

Indian Ocean Loggerheads

By Ronel Nel, Mayeul Dalleau, Diane Le Gouvello, Michael G. Hart-Davis, Tony Tucker, Alan F. Rees, Andrea D. Phillott, and Scott Whiting, and Sabrina Fossette

Recent issues of the *SWOT Report* have contained articles about the natural history, status, and distribution of loggerhead turtles in the Pacific Ocean (vol. XIII), as well as in the Atlantic Ocean and Mediterranean (vol. XIV), including maps of at-sea biogeography for these three large ocean biomes. Data have now been compiled from the Indian Ocean as well, to complete the first global map of loggerhead telemetry (pp. 32–33). This is the unique story of Indian Ocean loggerheads, in the final chapter in this series of ocean-scale overviews.

A loggerhead turtle that was accidentally hooked by a longline recovers in Kélonia's care center (Réunion Island) after hook removal surgery. © Hendrik Sauvignet/Ocean-OBS



Global distributions of the loggerhead have been divided into 10 regional management units, or RMUs (*SWOT Report*, vol. XII, pp. 30–33). Four of these RMUs are in the Indian Ocean, the largest being in the northwest (figure 1). The Northwest Indian Ocean RMU surrounds the islands of Masirah (Oman) and Socotra (Yemen), where several tens of thousands of females nest. Next in rookery size is the Southeast Indian Ocean RMU, around Western Australia, which has about 2,500 nesting females annually. Then comes the Southwest Indian Ocean RMU, whose rookeries are shared between South Africa and Mozambique, with fewer than 1,000 annual nesters. These three RMUs are globally ranked as second, third, and fourth, respectively, in terms of the abundance of nesting female loggerheads. The Northeast Indian Ocean RMU, in the Bay of Bengal, is ranked as the world’s smallest rookery, with likely fewer than 50 annual nesters.

The most conspicuous aspect of the movement of loggerheads among the largest three of these rookeries, as shown by telemetry studies, is the commonly observed movement of the turtles along a north-south transequatorial axis. This movement contrasts with the east-west migrations of loggerheads typical to the northern and southern hemispheres of both the Atlantic and Pacific Oceans, where turtles typically do not cross the equator. Rather, they follow the currents of their respective north and south oceanic gyres between feeding, breeding, and developmental habitats. The atypical loggerhead movement patterns in the Indian Ocean may derive from the fact that the Indian Ocean is the only major basin that is closed in the north by a continental shelf, thereby creating unique oceanographic and atmospheric phenomena.

This north-south migration of Indian Ocean loggerheads is best documented in juveniles from the Mascarene Plateau (55° S latitude), which have been tracked north to Oman and even to the Arabian Gulf, where they likely originated (*SWOT Report*, vol. VII, pp. 10–11; vol. XIV, pp. 6–7). Unsurprisingly, adult loggerheads in Western Australia also migrate northward with the Western Australian Current, taking them to the warmer waters of the Timor and Arafura Seas. Preliminary analysis of recent tracking of neonate loggerhead

turtles indicates that they do not take the same path as adults. More peculiar is that the eastern edge of the Indian Ocean loggerhead distribution seems to truncate, and the animals do not venture into the Pacific Ocean. This border is where Southeastern Indian Ocean RMU loggerheads meet those nesting in Queensland, which forage off the Great Barrier Reef (the Southwestern Pacific RMU). This apparent abrupt separation may be due to the limitations of our loggerhead tracking efforts to date, or could be caused by some other unknown factor that restricts their distribution. However, given that this RMU boundary lies roughly along a north-south line formed by the Torres Strait Islands, a narrow waterway that was previously a land bridge between Papua New Guinea and Cape York in northern Australia, it is likely a biogeographic relic from before the last ice age, when these islands and the current maze of shallow reefs and surrounding seas were above sea level.

The situation along the Southern African continent is very different. The fast-flowing Agulhas Current hugs the coast, flowing in a southwesterly direction toward the colder coast at Cape Agulhas, the continent’s southernmost point. Here it spins off partially into the Atlantic Ocean, or turns on itself and flows eastward again, to just north of the Arctic Circumpolar Current (figure 2). Modern tools such as ocean particle modeling can be used to predict the distribution of posthatchlings from the time they leave the nesting grounds. In one such model based on 2018 conditions, southwestern Indian Ocean loggerheads were shown to disperse with the Agulhas Current and end up either in the Agulhas Retroflexion or in the Benguela Current (on the west coast of South Africa), with a portion ending up in the cold Southern Ocean. These locations have a high probability of mortality.

Despite those useful modeling tools, there is still considerable uncertainty about the duration of the lost years or the location of the ontogenetic shift from the pelagic phase to the neritic, nor is it known with certainty which rookery these young loggerheads would reach as adults. However, what we do observe from global sea surface temperatures is that the western Indian Ocean is a much more

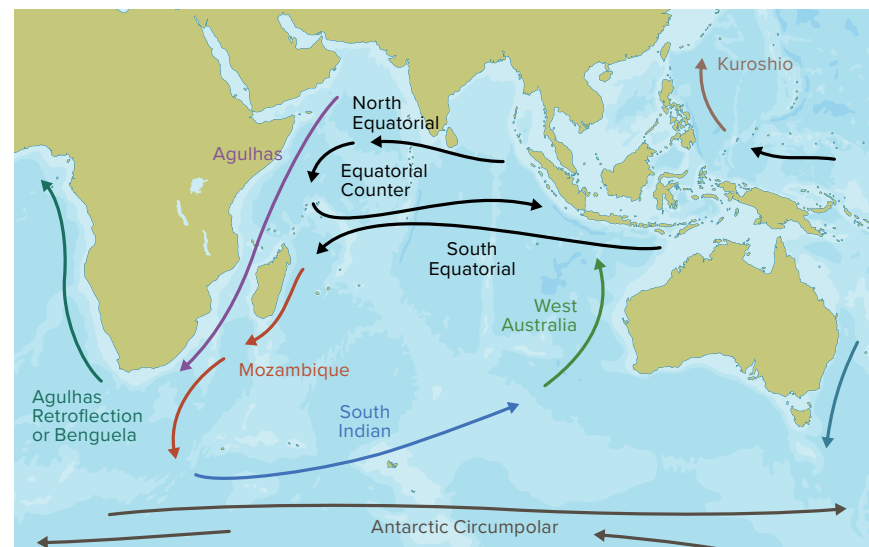
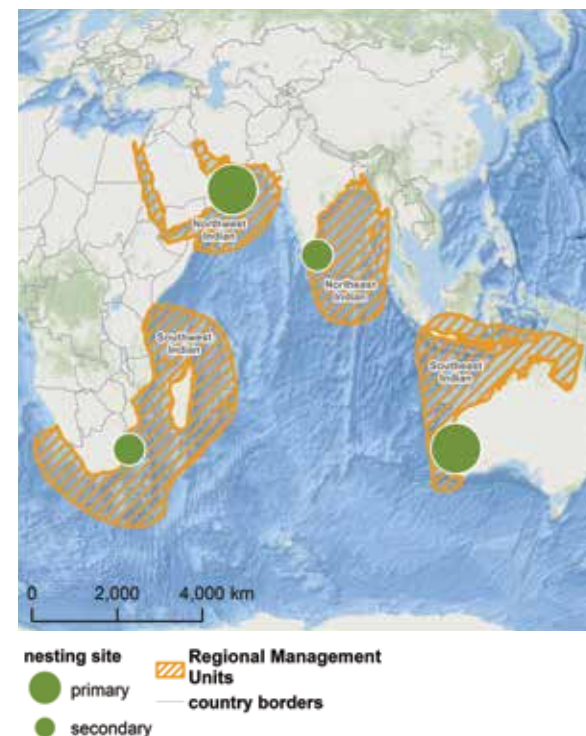


FIGURE 1 (AT LEFT). Map showing the Indian Ocean’s four regional management units for loggerhead turtles, with scaled circles indicating main nesting locations. FIGURE 2 (ABOVE). The ocean currents of the Indian Ocean affect both the migration of adult loggerhead turtles and the dispersion of loggerhead hatchlings.



The release of a loggerhead from Réunion Island attracts tourists and locals. The tag on the turtle’s back will simultaneously track her migration, most probably to Oman some 4,500 kilometers away, and record ocean temperatures. © Hendrik Sauvignat/Ocean-OBS

favorable habitat for loggerheads than either (a) the southern or southwestern edges of the African continent or (b) the southwest coast of Australia, since posthatchling turtles are unlikely to survive long-term or abrupt exposure in those cold waters. Indeed, the juvenile and adult turtles that have been tracked in the past tended to avoid the cold water of the Atlantic and Southern Oceans and appeared to be strong enough swimmers to navigate the currents and avoid the southern seas, which are notorious for their strong westerly winds and high waves.

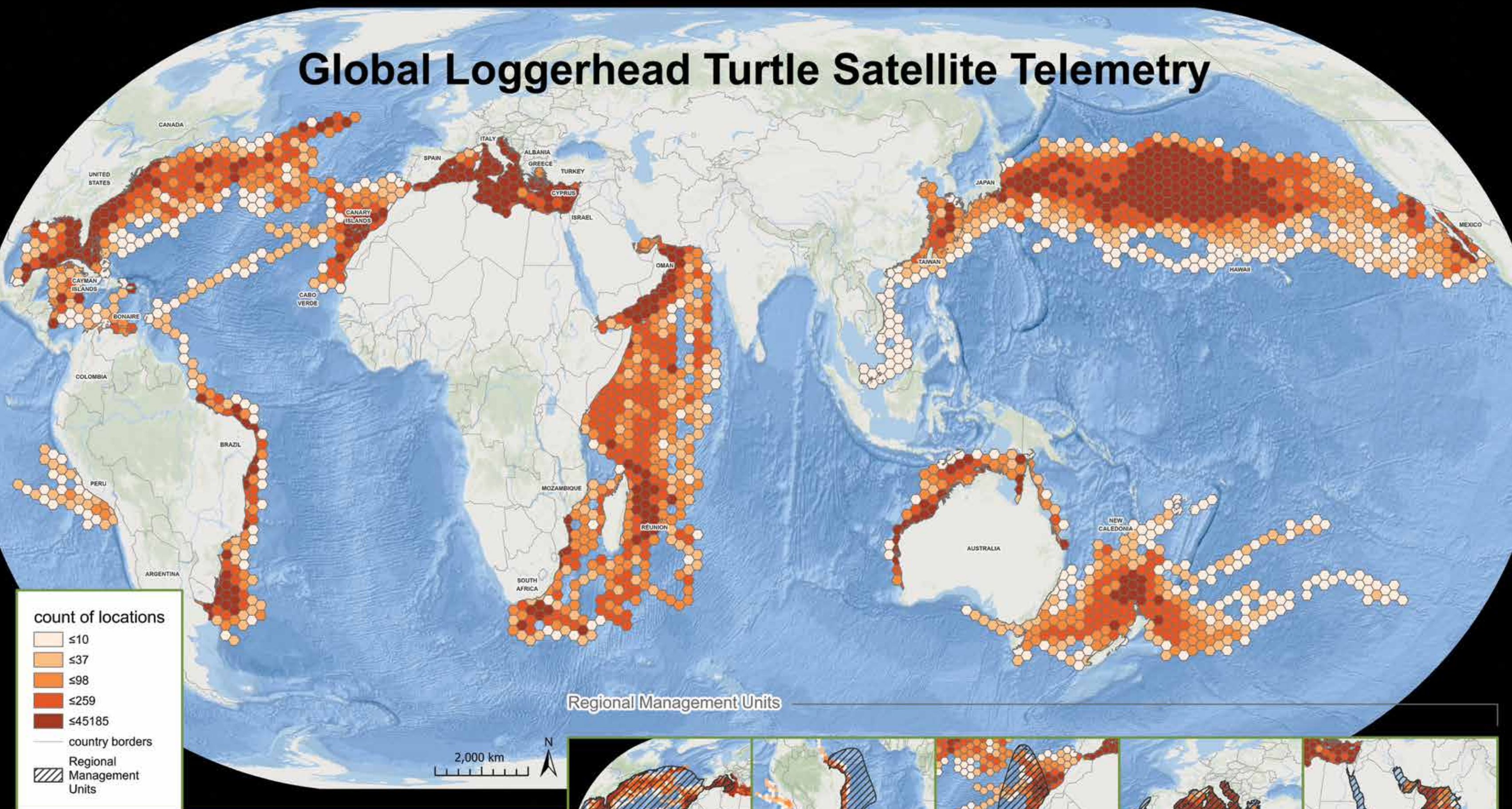
Also curious to note is that the southwestern and southeastern Indian Ocean loggerhead rookeries are both located at about 27°S latitude, with the closest southernmost tips of their respective continental landmasses also lying at approximately the same latitude (that is, Cape Agulhas, South Africa, and a point near Albany, Western Australia, both at about 35°S latitude, the latter being the southwesternmost point of Australia). So far south are these two rookeries, when compared with other loggerhead rookeries globally, that it is easy to assume some migration of animals into the other ocean basins, yet such migration does not seem to happen.

Sea turtles that manage to avoid the troubled cold waters to the south and stay in the warmer seas of the Indian Ocean still face many challenges, two significant ones being fisheries bycatch and plastic pollution. Many of the sea turtle tracks from the southwest Indian Ocean that are presented in the global map (pp. 32–33) were from rehabilitated juvenile and subadult turtles caught in commercial fisheries near La Réunion. They are the lucky turtles, because they were rescued, rehabilitated at Kélonia (the sea turtle rescue center of

Réunion), and released to the wild. However, an estimated 3,500 interactions between sea turtles and longline fisheries take place each year in the Indian Ocean, and whereas fishing pressures in the exclusive economic zones of most countries are managed, the high-seas impacts of turtle bycatch are believed to be shockingly high. Moreover, plastic pollution is ubiquitous throughout the Indian Ocean and presents a noteworthy threat to all age classes of loggerheads. Interestingly, studies have shown that a large amount of plastics found in the west actually originated on the eastern side of the ocean basin, where some of the most polluting countries are located. The impact of these turtle and plastic interactions has not yet been properly quantified, but unlike many of the fishing activities that are often size selective, with larger turtles being more vulnerable, plastic is an indiscriminate killer. Sea turtles of all sizes, including posthatchlings from their first days of feeding, have been seen to ingest or become entangled in plastics, which can result in malnutrition, disease, intestinal blockage, and often death.

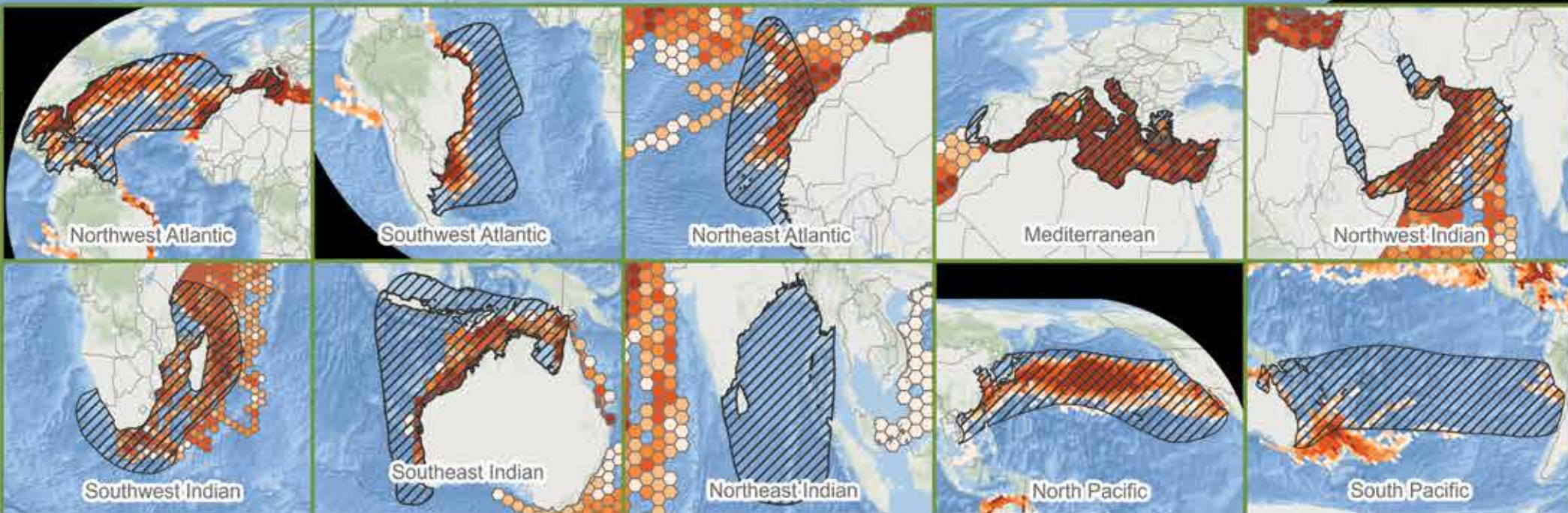
Scientists working on loggerheads in both the Atlantic and the Pacific Oceans have generated vast amounts of original knowledge in recent decades, making those loggerheads among the best studied sea turtle populations on Earth. Meanwhile, the Indian Ocean still has many unique features to explain and rare mysteries to tackle, and her loggerhead turtles exhibit striking patterns not seen anywhere else. There is still much to learn about loggerhead turtles in this very special ocean basin, and new information is needed to implement effective cross-jurisdictional management actions for the priority threats to all Indian Ocean sea turtles. •

Global Loggerhead Turtle Satellite Telemetry



Regional Management Units

notes: This map displays aggregated data from 1,273 individual loggerhead turtles and a total of 650,000 locations, sourced from more than 80 different projects. For details, see the data citations beginning on p. 49. Data are displayed as given by the providers and with minimal processing to remove locations on land and visual outliers. Some tracks are raw locations while others have been more extensively filtered or modeled. On the main map, polygons are colored according to the number of loggerhead locations they contain; color bins were determined by splitting the count data into quintiles. Darker colors represent a higher number of locations, which can indicate a high number of tracked turtles in that location or that turtles spent a lot of time there. Countries of origin are labeled in the map. The insets show the 10 loggerhead regional management units (or subpopulations) that were defined in 2010 by Wallace et al. by combining telemetry, genetics, tagging, and nesting data. This map is not intended to be a comprehensive representation of all extant telemetry data or an authoritative source for the studies cited. **scale:** 1:73,000,000 **projection:** Eckert IV (central meridian—80W) **data:** The SWOT team and reviewed literature; Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors. **produced in partnership with:** Oceanic Society, Duke University, OBIS-SEAMAP, and the IUCN-MTSG



PUERTO RICO (UNITED STATES)

DATA RECORD 20

Project Title: Puerto Rico Leatherback Tracking
Metadata: 1 adult female *Dermochelys coriacea*; tags deployed between 2004 and 2015
Data Source: Evans, D. 2020. Leatherback satellite tracking in Puerto Rico. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Daniel Evans

SAINT MARTIN (FRANCE)

DATA RECORD 22 | SWOT ID: 1022

Project Title: SEATAG—Guadeloupe and Saint-Martin, French West Indies
Project Partners: French State, Guadeloupe Region, European Union, and private sponsors
Metadata: 2 juvenile *Chelonia mydas*; tags deployed in Saint Martin
Data Sources: (1) Delcroix, E. 2018. SEATAG—Guadeloupe and Saint-Martin, French West Indies. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1022>) and originated from Satellite Tracking and Analysis Tool (STAT); http://www.seaturtle.org/tracking/index.shtml?project_id=942. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Eric Delcroix

SINT EUSTATIUS (THE NETHERLANDS)

DATA RECORD 21

Project Title: Dutch Antilles Marine Tracking
Metadata: 3 adult female *Chelonia mydas*; 2 adult female *Eretmochelys imbricata*
Data Source: Esteban, N., R. van Dam, E. Harrison, A. Herrera, and J. Berkel. 2015. Green and hawksbill turtles in the Lesser Antilles demonstrate behavioral plasticity in inter-nesting behavior and post-nesting migration. *Marine Biology* 162: 1153–1163.
SWOT Contact: Nicole Esteban

TRINIDAD

DATA RECORD 23

Project Title: Trinidad Leatherbacks
Metadata: 8 nesting female *Dermochelys coriacea*
Data Source: Eckert, S. 2020. Satellite tracking of adult leatherback turtles off of Trinidad. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Scott Eckert

UNITED STATES

DATA RECORD 24

Project Title: Lost Year Neonates
Metadata: 17 juvenile *Caretta caretta*; tags deployed at sea
Data Source: Mansfield, K. L., J. Wyneken, W. Porter, and J. Luo. 2014. First satellite tracks of neonate sea turtles redefine the “lost years” oceanic niche. *Proceedings of the Royal Society B* 281 (1781): 20133039.
SWOT Contact: Kate Mansfield

DATA RECORD 25

Project Title: Mote Marine Lab Loggerheads
Metadata: 127 *Caretta caretta*; tags deployed on nesting females
Data Source: Tucker, T., and K. Mazzarella. 2018. Mote Marine Lab loggerhead tracking. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XIV (2019).
SWOT Contacts: Tony Tucker and Kristen Mazzarella

DATA RECORD 26 | SWOT ID: 1342

Project Title: Florida Loggerhead Migrations
Project Partner: National Marine Fisheries Service Office of Protected Resources
Metadata: 38 adult *Caretta caretta*; tags deployed between 1998 and 2000
Data Sources: (1) Schroeder, B. 2018. Florida Loggerhead Migrations. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1342>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Barbara Schroeder

DATA RECORD 27 | SWOT ID: 960

Project Title: Movement Patterns of Kemp's Ridley Sea Turtles in the Northwestern Gulf of Mexico, 2004–2007
Project Partner: Sea Turtle and Fisheries Ecology Research Laboratory, Department of Marine Biology, Texas A&M University at Galveston
Metadata: 7 adult female and 15 juvenile *Lepidochelys kempii*
Data Sources: (1) Seney, E. 2013. Movement patterns of Kemp's ridley sea turtles in the northwestern Gulf of Mexico, 2004–2007. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/960>). (2) OBIS-SEAMAP.
SWOT Contact: Erin Seney

DATA RECORD 28 | SWOT ID: 1280

Project Title: Institute for Marine Mammal Studies Kemp's Ridley Tracks
Metadata: 51 juvenile, 16 subadult, and 1 adult *Lepidochelys kempii*; 2 juvenile *Caretta caretta*; 2 juvenile *Chelonia mydas*
Data Sources: (1) Eric Pulis. 2018. IMMS Ridley datasets 8 and 9. Data downloaded from

OBIS-SEAMAP (<http://seamap.env.duke.edu>) and originated from Satellite Tracking and Analysis Tool (STAT); http://www.seaturtle.org/tracking/index.shtml?project_id=1280. (2) Coleman, A. 2017. IMMS Ridley datasets 1–7. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1083>) and originated from Satellite Tracking and Analysis Tool (STAT); http://www.seaturtle.org/tracking/index.shtml?project_id=678. (3) STAT. (4) OBIS-SEAMAP.
SWOT Contacts: Andy Coleman and Eric Pullis

DATA RECORD 29 | SWOT ID: 1142

Project Title: Northeast Florida Green Turtle Tracking Project
Project Partners: Guana Tolomato Matanzas National Estuarine Research Reserve, Friends of the GTM Reserve, Keepers of the Coast, and Eastman Environmental.
Metadata: 3 juvenile *Chelonia mydas*
Data Sources: (1) Eastman S. 2017. Northeast Florida Green Turtle Tracking Project. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1142>) and originated from Satellite Tracking and Analysis Tool (STAT); http://www.seaturtle.org/tracking/index.shtml?project_id=620. (2) OBIS-SEAMAP.
SWOT Contact: Erin Seney

DATA RECORD 30

Project Title: Cape Canaveral Sea Turtle Tagging
Metadata: 32 male *Caretta caretta*; 3 *Lepidochelys kempii*
Data Sources: (1) Arendt, M. D., A. L. Segars, J. I. Byrd, J. Boynton, J. D. Whitaker, L. Parker, D. W. Owens, G. Blanvillain, J. M. Quattro, and M. A. Roberts. 2012a. Distributional patterns of adult male loggerhead (*Caretta caretta*) sea turtles in the vicinity of Cape Canaveral, Florida, USA, during and after a major annual breeding aggregation. *Marine Biology* 159 (1): 101–112. (2) Arendt, M.D., A. L. Segars, J. I. Byrd, J. Boynton, J. Schwenker, J. D. Whitaker, and L. Parker. 2012b. Migration, distribution, and dive behavior of adult male loggerhead sea turtles (*Caretta caretta*) following dispersal from a major breeding aggregation in the North Western Atlantic. *Marine Biology* 159 (1):113–125.
SWOT Contact: Mike Arendt

DATA RECORD 31

Project Title: Archie Carr Green Turtles
Metadata: 19 male and 8 female adult *Chelonia mydas*
Data Sources: Bagley, D. 2019. Tracking of male and female green turtles. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Dean Bagley

DATA RECORD 32

Project Title: Archie Carr Green Turtles
Metadata: 19 male and 8 female adult *Chelonia mydas*
Data Sources: Bagley, D. 2019. Tracking of male and female green turtles. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Dean Bagley

DATA RECORD 33

Project Title: Archie Carr Green Turtles
Metadata: 19 male and 8 female adult *Chelonia mydas*
Data Sources: Bagley, D. 2019. Tracking of male and female green turtles. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Dean Bagley

Project Title: Archie Carr Green Turtles
Metadata: 19 male and 8 female adult *Chelonia mydas*
Data Sources: Bagley, D. 2019. Tracking of male and female green turtles. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Dean Bagley

BRAZIL

DATA RECORD 3

Metadata: 19 juvenile *Caretta caretta*; tags deployed at sea
Data Source: Mansfield, K. L., M. L. Mendilaharsu,

Project Title: Archie Carr Interesting Loggerheads
Metadata: 14 adult female *Caretta caretta*
Data Sources: (1) Ceriani, S. 2019. Tracking interesting loggerhead turtles. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020). (2) Evans, D. R., R. R. Carthy, and S. A. Ceriani. 2019. Migration routes, foraging behavior, and site fidelity of loggerhead sea turtles (*Caretta caretta*) satellite tracked from a globally important rookery. *Marine Biology* 166: 134.
SWOT Contact: Simona Ceriani

DATA RECORD 33 | SWOT ID: 658

Project Title: Loggerhead Marinelifelife Center Tracking
Metadata: 7 adult, 3 juvenile, and 6 subadult *Caretta caretta*
Data Sources: (1) Manire, C. 2019. Loggerheads rehabilitated at Loggerhead Marinelifelife Center. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/658>). (2) OBIS-SEAMAP.
SWOT Contacts: Sarah Hirsch and Charles Manire

DATA RECORD 34

Project Title: Gulf of Mexico Kemp's and Green Turtles
Metadata: 9 *Lepidochelys kempii*; 15 *Chelonia mydas*
Data Source: Metz, T. 2019. Tracking Kemp's and green turtles in the Gulf of Mexico. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Tasha Metz

DATA RECORD 35

Project Title: Mote Additional Loggerheads
Metadata: 7 adult male *Caretta caretta*
Data Sources: (1) Mazzarella, K., R. Hardy, and D. Evans. Satellite tagged sea turtle movements associated with red tide. Poster presentation at the Annual Symposium on Sea Turtle Conservation and Biology, February 2019. (2) Mazzarella, K. Unpublished data from the Mote Marine Lab. http://www.seaturtle.org/tracking/index.shtml?project_id=1325. (3) STAT.
SWOT Contact: Kristen Mazzarella

DATA RECORD 36

Project Title: Green Turtles from Southwest Florida
Metadata: 10 adult female *Chelonia mydas*
Data Source: Sloan, K. 2020. Tracking green turtles from southwest Florida. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020).
SWOT Contact: Kelly Sloan

GLOBAL LOGGERHEAD SATELLITE TELEMETRY

The following data records refer to satellite telemetry datasets from tags that were deployed on loggerhead turtles worldwide and were combined to create the map on pp. 32–33. The data are organized first by ocean basin and then by country of deployment. For information regarding data processing and filtering, see the note on the map on p. 32. These data were generously contributed to SWOT by the people and partners listed subsequently. Records that have a SWOT ID can be viewed in detail in the SWOT online database and mapping application at <http://seamap.env.duke.edu/swot>, which contains additional information about the projects and their methodologies.

To save space, we have used the following abbreviations in the data source fields: (1) “STAT” refers to Coyne, M. S., and B. J. Godley. 2005. Satellite Tracking and Analysis Tool (STAT): An integrated system for archiving, analyzing, and mapping animal tracking data. *Marine Ecology Progress Series* 301: 1–7. (2) “SWOT Online Database” refers to Kot, C. Y., E. Fujioka, A. DiMatteo, B. P. Wallace, B. J. Hutchinson, J. Cleary, P. N. Halpin, and R. B. Mast. 2015. The State of the World's Sea Turtles Online Database. Data provided by the SWOT Team and hosted on OBIS-SEAMAP. Oceanic Society, IUCN Marine Turtle Specialist Group, and Marine Geospatial Ecology Lab, Duke University. <http://seamap.env.duke.edu/swot>. (3) “OBIS-SEAMAP” refers to Halpin, P. N., A. J. Read, E. Fujioka, B. D. Best, B. Donnelly, L. J. Hazen, C. Kot, K. Urian, E. LaBrecque, A. DiMatteo, J. Cleary, C. Good, L. B. Crowder, and K. D. Hyrenbach. 2009. OBIS-SEAMAP: The world data center for marine mammal, sea bird, and sea turtle distributions. *Oceanography* 22 (2): 104–115. When listed, these sources indicate that the dataset was contributed online through STAT, SWOT, or OBIS-SEAMAP.

ATLANTIC OCEAN

ARGENTINA

DATA RECORD 1

Metadata: 6 *Caretta caretta*; tags deployed in Argentina
Data Source: González Carman, V., I. Bruno, S. Maxwell, K. Álvarez, D. Albareda, E. M. Acha, and C. Campagna. 2016. Habitat use, site fidelity, and conservation opportunities for juvenile loggerhead sea turtles in the Río de la Plata,

Argentina. *Marine Biology* 163: 1–13.
SWOT Contact: Victoria González Carman

BONAIRE

DATA RECORD 2

Metadata: 5 female *Caretta caretta*; tags deployed on nesting turtles
Data Sources: (1) Nava, M. I., and Sea Turtle Conservation Bonaire. 2019. Tracking marine turtles off of Bonaire. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XIV (2019). (2) Becking, L. E., M. J. A.

Christianen, M. I. Nava, N. Miller, S. Willis, and R. P. van Dam. 2016. Post-breeding migration routes of marine turtles from Bonaire and Klein Bonaire, Caribbean Netherlands. *Endangered Species Research* 30: 117–124.
SWOT Contact: Mabel Nava

N. F. Putman, M. A. G. dei Marcovaldi, A. E. Sacco, G. Lopez, T. Pires, and Y. Swimmer. 2017. First satellite tracks of South Atlantic sea turtle “lost years”: Trans-equatorial and seasonal implications for population connectivity. *Proceedings of the Royal Society B* 284: 20171730.
SWOT Contact: Kate Mansfield

DATA RECORD 4

Metadata: 10 nesting *Caretta caretta*
Data Source: Marcovaldi, M. Á., G. G. Lopez, L. S. Soares, E. S. H. M. Lima, J. C. A. Thomé, and A. P. Almeida. 2010. Satellite-tracking of female

loggerhead turtles highlights fidelity behavior in northeastern Brazil. *Endangered Species Research* 12: 263–272.
SWOT Contact: Neca Marcovaldi

DATA RECORD 5

Metadata: 13 *Caretta caretta*; tags deployed in Brazil
Data Source: Marcovaldi, M. A. 2018. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XIV (2019).
SWOT Contact: Neca Marcovaldi

DATA RECORD 6 | SWOT ID: 951

Project Title: Brazil Trawl-Caught Turtles
Project Partners: Fisheries Bycatch Research Group; Danielle Monteiro, Universidade Federal do Rio Grande (FURG); and Projeto TAMAR
Metadata: 3 adult and 5 juvenile *Caretta caretta* tagged after being caught in trawl fisheries and released on the continental shelf of southern Brazil in 2013 and 2014
Data Sources: (1) Monteiro, D. 2018. Brazil Trawl-Caught Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/951>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Danielle Monteiro

DATA RECORD 7 | SWOT ID: 1148

Project Title: Neonates Tagged Off Brazil
Project Partners: Fisheries Bycatch Research Group; Yonat Swimmer, Projeto TAMAR; and NOAA, University of Central Florida
Metadata: 4 juvenile *Caretta caretta*; tags deployed in 2013
Data Sources: (1) Swimmer, Y. 2017. Neonates tagged off Brazil. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1148>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Yonat Swimmer

DATA RECORD 8 | SWOT ID: 984

Project Title: Study of the Biology of Sea Turtles in Brazil through Satellite Telemetry
Project Partner: Projeto TAMAR-IBAMA
Metadata: 15 adult *Eretmochelys imbricata*; 5 adult *Dermochelys coriacea*; 10 adult *Caretta caretta*; 10 adult *Lepidochelys olivacea*; tags deployed in Brazil in 2005 and 2006
Data Sources: (1) Lopez, G. 2018. Study of the Biology of Sea Turtles in Brazil through Satellite Telemetry. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/984>) on February 10, 2020, and originated from Satellite Tracking and Analysis Tool (STAT; http://www.seaturtle.org/tracking/index.shtml?project_id=63). (2) STAT. (3) SWOT Online Database.
SWOT Contact: Gustavo Lopez

DATA RECORD 9

Project Title: Study of Habitat Use by Loggerhead Turtles in Southern Brazil
Project Partner: Danielle Monteiro, Projeto TAMAR—NEMA/FURG
Metadata: 16 *Caretta caretta*; tags deployed in southern Brazil
Data Source: Monteiro, D. 2016. Satellite tracking of loggerhead turtles in southern Brazil. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XI (2016).

CABO VERDE

DATA RECORD 10 | SWOT ID: 346

Project Title: Cabo Verde (Proyecto Aegina): Males and Females
Project Partners: Instituto Canario de Ciencias Marinas (ICCM), Gobierno de Canarias; Instituto Nacional de Desenvolvimento das Pescas (INDP); Direcção Geral do Ambiente; and Ministerio de Ambiente, Agricultura e Pescas
Metadata: 3 adult *Caretta caretta*
Data Sources: (1) Cruz, N. 2018. Cabo Verde (Proyecto Aegina): Males and females. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/346>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Nuria Cruz

DATA RECORD 11 | SWOT ID: 1442

Project Title: Cabo Verde: LIFE *Caretta caretta*
Project Partner: LIFE *Caretta caretta*
Metadata: 4 adult *Caretta caretta*; tags deployed in 1999
Data Sources: (1) Cruz, N. 2018. Cabo Verde. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1442>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Nuria Cruz

CANADA

DATA RECORD 12

Metadata: 11 *Caretta caretta*; tags deployed at sea
Data Source: James, M., and Sea Turtle Unit, Fisheries and Oceans Canada. 2019. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XIV (2019).
SWOT Contact: Mike James

CANARY ISLANDS (SPAIN)

DATA RECORD 13 | SWOT ID: 496

Project Title: Canary Islands: OAG
Project Partners: Observatorio Ambiental Granadilla; Sociedad de Estudio de Cetáceos en el Archipiélago Canario; Centro de Gestión de Biodiversidad, Departamento de Biología, Universidad de Las Palmas de Gran Canaria; and Centro de Recuperación de Fauna Silvestre, Cabildo Insular de Gran Canaria
Metadata: 18 juvenile and 1 subadult *Caretta caretta*; tags deployed between 2008 and 2010
Data Sources: (1) Machado, A. 2017. Canary Islands: OAG. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/496>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Antonio Machado

DATA RECORD 14

Project Title: Juvenile loggerheads (1999–2000) tagged in the Canary Islands
Project Partners: Universidad de Las Palmas de Gran Canaria and Sociedad Herpetológica Española
Metadata: 5 juvenile *Caretta caretta*; tags deployed in the Canary Islands
Data Source: Universidad de Las Palmas de Gran Canaria and Sociedad Herpetológica Española. 2017. Program number 01602: Proyecto Life B4-3200/97/247 de apoyo a la conservación del delfín mular (*Tursiops truncatus*) y la tortuga común (*Caretta caretta*) en Canarias. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XII (2017).
SWOT Contact: Nuria Varo Cruz

DATA RECORD 15 | SWOT ID: 347

Project Title: Islas Canarias (Proyecto Aegina): Juvenile Loggerheads
Project Partners: Instituto Canario de Ciencias Marinas, Gobierno de Canarias; Instituto Nacional de Desenvolvimento das Pescas; and Direcção Geral do Ambiente, Ministerio de Ambiente, Agricultura e Pescas
Metadata: 11 juvenile *Caretta caretta*; tags deployed in 2006
Data Sources: (1) Cruz, N. 2018. Islas Canarias (Proyecto Aegina): Juvenile loggerheads. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/347>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Nuria Varo Cruz

DATA RECORD 16 | SWOT ID: 1444

Project Title: Canary Islands
Project Partner: LIFE *Caretta caretta*
Metadata: 9 juvenile *Caretta caretta*; tags deployed in Canary Islands
Data Sources: (1) Cruz, N. 2016. Canary Islands. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1444>) on February 12, 2017, originated from STAT (http://www.seaturtle.org/tracking/index.shtml?project_id=886). (2) STAT. (3) SWOT Online Database.
SWOT Contact: Nuria Varo Cruz

DATA RECORD 17 | SWOT ID: 1801

Project Title: Juvenile Loggerheads: Canary Islands Reintroduction Program—ADS Biodiversidad
Project Partners: Asociación para el Desarrollo Sostenible y Conservación de la Biodiversidad (ADS Biodiversidad) and Centre of Cabildo de Fuerteventura (Morro Jable)
Metadata: 5 juvenile *Caretta caretta*; individuals are 7–8 years old and have been reared in captivity; tags deployed at Cofete Beach
Data Sources: (1) Cruz, N. 2018. Juvenile loggerheads: Canary Islands reintroduction program. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1801>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Nuria Varo Cruz

CAYMAN ISLANDS

DATA RECORD 18 | SWOT ID: 349

Project Title: Cayman Islands 2003: Loggerhead and Green Turtles
Project Partner: Marine Turtle Research Group, Cayman Islands Department of Environment
Metadata: 1 adult *Caretta caretta*; tag deployed July 2003

Data Sources: (1) Blumenthal, J. 2018. Cayman Islands 2003: Loggerhead and Green Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/349>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Janice Blumenthal

DATA RECORD 19 | SWOT ID: 350

Project Title: Cayman Islands 2004: Loggerhead and Green Turtles
Project Partner: Marine Turtle Research Group, Cayman Islands Department of Environment
Metadata: 2 adult *Caretta caretta*; tags deployed in 2005 and 2006
Data Sources: (1) Blumenthal, J. 2018. Cayman Islands 2004: Loggerhead and Green Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/350>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Janice Blumenthal

COLOMBIA

DATA RECORD 20 | SWOT ID: 1292

Project Title: Caribbean Colombian Sea Turtle Satellite Tracking
Project Partners: Sea Turtles and Mammal Conservation Program (ProCTMM), 2018. Caribbean Colombian Sea Turtle Satellite Tracking. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1292>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: ProCTMM

SPAIN

DATA RECORD 21 | SWOT ID: 1146

Project Title: Spain Tags Merged
Project Partners: Fisheries Bycatch Research Group, NOAA, and Kai Submon, University of North Carolina, Wilmington
Metadata: 1 adult, 5 juvenile, and 20 subadult *Caretta caretta*; tags deployed between 2008 and 2012
Data Sources: (1) Swimmer, Y. 2017. Spain tags merged. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1146>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Yonat Swimmer

DATA RECORD 22 | SWOT ID: 1401

Project Title: Conservación y Preservación de Tortugas Marinas
Project Partners: Fundación para la Conservación y Recuperación de Animales Marinos and Universitat Politècnica de València
Metadata: 3 juvenile and 3 adult *Caretta caretta*; tags deployed in Tarragona, Spain, in 2016; dataset includes an adult male loggerhead that traveled across the Atlantic to waters east of Florida, United States
Data Sources: (1) Fundación para la Conservación y Recuperación de Animales Marinos. 2019. Conservación y preservación de tortugas marinas. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1401>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

UNITED STATES

DATA RECORD 23

Project Title: Cape Canaveral Male Loggerheads
Metadata: 32 male *Caretta caretta*
Data Sources: (1) Arendt, M. D., A. L. Segars, J. I. Byrd, J. Boynton, J. D. Whitaker, L. Parker, D. W. Owens, G. Blanvillain, J. M. Quattro, and M. A. Roberts. 2012. Distributional patterns of adult male loggerhead (*Caretta caretta*) sea turtles in the vicinity of Cape Canaveral, Florida, USA, during and after a major annual breeding aggregation. *Marine Biology* 159 (1): 101–112. (2) Arendt, M. D., A. L. Segars, J. I. Byrd, J. Boynton, J. Schwenter, J. D. Whitaker, and L. Parker. 2012. Migration, distribution, and dive behavior of adult male loggerhead sea turtles (*Caretta caretta*) following dispersal from a major breeding aggregation in the North Western Atlantic. *Marine Biology* 159 (1): 113–125.
SWOT Contact: Mike Arendt

DATA RECORD 24

Metadata: 3 *Caretta caretta*
Data Source: Godfrey, M. 2018. Rehabilitated sea turtles from Topsail Island, North Carolina. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XIV (2019).

SWOT Contacts: Matthew Godfrey and Karen Beasley

DATA RECORD 25 | SWOT ID: 996

Project Title: North Carolina Rehabilitated Sea Turtle Monitoring Project
Project Partners: Karen Beasley, Sea Turtle Rescue and Rehabilitation Center, and North Carolina State University
Metadata: 2 subadult *Caretta caretta*; tags deployed in 2009 and 2013 on rehabilitated individuals
Data Sources: (1) Coyne, M. 2017. North Carolina Rehabilitated Sea Turtle Monitoring Project. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/996>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Michael Coyne

DATA RECORD 26

Metadata: 17 juvenile *Caretta caretta*; tags deployed at sea
Data Source: Mansfield, K. L., J. Wyneken, W. Porter, and J. Luo. 2014. First satellite tracks of neonate sea turtles redefine the “lost years” oceanic niche. *Proceedings of the Royal Society B* 281 (1781): 20133039.
SWOT Contact: Kate Mansfield

DATA RECORD 27

Project Partners: College of William and Mary and Virginia Institute of Marine Science
Metadata: 21 juvenile and 10 adult *Caretta caretta*
Data Sources: (1) Mansfield, K. L., V. S. Saba, J. Keinath, and J. A. Musick. 2009. Satellite telemetry reveals a dichotomy in migration strategies among juvenile loggerhead sea turtles in the northwest Atlantic. *Marine Biology* 156: 2555–2570. (2) Mansfield, K. L. 2006. Sources of mortality, movements, and behavior of sea turtles in Virginia. Dissertation. College of William and Mary, Marine Science School, Virginia Institute of Marine Science, Gloucester Point, VA.
SWOT Contact: Kate Mansfield

DATA RECORD 28

Metadata: 127 *Caretta caretta*; tags deployed on nesting females in Florida
Data Source: Tucker, T., and K. Mazzarella. 2018. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XIV (2019).
SWOT Contact: Tony Tucker

DATA RECORD 29 | SWOT ID: 410

Project Title: Virginia Aquarium Stranding Response Program
Project Partners: Virginia Aquarium Stranding Response Program, Virginia Aquarium and Marine Science Center, and Seaturtle.org
Metadata: 17 juvenile, 3 subadult, and 1 adult *Caretta caretta*; tags deployed between 2007 and 2016 on stranded turtles
Data Sources: (1) Lockhart, G. 2018. Virginia Aquarium Stranding Response Program. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/410>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contacts: Gwen Lockhart and Susan Barco

DATA RECORD 30 | SWOT ID: 978

Project Title: Virginia Aquarium Sea Turtle Research
Project Partner: Virginia Aquarium and Marine Science Center Foundation
Metadata: 1 adult, 7 subadult, and 2 unknown-life-stage *Caretta caretta*; tags deployed on wild-caught or bycaught individuals in 2013 and 2015
Data Sources: (1) Barco, S. 2018. Virginia Aquarium Sea Turtle Research. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/978>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Susan Barco

DATA RECORD 31 | SWOT ID: 1018

Project Title: Virginia Aquarium and U.S. Navy Sea Turtle Research Project
Project Partners: Virginia Aquarium Research and Conservation Department, and U.S. Fleet Forces Command, Naval Facilities Engineering Command (NAVFAC) Atlantic
Metadata: 1 adult, 4 juvenile, and 11 unknown-life-stage *Caretta caretta*; tags deployed between 2013 and 2015
Data Sources: (1) Lockhart, G. 2018. Virginia Aquarium and U.S. Navy Sea Turtle Research Project. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1018>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Gwen Lockhart

DATA RECORD 32 | SWOT ID: 655

Project Title: North Carolina Long-Term Sea Turtle Monitoring Project

Project Partners: Seaturtle.org, the North Carolina Wildlife Resources Commission, and Duke University Marine Laboratory
Metadata: 8 adult *Caretta caretta*; tags deployed in 2010, 2012, and 2013
Data Sources: (1) Coyne, M. 2017. North Carolina Long-Term Sea Turtle Monitoring Project. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/655>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP
SWOT Contact: Michael Coyne

DATA RECORD 33 | SWOT ID: 1342

Project Title: Florida Loggerhead Migrations
Project Partner: National Marine Fisheries Service Office of Protected Resources
Metadata: 38 adult *Caretta caretta*; tags deployed between 1998 and 2000
Data Sources: (1) Schroeder, B. 2018. Florida Loggerhead Migrations. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1342>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP
SWOT Contact: Barbara Schroeder

DATA RECORD 34 | SWOT ID: 1490

Project Title: Juvenile Loggerhead Use of the Gulf Stream off Cape Hatteras, North Carolina
Project Partners: North Carolina Renewable Ocean Energy Program, Protected Resources Branch of the National Oceanic and Atmospheric Administration Beaufort Laboratory, University of North Carolina Coastal Studies Institute, North Carolina Aquariums at Pine Knoll Shores and Roanoke Island, and University of Central Florida
Metadata: 3 juvenile *Caretta caretta*; headstarted turtles originally collected from North Carolina nests; tagged turtles released in Sargassum mats in the gulf stream off the coast of North Carolina in May 2017
Data Sources: (1) Dubbs, L. 2017. Juvenile loggerhead use of the Gulf Stream off Cape Hatteras, North Carolina. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1490>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP
SWOT Contact: Lindsey Dubbs

DATA RECORD 35

Project Title: Mote Marine Lab Males
Metadata: 7 adult male *Caretta caretta*
Data Sources: (1) Mazzarella, K., R. Hardy, and D. Evans. 2019. Satellite tagged sea turtle movements associated with red tide. Poster presentation at the Annual Symposium on Sea Turtle Conservation and Biology, February 2019. (2) Mazzarella, K. 2019. Unpublished data from the Mote Marine Lab. http://www.seaturtle.org/tracking/index.shtml?project_id=1325.
SWOT Contact: Kristen Mazzarella

DATA RECORD 36

Project Title: Archie Carr Internesting Loggerheads
Metadata: 14 adult female *Caretta caretta*
Data Sources: (1) Ceriani, S. 2019. Tracking interesting loggerhead turtles. Personal communication. In *SWOT Report—State of the World's Sea Turtles*, vol. XV (2020). (2) Evans, D. R., R. R. Carthy, and S. A. Ceriani. 2019. Migration routes, foraging behavior, and site fidelity of loggerhead sea turtles (*Caretta caretta*) satellite tracked from a globally important rookery. *Marine Biology* 166: 134.
SWOT Contact: Simona Ceriani

DATA RECORD 37

Project Title: Loggerhead Marinlife Center Tracking
Metadata: 7 adult, 3 juvenile, and 6 subadult *Caretta caretta*
Data Sources: (1) Manire, C. 2019. Loggerheads rehabilitated at Loggerhead Marinlife Center. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/658>). (2) OBIS-SEAMAP
SWOT Contacts: Sarah Hirsch and Charles Manire

INDIAN OCEAN

AUSTRALIA

DATA RECORD 38

Project Title: Western Australia Loggerheads
Metadata: 31 *Caretta caretta*
Data Sources: (1) Waayers D., T. Tucker, S. Whiting, R. Groom, M. Vanderklift, R. Pillans, J. Rossendell, K. Pendoley, X. Hoenner, M. Thums, K. Dethmers, C. J. Limpus, A. Wirsig, C. McMahon, A. Strydom, P. Whittock, K. Howlett, D. Oades, G. McFarlane, T. Duke, M. Guinea, A. Whiting, M. Speirs, J. King, K. Hattingh, M. Heithaus, R. Mau, and D. Holley. 2019. Satellite tracking of

marine turtles in south-eastern Indian Ocean: A gap analysis of deployments spanning 1990–2016. *Indian Ocean Turtle Newsletter* 29: 23–37. (2) Mau, R., B. Halkyard, C. Smallwood, and J. Downs. 2013. Critical habitats and migratory routes of tagged loggerhead turtles (*Caretta caretta*) after nesting at Ningaloo Reef, Western Australia. In *Proceedings of the First Western Australian Marine Turtle Symposium* 1: 14. (3) Tucker, T., S. Fossette, S. Whiting, D. Rob, and P. Barnes. 2019. *Spatial and Temporal Use of Inter-nesting Habitat by Sea Turtles along the Muiron Islands and Ningaloo Coast*. Woodside Energy Report.
SWOT Contact: Tony Tucker

MOZAMBIQUE

DATA RECORD 39 | SWOT ID: 1118

Project Title: AICM Satellite-Tracked Loggerhead Sea Turtles from Mozambique, 2012, under the Southwestern Indian Ocean Fisheries Project (SWIOFP)
Project Partners: Associação para Investigação Costeira e Marinha, Ifremer, and Kélonia
Metadata: 3 adult female *Caretta caretta*; tags deployed in Mozambique
Data Sources: (1) Pereira, M. A. M., E. J. S. Videira, P. M. B. Gonçalves, and R. S. Fernandes. 2014. Post-nesting migration of loggerhead turtles (*Caretta caretta*) from Southern Mozambique. *African Sea Turtle Newsletter* 1: 48–51. (2) Videira, E., M. Dalleau, J. Bourjea, and M. Pereira. 2015. AICM satellite-tracked loggerhead sea turtles from Mozambique, 2012, under SWIOFP. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1118>) on February 12, 2017. (3) SWOT Online Database.
SWOT Contacts: Eduardo Videira, Mayeul Dalleau, Jérôme Bourjea, and Marcos Pereira

OMAN

DATA RECORD 40

Project Title: Masirah Island Nesting Females
Metadata: 10 female nesting *Caretta caretta*
Data Sources: (1) Rees, A. F., S. Al Saady, A. C. Broderick, M. S. Coyne, N. Papatathanasopoulou, and B. J. Godley. 2010. Behavioral polymorphism in one of the world's largest populations of loggerhead sea turtles, *Caretta caretta*. *Marine Ecology Progress Series* 418: 201–212. (2) Rees, A. F., A. Al-Kiyumi, A. C. Broderick, N. Papatathanasopoulou, and B. J. Godley. 2012. Each to their own: Interspecific differences in migration of Masirah Island turtles. *Chelonian Conservation Biology* 11 (2): 243–248.
SWOT Contact: ALan Rees

RÉUNION ISLAND (FRANCE)

DATA RECORD 41

Project Title: Movements of Late Juvenile Loggerhead Sea Turtles from Réunion Island (COCA LOCA Project)
Project Partners: Kélonia and Ifremer
Metadata: 22 adult *Caretta caretta*; tags deployed in La Réunion (France)
Data Source: Dalleau, M., L. Hoarau, M. Lalire, P. Gaspar, C. Tardy, S. Jaquemet, J. Bossert, S. Ciccione, and J. Bourjea. 2016. *COCA LOCA: Connectivity of Loggerhead Turtle (Caretta caretta) in Western Indian Ocean: Implementation of Local and Regional Management*. Final Report, Centre d'Étude et de Découverte des Tortues Marines.
SWOT Contacts: Mayeul Dalleau and Jérôme Bourjea

DATA RECORD 42 | SWOT ID: 1014

Project Title: Ifremer/Kélonia Satellite-Tracked Late Juvenile Loggerhead Sea Turtles from Reunion Island, 2008–2012
Project Partners: Ifremer, CLS, and Kélonia
Metadata: 17 juvenile *Caretta caretta*; tags deployed in La Réunion (France)
Data Source: Dalleau, M., B. Simon, J. Sudre, S. Ciccione, and J. Bourjea. 2014. The spatial ecology of juvenile loggerhead turtles (*Caretta caretta*) in the Indian Ocean sheds light on the “lost years” mystery. *Marine Biology* 161 (8): 1835–1849.
SWOT Contacts: Mayeul Dalleau and Jérôme Bourjea

SOUTH AFRICA

DATA RECORD 43

PROJECT TITLE: POST-NESTING LEATHERBACK AND LOGGERHEAD TURTLES IN SOUTH AFRICA

Metadata: 20 adult female *Caretta caretta*; tags deployed in South Africa
Data Sources: (1) Harris, L.R., R. Nel,

H. Oosthuizen, M. Meijer, D. Kotze, D. Anders, S. McCue, and S. Bachoo. 2017. Managing conflicts between economic activities and threatened migratory marine species toward creating a multiobjective blue economy. *Conservation Biology* 32 (2): 411–423. (2) Harris, L. R., R. Nel, H. Oosthuizen, M. Meijer, D. Kotze, D. Anders, S. McCue, and S. Bachoo. 2015. Paper-efficient multi-species conservation and management are not always field-effective: The status and future of West Indian Ocean leatherbacks. *Biological Conservation* 191: 383–390.
SWOT Contacts: Ronel Nel and Linda Harris

PACIFIC OCEAN

JAPAN

DATA RECORD 44

Metadata: 4 adult female *Caretta caretta*; 5 tags deployed in Japan, but only 4 transmitted
Data Source: Hatase, H., N. Takai, Y. Matsuzawa, W. Sakamoto, K. Omuta, K. Goto, N. Arai, and T. Fujiwara. 2002. Size-related differences in feeding habitat use of adult female loggerhead turtles *Caretta caretta* around Japan determined by stable isotope analyses and satellite telemetry. *Marine Ecology Progress Series* 233: 273–281.
SWOT Contact: Hideo Hatase

DATA RECORD 45 | SWOT ID: 1546

Project Title: Post-nesting Migration of Loggerhead Turtles around Japan 2005
Project Partners: Atmosphere and Ocean Research Institute, University of Tokyo, and Yakushima Sea Turtle Research Group
Metadata: 2 adult female *Caretta caretta*; tags deployed in Japan in 2005
Data Sources: (1) Hatase, H., K. Omuta, and K. Tsukamoto. 2007. Bottom or midwater: Alternative foraging behaviours in adult female loggerhead sea turtles. *Journal of Zoology* 273: 46–55. (2) Hatase H. 2017. Post-nesting migration of loggerhead turtles around Japan 2005. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1546>) on October 10, 2017. (3) STAT. (4) OBIS-SEAMAP. (5) SWOT Online Database.
SWOT Contact: Hideo Hatase

DATA RECORD 46

Project Partners: Data were combined from various studies carried out by the NOAA Pacific Islands Fisheries Science Center (PIFSC) in collaboration with many partners. See cited literature for project partners and other details.
Metadata: 178 *Caretta caretta*; tags deployed in Japan on animals captive reared by the Port of Nagoya Public Aquarium and on animals caught incidentally in fisheries
Data Sources: (1) Polovina, J. J., I. Uchida, G. H. Balazs, E. A. Howell, D. M. Parker, and P. H. Dutton. 2006. The Kuroshio Extension bifurcation region: A pelagic hotspot for juvenile loggerhead sea turtles. *Deep Sea Research Part II: Topical Studies in Oceanography* 53 (3–4): 326–339. (2) Kobayashi, D. R., J. J. Polovina, D. M. Parker, N. Kamezaki, I.-J. Cheng, I. Uchida, P. H. Dutton, and G. H. Balazs. 2008. Pelagic habitat characterization of loggerhead sea turtles, *Caretta caretta*, in the North Pacific Ocean (1997–2006): Insights from satellite tag tracking and remotely sensed data. *Journal of Experimental Marine Biology and Ecology* 356 (1–2): 96–114. (3) Abecassis, M., I. Senina, P. Lehodey, P. Gaspar, D. M. Parker, G. H. Balazs, and J. Polovina. 2013. A model of loggerhead sea turtle (*Caretta caretta*) habitat and movement in the oceanic North Pacific. *PLoS ONE* 8 (9): e73274. (4) Parker, D. M., G. H. Balazs, M. R. Rice, and S. M. Tomkiewicz. 2014. Variability in reception duration of dual satellite tags on sea turtles tracked in the Pacific Ocean. *Micronesica* 2014-03: 1–8. (5) Saito, T., M. Kurita, H. Okamoto, I. Uchida, D. M. Parker, and G. H. Balazs. 2015. Tracking male loggerhead turtle migrations around southwestern Japan using satellite telemetry. *Chelonian Conservation and Biology* 14 (1): 82–87. (6) Briscoe, D. K., D. M. Parker, G. H. Balazs, M. Kurita, T. Saito, H. Okamoto, M. R. Rice, J. J. Polovina, and L. B. Crowder. 2016. Active dispersal in loggerhead sea turtles (*Caretta caretta*) during the “lost years.” *Proceedings of the Royal Society B* 283: 20160690. (7) Briscoe, D. K., D. M. Parker, S. Bograd, E. Hazen, K. Scales, G. H. Balazs, M. Kurita, T. Saito, H. Okamoto, M. R. Rice, J. J. Polovina, and L. B. Crowder. 2016. Multi-year tracking reveals extensive pelagic phase of juvenile loggerhead sea turtles in the North Pacific. *Movement Ecology* 4: 23.
SWOT Contact: T. Todd Jones

MEXICO

DATA RECORD 47 | SWOT ID: 1265

Project Title: Loggerhead Turtle Movements in the Southern California Bight
Project Partners: NOAA–National Marine Fisheries Service (NMFS) Southwest Fisheries Science Center, NMFS West Coast Regional Office, and Aquarium of the Pacific
Metadata: 3 *Caretta caretta*; tags deployed in Southern California
Data Sources: (1) NOAA Southwest Fisheries Science Center. 2018. Satellite tracking of three loggerhead turtles in Mexico. Personal communication. In *SWOT Report—The State of the World's Sea Turtles*, vol. XIII (2018). (2) Seminoff, J., and T. Eguchi. 2016. Loggerhead turtle movements in the Southern California Bight. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1265>) on October 2, 2017. (3) OBIS-SEAMAP. (4) SWOT Online Database. (5) STAT.
SWOT Contact: Jeffrey Seminoff

DATA RECORD 48

Metadata: 12 *Caretta caretta*; tags deployed in Baja California Sur, Mexico, from 1996 to 2005
Data Source: Peckham, S. H., D. Maldonado Diaz, A. Walli, G. Ruiz, L. B. Crowder, and J. P. Nicholes. 2007. Small-scale fisheries bycatch jeopardizes endangered Pacific loggerhead turtles. *PLoS ONE* 2 (10): e1041.
SWOT Contact: Hoyt Peckham

DATA RECORD 49

Project Title: Adelita
Metadata: 1 *Caretta caretta*; tag deployed in Baja California, Mexico. (This turtle, known as “Adelita,” was the first loggerhead to be tracked crossing the Pacific Ocean. The tag was deployed on July 19, 1994, on the central Pacific coast of the Baja California Peninsula and was recovered, on the turtle, dead in a set net, by a fisherman off the coast of Kyushu, Japan, 478 days later on November 9, 1995, after traveling 10,600 kilometers.)
Data Sources: (1) Nichols, W. J., A. Resendiz, J. A. Seminoff, and B. Resendiz. 2000. Transpacific migration of a loggerhead turtle monitored by satellite telemetry. *Bulletin of Marine Science* 67: 937–947. (2) Resendiz, A., B. Resendiz, W. J. Nichols, J. A. Seminoff, and N. Kamezaki. 1998. First confirmed east-west transpacific movement of a loggerhead sea turtle, *Caretta caretta*, released in Baja California, Mexico. *Pacific Science* 52 (2): 151–153
SWOT Contact: Wallace J. Nichols

DATA RECORD 50 | SWOT ID: 126

Project Title: Pacific Turtle Tracks: Turtle-Safe Seas Project
Project Partner: Blue Ocean Institute
Metadata: 1 *Caretta caretta*; tag deployed in Baja California, Mexico
Data Sources: (1) Nichols, W. J. 2014. Pacific Turtle Tracks: Turtle-Safe Seas Project. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/126>) on February 17, 2017. (2) OBIS-SEAMAP. (3) SWOT Online Database.
SWOT Contact: Wallace J. Nichols

DATA RECORD 51

Project Title: Pacific Turtle Tracks: Grupo Tortuguero
Project Partner: Grupo Tortuguero
Metadata: 12 *Caretta caretta*; tags deployed in Mexico from 1996 to 2001
Data Sources: (1) Nichols, W. J. 2016. Pacific Turtle Tracks: Grupo Tortuguero. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/317>) on July 7, 2016. (2) OBIS-SEAMAP. (3) STAT.
SWOT Contact: Wallace J. Nichols

DATA RECORD 52 | SWOT ID: 1176

Project Title: Tortugas Marinas del Golfo de California
Project Partners: Instituto Politécnico Nacional, CIDIIR Sinaloa, Red Tortuguera A.C., Grupo Tortuguero de las Californias A.C., Smithsonian Mason School of Conservation, Instituto de Ciencias del Mar y Limnología–UNAM, and the local fishing communities of La Reforma and Angostura
Metadata: 6 *Caretta caretta* adults and subadults; tags deployed in the Gulf of California, Mexico
Data Sources: (1) Zavala, A. 2016. Tortugas Marinas del Golfo de California. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1176>) on July 7, 2016. (2) OBIS-SEAMAP. (3) STAT. (4) SWOT Database Online.
SWOT Contact: Alan Zavala

DATA RECORD 53

Metadata: 12 loggerheads; tags deployed in Baja California Sur, Mexico

Data Source: Animal Telemetry Network. 2018. 12 loggerhead turtle tracks in Baja California Sur, Mexico. <http://oceanview.pfeg.noaa.gov/ATN/>.
SWOT Contact: Scott Eckert

NEW CALEDONIA (FRANCE)

DATA RECORD 54

Project Partners: NOAA Pacific Islands Fisheries Science Center and Aquarium des Lagons, Noumea, New Caledonia
Metadata: 52 juvenile *Caretta caretta*; tags deployed in 2008 and 2012 on animals that were captive reared by the Aquarium des Lagons in Noumea, New Caledonia
Data Sources: (1) Kobayashi, D. R., R. Farman, J. J. Polovina, D. M. Parker, M. R. Rice, and G. H. Balazs. 2014. "Going with the flow" or not: Evidence of positive rheotaxis in oceanic juvenile loggerhead turtles (*Caretta caretta*) in the South Pacific Ocean using satellite tags and ocean circulation data. *PLoS ONE* 9 (8): e103701.
(2) Christiansen, F., N. F. Putman, R. Farman, D. M. Parker, M. R. Rice, J. J. Polovina, G. H. Balazs, and G. C. Hays. 2016. Spatial variation in directional swimming enables juvenile sea turtles to reach and remain in productive waters. *Marine Ecology Progress Series* 557: 247–259.
SWOT Contact: T. Todd Jones

PERU

DATA RECORD 55 | SWOT ID: 1931

Project Title: Peru Cabezonas
Project Partners: Jeffrey Mangel, ProDelphinus, NOAA Southwest Fisheries Science Center, Peter Dutton, Jeff Seminoff, and Denise Parker
Metadata: 15 subadult *Caretta caretta*; tags deployed in Ilo and Pucusana, Peru, from 2003 to 2007, on turtles bycaught in line fisheries; only 14 tags transmitted effectively
Data Sources: (1) Mangel, J. C., J. Alfaro-Shigueto, M. J. Witt, P. H. Dutton, J. A. Seminoff and B. J. Godley. 2011. Post-capture movements of loggerhead turtles in the southeastern Pacific Ocean assessed by satellite tracking. *Marine Ecology Progress Series* 433: 261–272. (2) STAT. (3) SWOT Online Database.
SWOT Contact: Jeffrey Mangel

TAIWAN

DATA RECORD 56

Project Title: Loggerhead Turtle Movement off the Coast of Taiwan
Project Partners: Data are from the NOAA Pacific Islands Fisheries Science Center in collaboration with many partners. See cited literature for project partners and other details.
Metadata: 34 *Caretta caretta*; tags deployed on turtles caught as bycatch in the Taiwanese coastal poundnet fishery from 2002 to 2008
Data Sources: (1) Kobayashi, D. R., J. J. Polovina, D. M. Parker, N. Kamezaki, I.-J. Cheng, I. Uchida, P. H. Dutton, and G. H. Balazs. 2008. Pelagic habitat characterization of loggerhead sea turtles, *Caretta caretta*, in the North Pacific Ocean (1997–2006): Insights from satellite tag tracking and remotely sensed data. *Journal of Experimental Marine Biology and Ecology* 356: 96–114. (2) Kobayashi, D. R., I.-J. Cheng, D. M. Parker, J. J. Polovina, N. Kamezaki, and G. H. Balazs. 2011. Loggerhead turtle (*Caretta caretta*) movement off the coast of Taiwan: Characterization of a hotspot in the East China Sea and investigation of mesoscale eddies. *ICES Journal of Marine Science* 68 (4): 707–718. (3) Parker, D., G. H. Balazs, and J. J. Polovina. 2015. Loggerhead turtle movement off the coast of Taiwan. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1304>) on February 23, 2017. (4) OBIS-SEAMAP.
SWOT Contacts: Denise Parker, George Balazs, Jeffrey Polovina, and T. Todd Jones

INTERNATIONAL

DATA RECORD 57

Project Partners: Data were combined from various studies carried out by the NOAA Pacific Islands Fisheries Science Center in collaboration with many partners. See cited literature for project partners and other details.
Metadata: 28 *Caretta caretta*; tags deployed at various locations in the Central North Pacific Ocean on turtles caught incidentally in commercial longline fisheries
Data Sources: (1) Polovina, J. J., D. R. Kobayashi, D. M. Ellis, M. P. Seki, and G. H. Balazs. 2000. Turtles on the edge: Movement of loggerhead turtles (*Caretta caretta*) along oceanic fronts in the central North Pacific, 1997–1998. *Fisheries Oceanography* 9 (1): 71–82. (2) Polovina, J. J.,

E. Howell, D. M. Parker, and G. H. Balazs. 2003. Dive-depth distribution of loggerhead (*Caretta caretta*) and olive ridley (*Lepidochelys olivacea*) sea turtles in the central North Pacific: Might deep longline sets catch fewer turtles? *Fisheries Bulletin* 101 (1): 189–193. (3) Chaloupka, M., D. M. Parker, and G. H. Balazs. 2004. Modelling post-release mortality of loggerhead sea turtles exposed to the Hawaii-based pelagic longline fishery. *Marine Ecology Progress Series* 280: 285–293. (4) Polovina, J. J., G. H. Balazs, E. A. Howell, D. M. Parker, M. P. Seki, and P. H. Dutton. 2004. Forage and migration habitat of loggerhead (*Caretta caretta*) and olive ridley (*Lepidochelys olivacea*) sea turtles in the central North Pacific Ocean. *Fisheries Oceanography* 13 (1): 36–51. (5) Polovina, J. J., I. Uchida, G. H. Balazs, E. A. Howell, D. M. Parker, D., and P. H. Dutton. 2006. The Kuroshio Extension bifurcation region: A pelagic hotspot for juvenile loggerhead sea turtles. *Deep Sea Research Part II: Topical Studies in Oceanography* 53 (3–4): 326–339. (6) Kobayashi, D. R., J. J. Polovina, D. M. Parker, N. Kamezaki, I.-J. Cheng, I. Uchida, P. H. Dutton, and G. H. Balazs. 2008. Pelagic habitat characterization of loggerhead sea turtles, *Caretta caretta*, in the North Pacific Ocean (1997–2006): Insights from satellite tag tracking and remotely sensed data. *Journal of Experimental Marine Biology and Ecology* 356: 96–114. (7) Howell, E. A., P. H. Dutton, J. J. Polovina, H. Bailey, D. M. Parker, and G. H. Balazs. 2010. Oceanographic influences on the dive behavior of juvenile loggerhead turtles (*Caretta caretta*) in the North Pacific Ocean. *Marine Biology* 157: 1011–1026. (8) Abecassis, M., I. Senina, P. Lehodey, P. Gaspar, D. M. Parker, G. H. Balazs, and J. J. Polovina. 2013. A model of loggerhead sea turtle (*Caretta caretta*) habitat and movement in the oceanic North Pacific. *PLoS ONE* 8 (9): e73274. (9) Parker, D. M., G. H. Balazs, M. R. Rice, and S. M. Tomkiewicz. 2014. Variability in Reception Duration of Dual Satellite Tags on Sea Turtles Tracked in the Pacific Ocean. *Micronesia* 2014–03: 1–8. (10) Briscoe, D. K., D. M. Parker, S. Bograd, E. Hazen, K. Scates, G. H. Balazs, M. Kurita, T. Saito, H. Okamoto, M. R. Rice, J. J. Polovina, and L. B. Crowder. 2016. Multi-year tracking reveals extensive pelagic phase of juvenile loggerhead sea turtles in the North Pacific. *Movement Ecology* 4:23.
SWOT Contact: T. Todd Jones

MEDITERRANEAN SEA

ALBANIA

DATA RECORD 58 | SWOT ID: 542

Project Title: First satellite tracking of sea turtles in Albania
Project Partners: MEDASSET, Albanian Herpetofauna Society, University of Tirana
Metadata: 3 subadult *Caretta caretta*; tags deployed on turtles that had been incidentally captured in the Patok area of Albania.
Data Sources: (1) Venizelos, L. 2017. First satellite tracking of sea turtles in Albania. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/542>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Lily Venizelos

CYPRUS

DATA RECORD 59 | SWOT ID: 1688

Project Title: Cyprus 2018
Project Partners: University of Exeter, Marine Turtle Research Group, Society for the Protection of Turtles (SPOT)
Metadata: 10 *Caretta caretta* and 11 *Chelonia mydas*; tags deployed in 2018 on foraging turtles in Famagusta Bay, Northern Cyprus.
Data Sources: (1) Exeter, R. 2019. Cyprus 2018. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1688>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Robin Exeter

DATA RECORD 60 | SWOT ID: 1294

Project Title: North Cyprus 2015: Green Turtles
Project Partners: Marine Turtle Research Group, MEDASSET, Albanian Herpetofauna Society, University of Tirana, United Nations Environment Programme, Regional Activity Centre for Specially Protected Areas (RAC/SPA) of UNEP/MAP, British Chelonia Group
Metadata: 2 male subadult *Caretta caretta*; tags deployed in 2009 on individuals caught in fishing nets.
Data Sources: (1) Bradshaw, P. 2018. North Cyprus 2015: Green Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/>

[dataset/1294](http://seamap.env.duke.edu/)) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Lily Venizelos

DATA RECORD 61 | SWOT ID: 1921

Project Title: North Cyprus 2017
Project Partners: Marine Turtle Research Group, Society for the Protection of Turtles in Northern Cyprus (SPoT)
Metadata: 10 adult *Caretta caretta*; tags deployed in mid-2017 and mid-2018 on nesting females on Alagadi Beach, Cyprus.
Data Sources: (1) Haywood, J. 2018. North Cyprus 2017. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1921>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Julia Haywood

DATA RECORD 62 | SWOT ID: 1897

Project Title: Northern Cyprus 2004: Loggerhead & Green Turtles
Project Partners: Marine Turtle Research Group, Society for the Protection of Turtles in Northern Cyprus (SPoT)
Metadata: 4 adult *Chelonia mydas* and 1 adult *Caretta caretta*; tags deployed in 2003 and 2004.
Data Sources: (1) Broderick, A. 2018. Northern Cyprus 2004: Loggerhead & Green Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1897>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Annette Broderick

DATA RECORD 63

Project Title: Northern Cyprus 2005: Loggerhead Turtles
Project Partners: Marine Turtle Research Group, Society for the Protection of Turtles in Northern Cyprus (SPoT)
Metadata: 3 adult *Caretta caretta*; tags deployed in 2005.
Data Sources: (1) Broderick, A. 2018. Northern Cyprus 2005: Loggerhead Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1899>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Annette Broderick

DATA RECORD 64 | SWOT ID: 1901

Project Title: Northern Cyprus 2006–2008: Loggerhead Turtles
Project Partners: Marine Turtle Research Group, Society for the Protection of Turtles in Northern Cyprus (SPoT)
Metadata: 6 adult *Caretta caretta*; 3 tags deployed in 2006, 2 in 2007, and 1 in 2008.
Data Sources: (1) Broderick, A. 2018. Northern Cyprus 2006–2008: Loggerhead Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1901>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Annette Broderick

DATA RECORD 65 | SWOT ID: 1909

Project Title: Northern Cyprus 2009
Project Partners: Marine Turtle Research Group, Society for the Protection of Turtles in Northern Cyprus (SPoT)
Metadata: 6 adult *Caretta caretta* and 1 adult *Chelonia mydas*; tags deployed in 2009.
Data Sources: (1) Broderick, A. 2018. Northern Cyprus 2009. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1909>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Annette Broderick

DATA RECORD 66 | SWOT ID: 1913

Project Title: Northern Cyprus 2012
Project Partners: Marine Turtle Research Group, Society for the Protection of Turtles in Northern Cyprus (SPoT); Biological Sciences Department, Eastern Mediterranean University
Metadata: 5 adult *Caretta caretta*; tags deployed in May and June of 2012.
Data Sources: (1) Broderick, A. 2018. Northern Cyprus 2012. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1913>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Annette Broderick

DATA RECORD 67 | SWOT ID: 1816

Project Title: Loggerhead satellite tracking data from Rethymno, Crete, Greece
Project Partners: Samir Patel, Drexel University; Coonamessett Farm Foundation
Metadata: 21 *Caretta caretta*; tags deployed on post-reproductive turtles (20 female and 1 male) in Rethymno, Crete, Greece during 2010 and 2011; only 20 tags transmitted successfully.
Data Sources: (1) Patel, S. H., S. J. Morreale, A. Panagopoulou, H. Bailey, N. J. Robinson,

F. V. Paladino, D. Margaritoulis, and J. R. Spotila. 2015. Change-point analysis: A new approach for revealing animal movements and behaviors from satellite telemetry data. *Ecosphere* 12: 1–13.
(2) OBIS-SEAMAP.
SWOT Contact: Samir Patel

DATA RECORD 68 | SWOT ID: 1846

Project Title: Rethymno Nesting Turtle Project
Project Partners: ARCHELON, the Sea Turtle Protection Society of Greece
Metadata: 1 adult *Caretta caretta*; tag deployed in 2005.
Data Sources: (1) Rees, A. 2018. Rethymno Nesting Turtle. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1846>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: ALan Rees

DATA RECORD 69 | SWOT ID: 1820

Project Title: Telemetry of Loggerhead Turtles in Amvrakikos Bay
Project Partners: ARCHELON, the Sea Turtle Protection Society of Greece; Etanam (a local management agency of the Amvrakikos Bay region)
Metadata: 1 subadult, 2 adult, and 3 unknown-life-stage *Caretta caretta*; tags deployed in 2002 and 2003.
Data Sources: (1) Rees, A. 2018. Telemetry of loggerhead turtles in Amvrakikos Bay. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1820>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: ALan Rees

DATA RECORD 70 | SWOT ID: 1903

Project Title: Zakynthos 2007: Loggerhead Turtles
Project Partners: Marine Turtle Research Group, ARCHELON, the Sea Turtle Protection Society of Greece
Metadata: 11 adult *Caretta caretta*; tags deployed in July 2007.
Data Sources: (1) Zbinden, J. 2018. Zakynthos 2007: Loggerhead Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1903>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: Judith Zbinden

DATA RECORD 71 | SWOT ID: 1923

Project Title: Zakynthos Nesting Turtles
Project Partners: Division of Conservation Biology (Judith Zbinden, Adrian Aebischer, Raphael Arlettaz) of the University of Bern, Switzerland; ARCHELON, the Sea Turtle Protection Society of Greece
Metadata: 6 *Caretta caretta*; tags deployed in 2004. The turtles tracked in this project are among the first loggerheads to be tracked during their post-nesting migration from a Greek nesting beach.
Data Sources: (1) Rees, A. 2018. Zakynthos Nesting Turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1923>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.
SWOT Contact: ALan Rees

DATA RECORD 72

Metadata: 57 *Caretta caretta*.
Data Source: Schofield, G., A. Dimadi, S. Fossette, K. A. Katselidis, D. Koutsoubas, M. K. S. Lilley, A. Luckman, J. D. Pantis, A. D. Karagouni, and G. C. Hays. 2013. Satellite tracking large numbers of individuals to infer population level dispersal and core areas for the protection of an endangered species. *Diversity and Distributions* 19 (7): 834–844.
SWOT Contact: Gail Schofield

ISRAEL

DATA RECORD 73 | SWOT ID: 1185

Project Title: Israel's sea turtle monitoring program
Project Partners: Israel National Nature and Parks Authority, Sea Turtle Rescue Center
Metadata: 16 *Caretta caretta* and 3 *Chelonia mydas*; tags deployed on rehabilitated turtles in Israel between 2014 and 2018.
Data Sources: (1) Israel Center. 2019. Israel's sea turtle monitoring program. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1185>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

ITALY

DATA RECORD 74 | SWOT ID: 1680

Project Title: Bepi Project: Adriatic Sea Project
Project Partners: Islameta Group; Department of Biology, University of Pisa; Research and Educational Activities for Chelonian Conservation (ARCHE), Ferrara, Italy; Istituto Zooprofilattico Sperimentale

della Lombardia e dell'Emilia-Romagna "Bruno Ubertini," Ferrara Section

Metadata: 1 male *Caretta caretta* that had been injured and rehabilitated; tag deployed in 2003 from Porto Garibaldi, northern Italy.

Data Sources: (1) Luschi, P. 2018. Bepi Project: Adriatic Sea. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1680>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Paolo Luschi

DATA RECORD 75 | SWOT ID: 1686

Project Title: CARESAT

Project Partners: Islameta Group; Department of Biology, University of Pisa; Parco Regionale della Maremma (Maremma Regional Park)

Metadata: 3 juvenile and 2 subadult *Caretta caretta*; tags deployed on rehabilitated turtles in the waters of Tuscany, Italy, from 2014 to 2016.

Data Sources: (1) Luschi, P. 2018. CARESAT. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1686>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Paolo Luschi

DATA RECORD 76 | SWOT ID: 1682

Project Title: Loggerheads in the Tyrrhenian Sea

Project Partners: Islameta Group; Department of Biology, University of Pisa; Centro Recupero Tartarughe Marine; Acquario di Grosseto (Italy)

Metadata: 7 juvenile and 2 adult *Caretta caretta*; tags deployed on turtles off the coast of Tuscany, Italy from 2005 to 2016.

Data Sources: (1) Islameta Group and Department of Biology, University of Pisa. 2018. Loggerheads in the Tyrrhenian Sea. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1682>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Paolo Luschi

DATA RECORD 77 | SWOT ID: 1684

Project Title: Rehabilitated Loggerhead from Southern Italy

Project Partners: Islameta Group; Department of Biology, University of Pisa

Metadata: 1 adult *Caretta caretta*; tag deployed on a rehabilitated turtle that was released at the Brancaleone beach, Reggio Calabria.

Data Sources: (1) Italy, D. 2018. Rehabilitated loggerhead from southern Italy. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1684>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Paolo Luschi

DATA RECORD 78 | SWOT ID: 1826

Project Title: WWF Italy

Project Partners: Sea Turtle Network, WWF Italy

Metadata: 10 adult *Caretta caretta*; tags deployed in 2006, 2007, and 2009.

Data Sources: (1) Casale, P. 2018. WWF Italy. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1826>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Paolo Casale

DATA RECORD 79 | SWOT ID: 1834

Project Title: WWF Italy—Manfredonia

Project Partners: WWF Italy; Centro Cultura del Mare Associazione di Promozione Sociale (APS); Lega Navale di Manfredonia; University of Rome la Sapienza

Metadata: 3 juvenile and 2 subadult *Caretta caretta*; individuals were incidentally caught by trawlers fishing in the Gulf of Manfredonia.

Data Sources: (1) Casale, P. 2018. WWF Italy—Manfredonia. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1834>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Paolo Casale

DATA RECORD 80

Project Title: Habitat Use by Foraging Sea Turtles in the Mediterranean

Project Partners: Stazione Zoologica Anton Dohrn, Marine Turtle Research Center

Metadata: 1 juvenile, 3 subadult, and 2 adult *Caretta caretta*; tags deployed in 2013 and 2014.

Data Sources: (1) Hochscheid, S., Marine Turtle Research Center, Stazione Zoologica Anton Dohrn, Naples, Italy. Unpublished data. (2) Uçar, A. H., E. Maffucci, S. Ergene, M. Ergene, Y. Katılmış, E. Başkale, Y. Kaska, and S. Hochscheid. A stranded loggerhead turtle tracked with satellite in Mersin Bay, eastern Mediterranean Sea, Turkey. *Marine Turtle Newsletter*, under review. (3) STAT.

DATA RECORD 81

Project Title: SZN: Movements of Rehabilitated Sea Turtles

Project Partners: Stazione Zoologica Anton Dohrn; Bagnofutura; The Sea Turtle Rescue Center

(DEKAMER); Centro Regionale di Recupero Fauna Selvatica e Tartarughe Marine, Comiso, Sicily

Metadata: 2 juvenile *Lepidochelys kempii*; 1 juvenile, 2 subadult, and 5 adult *Caretta caretta*; and 1 adult *Chelonia mydas*. Tags deployed on 10 rehabilitated and 1 hand-reared individual between 2008 and 2014.

Data Sources: (1) Hochscheid, S., Marine Turtle Research Center, Stazione Zoologica Anton Dohrn, Naples, Italy. Unpublished data. (2) Luschi, P., R. Mencacci, G. Cerritelli, L. Papetti, and S. Hochscheid. 2018. Large-scale movements in the oceanic environment identify important foraging areas for loggerheads in central Mediterranean Sea. *Marine Biology* 165: 4. (3) STAT.

DATA RECORD 82

Metadata: 3 *Caretta caretta*.

Data Source: Mencacci, R., A. Ligas, P. Meschini, and P. Luschi. 2011. Movements of three loggerhead sea turtles in Tuscany waters. *Atti della Società Toscana di Scienze Naturali, Serie B*, 118: 117–120.

SWOT Contacts: Paolo Luschi and Resi Mencacci

DATA RECORD 83

Metadata: 1 adult *Caretta caretta*. Tag deployed on a rehabilitated individual.

Data Sources: (1) Luschi, P., R. Mencacci, G. Cerritelli, L. Papetti, and S. Hochscheid. 2018. Large-scale movements in the oceanic environment identify important foraging areas for loggerheads in central Mediterranean Sea. *Marine Biology* 165: 4. (2) Hochscheid, S., F. Bentivegna, A. Hamza, and G.C. Hays. 2010. When surfacers do not dive: Multiple significance of extended surface times in marine turtles. *Journal of Experimental Biology* 213: 1328–1337.

DATA RECORD 84

Metadata: 7 *Caretta caretta*.

Data Source: Mingozzi, T., R. Mencacci, G. Cerritelli, D. Giunchi, and P. Luschi. 2016. Living between widely separated areas: Long-term monitoring of Mediterranean loggerhead turtles sheds light on cryptic aspects of females spatial ecology. *Journal of Experimental Marine Biology and Ecology* 485: 8–17.

SWOT Contacts: Paolo Luschi and Resi Mencacci

DATA RECORD 85

Metadata: 4 *Caretta caretta*.

Data Source: Luschi, P., R. Mencacci, G. Cerritelli, L. Papetti, and S. Hochscheid. 2018. Large-scale movements in the oceanic environment identify important foraging areas for loggerheads in central Mediterranean Sea. *Marine Biology* 165: 4. (3) STAT. (3) OBIS-SEAMAP.

DATA RECORD 86

Metadata: 4 *Caretta caretta*.

Data Source: Mencacci, R., and P. Luschi. 2018. Unpublished tracks. Personal communication in *SWOT Report—State of the World's Turtles*, vol. XIV (2019).

SWOT Contacts: Paolo Luschi and Resi Mencacci

DATA RECORD 87

Metadata: 3 *Caretta caretta*.

Data Source: Luschi, P., R. Mencacci, C. Vallini, A. Ligas, P. Lambardi, and S. Benvenuti. 2013. Long-term tracking of adult loggerhead turtles (*Caretta caretta*) in the Mediterranean Sea. *Journal of Herpetology* 47: 227–231.

SWOT Contacts: Paolo Luschi and Resi Mencacci

SPAIN

DATA RECORD 88

Project Title: Andalusia, Spain. Small loggerheads from a nest at Pulpi (Almería)

Project Partners: Doñana Biological Station, Consejo Superior Investigaciones Científicas (CSIC); Universitat Politècnica de València; Unidad de Zoología Marina; Universidad de Valencia; Asociación Española de Herpetología; Environmental Office of Andalusia; Aquarium of Sevilla; NGO Equinac; Fundación Hombre y Territorio

Metadata: 9 juvenile *Caretta caretta*; tags deployed on headstarted turtles (<1 year old) in 2016–2017 that originated from a doomed nest in Pulpi, Andalusia, Spain, where they were also released.

Data Sources: (1) Marco, A., and E. Belda. 2017. Andalusia, Spain. Small loggerheads from a nest at Pulpi (Almería). Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1383>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contacts: Adolfo Marco and Eduardo Belda

DATA RECORD 89 | SWOT ID: 1401

Project Title: Conservación y Preservación de Tortugas Marinas

Project Partners: Fundación para la Conservación y Recuperación de Animales Marinos (CRAM), Universitat Politècnica de València

Metadata: 3 juvenile and 3 adult *Caretta caretta*; tags deployed in Tarragona, Spain in 2016; dataset includes an adult male loggerhead that traveled across the Atlantic to waters east of Florida, U.S.A.

Data Sources: (1) Fundación para la Conservación y Recuperación de Animales Marinos (CRAM). 2019. Conservación y preservación de tortugas marinas. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1401>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

DATA RECORD 90 | SWOT ID: 1550

Project Title: Seguimiento de 10 Crías de Tortuga Boba Nacidas en 2016 en el Litoral Valenciano, en el Marco del Proyecto LIFE 15 IPE ES 012

Project Partners: LIFE IP Intemares; Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente (Spain)

Metadata: 10 *Caretta caretta* hatchlings; tags deployed on hatchlings from a nest found in Las Palmeras in Sueca (Valencia) in 2016, which were transferred and released on the protected beach of La Punta (Parc Natural de l'Albufera).

Data Sources: (1) Belda, E. 2018. Seguimiento de 10 crías de tortuga boba nacidas en 2016 en el litoral valenciano, en el marco del Proyecto LIFE 15 IPE ES 012. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1550>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Eduardo Belda

DATA RECORD 91 | SWOT ID: 1146

Project Title: Spain Tags Merged

Project Partners: Fisheries Bycatch Research Group, NOAA, Kai Submon, UNCW

Metadata: 1 adult, 5 juvenile, and 20 subadult *Caretta caretta*; tags deployed between 2008 and 2012.

Data Sources: (1) Swimmer, Y. 2017. Spain tags merged. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1146>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Yonat Swimmer

DATA RECORD 92 | SWOT ID: 1310

Project Title: Spain-Balearic Islands 2015 Loggerhead Turtles

Project Partners: Fisheries Bycatch Research Group

Group Metadata: 2 subadult and 2 juvenile *Caretta caretta*; tags deployed in June and July of 2016.

Data Sources: (1) Swimmer, Y. 2018. Spain-Balearic Islands 2015 loggerhead turtles. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1310>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Yonat Swimmer

DATA RECORD 93 | SWOT ID: 1314

Project Title: Tracking Small Loggerheads from Spanish Nests

Project Partners: Universitat Politècnica de València; Unidad de Zoología Marina, Universidad de Valencia (Spain); Research Institute Doñana Biological Station, CSIC; Fundación para la Conservación y Recuperación de Animales Marinos (CRAM); Generalitat Valenciana; Junta de Andalucía; Oceanográfico de Valencia; Acuario de Sevilla; Xaloc Hermanos de Sal.

Metadata: 8 small-juvenile and 21 juvenile *Caretta caretta*; turtles born in Valencia (Spain) and Catalonia from natural nests found in Spain in 2014, Andalusia in 2015, and Valencia in 2016. The eggs were translocated, and the hatchlings were headstarted in five different centers.

Data Sources: (1) Belda, E. 2017. Tracking small loggerheads from Spanish nests. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/1314>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Eduardo Belda

TUNISIA

DATA RECORD 94

Metadata: 3 *Caretta caretta*.

Data Source: Casale, P., A. C. Broderick, D. Freggi, R. Mencacci, W. J. Fuller, B. J. Godley, and P. Luschi. 2012. Long-term residence of juvenile loggerhead turtles to foraging grounds: A potential conservation hotspot in the Mediterranean. *Aquatic Conservation: Marine and Freshwater Ecosystems* 22: 144–154.

SWOT Contacts: Paolo Luschi and Resi Mencacci

DATA RECORD 95

Metadata: 6 *Caretta caretta*.

Data Source: Casale, P., A. C. Broderick, D. Freggi, R. Mencacci, W. J. Fuller, B. J. Godley, and P. Luschi. 2012. Long-term residence of juvenile loggerhead turtles to foraging grounds:

A potential conservation hotspot in the Mediterranean. *Aquatic Conservation: Marine and Freshwater Ecosystems* 22: 144–154.

SWOT Contact: Paolo Casale

TURKEY

DATA RECORD 96

Project Partner: Pamukkale University Sea Turtle Rescue Center (DEKAMER)

Metadata: 15 *Caretta caretta*.

Data Sources: (1) Sezgin, C. 2016. Investigation of the effects of temperature on the sex of loggerhead sea turtle (*Caretta caretta* L.) hatchlings and migration patterns of adults. MSc thesis. Pamukkale University Institute of Science, Denizli, Turkey. (2) Kaska, Y., and D. Sözbilen. 2018. Unpublished data. Deniz Kaplumbagalari Arastirma Merkezi (DEKAMER), Pamukkale University.

SWOT Contact: Yakup Kaska

INTERNATIONAL

DATA RECORD 97

Project Title: ADRIA-Watch Project

Project Partners: Islameta Group; Department of Biology, University of Pisa and ADRIA-Watch

Metadata: 5 juvenile, 1 adult, and 1 subadult *Caretta caretta*; tags deployed between 2006 and 2008 at sites throughout the northern Adriatic Sea.

Data Sources: (1) Riccione, M. 2018. ADRIA-Watch project. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/982>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Marco Riccione

DATA RECORD 98 | SWOT ID: 980

Project Title: Loggerheads in the Adriatic Sea

Project Partners: Islameta Group; Department of Biology, University of Pisa; Research and Educational Activities for Chelonian Conservation (ARCHE), Ferrara, Italy; Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia-Romagna "Bruno Ubertini," Ferrara Section

Metadata: 2 adult and 1 juvenile *Caretta caretta*; tags deployed in the Adriatic Sea in 2004 and 2010.

Data Sources: (1) Luschi, P. 2018. Loggerheads in the Adriatic Sea. Data downloaded from OBIS-SEAMAP (<http://seamap.env.duke.edu/dataset/980>) on December 4, 2018. (2) STAT. (3) OBIS-SEAMAP.

SWOT Contact: Paolo Luschi

DATA RECORD 99

Project Title: RAC/SPA-SZN Tracking of Mediterranean Marine Turtles

Project Partners: UNEP/MAP Regional Activity Centre for Specially Protected Areas (RAC/SPA); Malta Environment and Planning Authority (MEPA); Environmental General Authority (EGA), Libya; Marine Biology Research Center (MBRC), Tajura; The Sea Turtle Rescue Center (DEKAMER); The Tyre Coast Nature Reserve (TCNR)

Metadata: 3 juvenile, 1 subadult, and 11 adult *Caretta caretta*; and 2 adult *Chelonia mydas*. Tags deployed between 2006 and 2013.

Data Sources: (1) Hochscheid, S., A. Saied, A. Hamza, A. Ouerghi, F. Bentivegna, Y. Kaska, F. Maffucci, N. Dakik, I. Jribi, M. N. Bradai, C. Mifsud, and Y. Levy. 2018. RAC/SPA-SZN Tracking of Mediterranean Marine Turtles. Personal communication in *SWOT Report—State of the World's Turtles*, vol. XIV (2019) (2) STAT.