrit

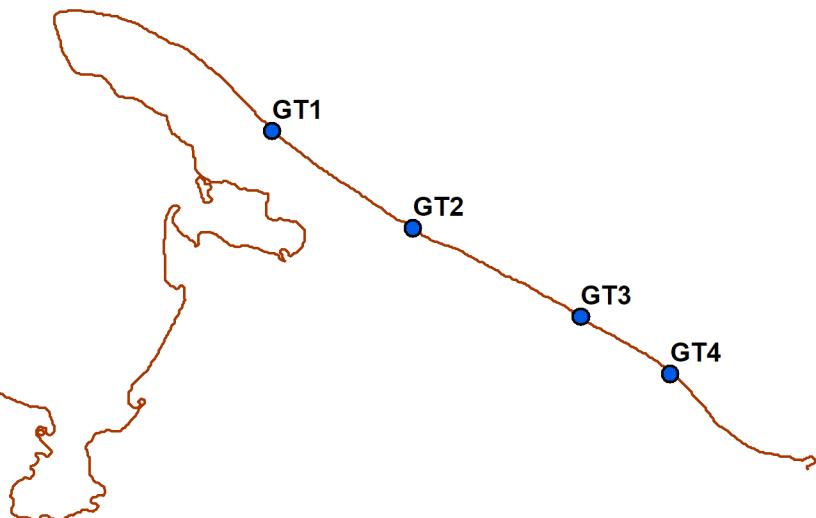
Guatemala Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	F
Green Turtle (<i>Chelonia mydas</i>)	F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes**
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

* Completely protected on the Caribbean coast. ** Pacific olive ridley egg take is managed by license.



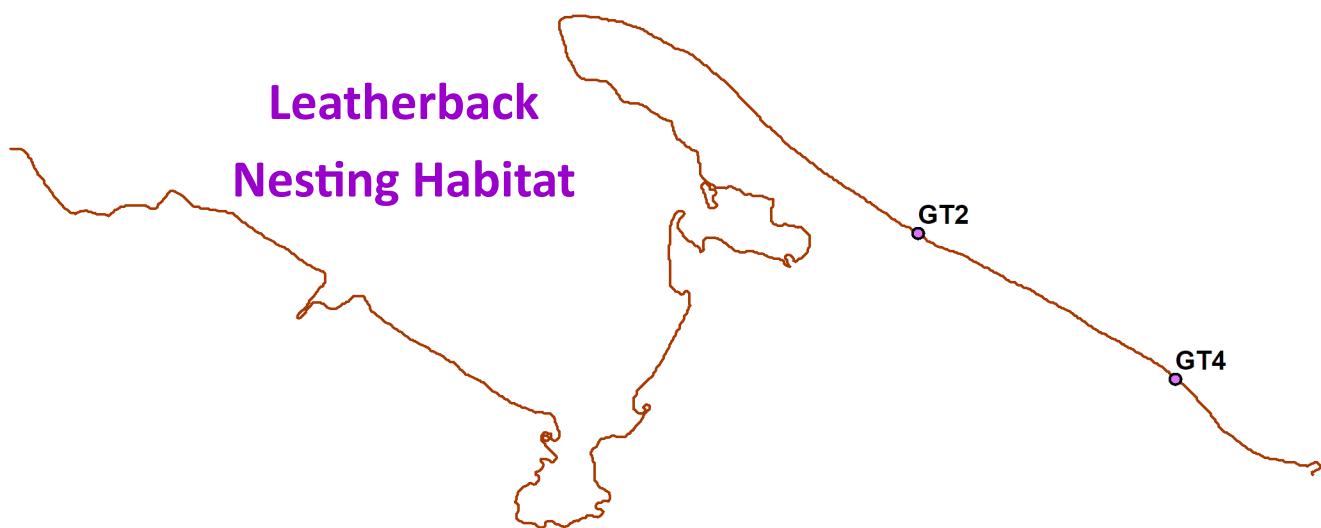
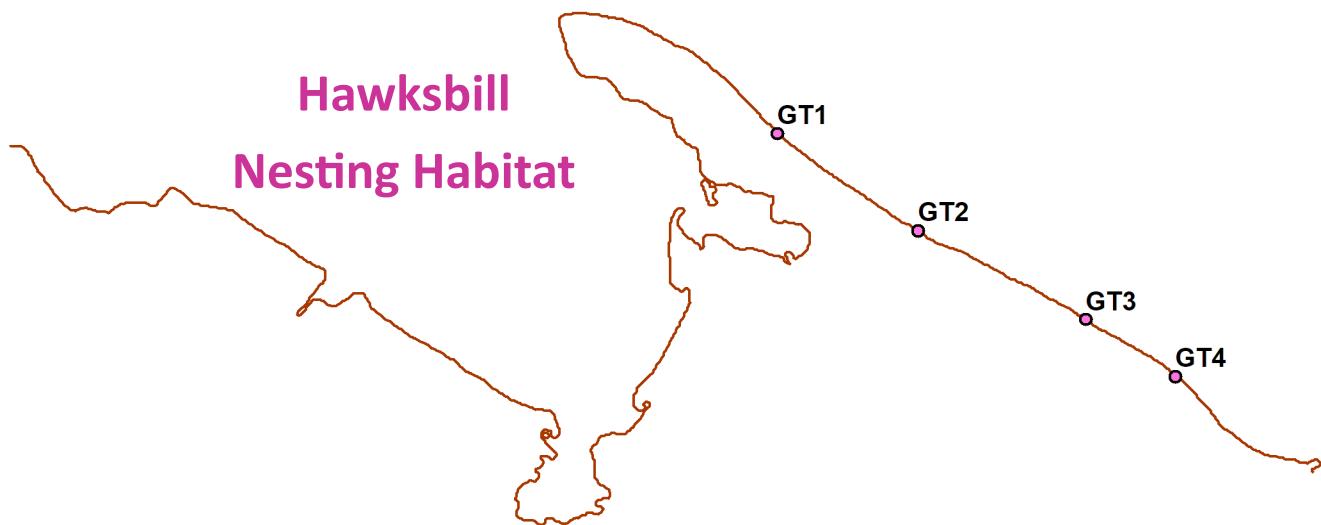
Data Providers
Tannia Sandoval
 CONAP Consejo Nacional de Áreas Protegidas

0 3 6 12 18 24 Kilometers

- Sea Turtle Nesting Habitat
- GSHHS Caribbean Shoreline



Guatemala Sea Turtle Habitat



Hawksbill Nesting Habitat Leatherback Nesting Habitat

● <25 Crawls per year

● < Crawls per year

— GSHHS Caribbean Shoreline

0 3 6 12 18 24 Kilometers



Guatemala Sea Turtle Habitat

Beach Identification Codes with Beach Names

GT1	Maguina	GT3	Jaloa
GT2	San Francisco del Mar	GT4	Estero Guinea - Montagua

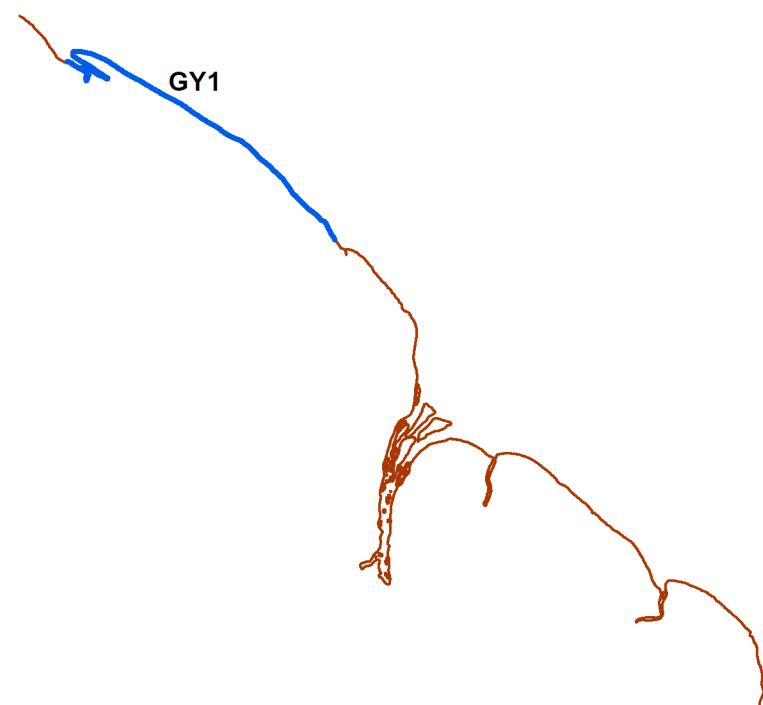
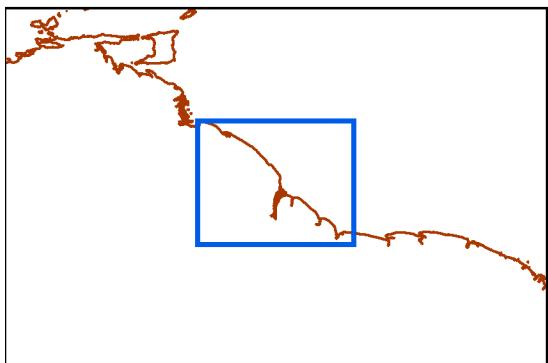
Guyana Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	IN
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	IN,F

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes*
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Unknown
Reports of illegal trade internationally	Unknown
General public awareness of laws	Yes
Recent prosecutions or penalties	Unknown
Enforcement considered adequate	I
Penalties are an adequate deterrent	Unknown

* The Fisheries Act (2002) mandates the use of Turtle Excluder Devices (TED) and Bycatch Reduction Devices (BRD).



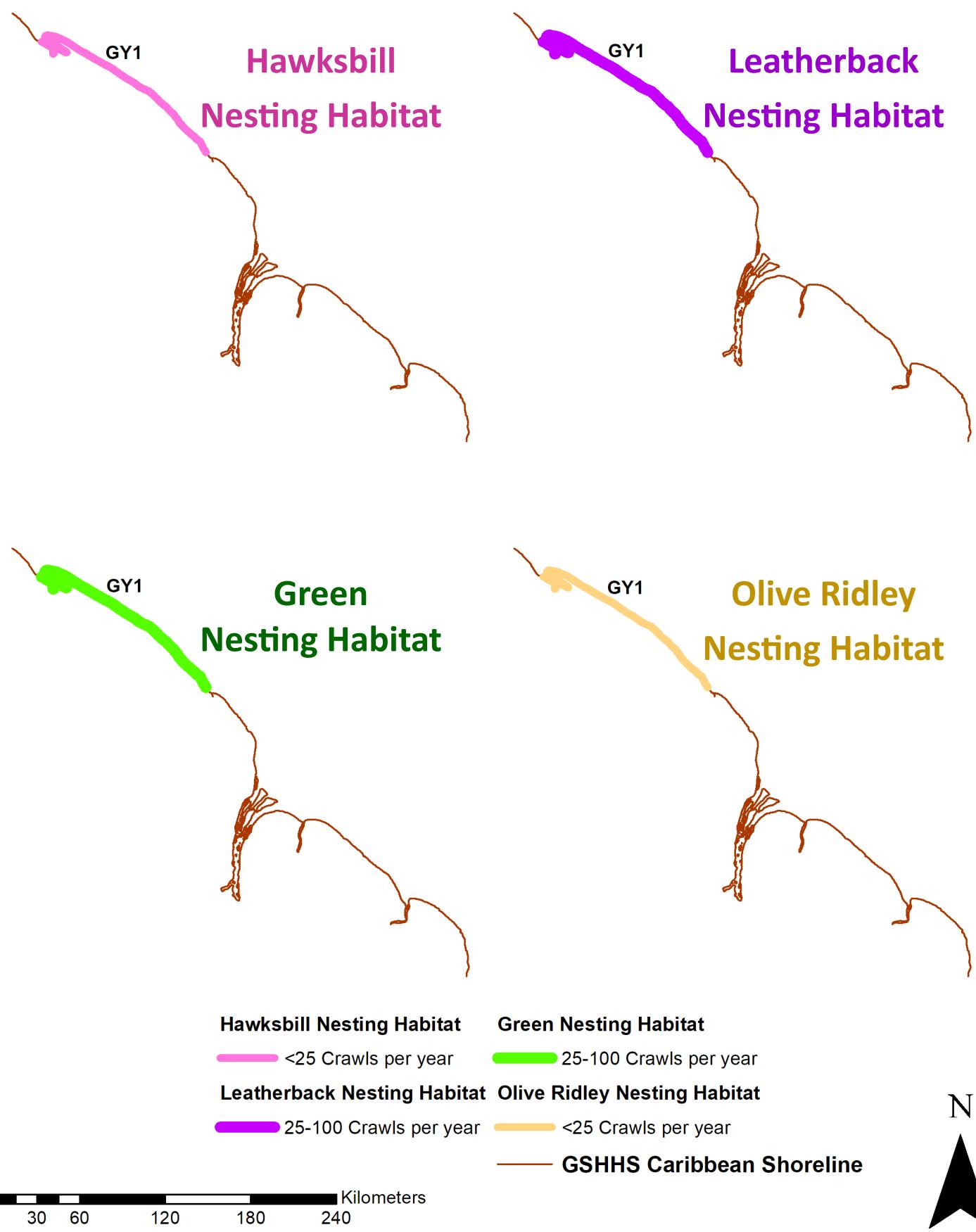
Data Providers
Sophea Edghill World Wildlife Fund Guianas 
Odacy Davis Denise Fraser Protected Areas Commission 
Romeo De Freitas Guyana Marine Turtle Conservation Society 

Kilometers
0 15 30 60 90 120

— Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Guyana Sea Turtle Habitat



Guyana Sea Turtle Habitat

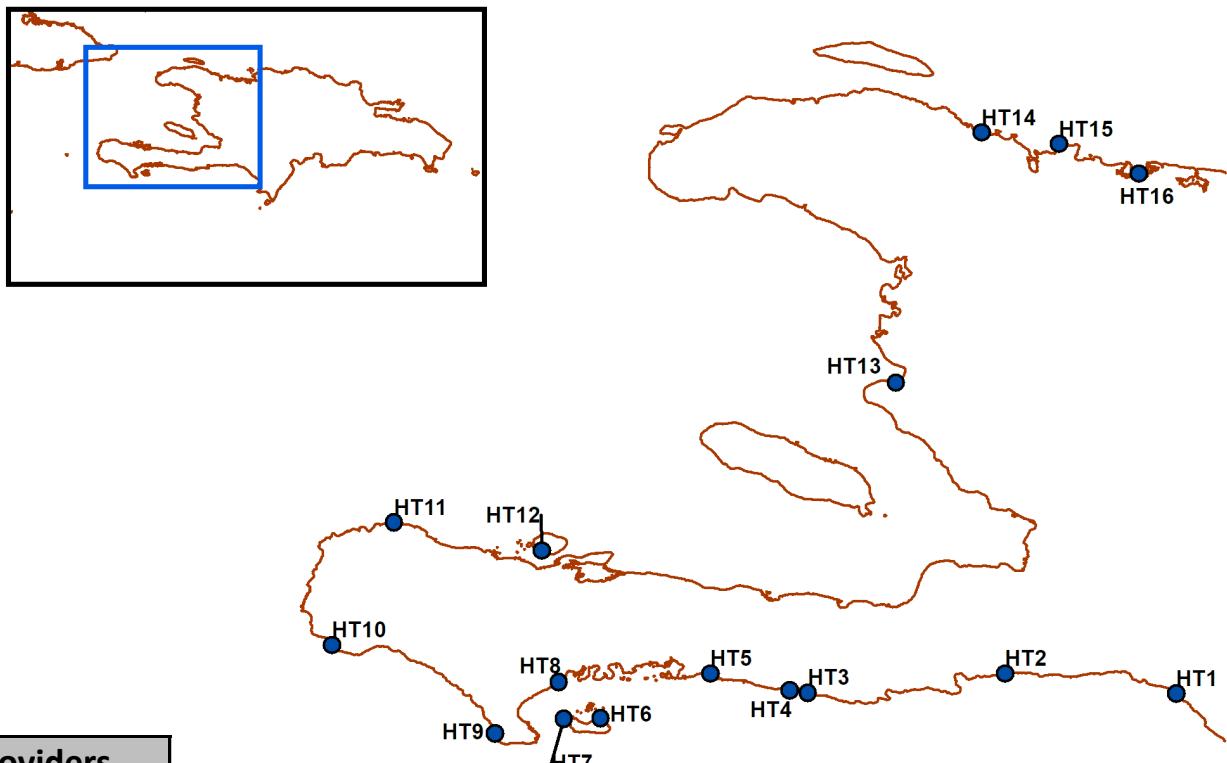
Beach Identification Codes with Beach Names			
GY1	Almond, Annette, Tiger, and Luri beaches		

Haiti Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No
Moratorium (fixed period)	No
Prohibition(s) on take	E, NF
Closed season	No
Minimum size limits	No
Maximum size limits	No
Annual quota	No
Permits/licenses required	Yes
Gear restrictions	No
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



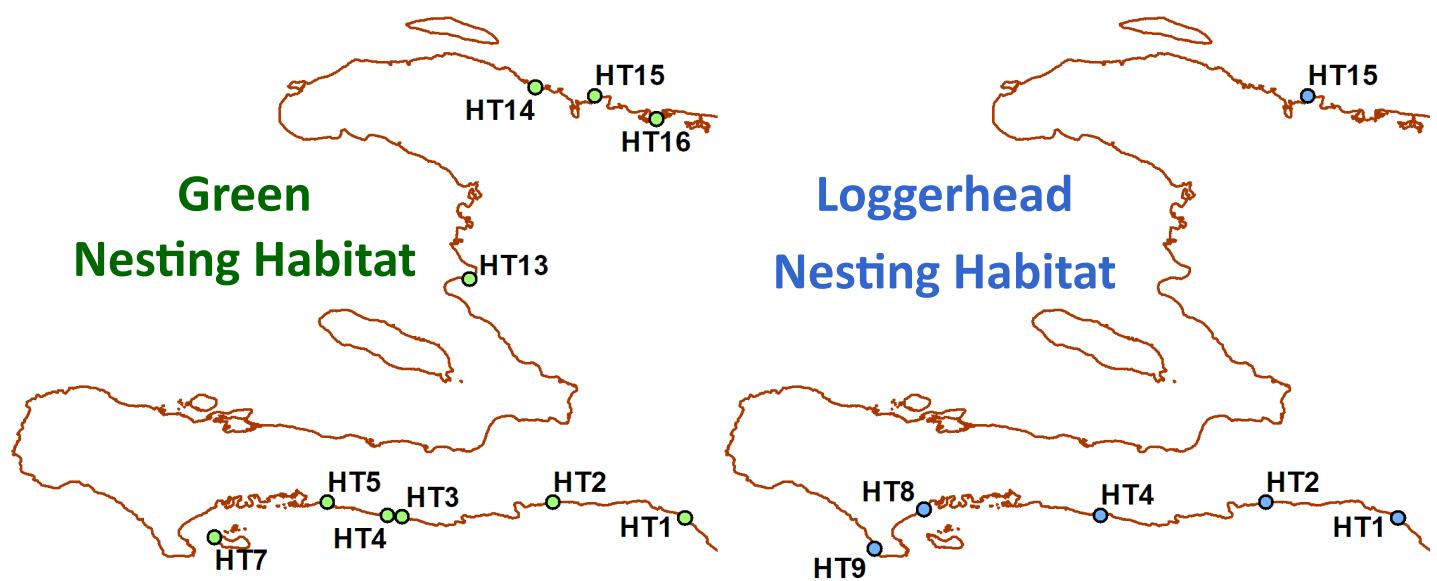
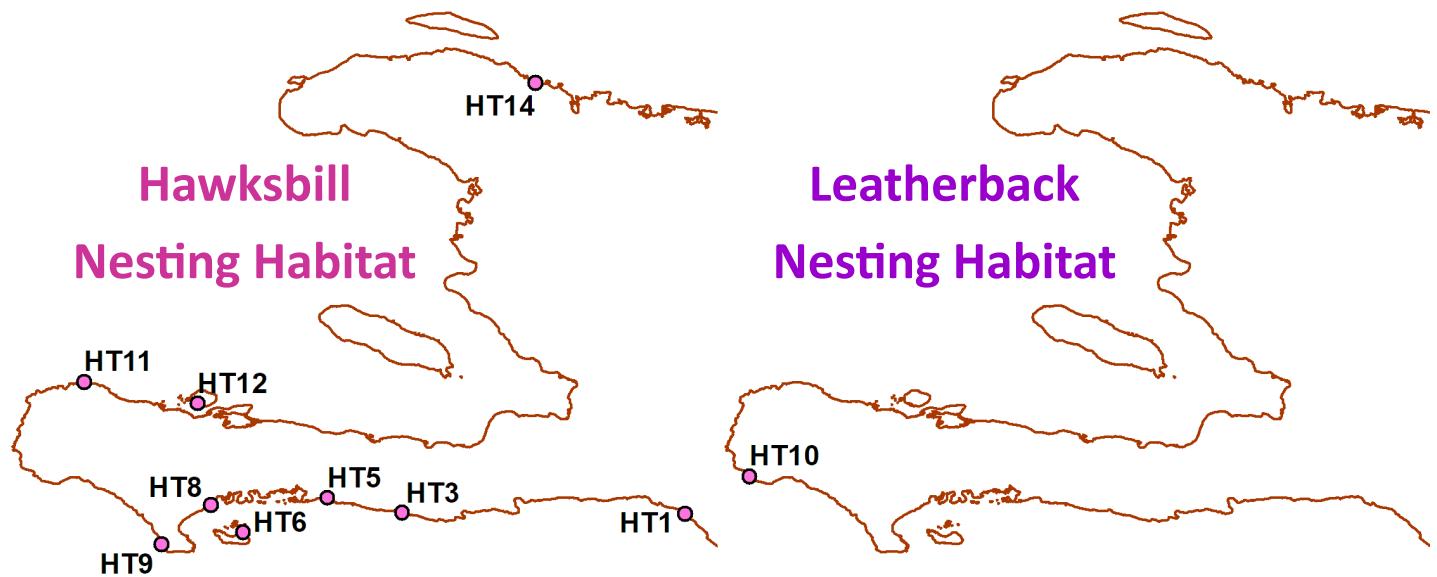
Data Providers
Jean Wiener Fondation pour la Protection de la Biodiversité Marine

0 20 40 80 120 160 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Haiti Sea Turtle Habitat



Hawksbill Nesting Habitat Leatherback Nesting Habitat

● X Crawls per year

● X Crawls per year

Green Nesting Habitat

● X Crawls per year

Loggerhead Nesting Habitat

● X Crawls per year

— GSHHS Caribbean Shoreline

0 25 50 100 150 200 Kilometers



Haiti Sea Turtle Habitat

Beach Identification Codes with Beach Names			
HT1	Anse Pitres to Belle-Anse	HT10	Tiburon
HT2	Cayes Jacmel to Raymond	HT11	Anse d'Azur
HT3	Mayette to Cotes de Fer	HT12	Gonavele Caymite
HT4	Cotes de Fer to Mouillage	HT13	Freycinau
HT5	Laborieux to Pointe de Tois Lataniers	HT14	Anse a Chou Chou
HT6	Ile-a-Vache at Point de l'Est	HT15	Fond Larange
HT7	Ile-a-Vache at Point Daimant	HT16	Baie de Caracol
HT8	Les Cayes to St. Jean	HT17	Anse du Diable
HT9	Pointe a Gravois to Port Salut	HT18	Petit Anse

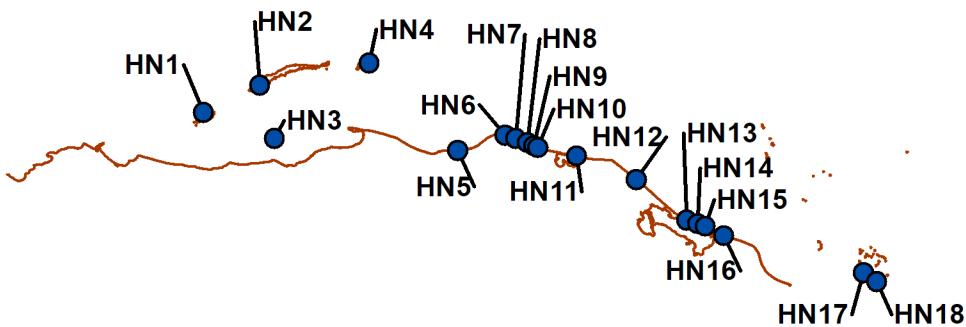
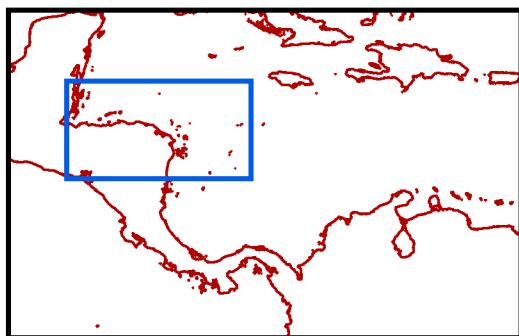
Honduras Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IF, IN
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	No
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	Unknown
Enforcement considered adequate	No
Penalties are an adequate deterrent	Unknown

* Legal exemptions exist for (undefined) use by indigenous groups.



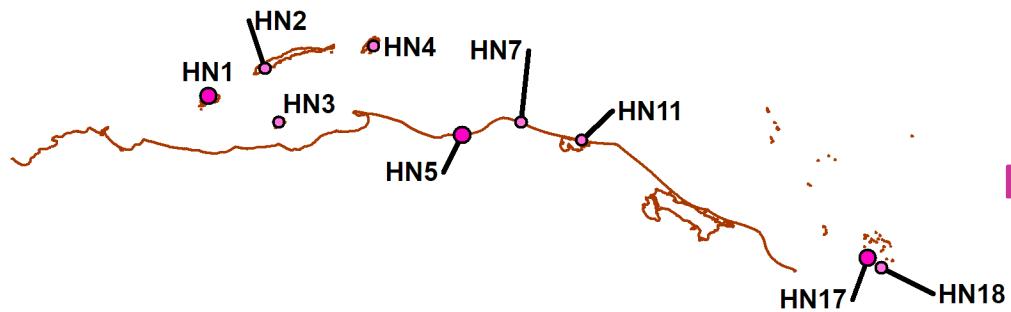
Data Providers
Lidia Salinas Stephen G. Dunbar ProTECTOR

Kilometers
0 35 70 140 210 280

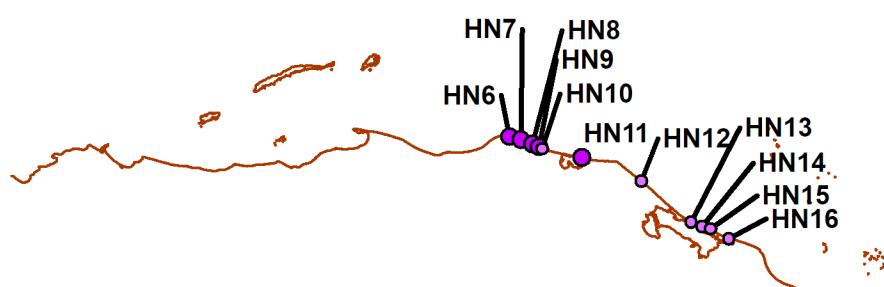
● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



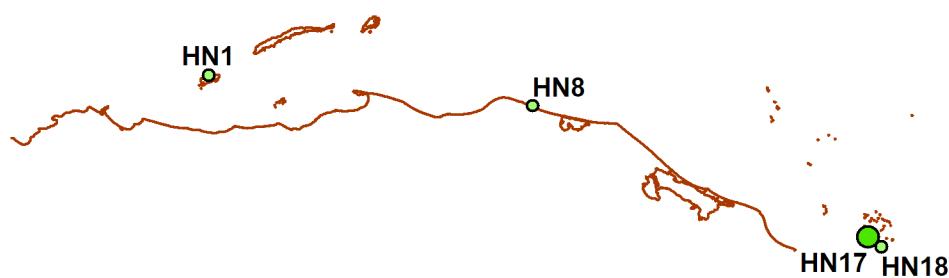
Honduras Sea Turtle Habitat



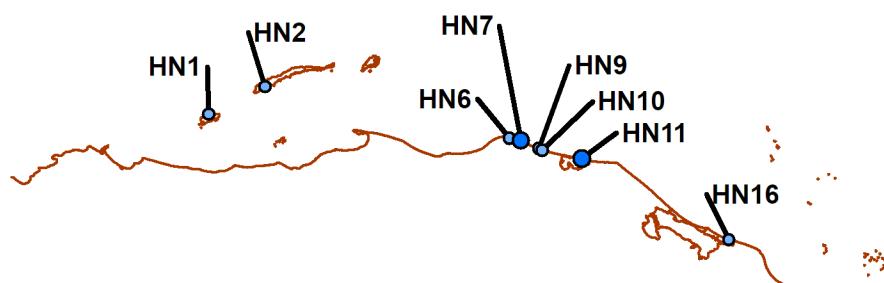
**Hawksbill
Nesting Habitat**



**Leatherback
Nesting Habitat**



**Green
Nesting Habitat**



**Loggerhead
Nesting Habitat**

Hawksbill Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Leatherback Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Green Nesting Habitat

- <25 Crawls per year
- 100-500 Crawls per year

Loggerhead Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Kilometers
0 35 70 140 210 280

GSHHS Caribbean Shoreline



Honduras Sea Turtle Habitat

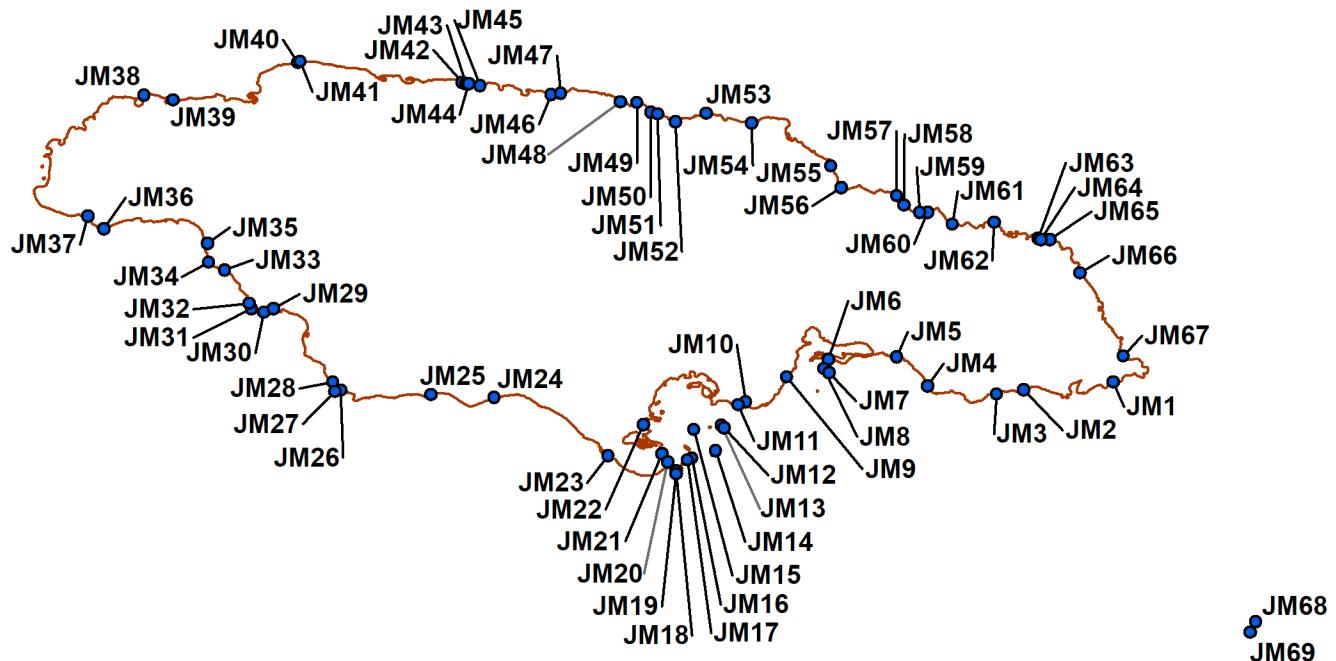
Beach Identification Codes with Beach Names			
HN1	Isla de Utila	HN10	Cocobila
HN2	Roatan	HN11	Brus Laguna
HN3	Cayos Cochinos	HN12	Barra de Tabakunta
HN4	Guanaja	HN13	Yahurabila
HN5	Sangre Laya	HN14	Barra Catarasca
HN6	Tocamacho	HN15	Prunnitara
HN7	Cabo Camaron – La Barra	HN16	Cauquira
HN8	Plaplaya	HN17	Cayo Bobel
HN9	Ibans	HN18	Cayo Port Royal or Tortuga

Jamaica Sea Turtle Habitat

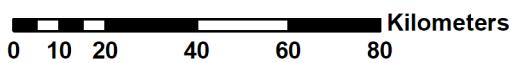
Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



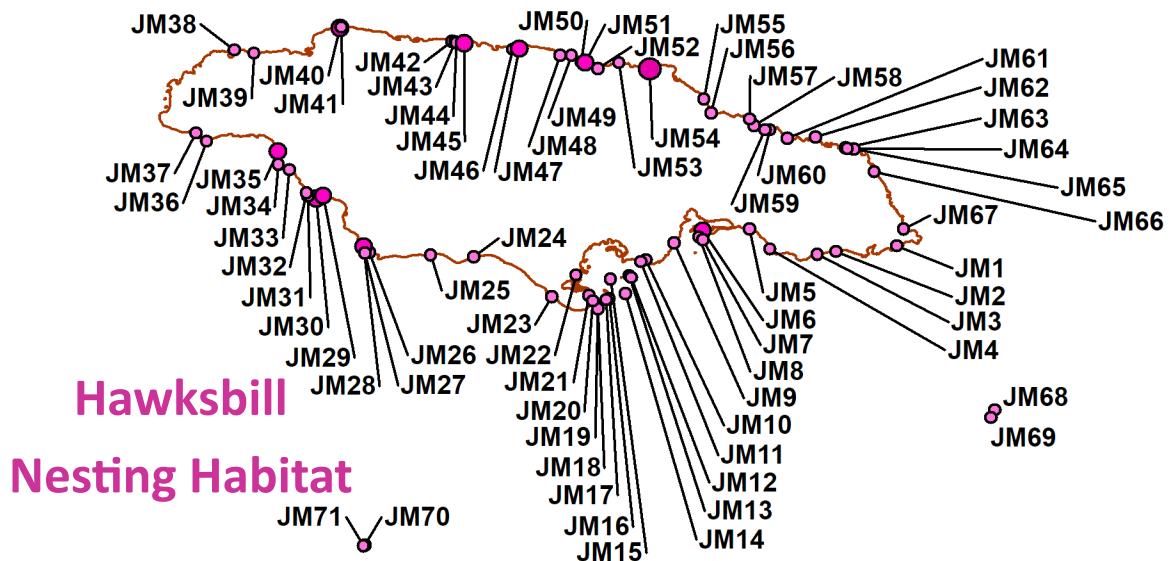
Data Providers
Andrea Donaldson Damany Calder National Environment and Planning Agency 



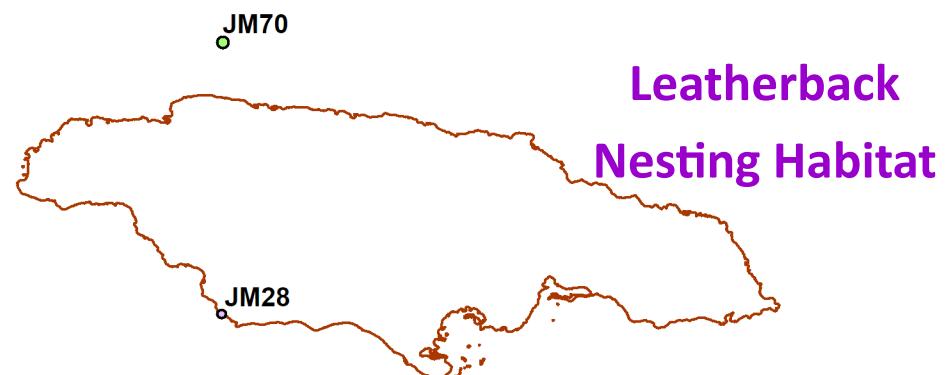
- Sea Turtle Nesting Habitat
- GSHHS Caribbean Shoreline



Jamaica Sea Turtle Habitat



Green Nesting Habitat



Hawksbill Nesting Habitat

Green Nesting Habitat

Leatherback Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year

- X Crawls per year
- <25 Crawls per year

- X Crawls per year
- GSHHS Caribbean Shoreline

Kilometers
0 15 30 60 90 120



Jamaica Sea Turtle Habitat

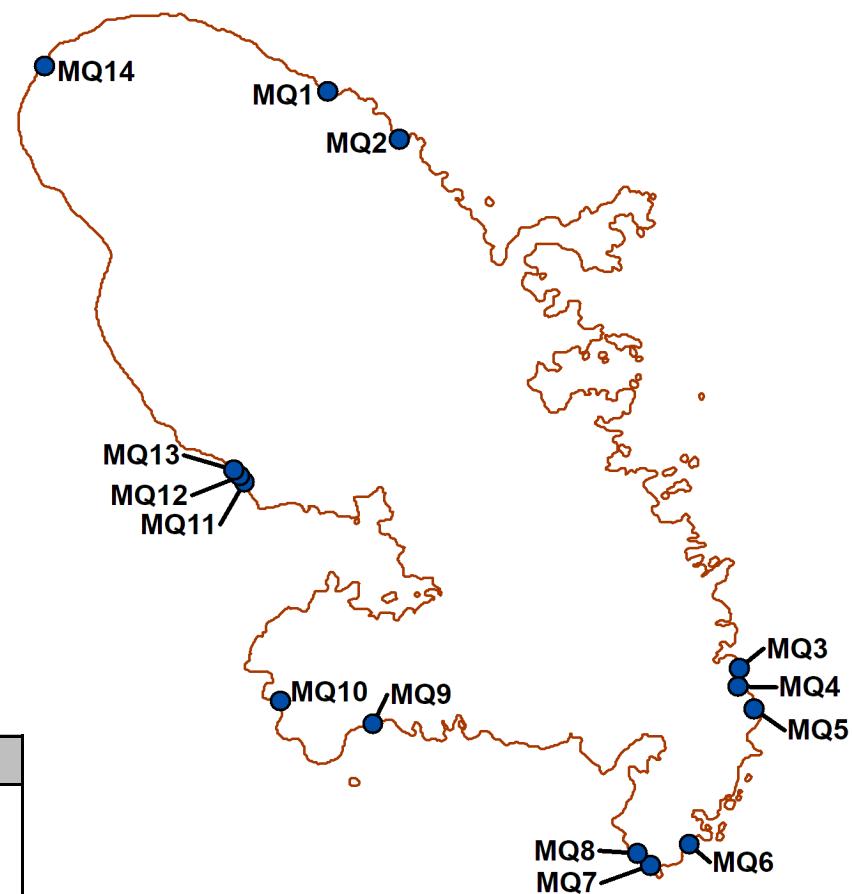
Beach Identification Codes with Beach Names			
JM1	Foul Bay	JM37	Little Bay
JM2	Duhaney Pen	JM38	Point
JM3	White Horses (west of Little Pedro Bay)	JM39	Barbican
JM4	Cow Bay	JM40	Half Moon Bay
JM5	Wiki wakie	JM41	Half Moon
JM6	Palsadoes/Port Royal	JM42	Silver Sands
JM7	Maiden Cay	JM43	Harmony Beach
JM8	Lime Cay	JM44	East of Harmony Beach
JM9	Hellshire Bay	JM45	Braco Beach
JM10	Manatee Bay	JM46	Grand Bahia
JM11	Coquar Bay	JM47	Idle Hours
JM12	Big Pelican Cay	JM48	Seville Beach
JM13	Little Pelican Cay	JM49	Drax Hall Beach
JM14	Bare Bush Cay	JM50	Mammee Bay
JM15	Pigeon Island	JM51	Laughing Waters
JM16	Little Half Moon Cay	JM52	Shaw Park
JM17	Big Half Moon Cay	JM53	Reggae Beach
JM18	Little Portland Cay	JM54	Golden Seas/Oracabessa
JM19	Big Portland Cay	JM55	Robin's Bay
JM20	Miller Bay	JM56	Annotto Bay
JM21	Long Pond	JM57	Windsor Castle
JM22	Peake Bay	JM58	Buff Bay
JM23	Jackson Bay	JM59	Spring Gardens
JM24	Gut's River	JM60	Orange Bay
JM25	Alligator Pond (east of Port Kaiser)	JM61	Hope Bay Beach
JM26	Calabash Bay	JM62	Paisley Gardens
JM27	Old Wharf	JM63	Frenchman's Cove
JM28	Billy's Bay	JM64	San San
JM29	Malcolm Bay	JM65	Fairy Hill/Winnifred Beach
JM30	Galleon Harbour	JM66	Long Bay
JM31	Luana Beach	JM67	Holland Bay
JM32	Font Hill	JM68	Morant Cay
JM33	Auchindown	JM69	Southeast Morant Cay
JM34	Crab Pond Point	JM70	Southwest Cay (Pedro Bank)
JM35	Bluefields	JM71	Middle Cay
JM36	St. John's Point		

Martinique Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	F?
Green Turtle (<i>Chelonia mydas</i>)	IN, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F?
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	No
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Unknown
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes



Data Providers
Fabian Rateau ONF International  ONF Martinique 

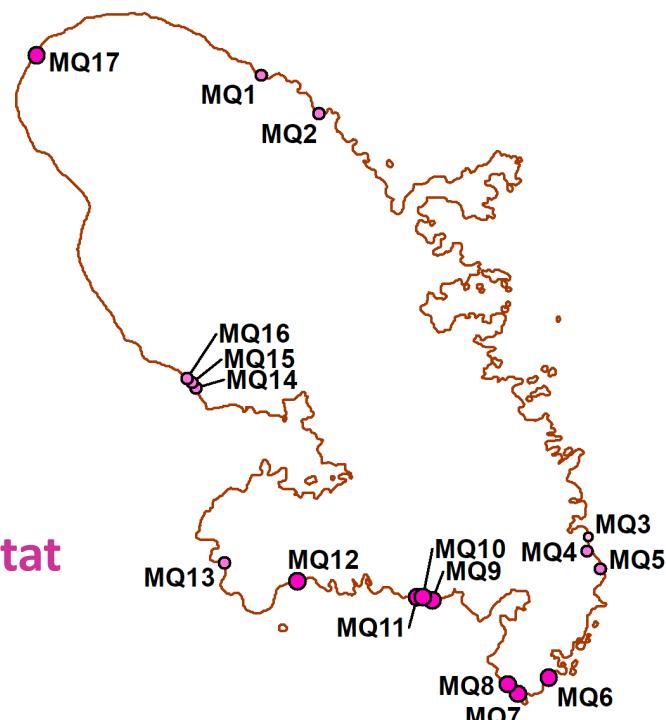
0 3.5 7 14 21 28 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline

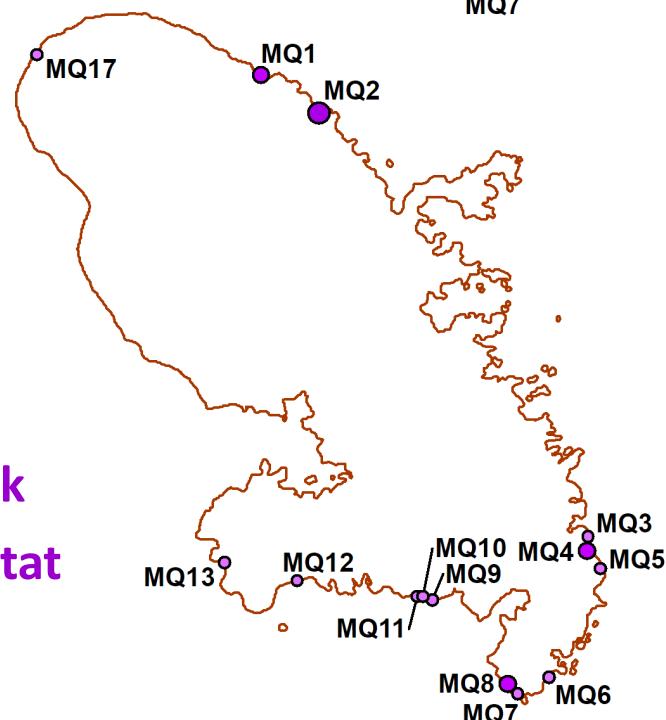


Martinique Sea Turtle Habitat

Hawksbill
Nesting Habitat



Leatherback
Nesting Habitat



Hawksbill Nesting Habitat Leatherback Nesting Habitat

◦ X Crawls per year

◦ <25 Crawls per year

● 25-100 Crawls per year

● <25 Crawls per year

● 25-100 Crawls per year

● 100-500 Crawls per year

— GSHHS Caribbean Shoreline

0 4.5 9 18 27 36 Kilometers



Martinique Sea Turtle Habitat

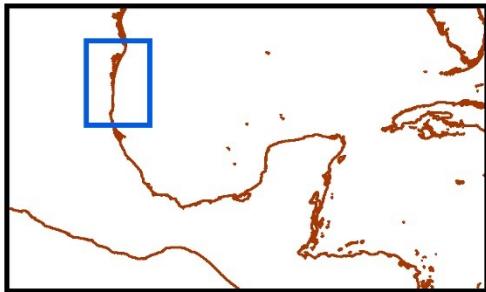
Beach Identification Codes with Beach Names			
MQ1	Lorrain	MQ10	Fond Banane
MQ2	Anse Charpentier	MQ11	Désert
MQ3	Petite Anse Macabou	MQ12	Diamant
MQ4	Grande Anse Macabou	MQ13	Anse d'arlet
MQ5	Anse Grosse Roche	MQ14	Madiana
MQ6	Anse Trabaud	MQ15	Anse Madame
MQ7	Grande Terre/ Anse à Prune/Grande Anse Salines	MQ16	Anse Collat
MQ8	Grande Anse des Salines	MQ17	Anse Lévrier/Anse à Voile
MQ9	Pont Café		

Mexico Sea Turtle Habitat—Tamaulipas

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	N, F
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

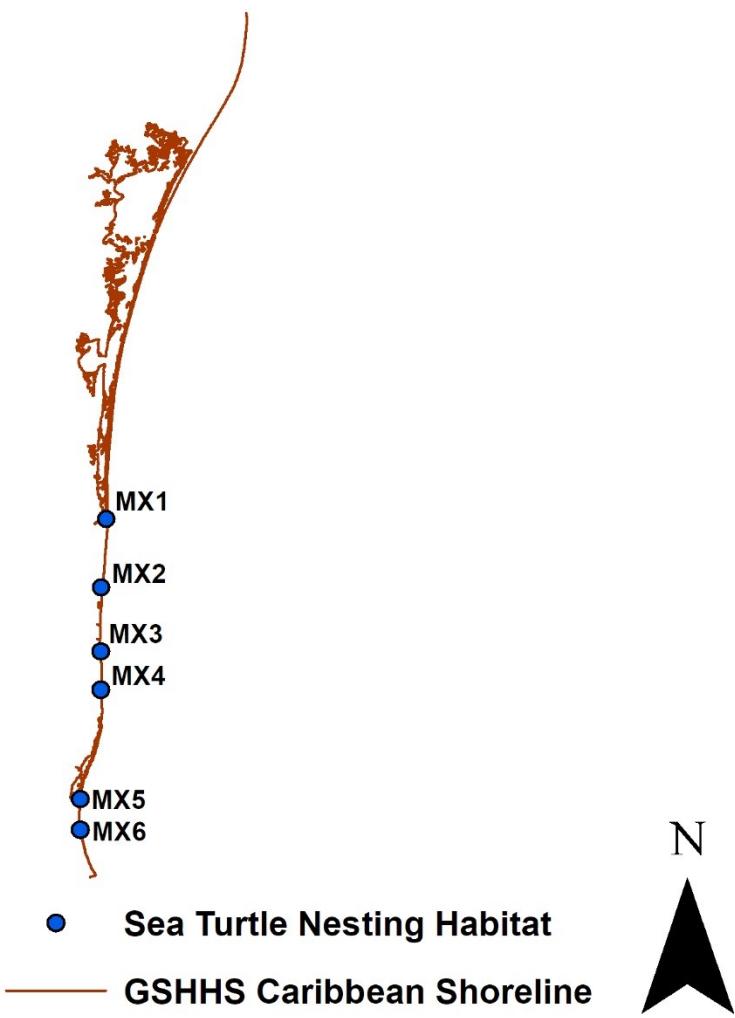
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

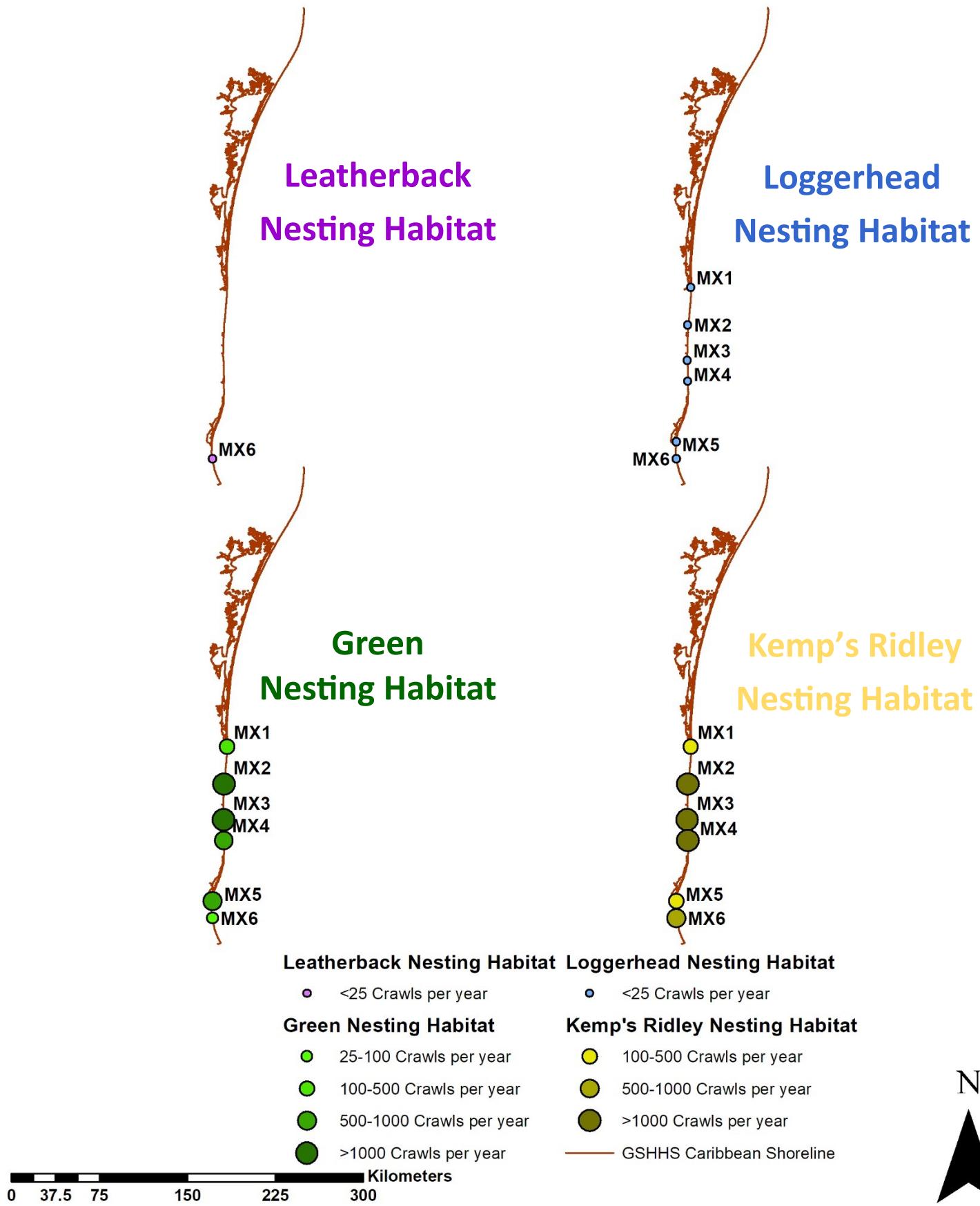


Data Providers
Martha Lopez Hernandez Héctor Hugo Acosta Sánchez Laura Sarti Martínez
 CONANP COMISIÓN NACIONAL DE ÁREAS NATURALES PROTEGIDAS
MVZ Alejandro García Peña
 TAM Comisión de Parques y Biodiversidad de Tamaulipas

0 30 60 120 180 240 Kilometers



Mexico Sea Turtle Habitat—Tamaulipas

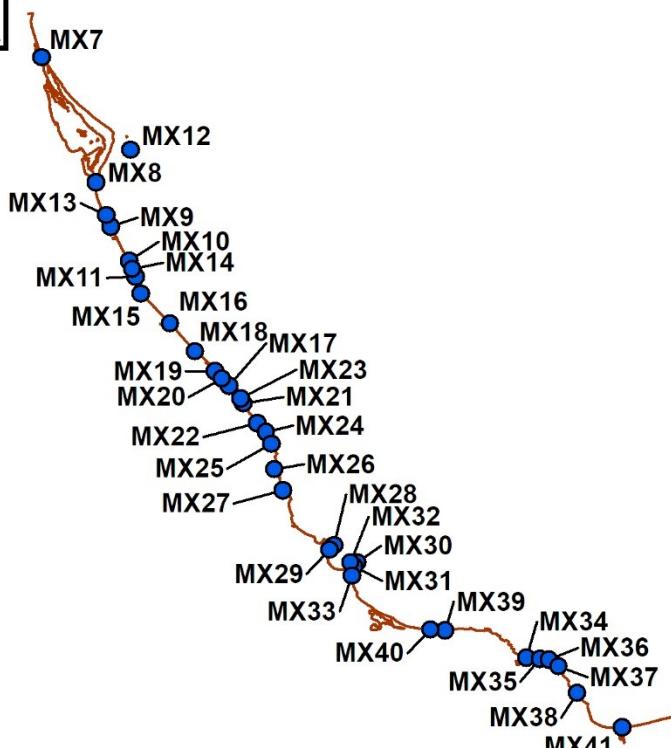
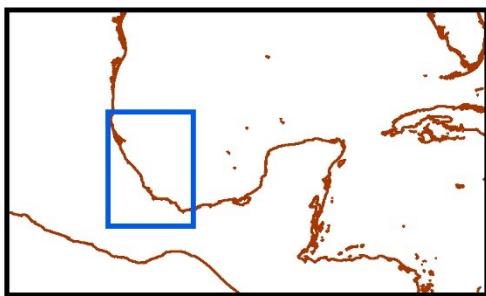


Mexico Sea Turtle Habitat—Veracruz

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	N, F
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes



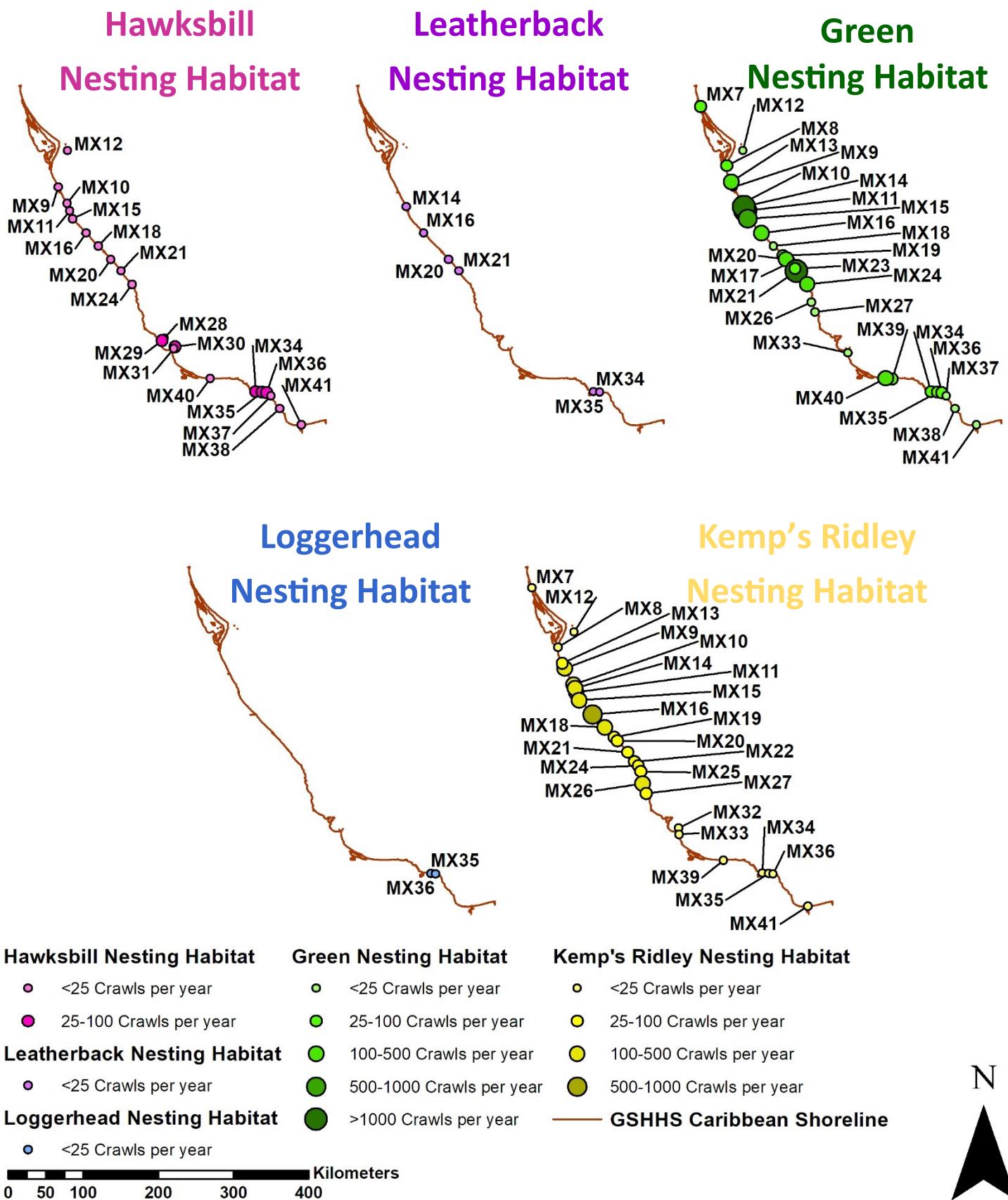
Data Providers
Raúl de Jesús González Díaz Mirón
 Acuario de Veracruz-Grupo Tortuguero del Estado
Christian Noe Absalon Torres, Blanca Mónica Zapata Nájera, Xóchitl Peralta Jiménez, Tomás Camarena Luhrs, Rosa Ciria Martínez Portugal, Adriana Laura Sarti M.
 Comisión Nacional de Áreas Naturales Protegidas

0 40 80 120 160 200 240 280 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Mexico Sea Turtle Habitat—Veracruz

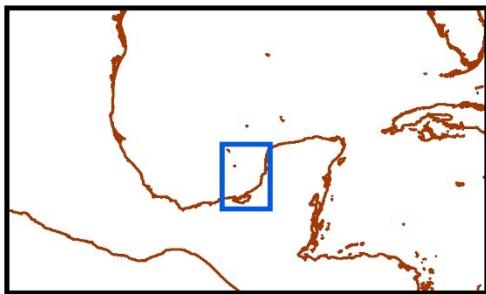


Mexico Sea Turtle Habitat—Campeche

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	N, F
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

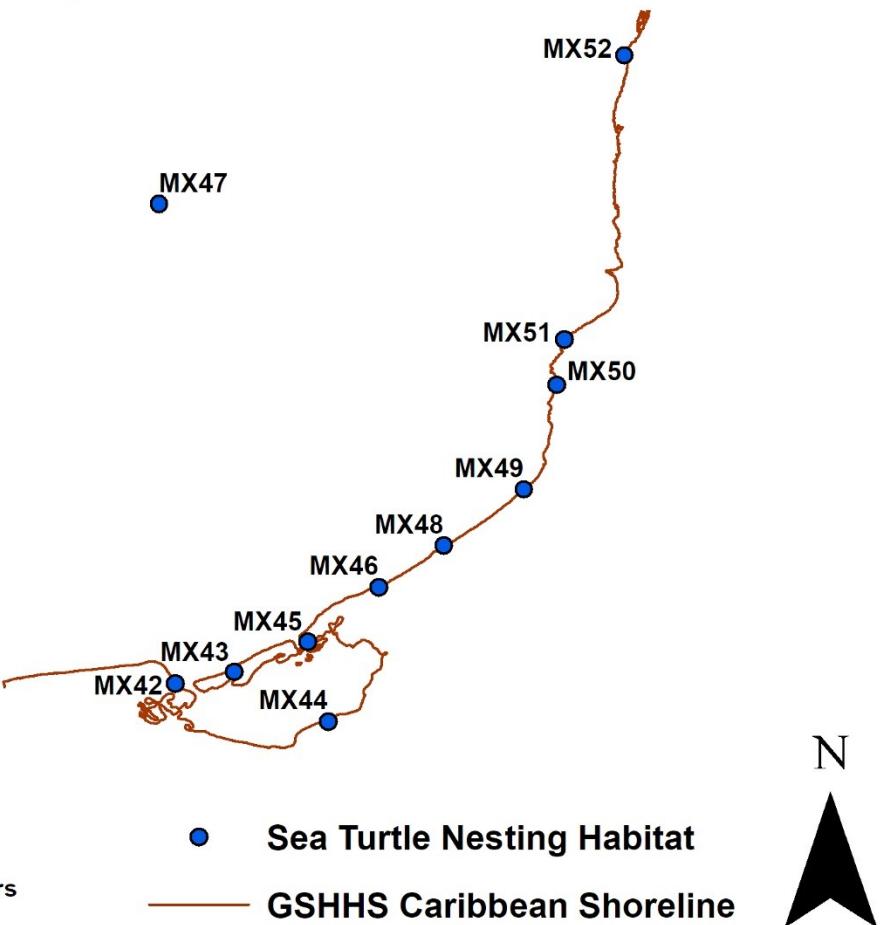
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

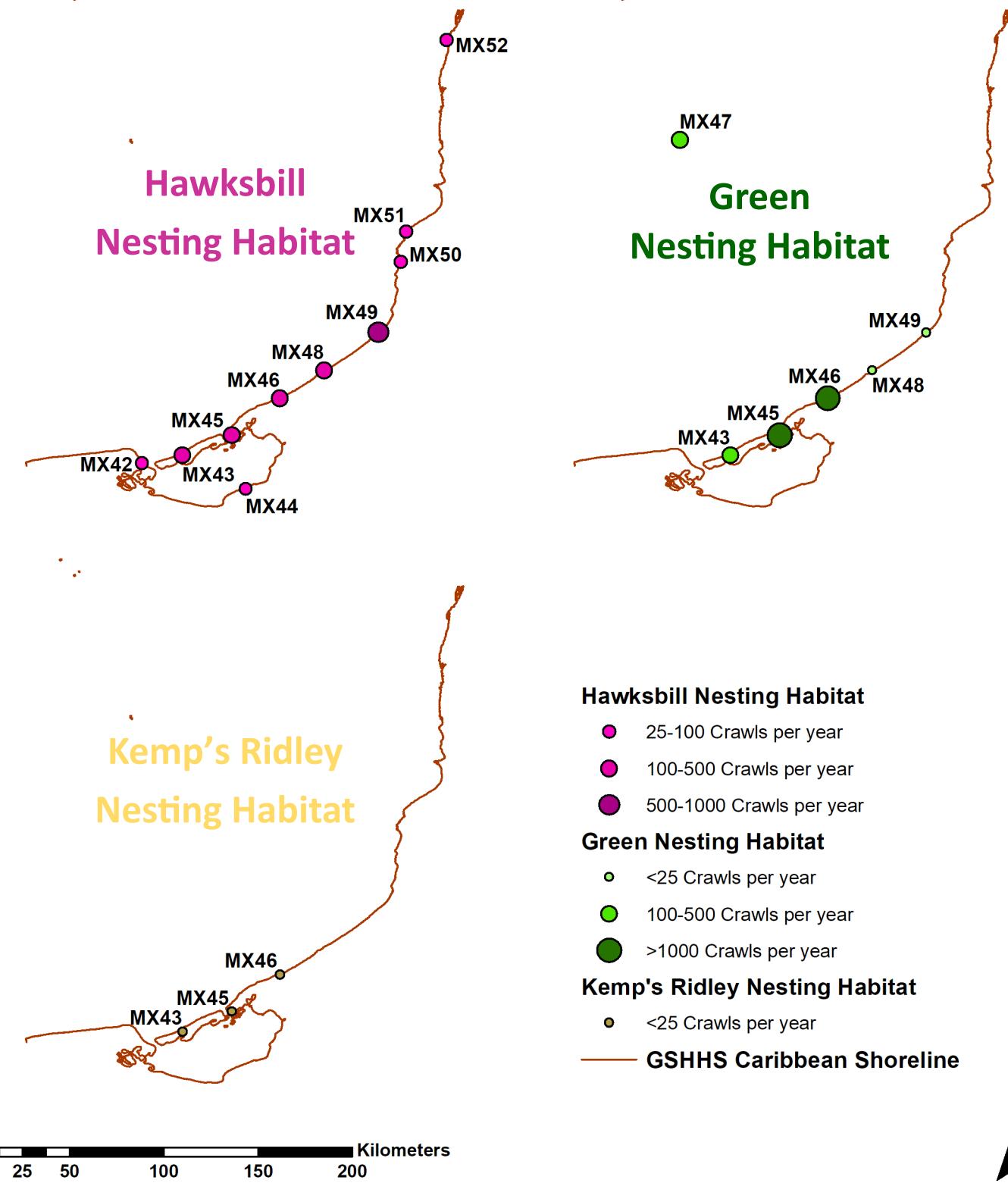


Data Providers	
Vicente Guzmán Hernández	
	Comisión Nacional de Áreas Naturales Protegidas
Jorge Berzunza Chío	
	Secretaría de Medio Ambiente y Recursos Naturales de Campeche
	Área de Protección de Flora y Fauna Laguna de Términos

0 20 40 80 120 160 Kilometers



Mexico Sea Turtle Habitat—Campeche

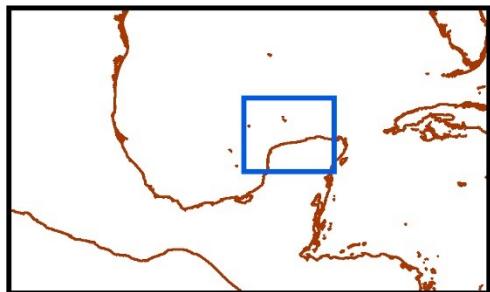


Mexico Sea Turtle Habitat—Yucatan

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	N, F
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

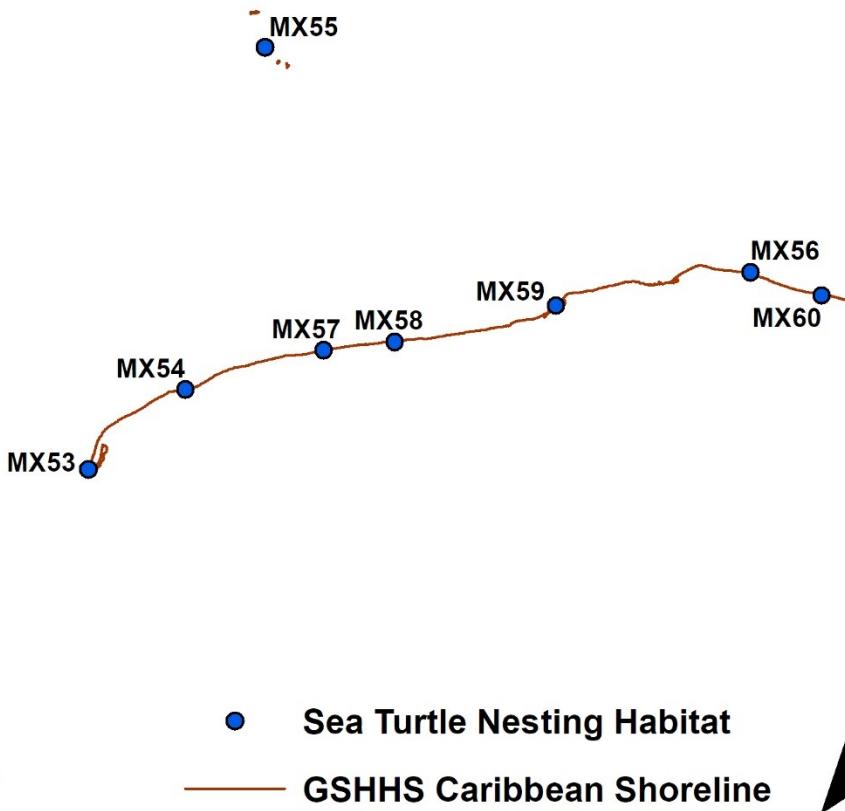
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes



Data Providers	
Melania López Castro Pronatura Península de Yucatán, A. C.	
Jonatan Alexander Ravell Ley Secretaría de Desarrollo	
Cristóbal Cáceres G. Cantón Reserva de la Biosfera Ría Lagartos	
Santuario Tortugas Marinas Playa Río Lagartos	
Parque Nacional Arrecife Alacranes	
Eduardo Cuevas CONACYT-Universidad Autónoma del Carmen	

0 20 40 80 120 160 Kilometers



Mexico Sea Turtle Habitat—Yucatan



Hawksbill Nesting Habitat Green Nesting Habitat Loggerhead Nesting Habitat

- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year

- <25 Crawls per year
- >1000 Crawls per year

- <25 Crawls per year
- GSHHS Caribbean Shoreline

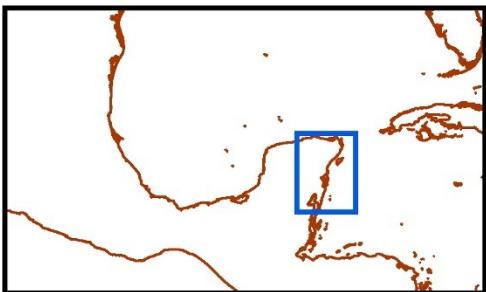


0 25 50 100 150 200 Kilometers

Mexico Sea Turtle Habitat—Quintana Roo

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	N, F
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I

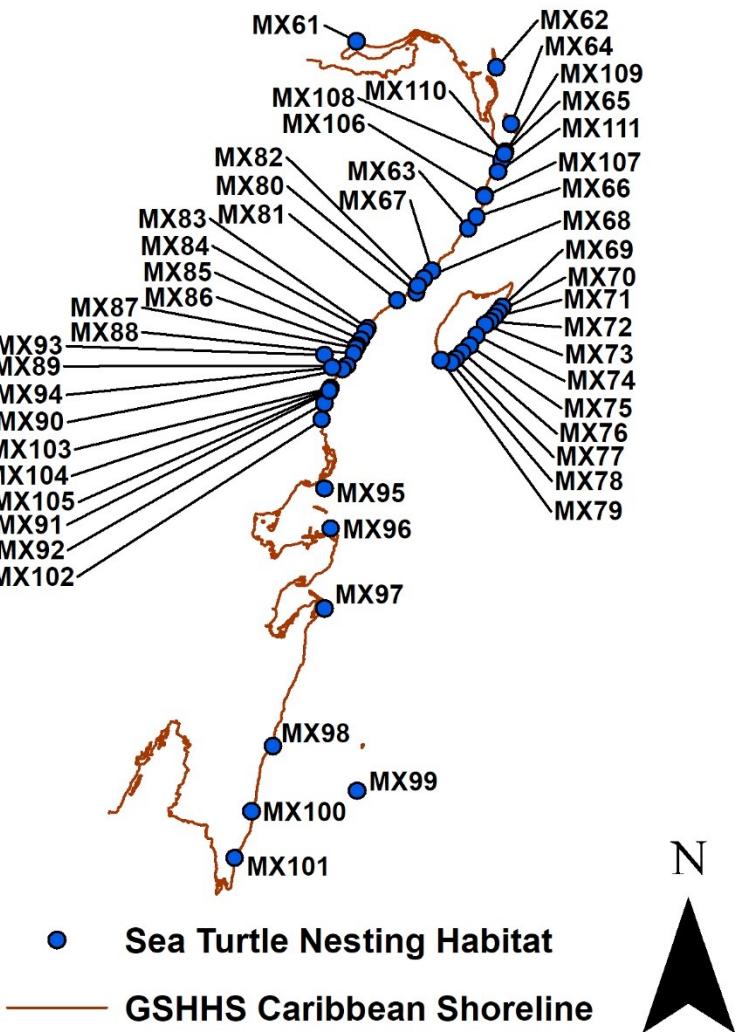
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent



National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

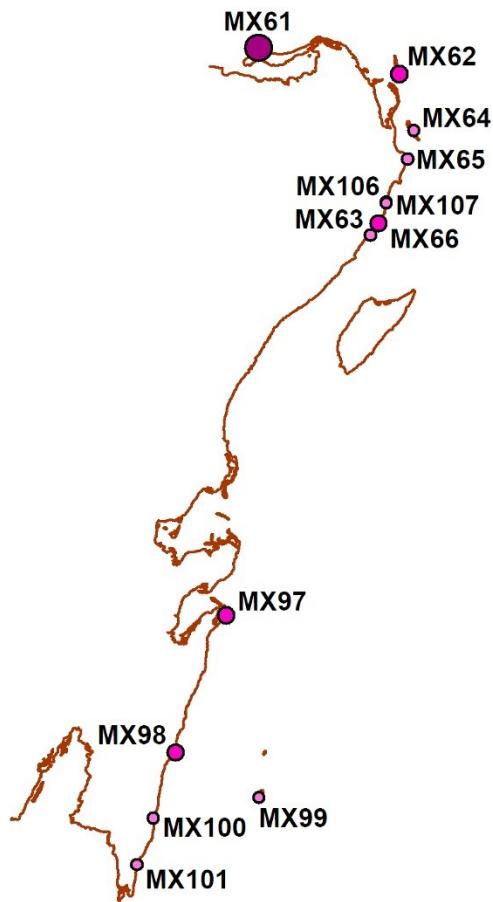
Data Providers	
	Comité Estatal para la Conservación de Tortugas Marinas en Quintana Roo
	Comisión Nacional de Áreas Naturales Protegidas
	H. Municipio Isla Mujeres
	H. Municipio de Solidaridad
	Centro Ecológico Akumal
	Fundacion Palace Resorts IAP
	Pronatura Península de Yucatán, A.C.
	pro natura península de yucatán, a.c.
	Flora, Fauna y Cultura de México, A.C.
	H. Municipio Benito Juárez
	Fundación de Parques y Museos de Cozumel
	El Colegio de la Frontera Sur, Unidad Chetumal
	ECOSUR
	Hard Rock Hotel Cancún
	Fundación Bahía Príncipe
	H. Municipio de Tulum

0 25 50 100 150 200 Kilometers

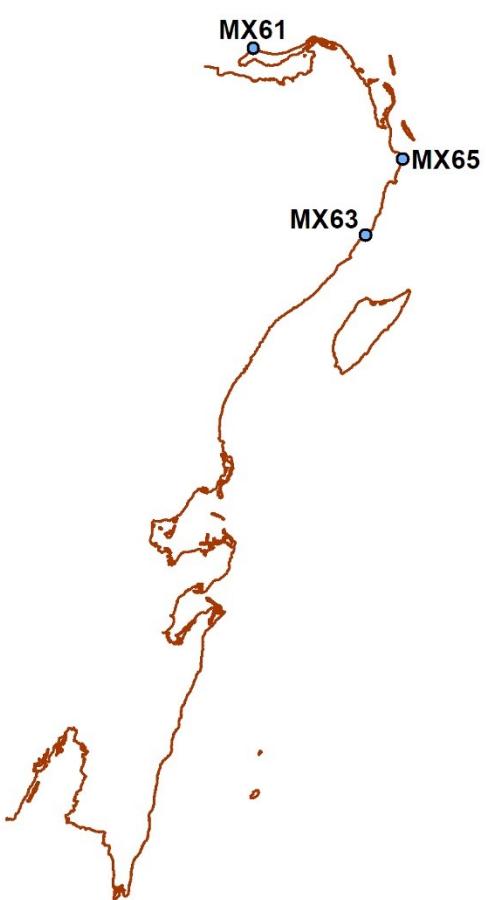


Mexico Sea Turtle Habitat—Quintana Roo

Hawksbill Nesting Habitat



Leatherback Nesting Habitat



Hawksbill Nesting Habitat Leatherback Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 500-1000 Crawls per year

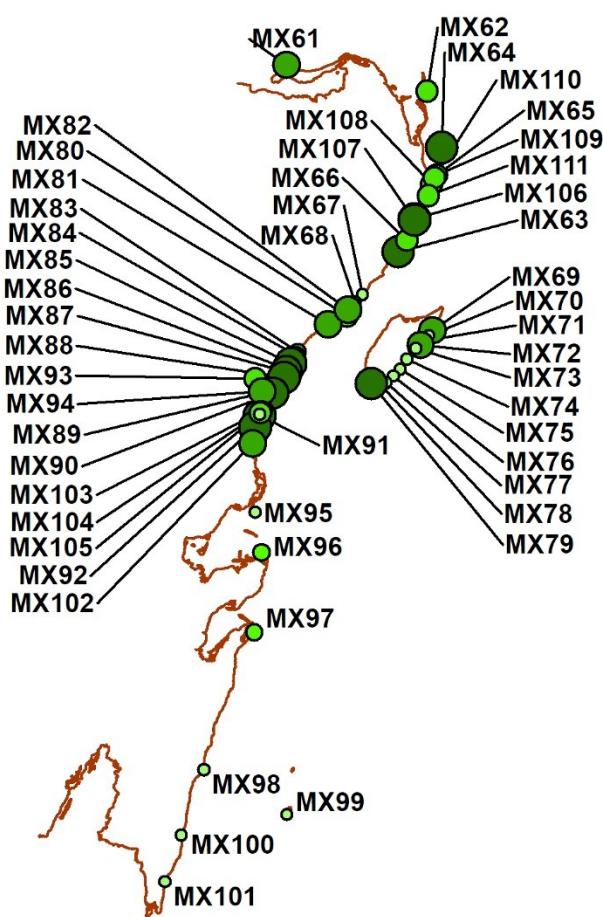
- <25 Crawls per year
- GSHHS Caribbean Shoreline

0 25 50 100 150 200 Kilometers

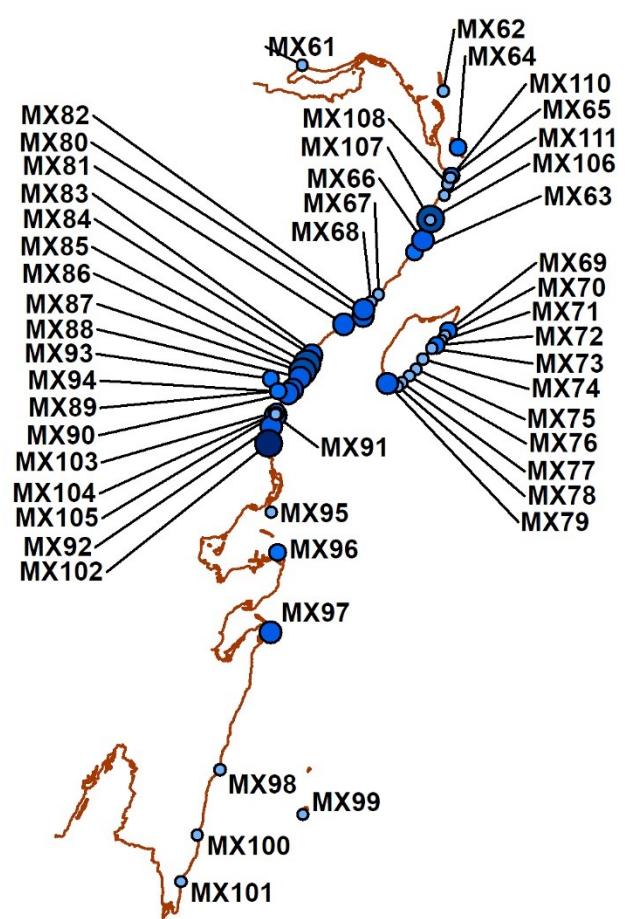


Mexico Sea Turtle Habitat—Quintana Roo

Green Nesting Habitat



Loggerhead Nesting Habitat



Green Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year
- >1000 Crawls per year

Loggerhead Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year
- >1000 Crawls per year

GSHHS Caribbean Shoreline

0 25 50 100 150 200 Kilometers



Mexico Sea Turtle Habitat

Beach Identification Codes with Beach Names			
MX1	La Pesca	MX41	Coatzacoalcos
MX2	Tepehuajes – Ostional	MX42	Xicalango - Victoria
MX3	Rancho Nuevo	MX43	Isla del Carmen
MX4	Playa Dos - Barra del Tordo	MX44	Chacahito
MX5	Miramar	MX45	Isla Aguada
MX6	Altamira	MX46	Sabancuy
MX7	Paraiso Escondido	MX47	Cayo Arcas
MX8	Cabo Rojo	MX48	Chenkan
MX9	Barra de Galindo	MX49	Punta Xen
MX10	Bahia de Cochinos - Villamar	MX50	Ensenada Xpicob
MX11	Farallon - Cazones	MX51	San Lorenzo
MX12	Isla Lobos	MX52	Isla Arena
MX13	R5	MX53	Celestún
MX14	Chaparrales	MX54	El Palmar
MX15	Rancho Playa	MX55	Arrecife Alacranes
MX16	Boca de Lima-Barra Tecolutla	MX56	Las Coloradas
MX17	El Laurel	MX57	Progreso
MX18	Vida Milenaria	MX58	Telchac Puerto
MX19	El Callejon del Pajaro y Cangrejo	MX59	Dzilam Bravo
MX20	Marcelino Yepez	MX60	El Cuyo
MX21	Lechuguilas—El Llano	MX61	Holbox
MX22	Santander	MX62	Isla Contoy
MX23	El Morro	MX63	PNAPM y Punta Brava
MX24	El Ensueño	MX64	Isla Mujeres
MX25	Boca Andrea	MX65	Isla Cancun
MX26	Central Nucleoelectrica Laguna Verde	MX66	Nizuc – Pt. Morelos
MX27	Chachalacas	MX67	Chenyuyu
MX28	Isla Verde	MX68	Fatima
MX29	Isla Sacrificios	MX69	Mezcalitos
MX30	Isla Enmedio	MX70	Punta Moreno
MX31	Isla Salmedina	MX71	Fidecaribe
MX32	Isla Polo	MX72	Chen-Rio
MX33	Mata de Uva/Barrancas/Playa Salinas	MX73	San Martin
MX34	Capulteotl	MX74	Chiqueros
MX35	El Salado	MX75	Box
MX36	Arrecifes	MX76	Cinco Puertas
MX37	Zapotitlan	MX77	Mirador
MX38	Peña Hermosa	MX78	Celarain
MX39	Punta Puntilla	MX79	Punta Sur
MX40	Agua Dulce	MX80	Punta Venado

Mexico Sea Turtle Habitat

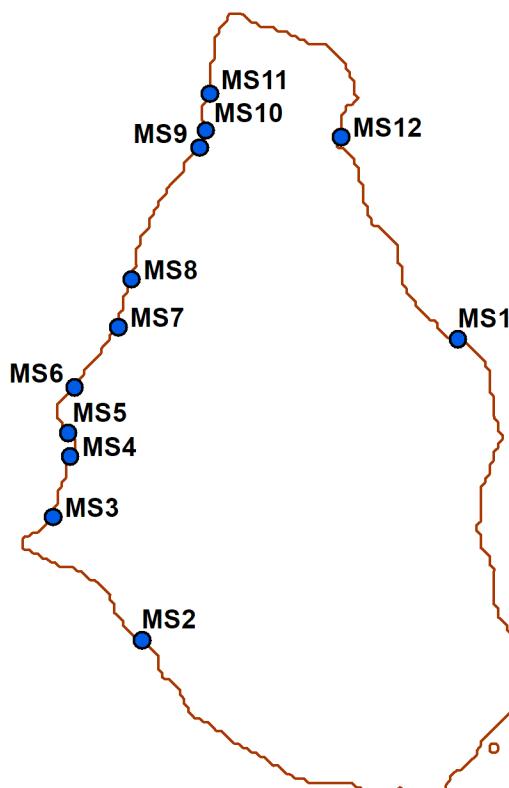
Beach Identification Codes with Beach Names			
MX81	Paamul	MX97	Punta Herrero
MX82	Xpu-ha	MX98	Majahual
MX83	Kantenah	MX99	Puerto Angel
MX84	Akumal	MX100	Herradura
MX85	Aventuras-DIF	MX101	Xcalak
MX86	Chemuyil	MX102	Lirios Balandrin
MX87	Xcacel	MX103	Papaya Playa
MX88	Xel-ha	MX104	Conchitas
MX89	Punta Cadena	MX105	Punta Piedra
MX90	Tankah	MX106	Puerto Morelos y Punta Brava
MX91	Kanzul	MX107	Tamul
MX92	Cahpechen	MX108	Hard Rock Cancun
MX93	Yu-Yum	MX109	Hotel Le Blanc
MX94	San Juan	MX110	Hotel Beach Palace
MX95	Punta Allen	MX111	Hotel Sun Palace
MX96	Punta Pajaros		

Montserrat Sea Turtle Habitat

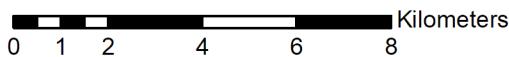
Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IN, F?
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	F?
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No
Moratorium (fixed period)	No
Prohibition(s) on take	No
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	No
Annual quota	No
Permits/licenses required	No
Gear restrictions	No
Area closures (MPA, park, reserve)	No
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	No



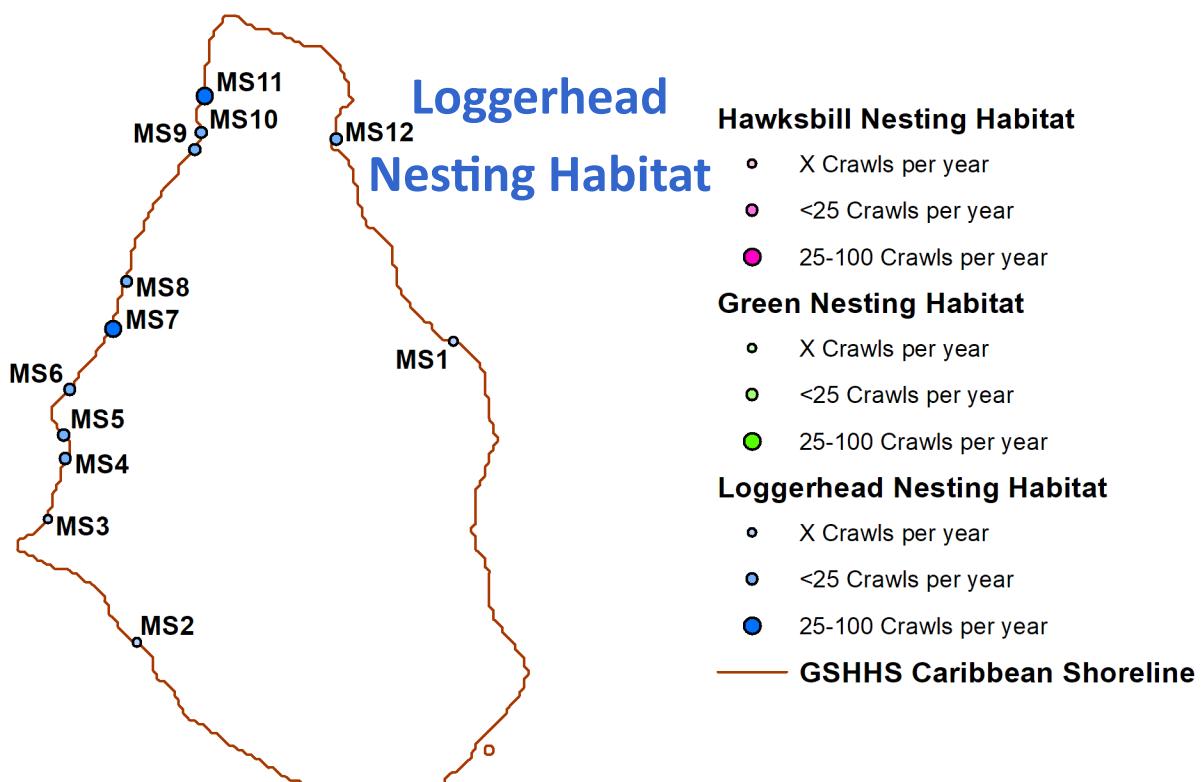
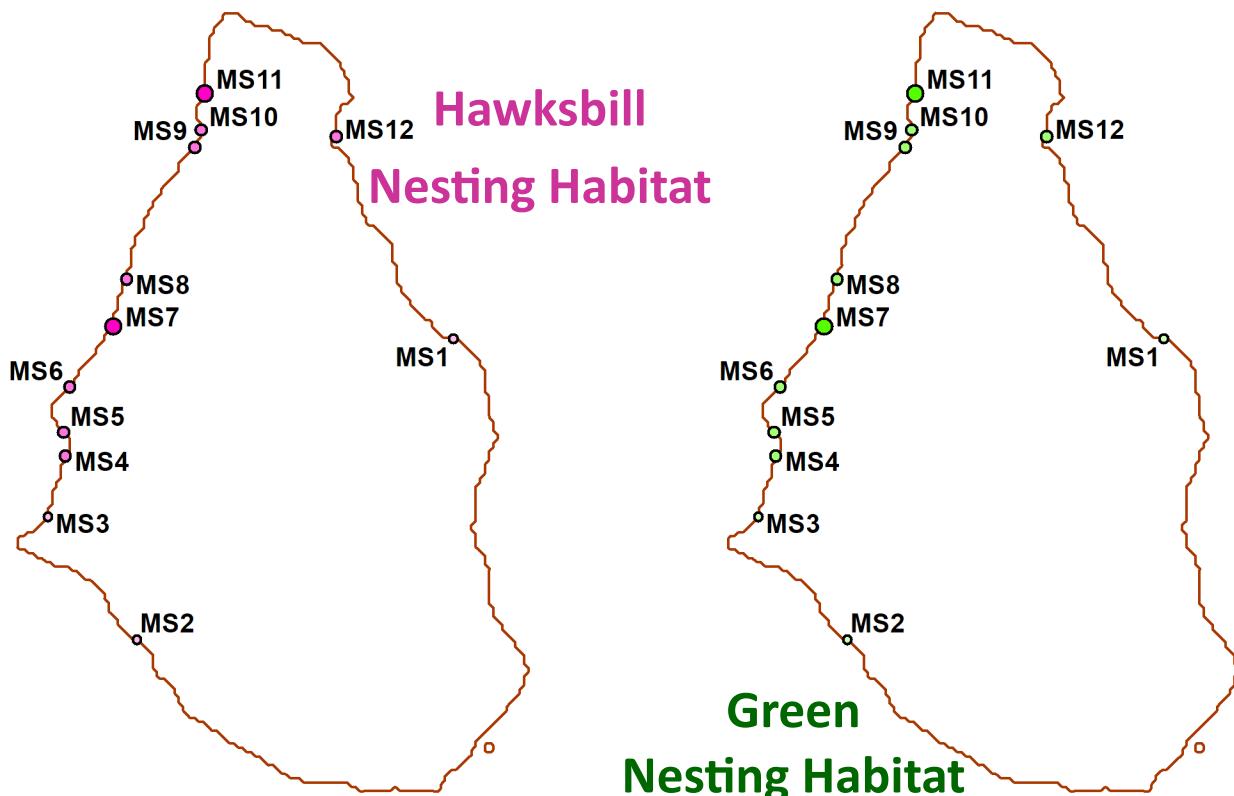
Data Providers
Alwyn Ponteen Ministry of Agriculture, Trade and Environment



● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Montserrat Sea Turtle Habitat



Hawksbill Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year

Green Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year

Loggerhead Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year

— GSHHS Caribbean Shoreline

0 1 2 4 6 8 Kilometers



Montserrat Sea Turtle Habitat

Beach Identification Codes with Beach Names			
MS1	Trant's Bay/Farm Bay	MS7	Woodlands Beach
MS2	Plymouth	MS8	Bunkum Bay
MS3	Fox's Bay	MS9	Carrs Bay
MS4	Isle Bay	MS10	Little Bay
MS5	Old Road Bay	MS11	Rendez-vous Bay
MS6	Lime Kiln Bay	MS12	Maguerita Bay

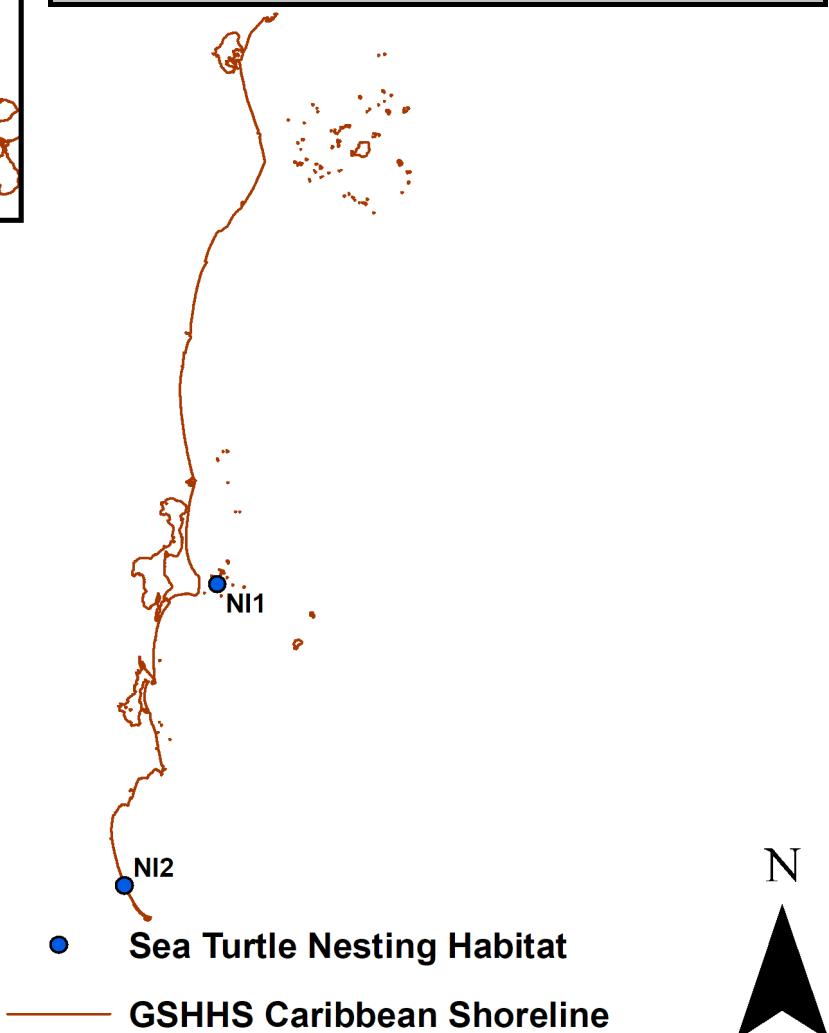
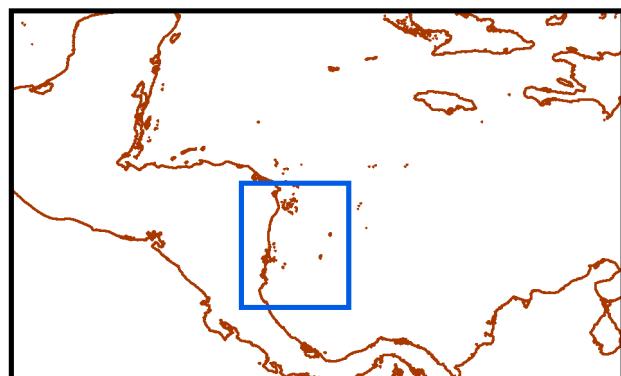
Nicaragua Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, IF
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	Yes*
Closed season	Yes (GT)
Minimum size limits	No
Maximum size limits	No
Annual quota	No
Permits/licenses required	No
Gear restrictions	No
Area closures (MPA, park, reserve)	No
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

*Completely protected, with the exemption of a seasonal subsistence green turtle [only] fishery in autonomous Caribbean coastal regions (RACCS, RACCN)



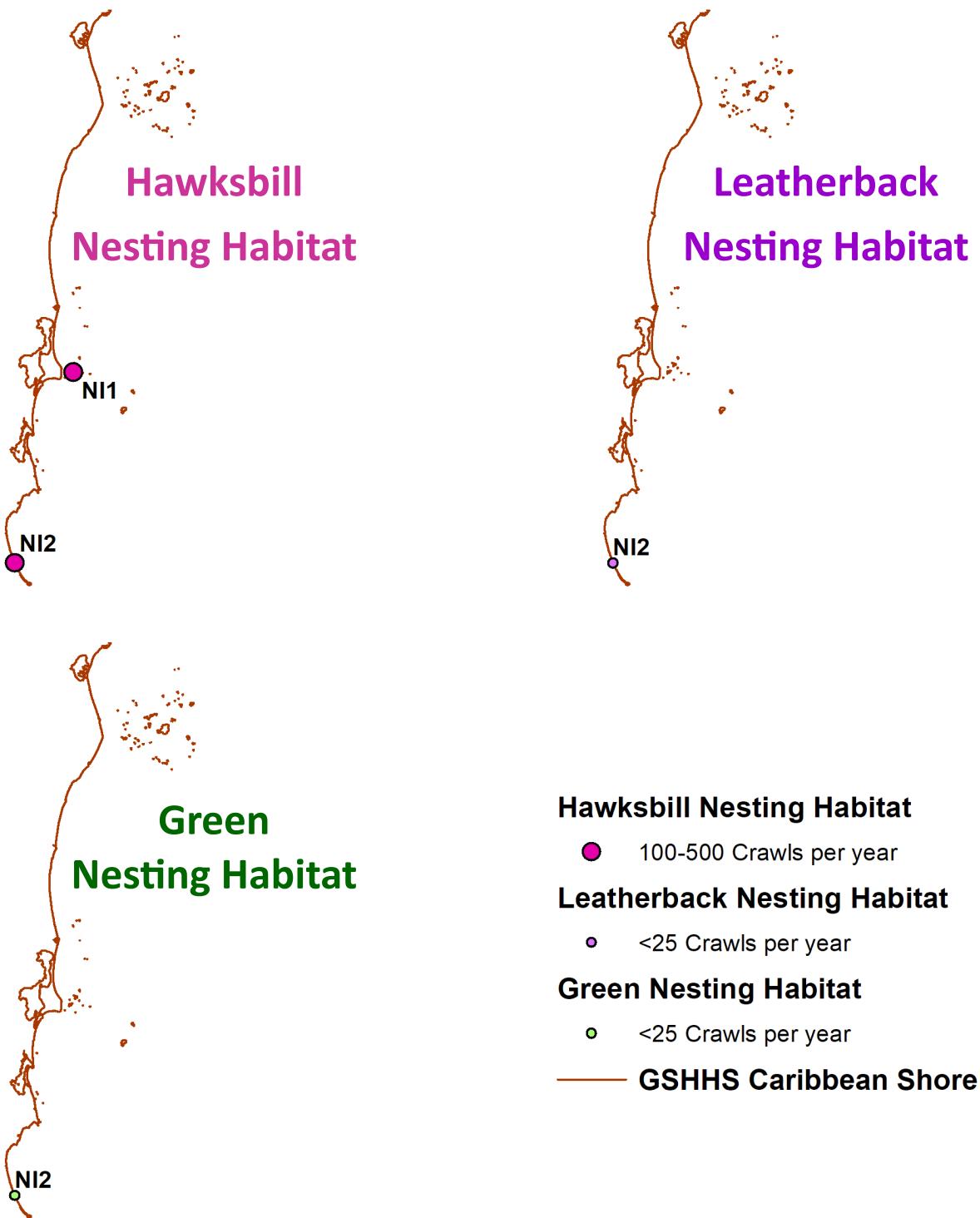
Data Providers
Dr. Cynthia Lagueux Dr. Cathi Campbell
Former affiliation: Wildlife Conservation Society


Current affiliation: Archie Carr Center for Sea Turtle Research, University of Florida



0 25 50 100 150 200 Kilometers

Nicaragua Sea Turtle Habitat



Kilometers
0 30 60 120 180 240



Nicaragua Sea Turtle Habitat

Beach Identification Codes with Beach Names

NI1	Pearl Cays	NI2	EI Cocal
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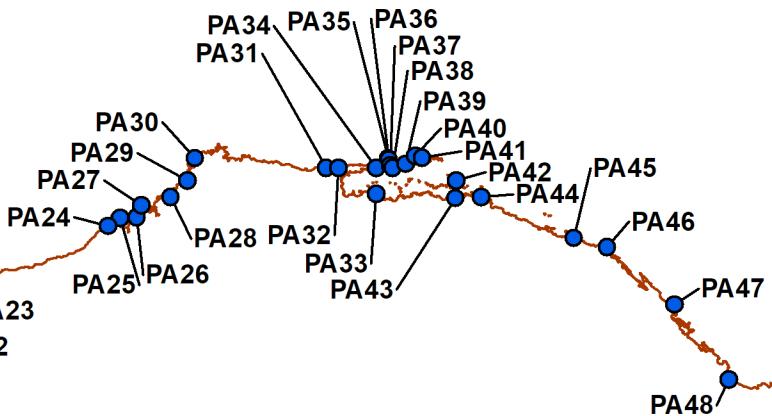
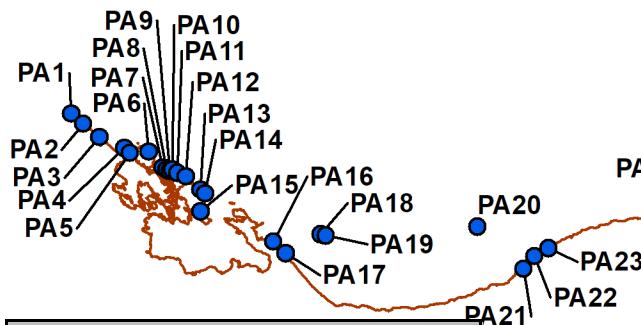
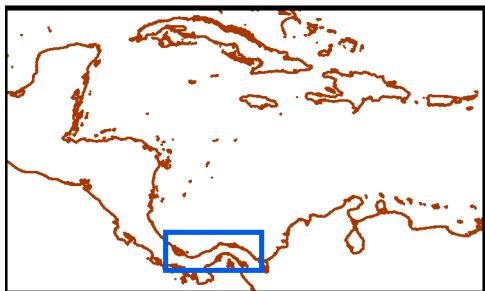
Panamá Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IN, F
Green Turtle (<i>Chelonia mydas</i>)	IN, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes*
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

* Tortoiseshell for cock fighting spurs, national dress and jewelry; scutes originate in Bocas del Toro and Kuna Yala; illegal use of eggs on both coasts.



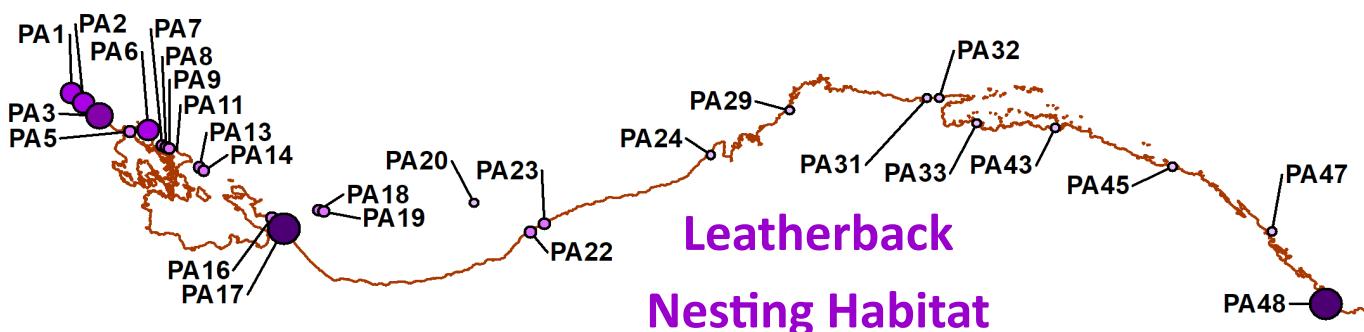
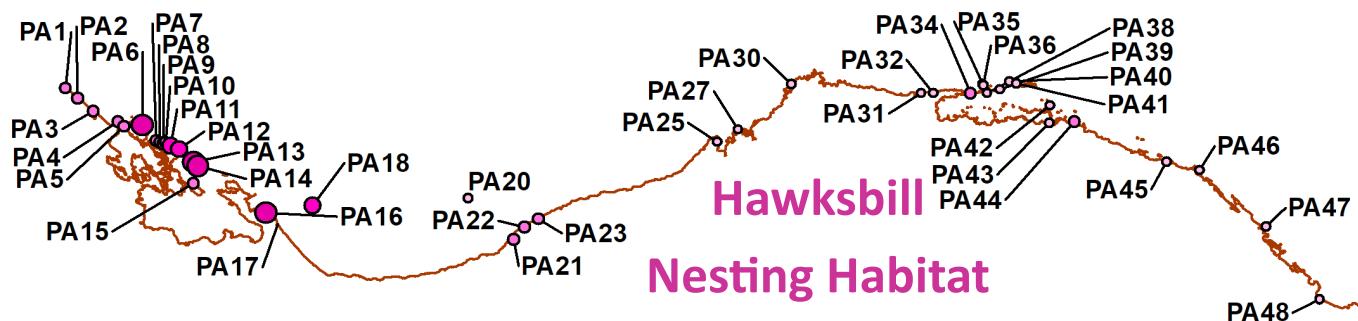
Data Providers	
	Dr. Anne Meylan FWC-FWRI
	Argelis Ruiz
	Marino Eugenio Abrego Ministerio de Ambiente
	Cristina Ordoñez
	Arcadio Castillo, CENDAH

0 25 50 100 150 200 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Panamá Sea Turtle Habitat



Hawksbill Nesting Habitat

- X Crawls per year
- ○ <25 Crawls per year
- ○ 25-100 Crawls per year
- ○ 100-500 Crawls per year
- ○ 500-1000 Crawls per year

Leatherback Nesting Habitat

- X Crawls per year
- ○ <25 Crawls per year
- ○ 100-500 Crawls per year
- ○ 500-1000 Crawls per year
- ○ >1000 Crawls per year

Green Nesting Habitat

- X Crawls per year
- ○ <25 Crawls per year

Loggerhead Nesting Habitat

- <25 Crawls per year

0 25 50 100 150 200 Kilometers

GSHHS Caribbean Shoreline



Panamá Sea Turtle Habitat

Beach Identification Codes with Beach Names			
PA1	Sixaola	PA25	Playa Diablo
PA2	San San	PA26	Playa Tortuguilla
PA3	Playa Soropta (Changuinola)	PA27	Playa frente al anitiguo campo de antenas en Galeta
PA4	Punta Antón (Punta Soropta)	PA28	Maria Chiquita
PA5	Playas Bocas del Drago (Lagarto, Gundula, Cristof and Cate) Isla Colon	PA29	Río Guanche
PA6	Playa Bluff y Playa Flores - Isla Colon	PA30	Playa Blanca
PA7	First Beach (Wizard's Beach)	PA31	Escribano
PA8	Second Beach (Drefffe Beach)	PA32	Playa Colorada (Ugub guinnid)
PA9	Red Frog Beach (Playa Rana Roja)	PA33	Rio Carti Grande
PA10	Polo's Beach	PA34	Isla Gaigirdup (Porvenir)
PA11	Playa Larga - Bastimentos (Long Bay)	PA35	Islas Waisagladub, Miria, Ogobbuguin, Biriadub, Diadub, Guiguindub (Cayos Gaimao o Cayos Holandeses)
PA12	Punta Vieja (Old Point)	PA36	Isla Wichudup-Bibi
PA13	Small Zapatilla Cay	PA37	Isla Niadup
PA14	Big Zapatilla Cay	PA38	Achutupo o Isla Perro
PA15	Cayo de Agua	PA39	Isla Masargandup
PA16	Playa Roja (Playa Colorado) (Red Beach)	PA40	Isla Aggwadargana, Cayos Gaimao (Cayos Holandeses)
PA17	Playa Chiriquí	PA41	Isla Masargandup/Isla Wichudup-Dummad
PA18	Playa San Pedro	PA42	Cayos Coco Bandera
PA19	Isla Escudo de Veraguas	PA43	Playa de Aidirgandi y Uggubba (mainland)
PA20	Coclé del Norte	PA44	Isla Digirdub
PA21	Petaquilla	PA45	San Ignacio de Tupile (Dadnaggwer Dubbir) coastal zone beach.
PA22	Punta Rincón	PA46	Ailigandi
PA23	Caimitillo	PA47	Playa Pino
PA24	Playa Fuerte Frances Portobelo	PA48	Playa Armila o Pito

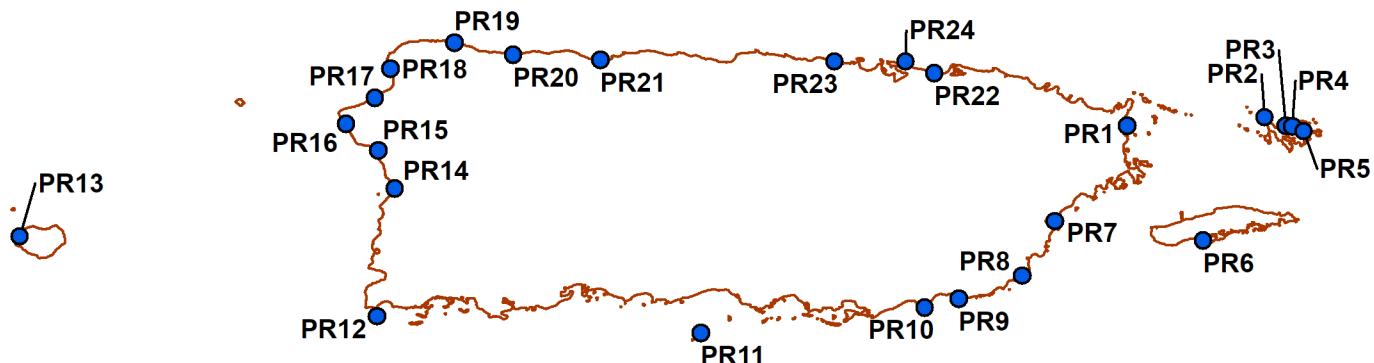
Puerto Rico Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	IF

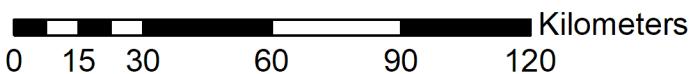
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

* State and federal permits required for all research and management actions.



Data Providers
Carlos E. Diez Departamento de Recursos Naturales y Ambientales 
Luis Crespo Amigos de las Tortugas Marinas 



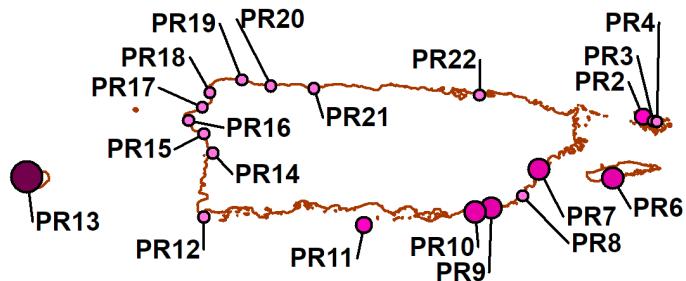
● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Puerto Rico Sea Turtle Habitat

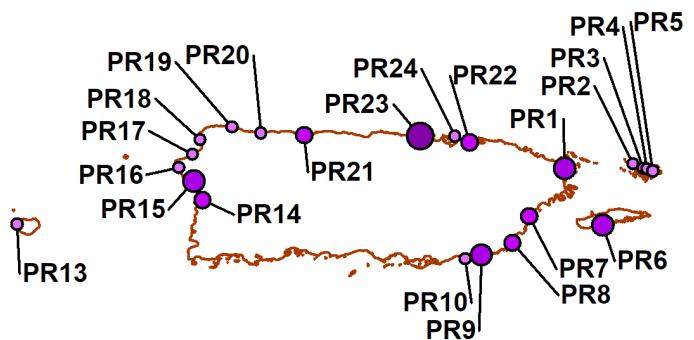
Hawksbill

Nesting Habitat



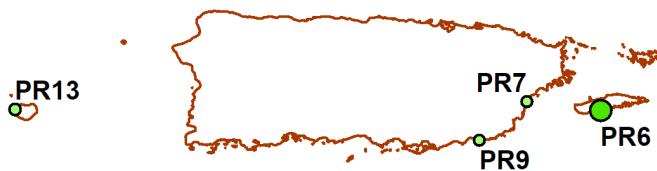
Leatherback

Nesting Habitat



Green

Nesting Habitat



Hawksbill Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- >1000 Crawls per year

Kilometers
0 20 40 80 120 160

Leatherback Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year

Green Nesting Habitat

- <25 Crawls per year
- 100-500 Crawls per year

GSHHS Caribbean Shoreline

N



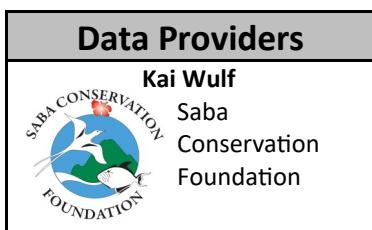
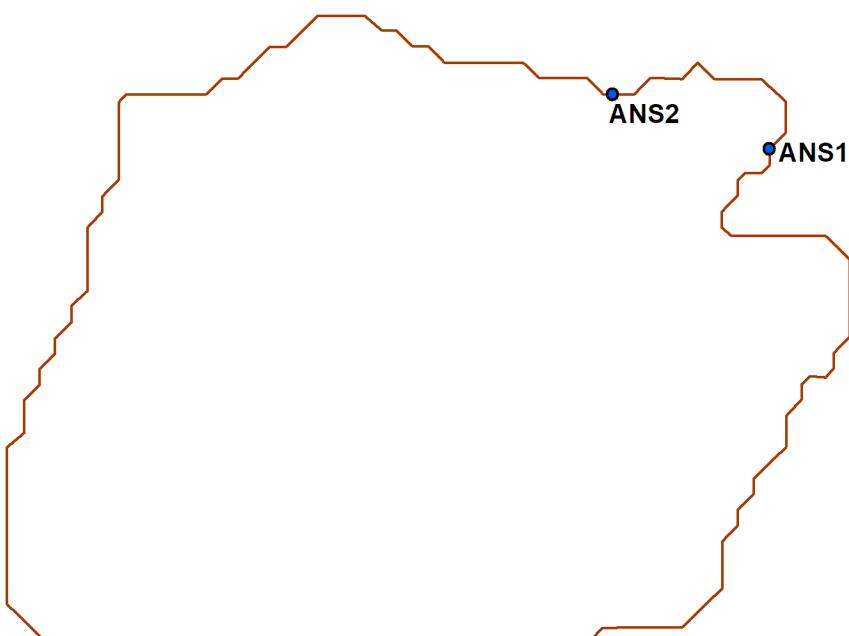
Puerto Rico Sea Turtle Habitat

Beach Identification Codes with Beach Names			
PR1	Paulinas, San Miguel, Convento	PR13	Mona Island
PR2	Culebra Archipealgo Inclusive	PR14	Mayaguez
PR3	Ressaca - Culebra	PR15	Anasco
PR4	Brava - Culebra	PR16	Rincon
PR5	Zoni - Culebra	PR17	Aguada
PR6	Vieques	PR18	Aguadilla
PR7	Humancao	PR19	Isabella
PR8	Yabucoa	PR20	Quebradillas
PR9	Maunabo	PR21	Arecibo
PR10	Patillas	PR22	Pinones
PR11	Caja de Muerto	PR23	Dorado
PR12	Cabo Rojo	PR24	San Juan

Saba Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	IN, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	I
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	No
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes



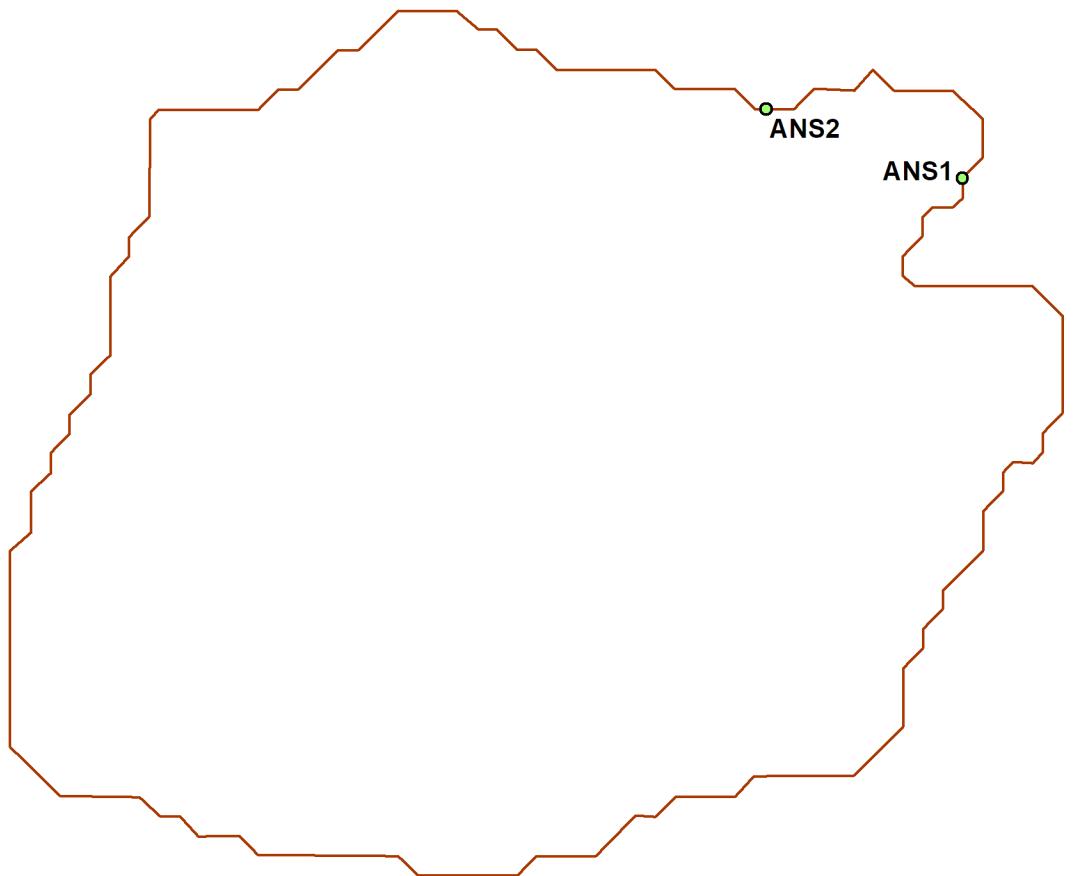
0 0.35 0.7 1.4 2.1 2.8 Kilometers

• Sea Turtle Nesting Habitat
 — GSHHS Caribbean Shoreline



Saba Sea Turtle Habitat

Green Nesting Habitat



Green Nesting Habitat

• <25 Crawls per year

0 0.3 0.6 1.2 1.8 2.4 Kilometers

— GSHHS Caribbean Shoreline



Saba Sea Turtle Habitat

Beach Identification Codes with Beach Names

ANS1	Cove Bay Beach	ANS2	Cave of Rum Bay
------	----------------	------	-----------------

Saint Barthélemy Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I, IF?
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F?
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I, IF?

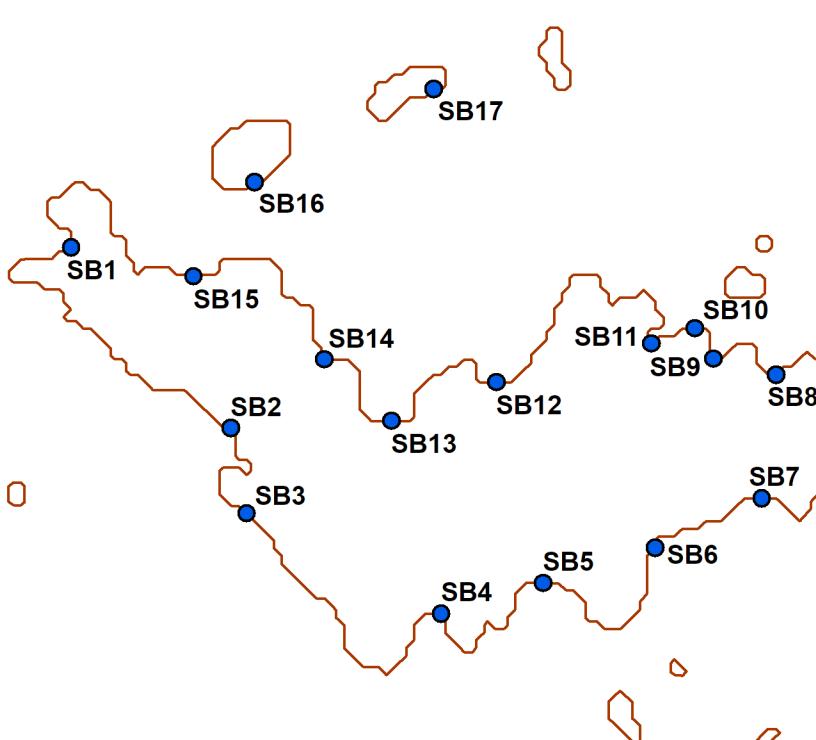
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	No
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes

* Under national law, only accredited professionals can handle and/or provide care to a sea turtle.

Data Providers
 Claire Saladin NeaWildlife Project
 Olivier Raynaud Agence Territoriale de l'environnement Saint Barthélémy

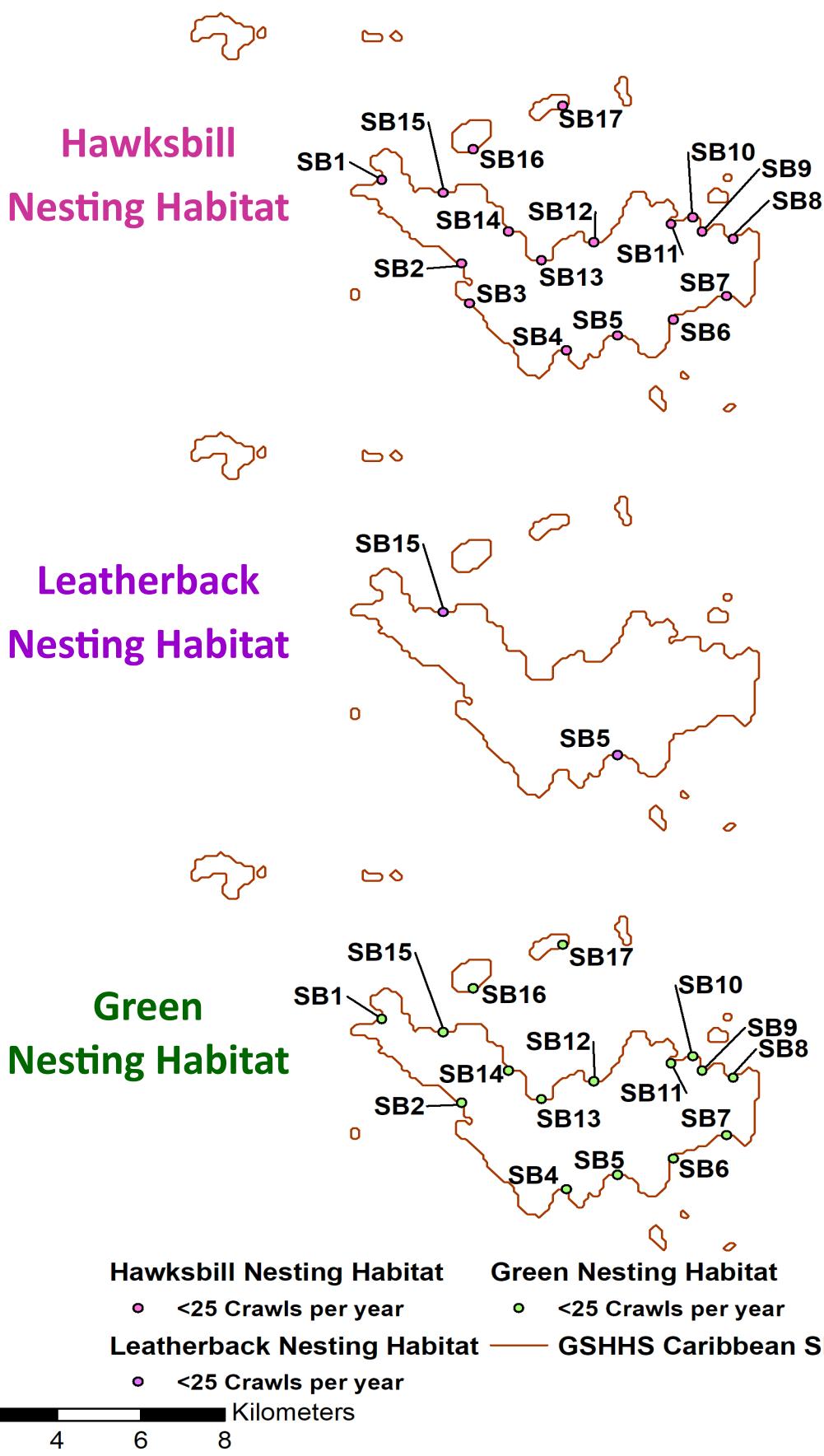
0 0.5 1 Kilometers
2 3 4



- Sea Turtle Nesting Habitat
- GSHHS Caribbean Shoreline



Saint Barthélemy Sea Turtle Habitat



Saint Barthélemy Sea Turtle Habitat

Beach Identification Codes with Beach Names			
SB1	Colombier	SB10	Maréchal
SB2	Public	SB11	Marigot
SB3	Shell Beach	SB12	Lorient
SB4	Gouverneur	SB13	Saint Jean
SB5	Saline	SB14	Anse des Cayes
SB6	Grand Fond	SB15	Flamands
SB7	Toiny	SB16	Ilet Bonhomme
SB8	Petit Cul-de-Sac	SB17	Ilet Fregate
SB9	Grand Cul-de-Sac		

Saint Kitts & Nevis Sea Turtle Habitat

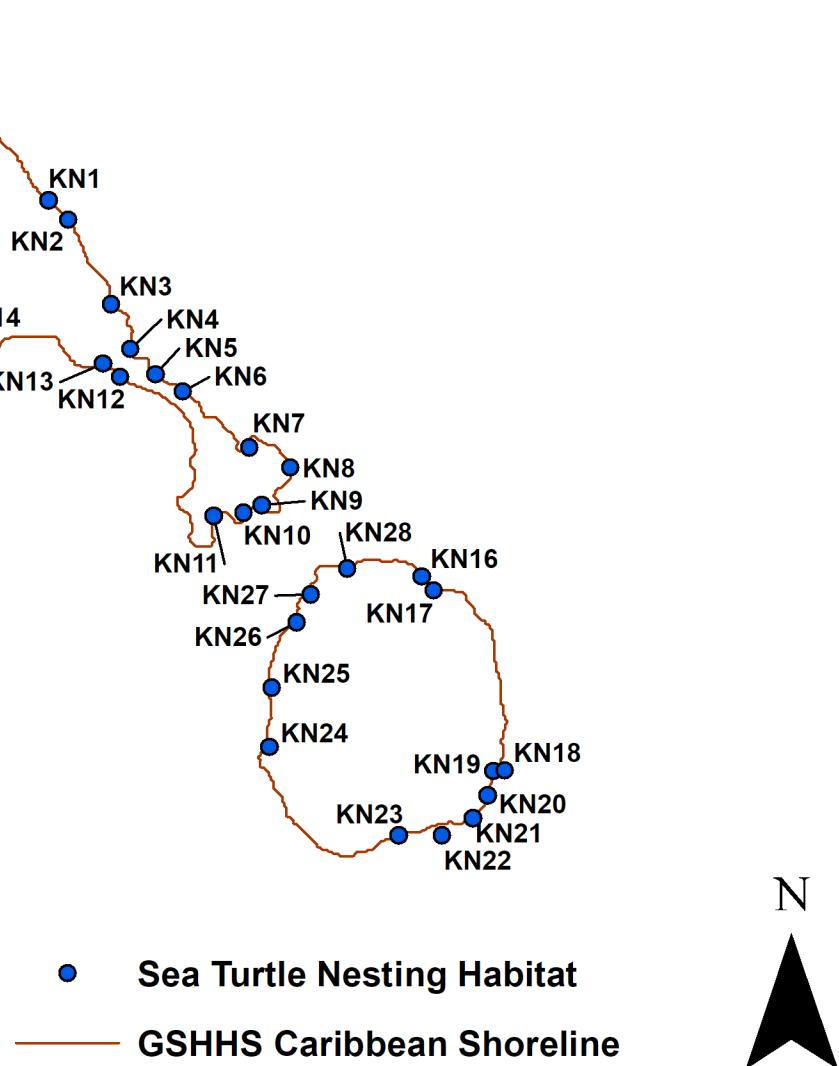
Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No
Moratorium (fixed period)	No
Prohibition(s) on take	E, N, NF
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	No
Annual quota	No
Permits/licenses required	No
Gear restrictions	Yes
Area closures (MPA, park, reserve)	No
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Unknown
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

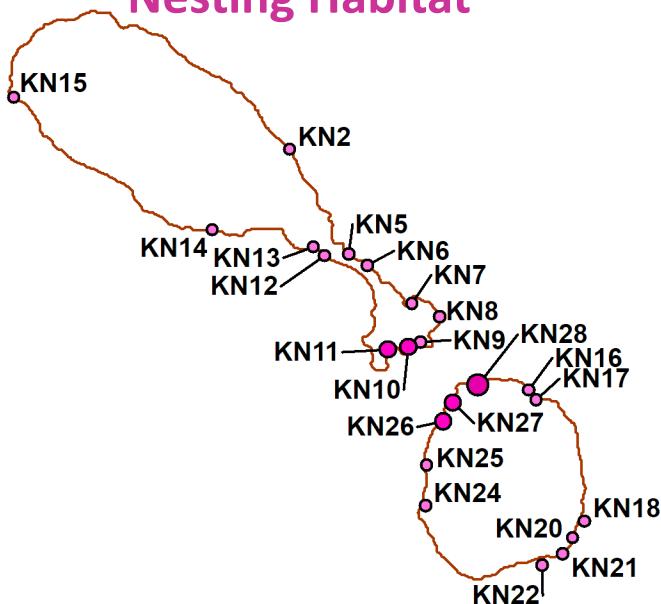
Data Providers
 Kimberly Stewart St. Kitts Sea Turtle Monitoring Network
 Emile Pemberton Nevis Turtle Group

0 2 4 8 12 16 Kilometers

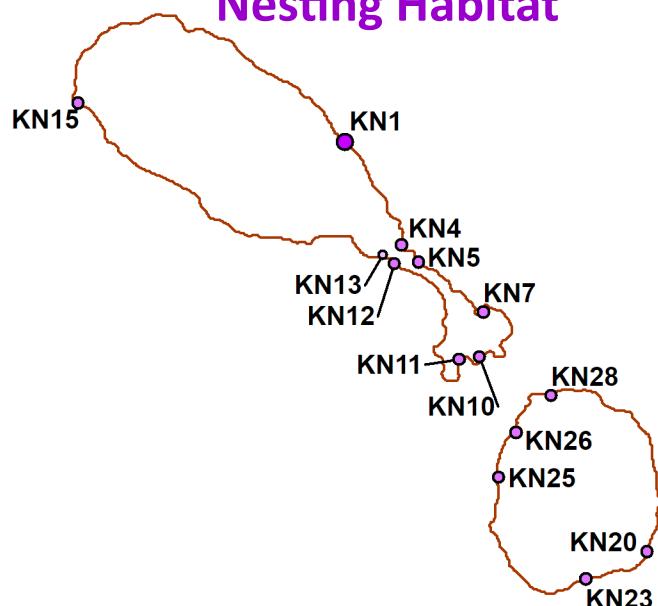


Saint Kitts & Nevis Sea Turtle Habitat

Hawksbill Nesting Habitat



Leatherback Nesting Habitat



Green Nesting Habitat



Hawksbill Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year

Leatherback Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year

Green Nesting Habitat

- <25 Crawls per year

— GSHHS Caribbean Shoreline

0 2.5 5 Kilometers 10 15 20



Saint Kitts & Nevis Sea Turtle Habitat

Beach Identification Codes with Beach Names - Saint Kitts			
KN1	Cayon to Key	KN9	Cockleshell
KN2	Conaree	KN10	Banana
KN3	Halfmoon Bay	KN11	Majors
KN4	North Frigate	KN12	South Friars
KN5	North Friars	KN13	Potato Bay
KN6	Turtle Bay	KN14	Camps
KN7	Sandy Bank Bay	KN15	Belle Tete
KN8	Mosquito		

Beach Identification Codes with Beach Names - Nevis			
KN16	Newcastle Beach	KN23	Cocolaba Bay
KN17	Long Haul Bay	KN24	Gallows Bay
KN18	Sandy Ghaut	KN25	Pinney's Beach
KN19	White Bay	KN26	Cades Bay
KN20	Black Bay	KN27	Jones Bay
KN21	Dog Bay	KN28	Sea Haven (Lovers) Beach
KN22	Garling Bay		

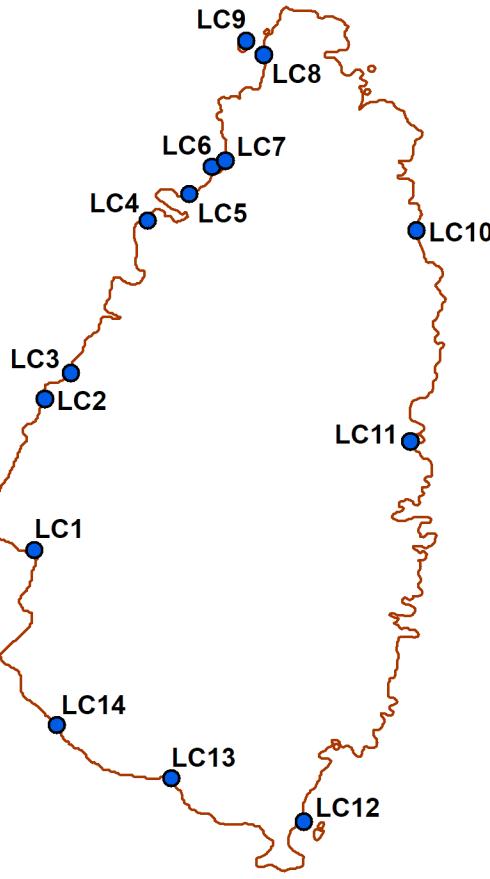
Saint Lucia Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No*
Moratorium (fixed period)	No
Prohibition(s) on take	E, N, NF
Closed season	Yes
Minimum size limits	Yes
Maximum size limits	No
Annual quota	No
Permits/licenses required	Yes**
Gear restrictions	Yes***
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Unknown
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

* LB [only] completely protected. ** Only licensed, registered fishers are allowed to catch sea turtles. *** Fisheries Reg 33(1)(d) No person shall set a net or otherwise attempt to catch a sea turtle within 100 m of the shore.



● Sea Turtle Nesting Habitat

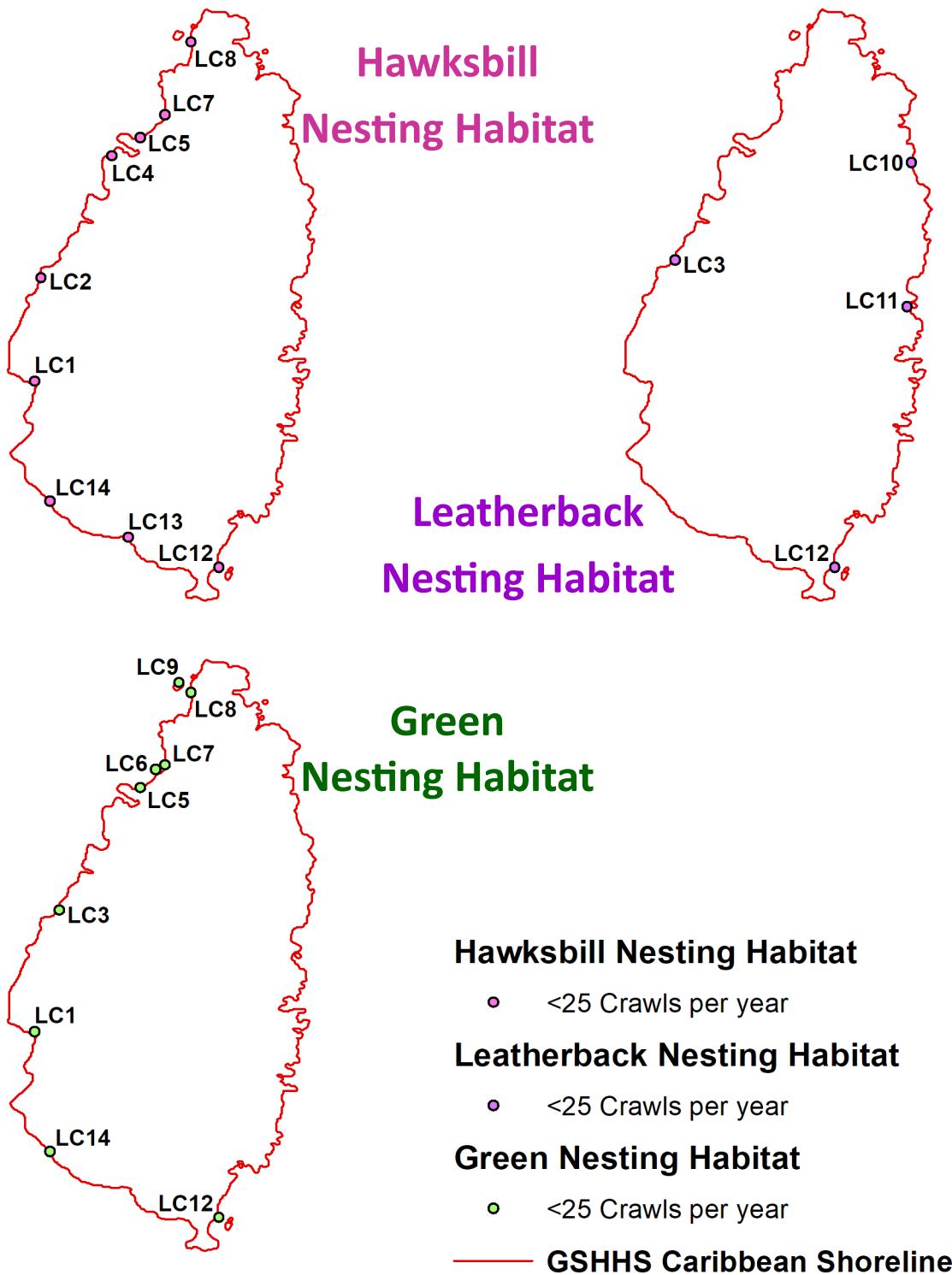
— GSHHS Caribbean Shoreline

Data Providers	
	Allena Joseph Department of Fisheries, Ministry of Agriculture, Forestry, and Fisheries
	Vincent Clarke Saint Lucia National Trust

0 3 6 12 18 24 Kilometers



Saint Lucia Sea Turtle Habitat



0 3.5 7 14 21 28 Kilometers



Saint Lucia Sea Turtle Habitat

Beach Identification Codes with Beach Names			
LC1	Soufriere	LC8	Reduit Beach
LC2	Anse Cochon	LC9	Pigeon Island
LC3	Anse La Raye	LC10	Grande Anse
LC4	La Toc	LC11	Dennerly
LC5	Vigie Beach	LC12	Point Sable
LC6	Rat Island Beach	LC13	Laborie
LC7	Choc	LC14	Choiseul

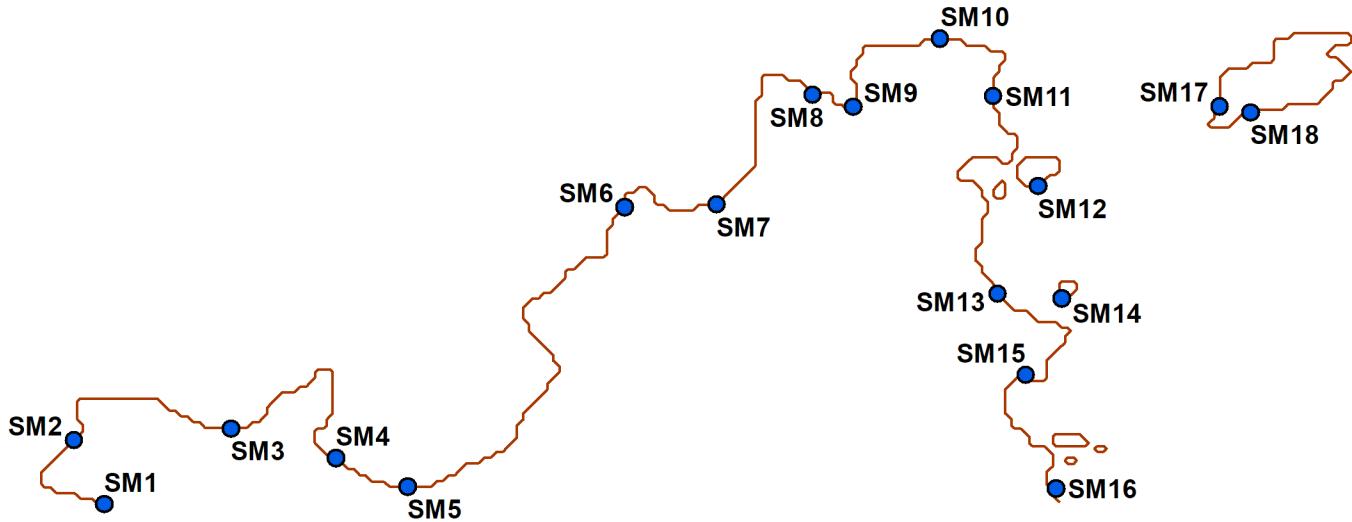
Saint Martin Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I, IF?
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F?
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	I, IF?

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

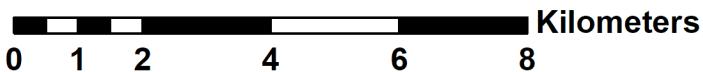
National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

* Under national law, only accredited professionals can handle and/or provide care to a sea turtle.



Data Providers
Dr. Claire Saladin Nicolas Maslach Julien Chalifour

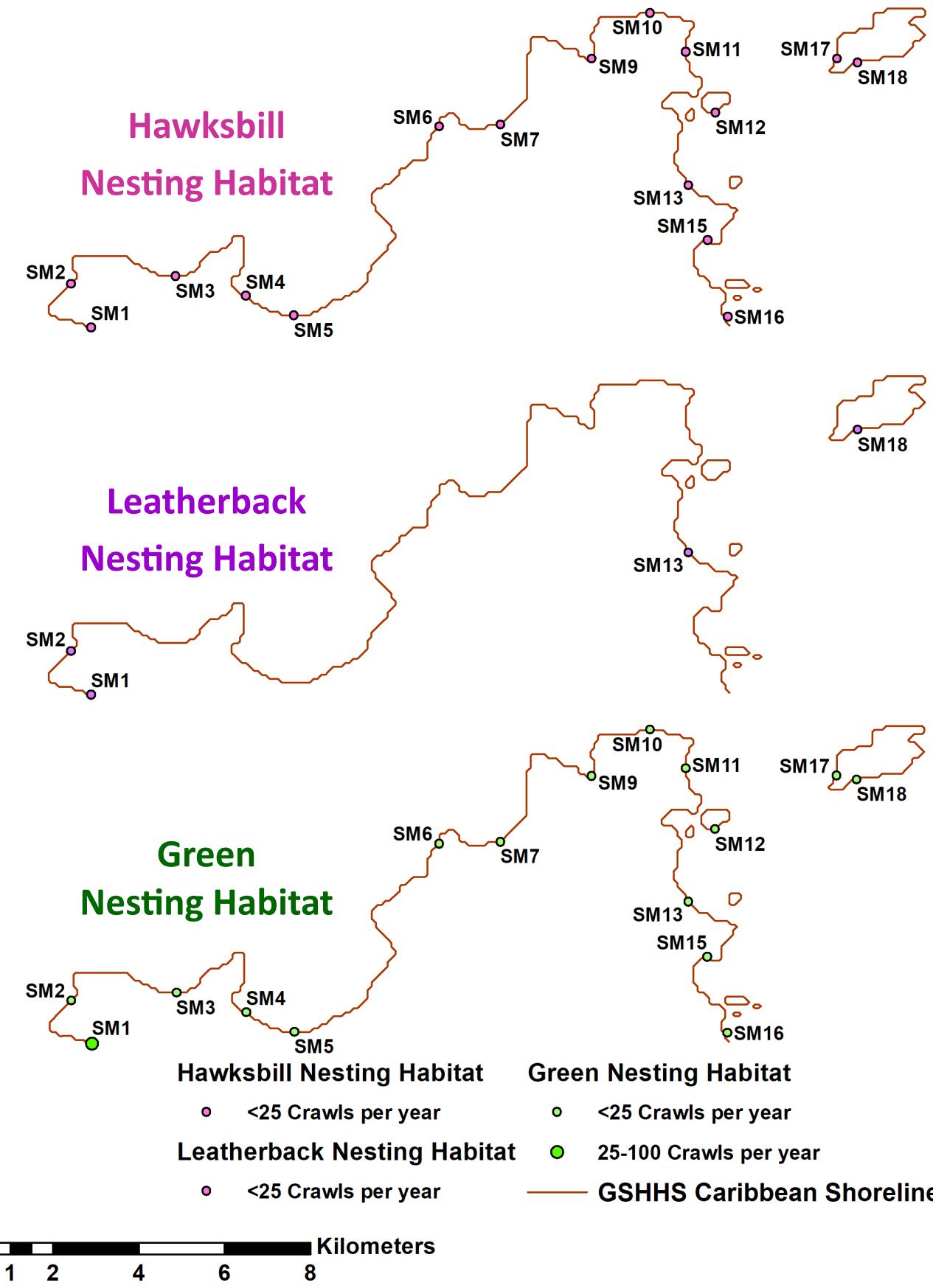
Réserve Naturelle
SAINT-MARTIN



● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Saint Martin Sea Turtle Habitat



Saint Martin Sea Turtle Habitat

Beach Identification Codes with Beach Names			
SM1	Baie longue/Long Bay	SM10	Petites Cayes
SM2	Baie aux Prunes/Plum Bay	SM11	Grandes Cayes
SM3	Bay Rouge/Red Bay	SM12	Pinel
SM4	Baie Nettle/Anse des Sables	SM13	Baie Orientale/Orient Bay
SM5	Sandyground	SM14	Caye Verte/Green Caye
SM6	Happy Baie	SM15	Galion
SM7	Baie de Grand Case	SM16	Coralita
SM8	Bell Beach	SM17	Baie Blanche/White Bay/Tintamarre
SM9	Anse Marcel	SM18	Lagon/Lagoon

Saint Vincent & the Grenadines Sea Turtle Habitat

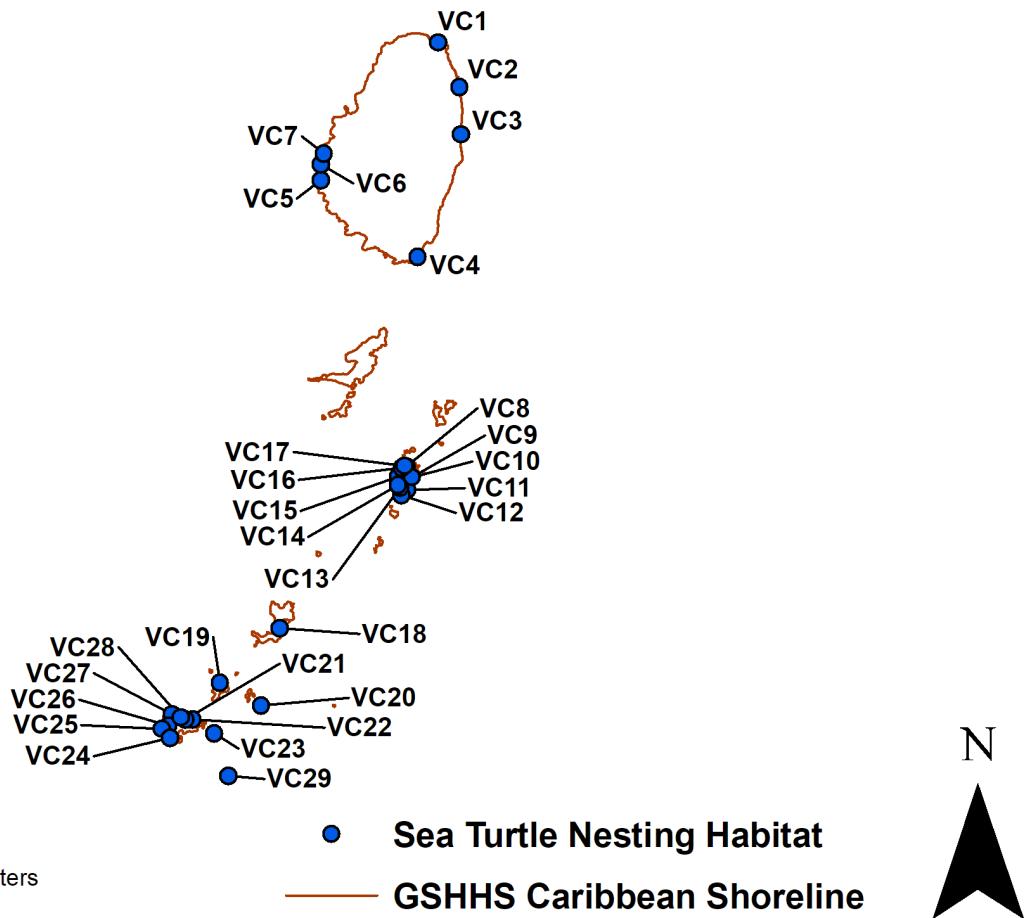
Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

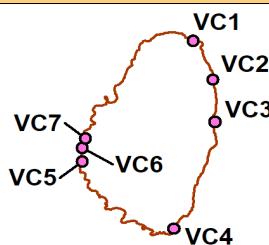
National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Unknown
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

Data Providers
Raven Hoflund The Turtle Project - Mustique

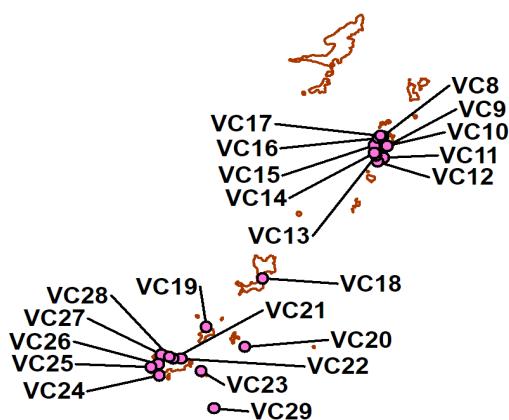
0 5 10 20 30 40 Kilometers



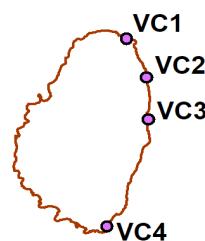
Saint Vincent & the Grenadines Sea Turtle Habitat



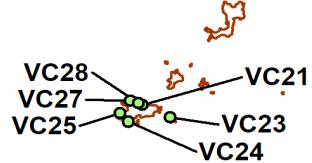
Hawksbill
Nesting Habitat



Leatherback
Nesting Habitat



Green
Nesting Habitat



Hawksbill Nesting Habitat

● <25 Crawls per year

Leatherback Nesting Habitat

● <25 Crawls per year

Green Nesting Habitat

● <25 Crawls per year

— GSHHS Caribbean Shoreline

0 5 10 20 30 40 Kilometers



Saint Vincent & the Grenadines Sea Turtle Habitat

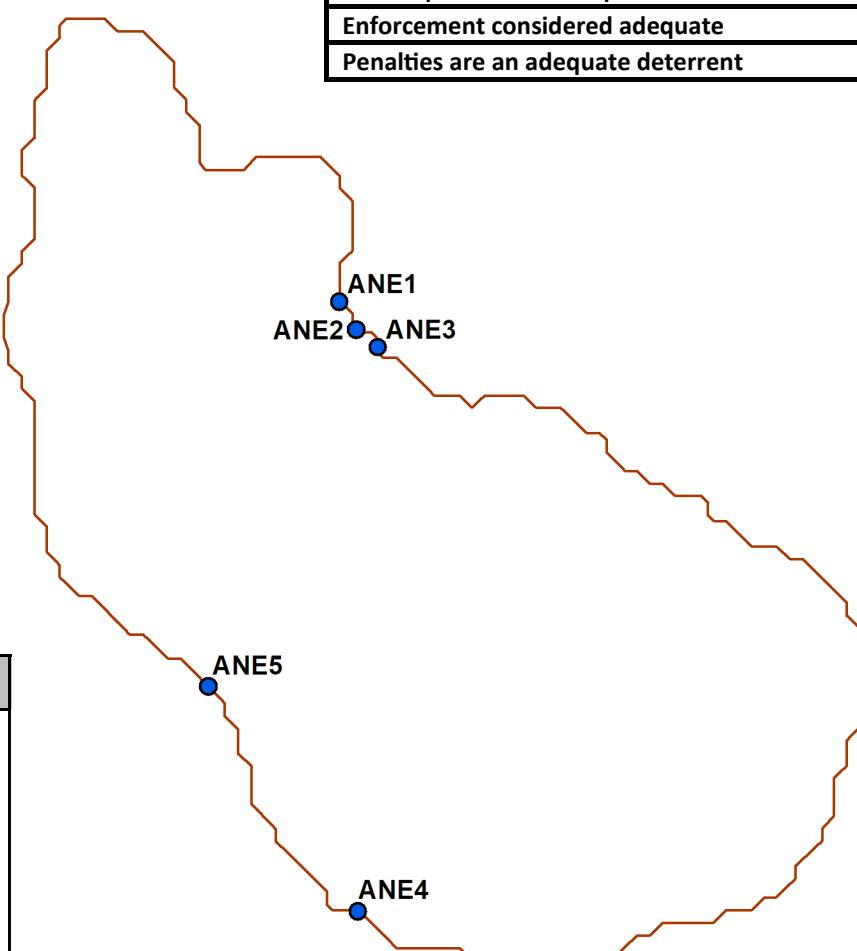
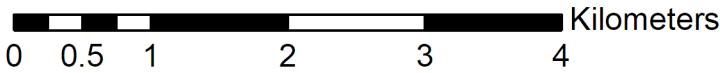
Beach Identification Codes with Beach Names			
VC1	Sandy Bay	VC16	Old Plantation - Mustique
VC2	Georgetown Bay	VC17	Endeavour Bay - Mustique
VC3	Colonarie Bay	VC18	Mahualt Bay/Tamarind, Canuoan
VC4	Brighton Bay	VC19	Saltwhistle - Mayreau
VC5	Mount Wynne Bay	VC20	Petite Tobac - Tobago Cays
VC6	Barrouallie	VC21	Richmond Beach - Union Island
VC7	Wallilabou Bay	VC22	Big Sand/Waterbreak Beach - Union Island
VC8	L'Ansecoy - Mustique	VC23	Unnamed - Palm or Prune Island
VC9	Macaroni - Mustique	VC24	Miss Irene - Union Island
VC10	Simplicity Bay- Mustique	VC25	Campbell - Union Island
VC11	Pasture Bay - Mustique	VC26	Chatham Bay - Union Island
VC12	Obsidian Bay - Mustique	VC27	Bloody Bay - Union Island
VC13	Gelliceaux Beah- Mustique	VC28	Spring Beach, Canuoan
VC14	Lagoon Bay- Mustique	VC29	Petite St. Vincent
VC15	Plantain - Mustique		

Sint Eustatius Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	A
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	No
Reports of exploitation/sale nationally	No
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes

Data Providers	
	Jessica Berkel St. Eustatius National Parks St. Eustatius Turtle Programme
	Nicole Esteban Swansea University



● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



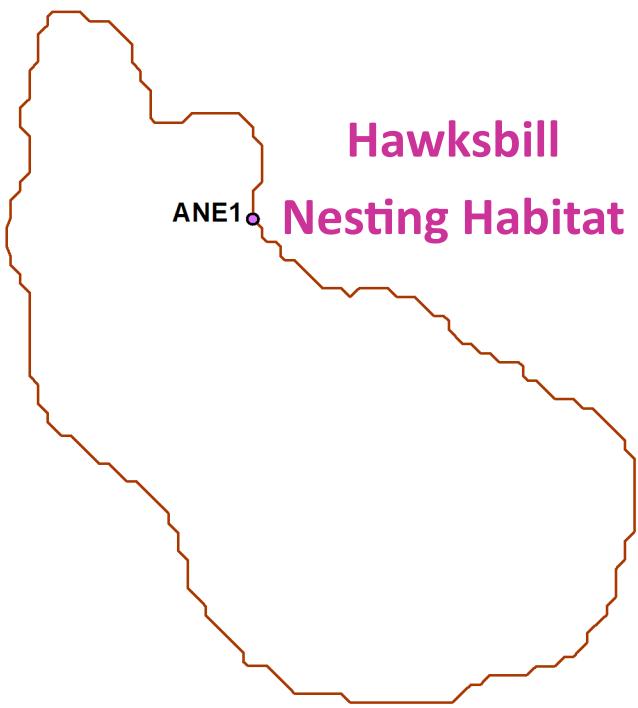
Sint Eustatius Sea Turtle Habitat



**Leatherback
Nesting Habitat**



**Green
Nesting Habitat**



**Hawksbill
Nesting Habitat**

Hawksbill Nesting Habitat

- <25 Crawls per year

Leatherback Nesting Habitat

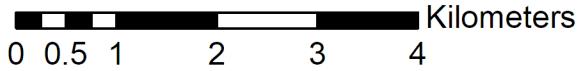
- <25 Crawls per year

Green Nesting Habitat

- <25 Crawls per year

- 25-100 Crawls per year

GSHHS Caribbean Shoreline



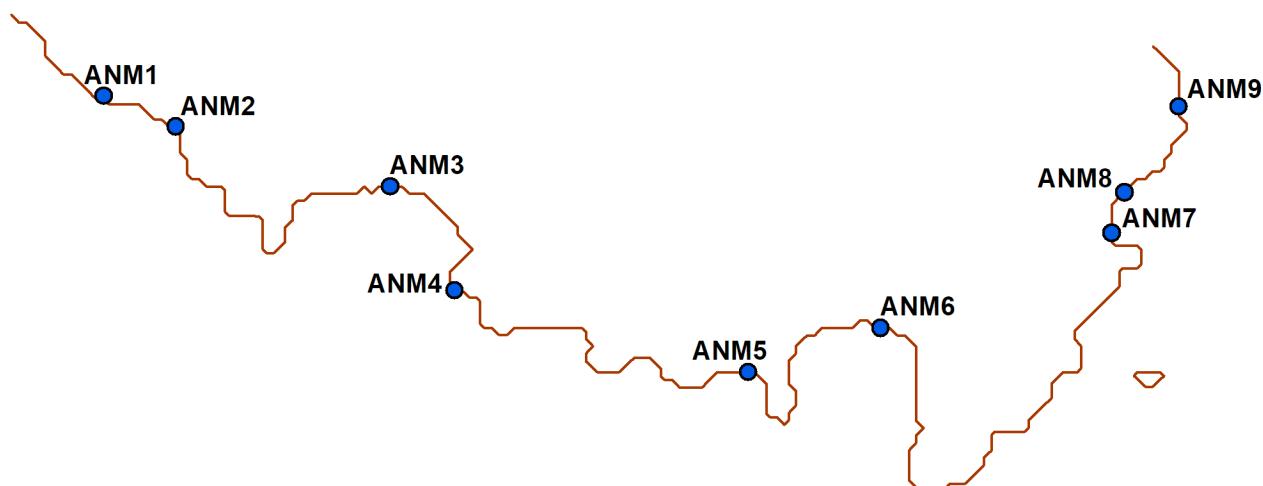
Sint Eustatius Sea Turtle Habitat

Beach Identification Codes with Beach Names			
ANE1	Zeelandia Beach	ANE4	Kay Bay
ANE2	Turtle Beach	ANE5	Oranje Bay
ANE3	Lynch Bay		

Sint Maarten Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	No
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	No
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes



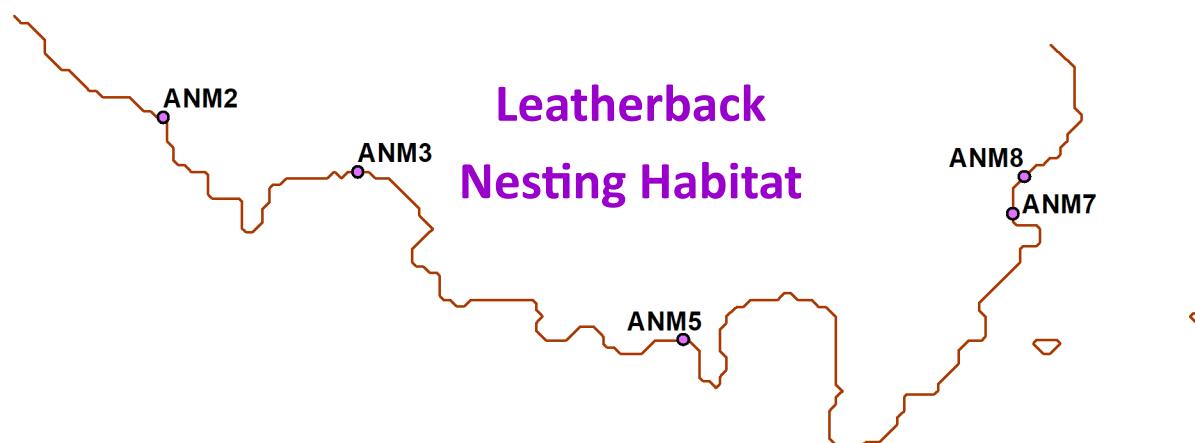
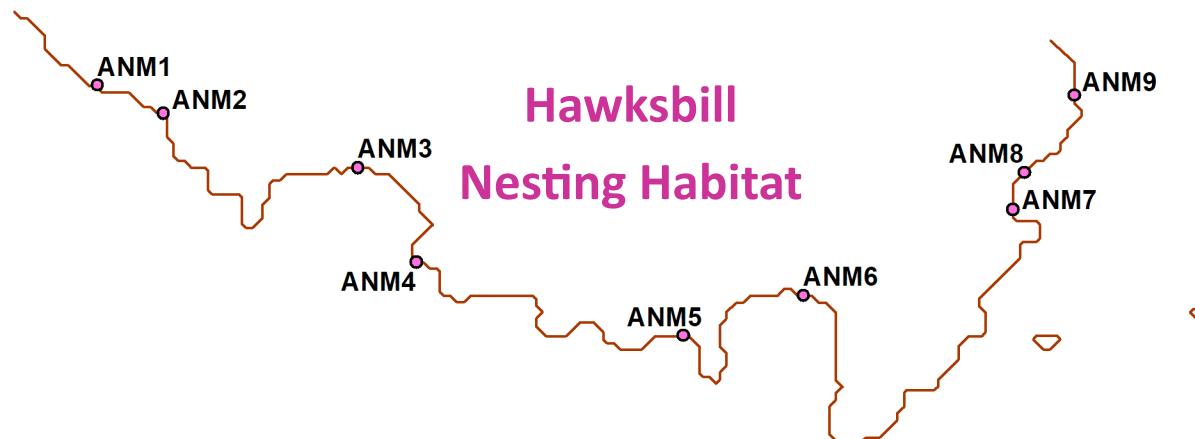
Data Providers
Melanie Meijer zu Schlochtern Tadzio Bervoets  NATURE FOUNDATION ST. MAARTEN

0 0.5 1 2 3 4 Kilometers

- Sea Turtle Nesting Habitat
- GSHHS Caribbean Shoreline



Sint Maarten Sea Turtle Habitat



Hawksbill Nesting Habitat

● <25 Crawls per year

Leatherback Nesting Habitat

● <25 Crawls per year

Green Nesting Habitat

● <25 Crawls per year

GSHHS Caribbean Shoreline

0 1 2 4 6 8 Kilometers



Sint Maarten Sea Turtle Habitat

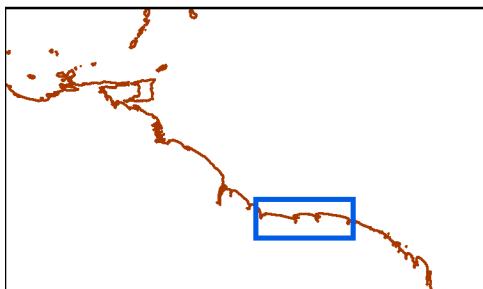
Beach Identification Codes with Beach Names			
ANM1	Cupecoy Beach	ANM6	Great Bay
ANM2	Mullet Bay	ANM7	Guana Bay Beach
ANM3	Simpson Bay	ANM8	Gibbs Bay
ANM4	Billy Folly	ANM9	Dawn Beach
ANM5	Little Bay		

Suriname Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IF
Green Turtle (<i>Chelonia mydas</i>)	N
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	IN
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	N, F
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent	

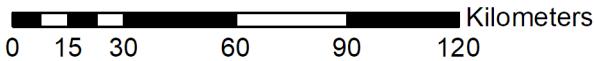
National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes (Eggs)
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

*Indigenous egg harvest allowed for personal consumption (limit: one doomed nest per family); requires an authorization letter from the Village Chief.



Data Providers

Michael Hiwat
Hanneke van Lavieren
World Wildlife Fund Guianas
 WWF
Claudine Sakimin
Patricia Sewpersad
 MINISTERIE VAN LAND, WATER EN GROND- EN BOSBEHEER
Nature Conservation Division

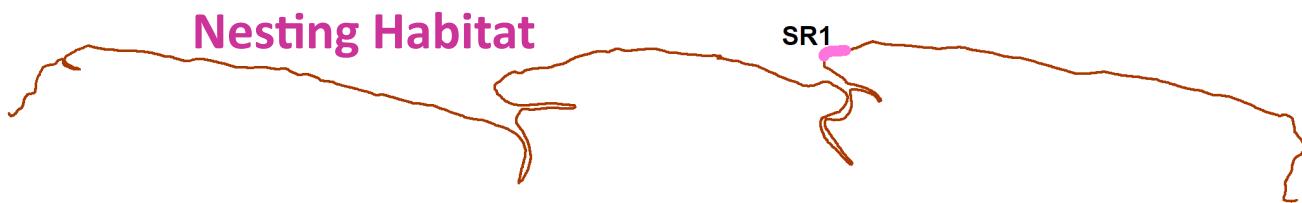


— Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



Suriname Sea Turtle Habitat

Hawksbill



Leatherback



Green

Nesting Habitat



Olive Ridley

Nesting Habitat



Hawksbill Nesting Habitat

<25 Crawls per year

Leatherback Nesting Habitat

25-100 Crawls per year

500-1000 Crawls per year

Green Nesting Habitat

>1000 Crawls per year

Olive Ridley Nesting Habitat

25-100 Crawls per year

GSHHS Caribbean Shoreline

0 15 30 60 90 120 Kilometers



Suriname Sea Turtle Habitat

Beach Identification Codes with Beach Names

SR1	Braamspunt	SR2	Galibi
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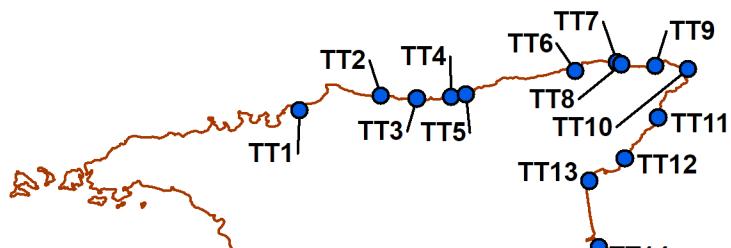
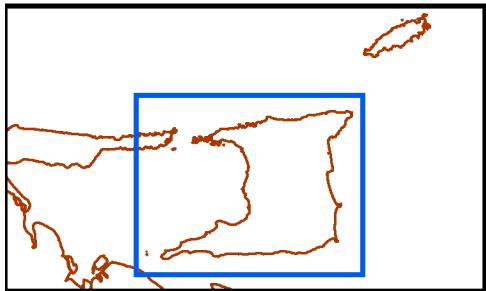
Trinidad & Tobago Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IN, IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	IN, F

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No*
Penalties are an adequate deterrent	Yes

* Terrestrial (nesting) enforcement adequate; marine enforcement lacking.



Data Providers
Suzan Lakan-Baptiste Kyle Mitchell
 NATURE SEEKERS
Turtle Village Trust


0 5 10 20 30 40 Kilometers

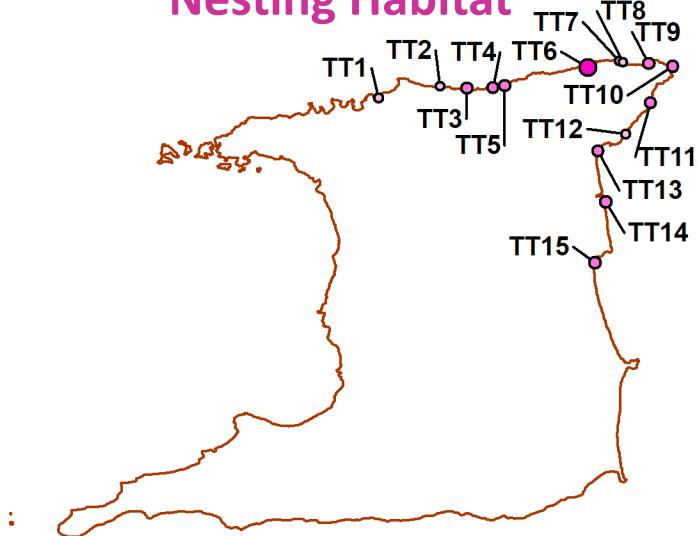
- Sea Turtle Nesting Habitat
- GSHHS Caribbean Shoreline



Trinidad & Tobago Sea Turtle Habitat

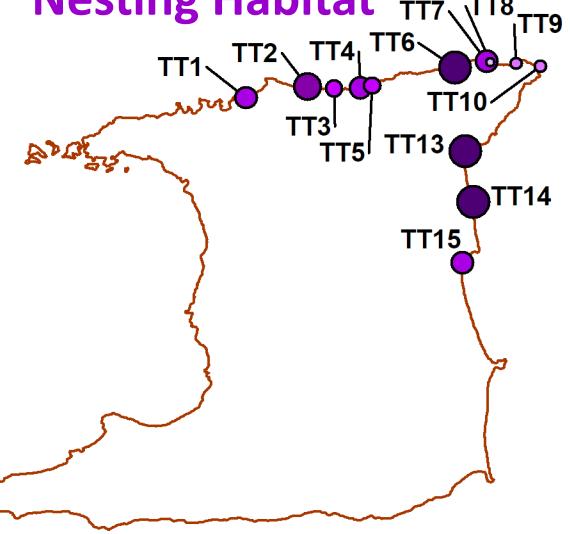
Hawksbill

Nesting Habitat



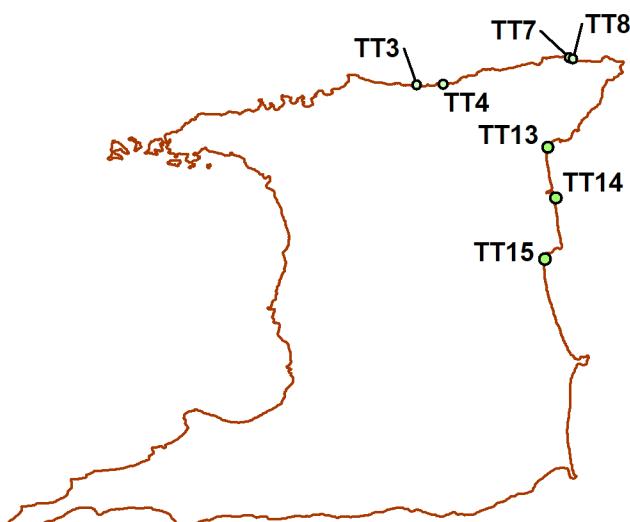
Leatherback

Nesting Habitat



Green

Nesting Habitat



Hawksbill Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year

Leatherback Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year
- >1000 Crawls per year

Green Nesting Habitat

- X Crawls per year
- 25-100 Crawls per year

Kilometers
0 5 10 20 30 40

GSHHS Caribbean Shoreline

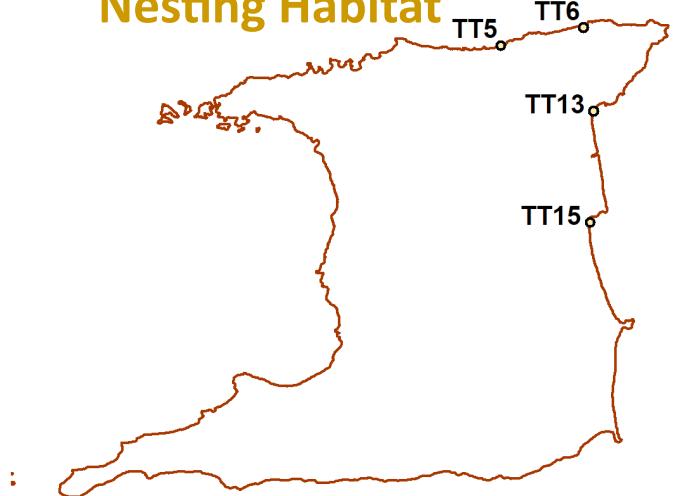


Trinidad & Tobago Sea Turtle Habitat

Loggerhead Nesting Habitat



Olive Ridley Nesting Habitat



Loggerhead Nesting Habitat

- X Crawls per year

Olive Ridley Nesting Habitat

- X Crawls per year

— GSHHS Caribbean Shoreline

Kilometers
0 5 10 20 30 40



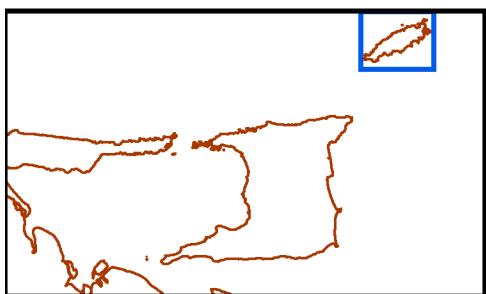
Trinidad & Tobago Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IN, IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	IN, F

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

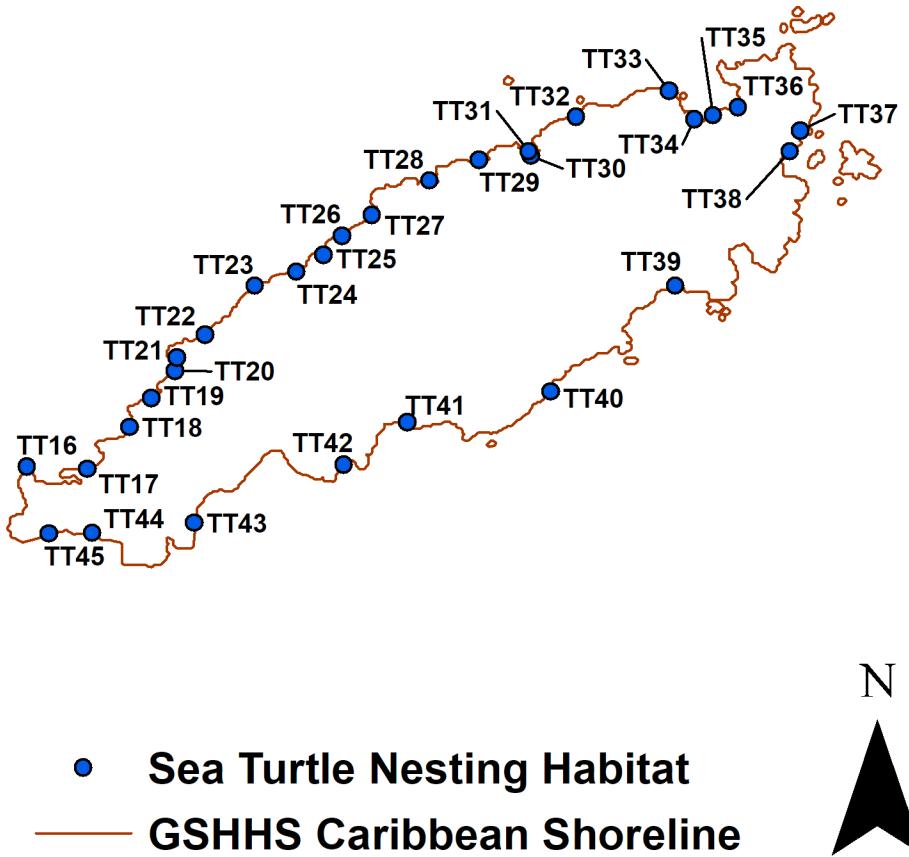
National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No*
Penalties are an adequate deterrent	Yes

* Terrestrial (nesting) enforcement adequate; marine enforcement lacking.



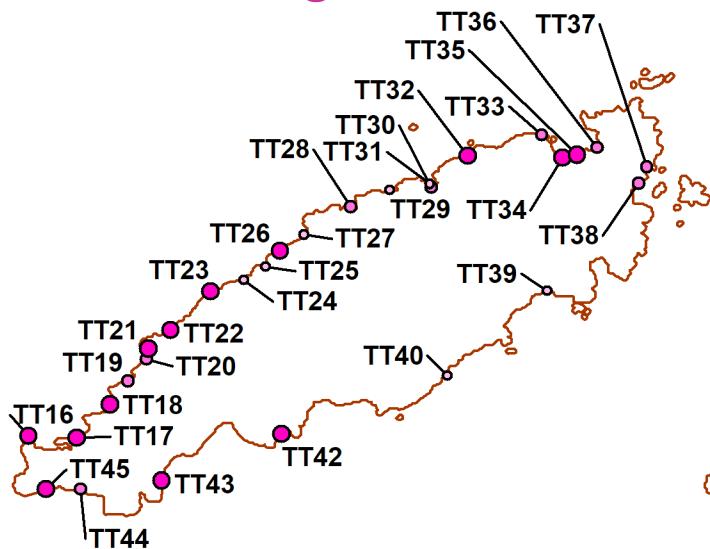
Data Providers	
Tanya Clovis, Giancarlo Lalsingh, Michelle Cazabon-Mannette	
 Save Our Sea Turtles	
Renardo Daniel Department of Natural Resources & Environment, Tobago House of Assembly	

0 2 4 8 12 16 Kilometers

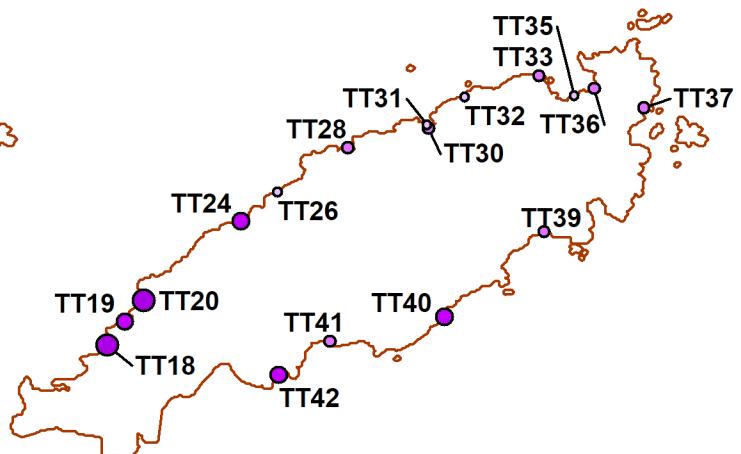


Trinidad & Tobago Sea Turtle Habitat

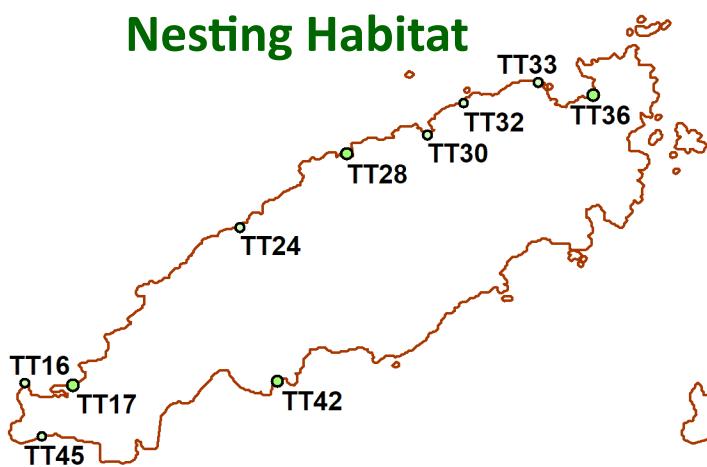
Hawksbill Nesting Habitat



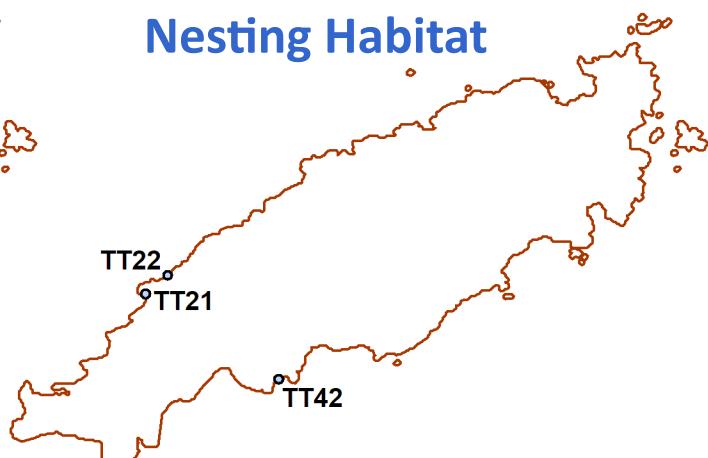
Leatherback Nesting Habitat



Green Nesting Habitat



Loggerhead Nesting Habitat



Hawksbill Nesting Habitat Leatherback Nesting Habitat Green Nesting Habitat

- | | | |
|---------------------------|--------------------------|--------------------------|
| ○ X Crawls per year | ○ X Crawls per year | ○ X Crawls per year |
| ● <25 Crawls per year | ● <25 Crawls per year | ● <25 Crawls per year |
| ■ 25-100 Crawls per year | ■ 25-100 Crawls per year | ■ 25-100 Crawls per year |
| ■ 100-500 Crawls per year | | |

0 3 6 12 18 24 Kilometers

- | | |
|---------------------------|--------------------------|
| ○ X Crawls per year | ○ X Crawls per year |
| ● <25 Crawls per year | ● <25 Crawls per year |
| ■ 25-100 Crawls per year | ■ 25-100 Crawls per year |
| ■ 100-500 Crawls per year | |
- Loggerhead Nesting Habitat**
- GSHHS Caribbean Shoreline



Trinidad & Tobago Sea Turtle Habitat

Beach Identification Codes with Beach Names - Trinidad			
TT1	Las Cuevas Bay	TT9	Mission Bay
TT2	Blanchisseuse Bay (Marianne)	TT10	Toco Bay
TT3	Paria Bay	TT11	No Head Beach
TT4	Grand Tacaribe	TT12	Balandra Bay
TT5	Madamas Beach	TT13	Matura Beach
TT6	Grand Riviere	TT14	Fishing Pond
TT7	Sans Souci	TT15	Manzanilla Beach - Cocos Bay
TT8	Big Bay		

Beach Identification Codes with Beach Names - Tobago			
TT16	Pigeon Point	TT31	Bloody Bay
TT17	Buccoo Bay	TT32	L'Anse Fourmi Beach
TT18	Rocky Point (Mt. Irvine Back Bay)	TT33	Man O War
TT19	Grafton Beach (Stone Haven Bay)	TT34	Hermitage
TT20	Turtle Beach (Great Courland Bay)	TT35	Cambleton
TT21	Back Bay (Plymouth)	TT36	Pirate's Bay (Charlottesville)
TT22	Arnos Vale	TT37	Speyside - Starwood Bay
TT23	Culloden Bay	TT38	Anse Bateau
TT24	King Peters Back Bay (Cotton Bay)	TT39	Roxborough Beach - Argyle
TT25	Gordon Bay	TT40	Goldsborough Beach
TT26	Celery Bay	TT41	John Dial Beach (Hope)
TT27	Emerald Bay - Castara Bay	TT42	Minister Bay -Big Baclet
TT28	Englishmen's Bay	TT43	Little Rockley Bay/Lambeau Beach/Magdalena
TT29	Parlatuvier Beach (Erasmus Cove)	TT44	Canoe/ Kilgwyn
TT30	Dead Bay	TT45	Crown Point/ Crimson/ Sandy Pt

Turks & Caicos Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	IN, IF
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	I
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A?
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A?

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

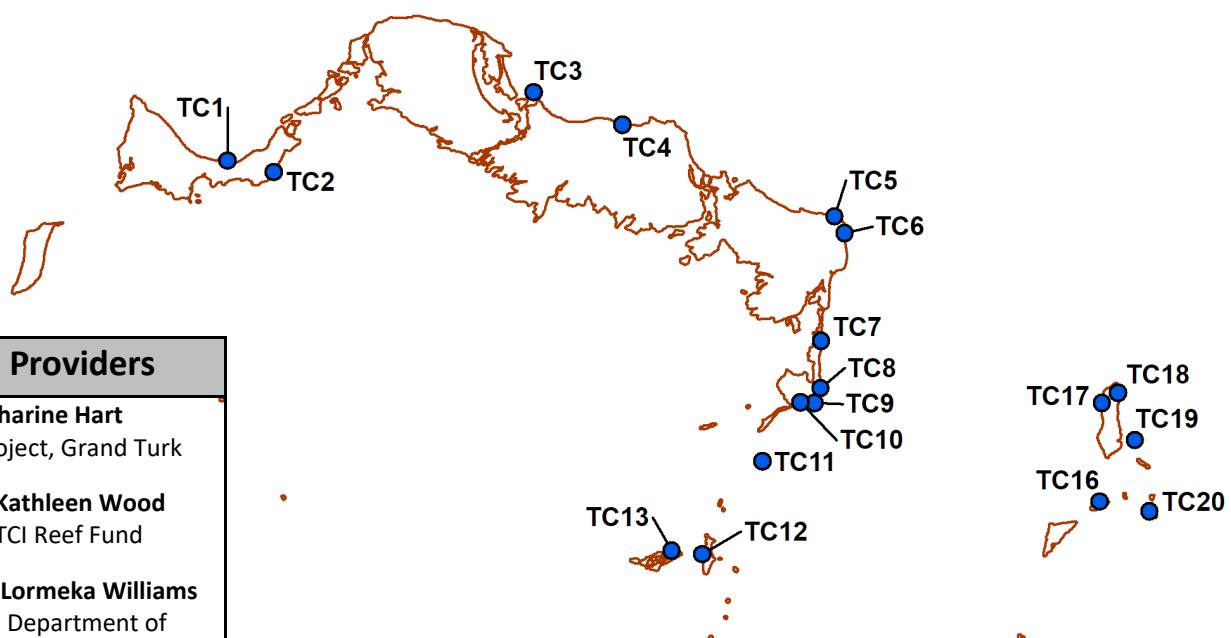
National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	No*
Moratorium (fixed period)	No
Prohibition(s) on take	E, N, NF
Closed season	Yes*
Minimum size limits	Yes
Maximum size limits	Yes
Annual quota	No
Permits/licenses required	Yes*
Gear restrictions	No
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Improving
Recent prosecutions or penalties	No
Enforcement considered adequate	No
Penalties are an adequate deterrent	Unknown

*Fishery is permanently closed except for a seasonal fishery (bounded by minimum and maximum size limits) on hawksbill and green turtles

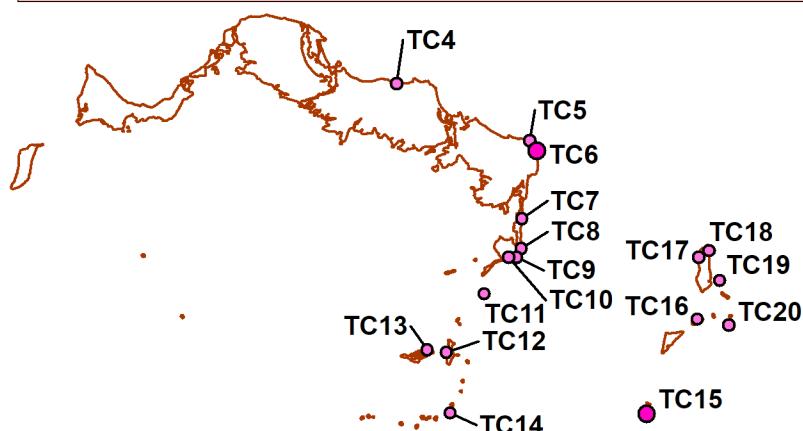
Data Providers	
Katharine Hart Turtle Project, Grand Turk	
Kathleen Wood TCI Reef Fund	
Lormeka Williams Department of Environment and Coastal Resources	
Heidi Hertler School for Field Studies	

0 5 10 20 30 40 Kilometers

- Sea Turtle Nesting Habitat
- GSHSS Caribbean Shoreline

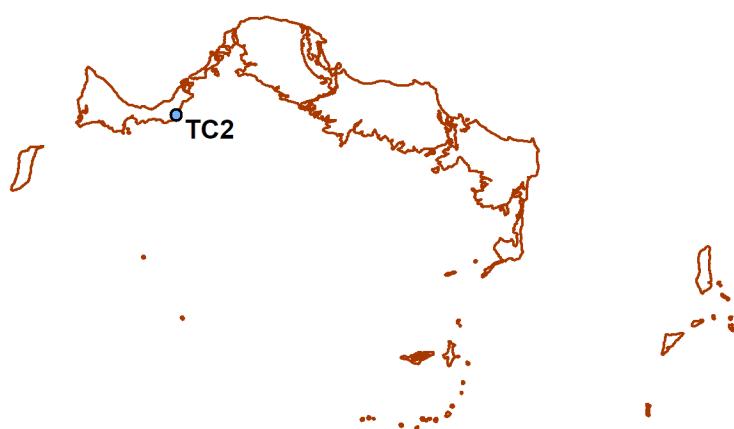
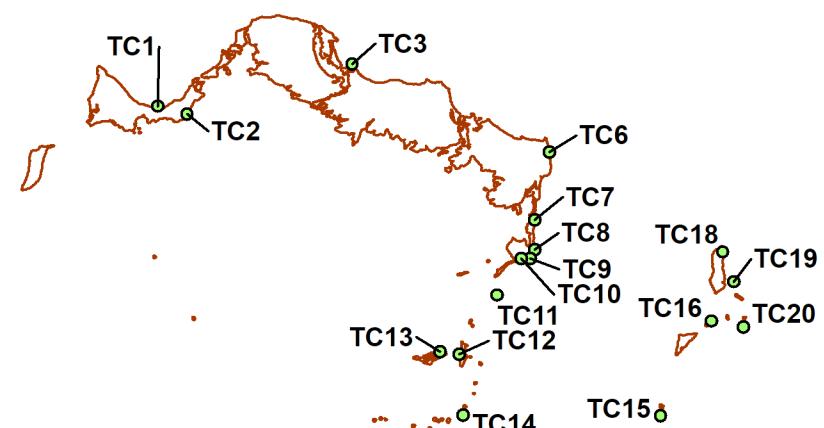


Turks & Caicos Sea Turtle Habitat



Hawksbill
Nesting Habitat

Green
Nesting Habitat



Loggerhead
Nesting Habitat

Hawksbill Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Green Nesting Habitat

- <25 Crawls per year

Loggerhead Nesting Habitat

- <25 Crawls per year

— GSHHS Caribbean Shoreline

0 10 20 40 60 80 Kilometers



Turks & Caicos Sea Turtle Habitat

Beach Identification Codes with Beach Names			
TC1	Grace Bay Beach	TC11	Fish Cay
TC2	Long Bay - Providenciales	TC12	Big Ambergris Cay
TC3	Highas Cay—North Caicos	TC13	White Cay
TC4	Bambarra Beach	TC14	Bush Cay
TC5	North Beach—East Caicos	TC15	Big Sand Cay
TC6	Long Bay – East Caicos	TC16	Cotton Cay
TC7	McCartney Key	TC17	Grand Turk (W)
TC8	Long Beach, South Caicos	TC18	Grand Turk (E)
TC9	Shark Bay, South Caicos	TC19	Gibbs Cay
TC10	East Bay, South Caicos	TC20	Eastern Cay

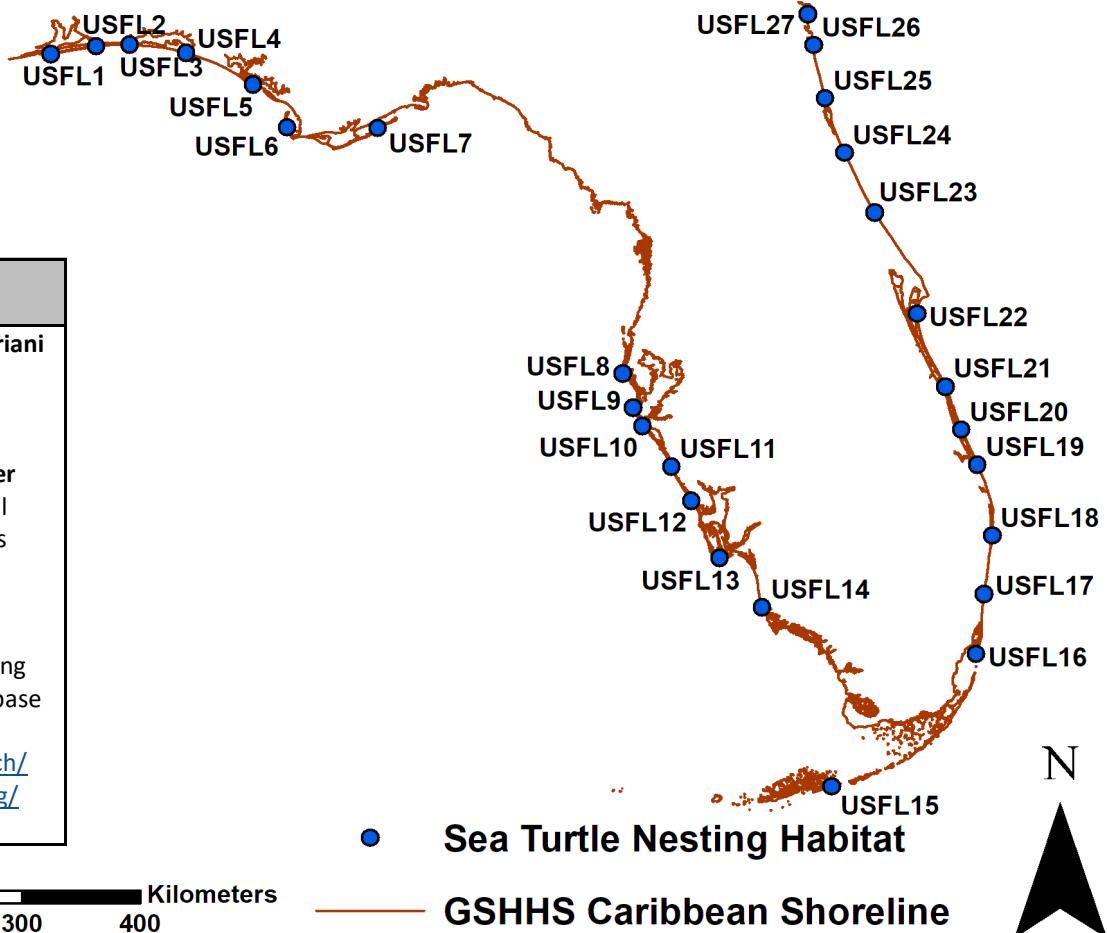
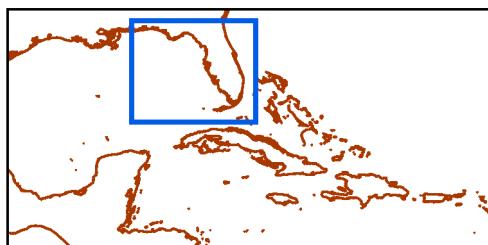
United States Sea Turtle Habitat—Florida

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	IN, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	N, F
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes**
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	No
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes

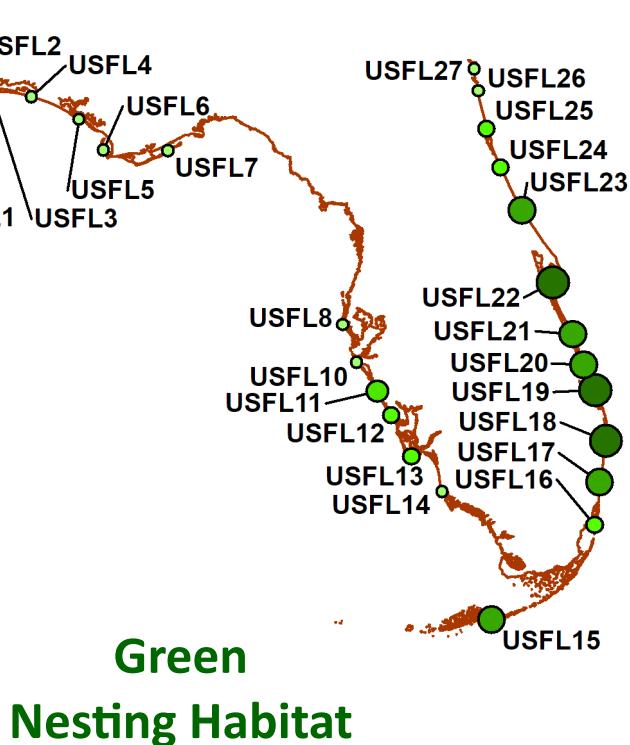
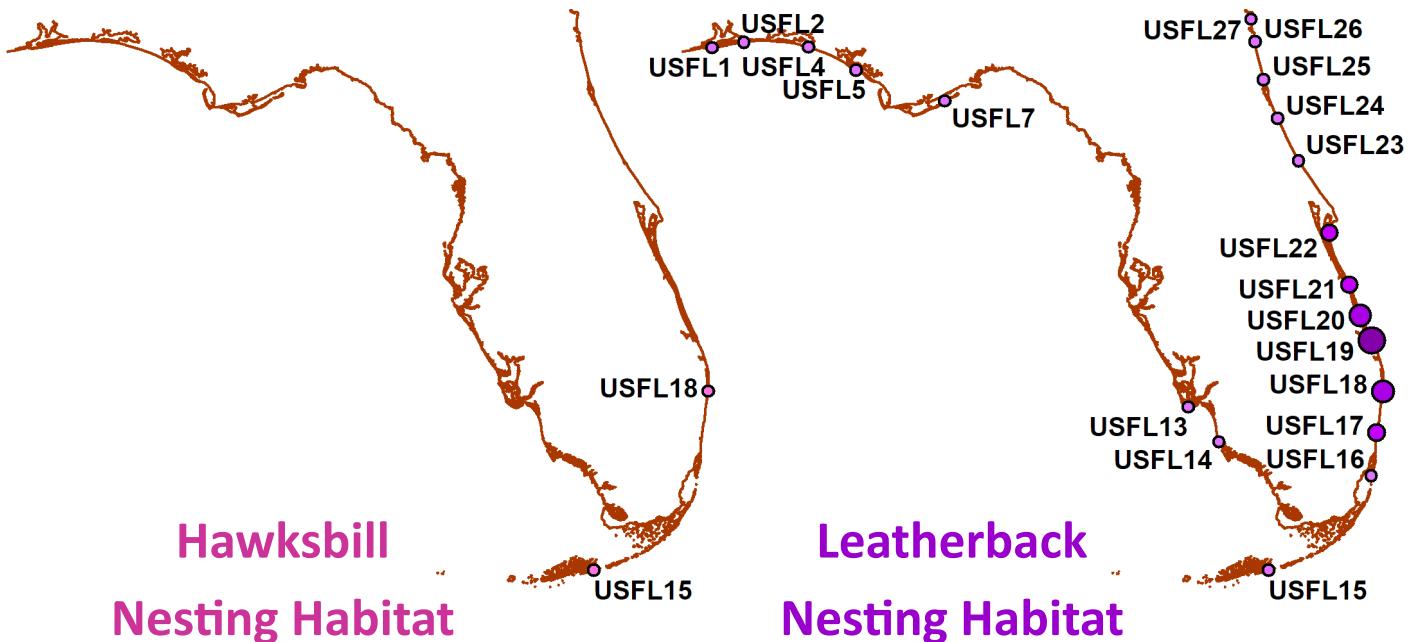
* State and federal permits required for conservation and research. ** Turtle Excluder Devices (TED) and other gear restrictions apply, depending on the fishery.



Data Providers	
	Dr. Simona A. Ceriani Dr. Anne Meylan FWC-FWRI
	Barbara Schroeder NOAA / National Marine Fisheries Service
Data source:	
FWC/FWRI Statewide Nesting Beach Survey Program Database as of 6 February 2019 https://myfwc.com/research/wildlife/sea-turtles/nesting/	

0 50 100 200 300 400 Kilometers

United States Sea Turtle Habitat—Florida



Hawksbill Nesting Habitat

- <25 Crawls per year

Leatherback Nesting Habitat

- <25 Crawls per year

- 25-100 Crawls per year

- 100-500 Crawls per year

- 500-1000 Crawls per year

Green Nesting Habitat

- <25 Crawls per year

- 25-100 Crawls per year

- 100-500 Crawls per year

- 500-1000 Crawls per year

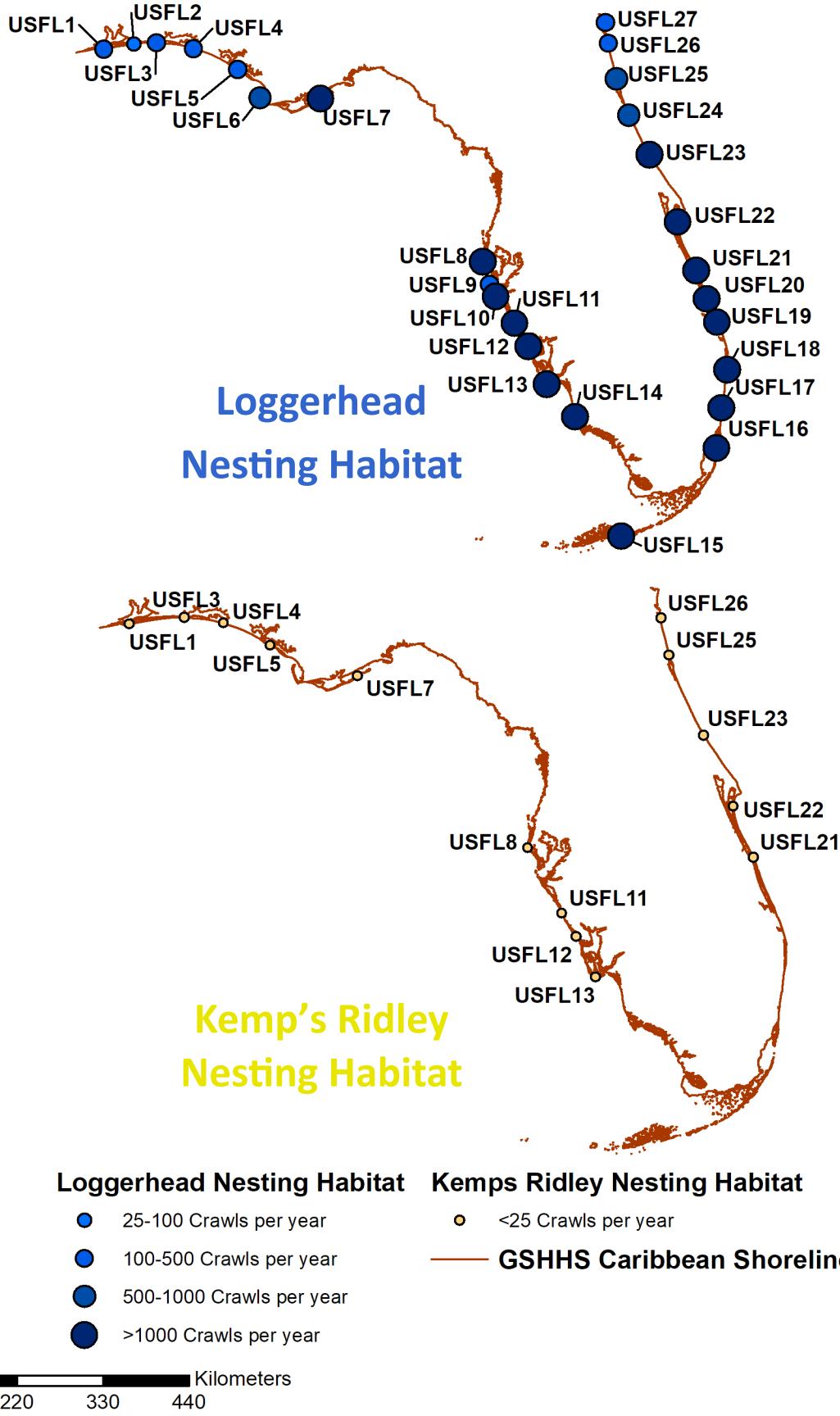
- >1000 Crawls per year

GSHHS Caribbean Shoreline

0 70 140 210 280 350 420 490 560 Kilometers



United States Sea Turtle Habitat—Florida



United States Sea Turtle Habitat—Florida

Beach Identification Codes with Beach Names			
USFL1	Escambia	USFL15	Monroe
USFL2	Santa Rosa	USFL16	Miami-Dade
USFL3	Okaloosa	USFL17	Broward
USFL4	Walton	USFL18	Palm Beach
USFL5	Bay	USFL19	Martin
USFL6	Gulf	USFL20	St. Lucie
USFL7	Franklin	USFL21	Indian River
USFL8	Pinellas	USFL22	Brevard
USFL9	Hillsborough	USFL23	Volusia
USFL10	Manatee	USFL24	Flagler
USFL11	Sarasota	USFL25	St. Johns
USFL12	Charlotte	USFL26	Duval
USFL13	Lee	USFL27	Nassau
USFL14	Collier		

United States Sea Turtle Habitat

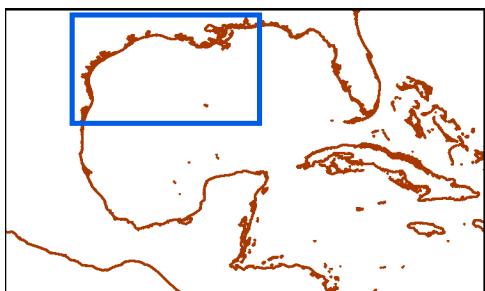
Texas, Louisiana, Mississippi, Alabama

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	IN, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	N, F
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

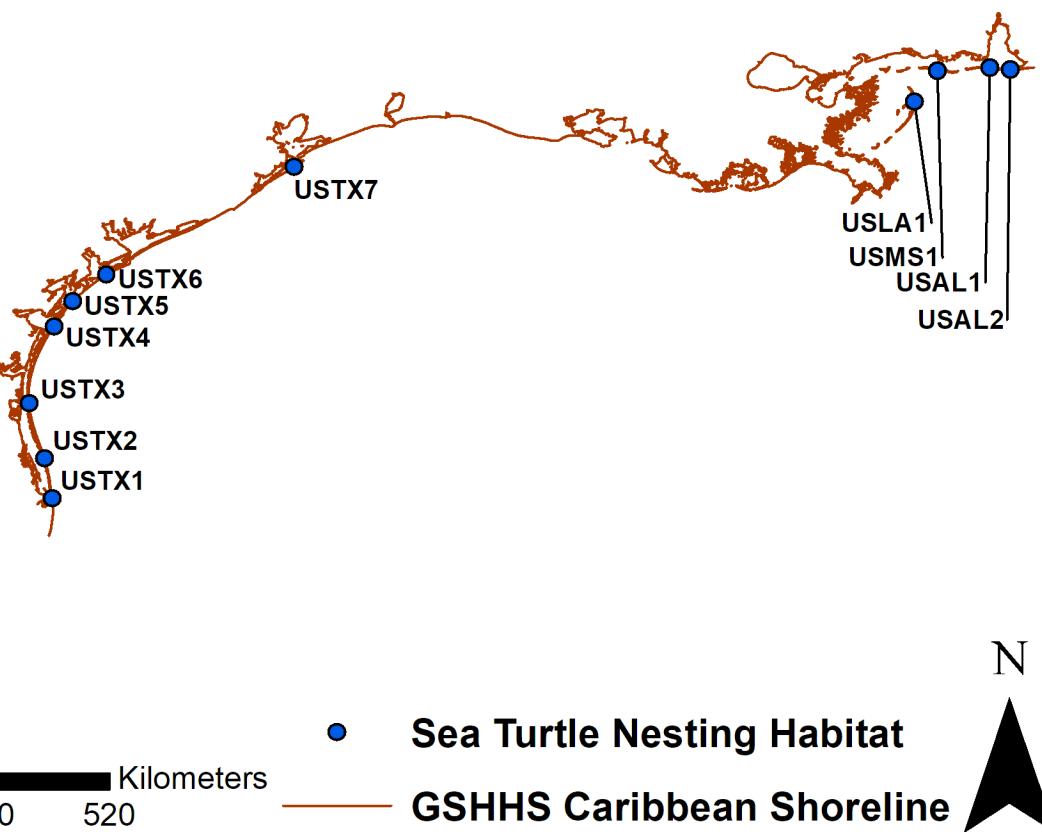
N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes**
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	No
Reports of illegal trade internationally	No
General public awareness of laws	Yes
Recent prosecutions or penalties	No
Enforcement considered adequate	Yes
Penalties are an adequate deterrent	Yes

* State and federal permits required for conservation and research. ** Turtle Excluder Devices (TED) and other gear restrictions apply, depending on the fishery.



Data Providers	
	Dr. Donna Shaver U.S. National Park Service
	Ann Marie Lauritsen Jackie Sablan U.S. Fish & Wildlife Service
	Mary Kay Skoruppa U.S. Geologic Survey
	Barbara Schroeder NOAA National Marine Fisheries Service



United States Sea Turtle Habitat Texas, Louisiana, Mississippi, Alabama



Hawksbill Nesting Habitat

- <25 Crawls per year

Leatherback Nesting Habitat

- <25 Crawls per year

Green Nesting Habitat

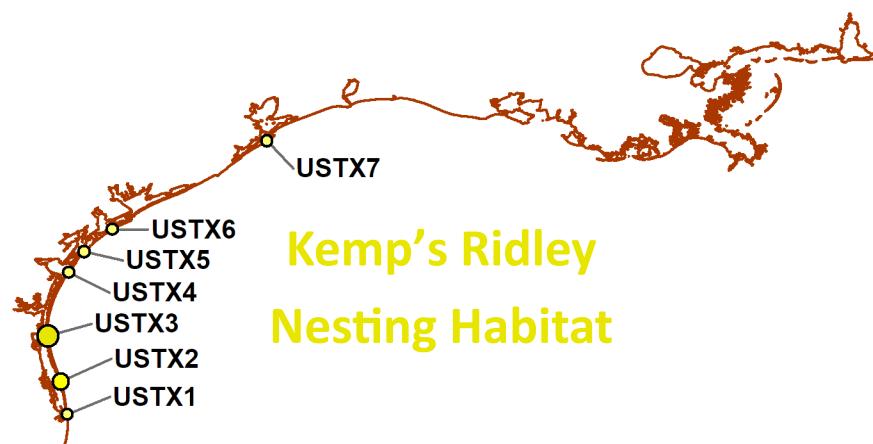
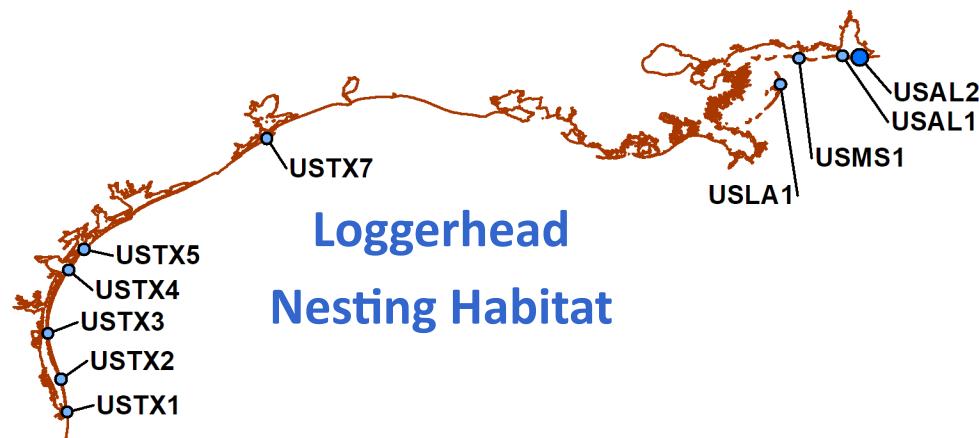
- <25 Crawls per year

— GSHHS Caribbean Shoreline

0 75 150 300 450 600 Kilometers



United States Sea Turtle Habitat Texas, Louisiana, Mississippi, Alabama



Loggerhead Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year

Kemp's Ridley Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year

— GSHHS Caribbean Shoreline

0 75 150 300 450 600 Kilometers



United States Sea Turtle Habitat

Texas, Louisiana, Mississippi, Alabama

Beach Identification Codes with Beach Names			
USTX1	Boca Chica Beach	USTX7	Upper Texas Coasts
USTX2	South Padre Island	USLA1	Breton National Seashore
USTX3	North Padre Island	USMS1	Gulf Islands National Seashore
USTX4	Mustang Island	USAL1	Dauphin Island
USTX5	San Jose Island	USAL2	Bon Secour National Wildlife Refuge
USTX6	Matagorda Island		

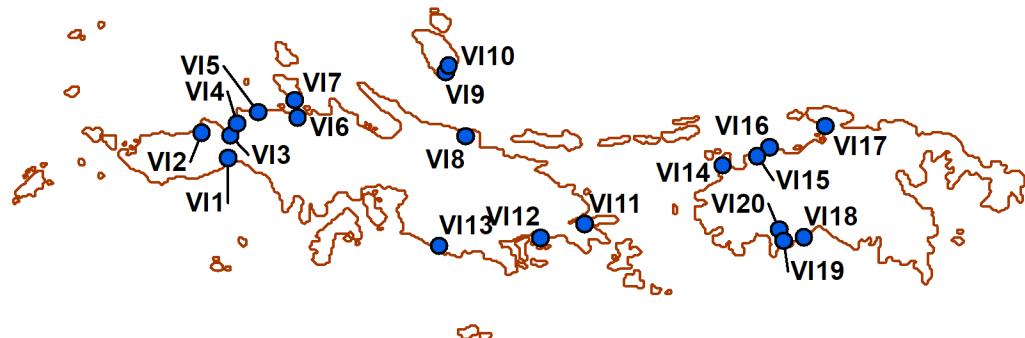
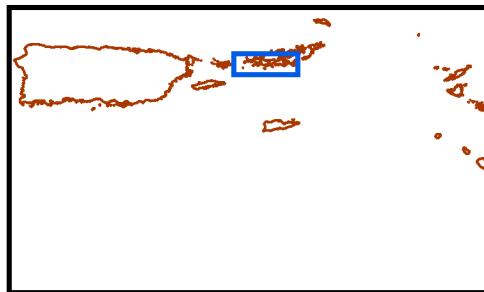
US Virgin Islands Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

* State and federal permits required for all research and management actions.



Data Providers
Rafe Boulon Friends of the Virgin Islands National Park
Renata Platenberg University of the Virgin Islands

0 2.5 5 10 15 Kilometers

● Sea Turtle Nesting Habitat
— GSHHS Caribbean Shoreline



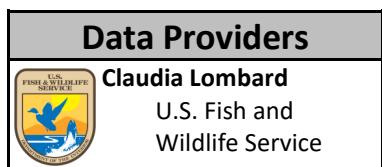
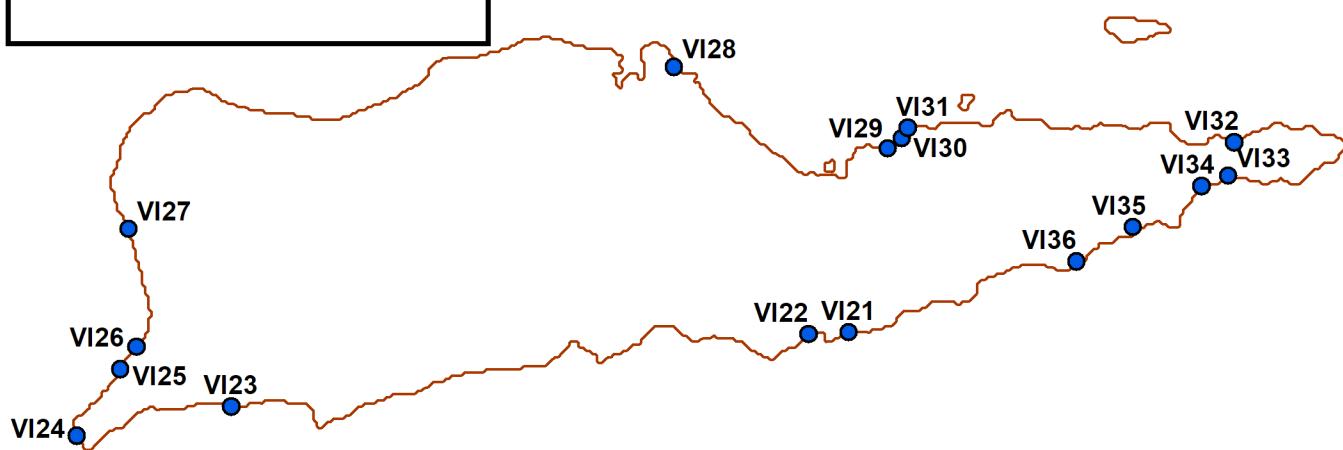
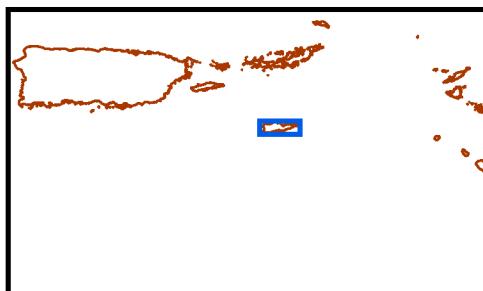
US Virgin Islands Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	I
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	A

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	Yes*
Gear restrictions	Yes
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	Yes
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	Yes

* State and federal permits required for all research and management actions.

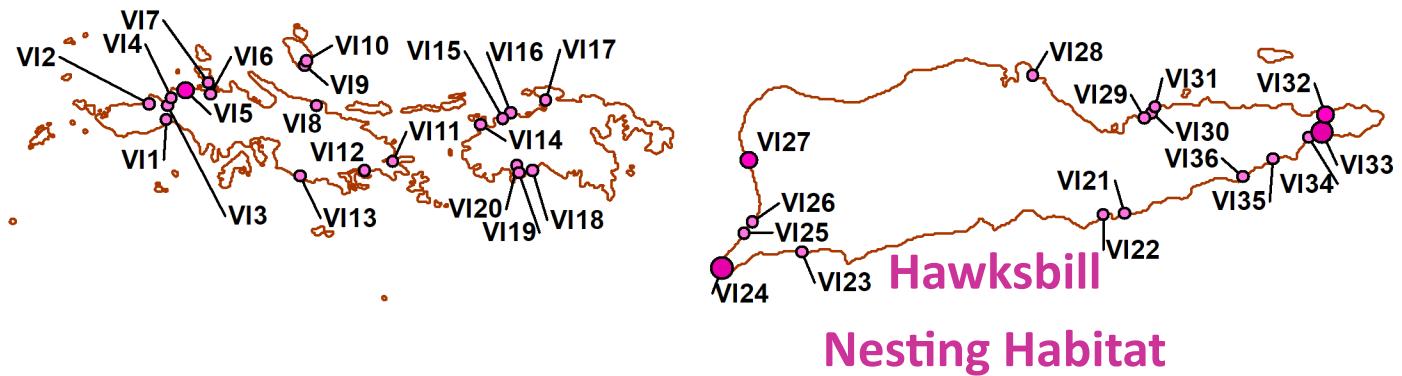


0 1.5 3 6 9 Kilometers

● Sea Turtle Nesting Habitat
 — GSHHS Caribbean Shoreline

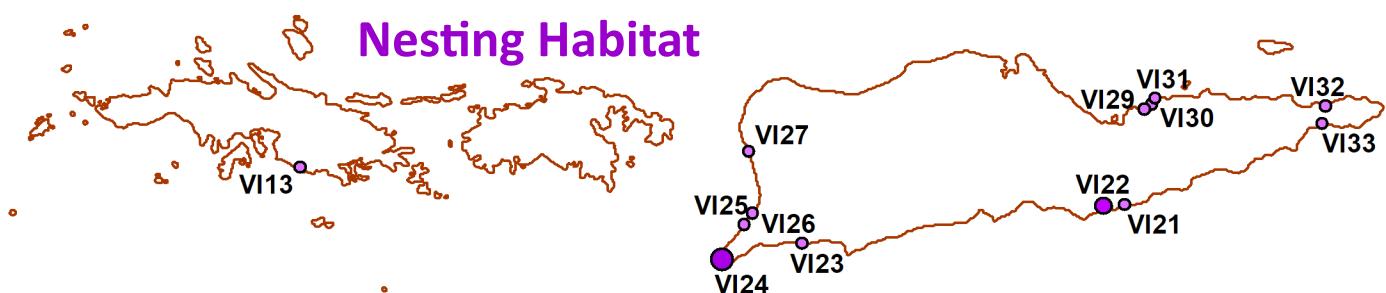


US Virgin Islands Sea Turtle Habitat



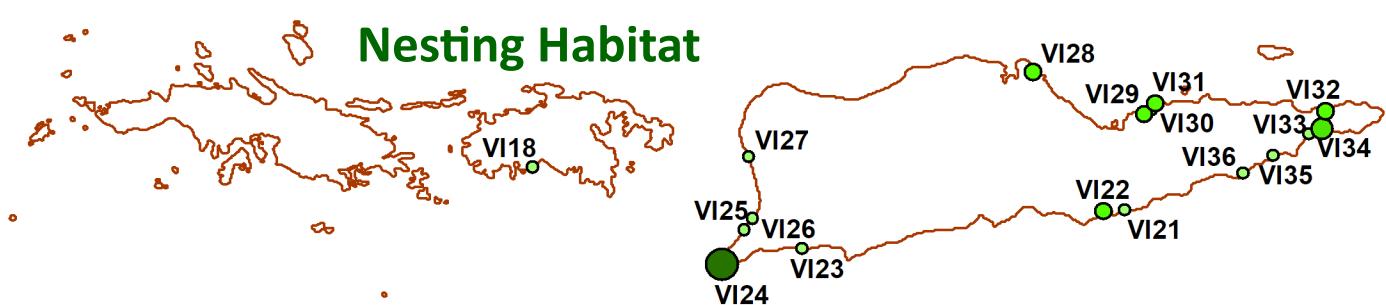
Leatherback

Nesting Habitat



Green

Nesting Habitat



Kilometers

0 4 8 16 24 32

Kilometers

0 3 6 12 18 24

Hawksbill Nesting Habitat Leatherback Nesting Habitat Green Nesting Habitat

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year

- <25 Crawls per year
- 25-100 Crawls per year
- 100-500 Crawls per year

- <25 Crawls per year
 - 25-100 Crawls per year
 - 100-500 Crawls per year
 - >1000 Crawls per year
- GSHHS Caribbean Shoreline**

N



US Virgin Islands Sea Turtle Habitat

Beach Identification Codes with Beach Names - St. Thomas			
VI1	Perseverance	VI8	Mandahl
VI2	Stumpy	VI9	Hans Lollik East
VI3	Santa Maria	VI10	Hans Lollik Tamarind Beach
VI4	Hendriks	VI11	Vessup
VI5	Sorgenfrij (Caret Bay)	VI12	Scott Beach
VI6	Neltjeberg	VI13	Abi Beach
VI7	Inner Brass		

Beach Identification Codes with Beach Names - St. John			
VI14	Scott Beach	VI18	Western Reef
VI15	Denis Bay	VI19	Cocoloba
VI16	Windswept	VI20	Genti
VI17	Francis Bay		

Beach Identification Codes with Beach Names - St. Croix			
VI21	Halfpenny	VI29	Grotto Beach (Beauregard Bay)
VI22	Manchenil	VI30	Cutlass Cove (Martel Bay)
VI23	Good Hope	VI31	Whistle Beach
VI24	Sandy Point National Wildlife Refuge	VI32	Smuggler's Cove
VI25	Stony Ground	VI33	Grapetree Bay
VI26	Second Target	VI34	Turner Hole
VI27	Sprat Hall	VI35	Rod Bay
VI28	Judith's Fancy	VI36	Robin Bay

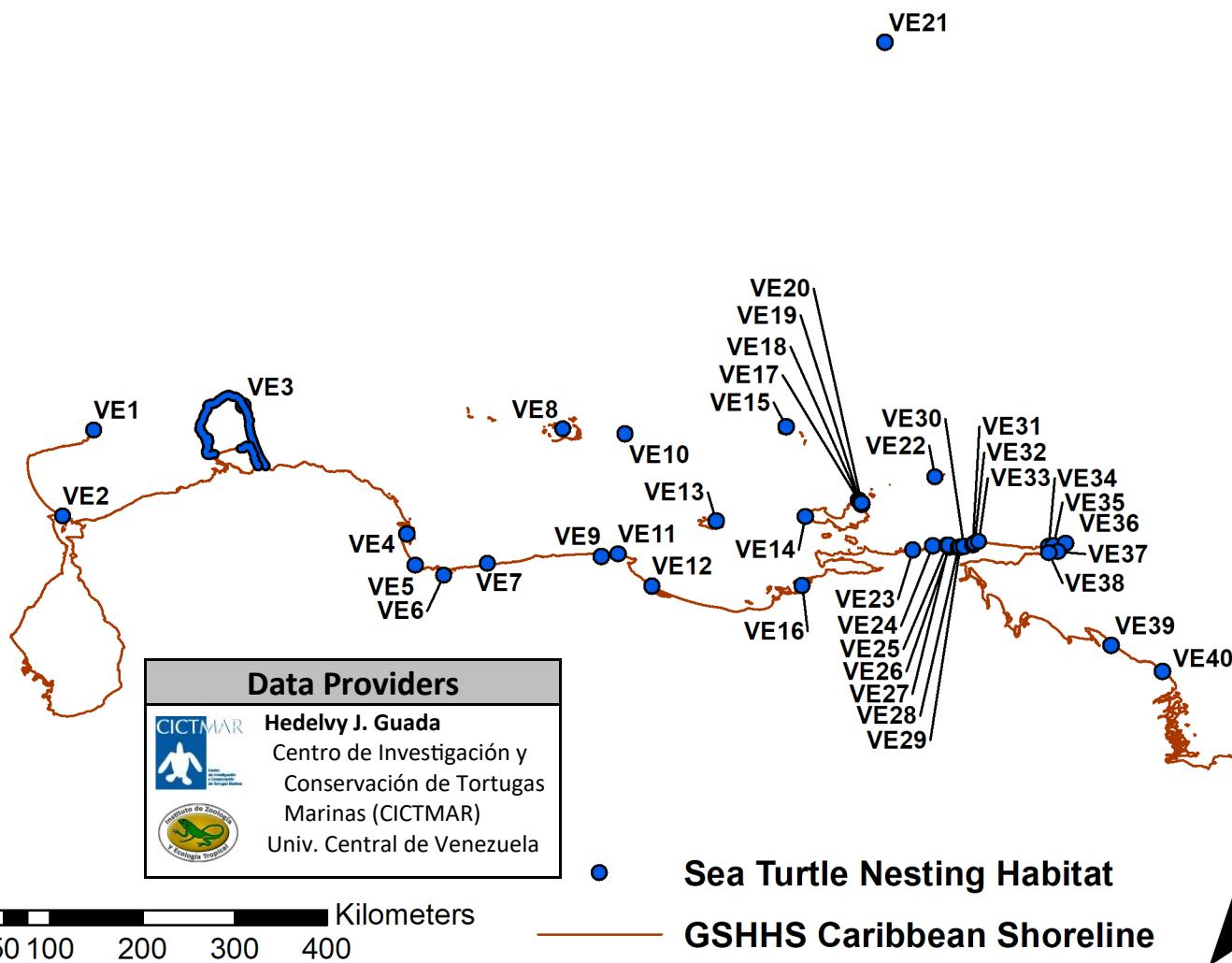
Venezuela Sea Turtle Habitat

Sea Turtle Presence	
Loggerhead Turtle (<i>Caretta caretta</i>)	N, F
Green Turtle (<i>Chelonia mydas</i>)	N, F
Leatherback Turtle (<i>Dermochelys coriacea</i>)	N, F
Hawksbill Turtle (<i>Eretmochelys imbricata</i>)	N, F
Kemp's Ridley Turtle (<i>Lepidochelys kempii</i>)	A
Olive Ridley Turtle (<i>Lepidochelys olivacea</i>)	F

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent

National Policy for the Protection of Sea Turtles	
Complete (indefinite) protection	Yes*
Moratorium (fixed period)	-
Prohibition(s) on take	-
Closed season	-
Minimum size limits	-
Maximum size limits	-
Annual quota	-
Permits/licenses required	-
Gear restrictions	Yes**
Area closures (MPA, park, reserve)	Yes
Reports of exploitation/sale nationally	Yes
Reports of illegal trade internationally	Yes
General public awareness of laws	No
Recent prosecutions or penalties	Yes
Enforcement considered adequate	No
Penalties are an adequate deterrent	No

* Indigenous use exempted in Gulf of Venezuela. ** Trawl fishing banned in 2009.

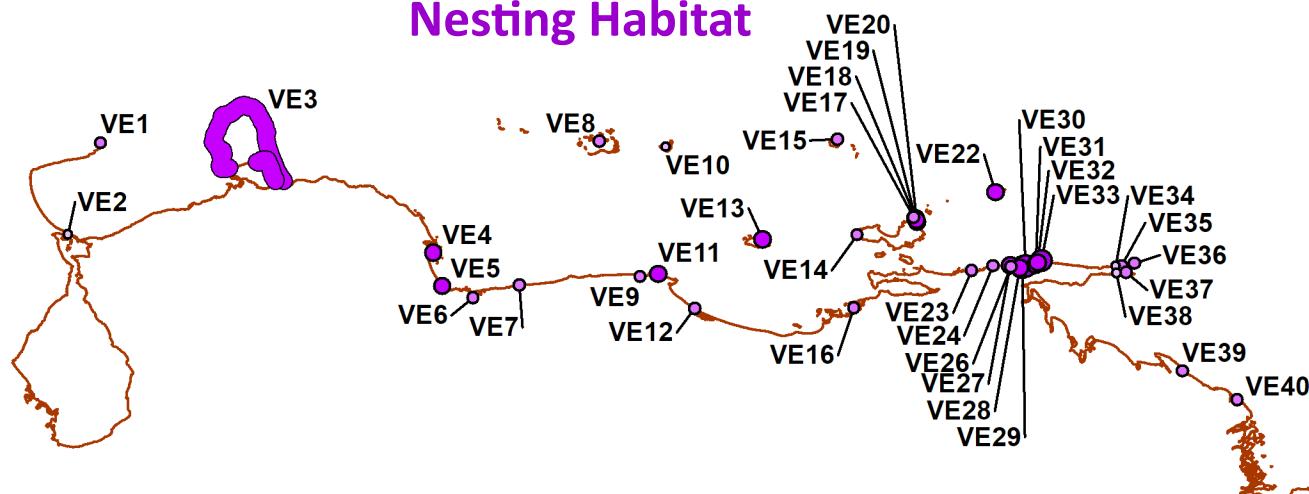


Venezuela Sea Turtle Habitat

Hawksbill Nesting Habitat



Leatherback Nesting Habitat



Hawksbill Nesting Habitat

- X Crawls per year
 - <25 Crawls per year
 - 25-100 Crawls per year
 - 100-500 Crawls per year
- 25-100 Crawls per year

0 50 100 200 300 400 Kilometers

Leatherback Nesting Habitat

- X Crawls per year
 - <25 Crawls per year
 - 25-100 Crawls per year
 - 100-500 Crawls per year
- 25-100 Crawls per year

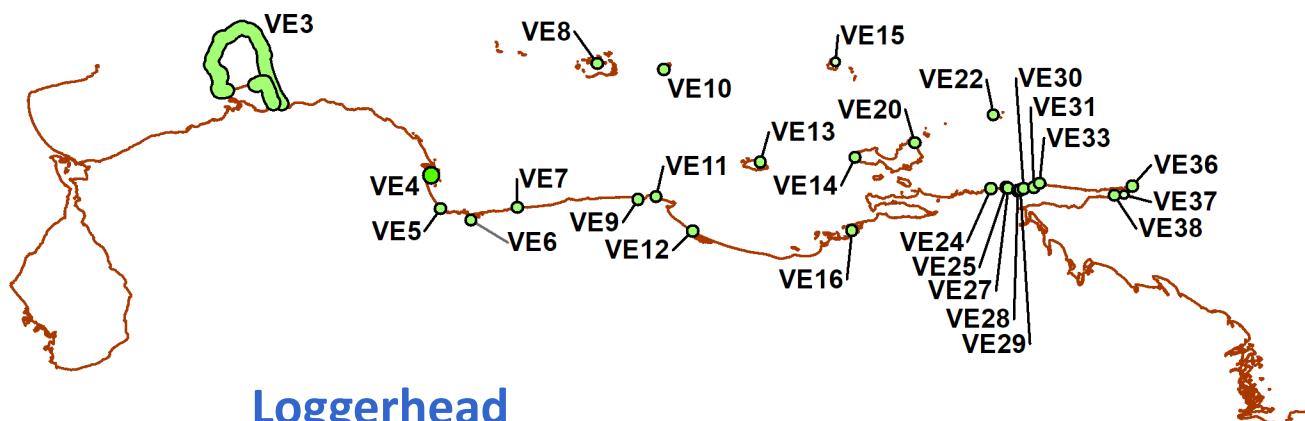
GSHHS Caribbean Shoreline



Venezuela Sea Turtle Habitat

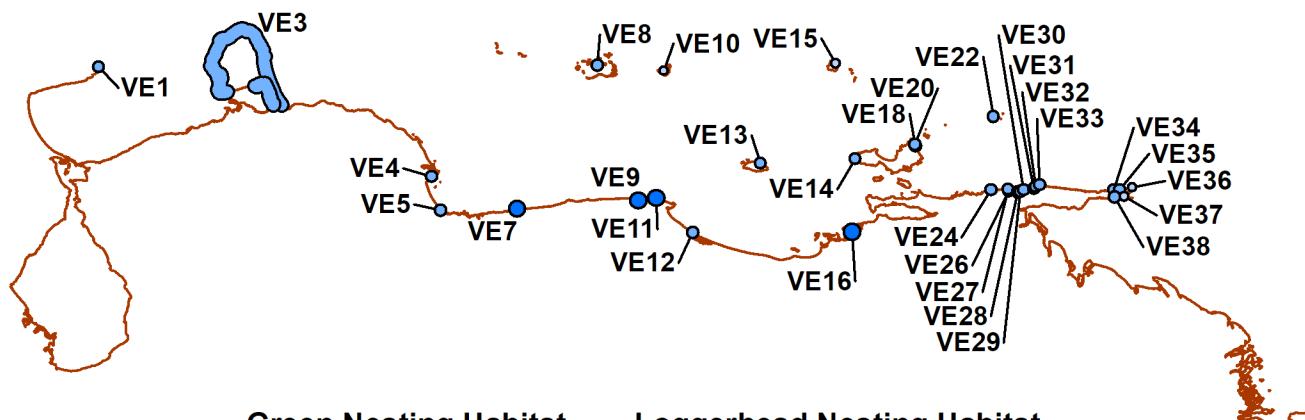
Green

Nesting Habitat



Loggerhead

Nesting Habitat



Green Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year
- >1000 Crawls per year

<25 Crawls per year

Loggerhead Nesting Habitat

- X Crawls per year
- <25 Crawls per year
- 25-100 Crawls per year

<25 Crawls per year
 GSHHS Caribbean Shoreline

Kilometers
0 50 100 200 300 400



Venezuela Sea Turtle Habitat

Beach Identification Codes with Beach Names			
VE1	Ensenada Malalmansipa-Castilletes, Zulia State	VE21	Isla de Aves Wildlife Refuge, Federal Dependency
VE2	Isla Zapara; and other adjacent areas, Zulia State	VE22	Archipiélago Los Testigos, Federal Dependency
VE3	Peninsula de Paraguana, Falcon State	VE23	Carúpano and adjacent beaches, Sucre State
VE4	Morrocoy National Park (Varadero, Mayorquina, Cayo Borracho, Cayo Sal)	VE24	Los Cocos and adjacent beaches, Morro de Puerto Santo
VE5	Golfo Triste, Falcon State	VE25	Mapurite, Sucre State
VE6	Patanemo and other beaches (including islands of the San Esteban National Park), Carabobo State	VE26	Chaguarama de Sotillo
VE7	Cuyagua and other beaches (including several within the Henri Pittier National Park), Aragua State	VE27	Puy Puy, Sucre State
VE8	Archipiélago Los Roques National Park, Insular Territory Miranda	VE28	Cangua, Sucre State
VE9	La Sabana and other beaches, La Guaira State	VE29	Querepare, Sucre State
VE10	Isla La Orchila, Insular Territory Miranda	VE30	San Juan de las Galdonas, Sucre State
VE11	El Banquito and several beaches, Miranda State	VE31	El Guamo, Sucre State
VE12	Laguna de Tacarigua National Park, Miranda State	VE32	San Juan de Unare, Sucre State
VE13	La Tortuga Island, Federal Dependency	VE33	Cipara, Sucre State
VE14	Península de Macanao (including beaches within the Laguna de La Restinga National Park), Isla de Margarita, Nueva Esparta State	VE34	Pargo, Peninsula de Paria National Park, Sucre State
VE15	Isla La Blanquilla, Federal Dependency	VE35	Uquire, Peninsula de Paria National Park, Sucre State
VE16	Mochima National Park, eastern area, Sucre State	VE36	Beaches in the southeastern tip of the Peninsula de Paria National Park (Los Garzos, Silvano, Obispo, Cerezo), Sucre State
VE17	El Humo, Isla de Margarita, Nueva Esparta State	VE37	Macurito, Sucre State
VE18	Other beaches in the eastern coast of the Isla de Margarita (El Tirano, El Cardón, Laguna Mar, La Caracola), Nueva Esparta State	VE38	Other beaches in the southeastern of the Peninsula de Paria, Sucre State
VE19	El Agua, Isla de Margarita, Nueva Esparta State	VE39	Delta del Orinoco-Mariusa National Park, Delta Amacuro State
VE20	Parguito, Isla de Margarita, Nueva Esparta State	VE40	Isla Tobejuba, Delta del Orinoco Biosphere Reserve, Delta Amacuro State



WIDECAST

Wider Caribbean Sea Turtle Conservation Network

"Working together to build a future where all inhabitants of the Wider Caribbean Region, human and sea turtle alike, can live together in balance."

The Wider Caribbean Sea Turtle Conservation Network (WIDECAST) is a regional coalition of experts and a Partner Organization to the U.N. Environment Programme's Caribbean Environment Programme. WIDECAST was founded in 1981 in response to a recommendation by the IUCN/CCA *Meeting of Non-Governmental Caribbean Organizations on Living Resources Conservation for Sustainable Development in the Wider Caribbean* (Santo Domingo, 26-29 August 1981) that a "Wider Caribbean Sea Turtle Recovery Action Plan should be prepared ... consistent with the Action Plan for the Caribbean Environment Programme."

WIDECAST's vision for achieving sea turtle recovery on a regional scale has focused on bringing the best available science to bear on sea turtle management and conservation, empowering people to make effective use of that science in the policy-making process, and providing a mechanism and a framework for cooperation within and among nations. By involving stakeholders at all levels and encouraging policy-oriented research, WIDECAST puts science to practical use in conserving biodiversity and advocates for grassroots involvement in decision-making and project leadership.

Emphasizing initiatives that strengthen capacity within participating countries and institutions, the network develops and replicates pilot projects, provides technical assistance, enables coordination in the collection, sharing and use of information and data, and promotes strong linkages between science, policy, and public participation in the design and implementation of conservation actions. Working closely with local communities and resource managers, the network has also developed standard management guidelines and criteria that emphasize best practices and sustainability, ensuring that current utilization practices, whether consumptive or non-consumptive, do not undermine sea turtle survival over the long term.

With Country Coordinators in more than 40 Caribbean nations and territories, WIDECAST is uniquely able to facilitate complementary conservation action across range States, including strengthening legislation, encouraging community involvement, and raising public awareness of the endangered status of the region's six species of migratory sea turtles. As a result, most Caribbean nations have adopted a national sea turtle management plan, poaching and illegal product sales have been dramatically reduced or eliminated at key sites, major nesting beaches are protected, many of our largest breeding colonies are monitored on an annual basis, alternative livelihood models are increasingly available for rural areas, and citizens are mobilized in support of conservation action. You can join us! Visit www.widecast.org for more information.

WWW.WIDECAST.ORG