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## Loggerhead Turtle (*Caretta caretta*)

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### Status

**ESA Threatened- 4 "distinct population segments"**

- » Northwest Atlantic Ocean DPS
- » South Atlantic Ocean DPS
- » Southeast Indo-Pacific Ocean DPS
- » Southwest Indian Ocean DPS

**ESA Endangered- 5 "distinct population segments"**

- » Northeast Atlantic Ocean DPS
- » Mediterranean Sea DPS
- » North Indian Ocean DPS
- » North Pacific Ocean DPS
- » South Pacific Ocean DPS

**CITES Appendix I** - throughout its range

### Species Description

**Weight:** Adult: 250 pounds (113 kg)  
Hatchling: 0.05 pounds (20 g)

**Length:** Adult: 3 feet (~1 m)  
Hatchling: 2 inches (4 cm)

**Appearance:** reddish-brown, slightly heart-shaped top shell ("carapace") with pale yellowish bottom shell ("plastron"); hatchlings are brown to dark gray

**Lifespan:** unknown, but they reach sexual maturity at around 35 years old

**Diet:** whelks and conch

**Behavior:** females nest from April-September and generally lay 3-5 nests per season

Loggerheads were named for their relatively large heads, which support powerful jaws and enable them to feed on hard-shelled prey, such as whelks and conch. The top shell (carapace) is slightly heart-shaped and reddish-brown in adults and sub-adults, while the bottom shell (plastron) is generally a pale yellowish color. The neck and flippers are usually dull brown to reddish brown on top and medium to pale yellow on the sides and bottom.

In the southeastern U.S., mating occurs in late March to early June and females lay eggs between late April and early September. Females lay three to five nests, and sometimes more, during a single nesting season. The eggs incubate approximately two months before hatching sometime between late June and mid-November.

Hatchlings lack the reddish-brown coloration of adults and juveniles. Their flippers are dark gray to brown above with white to white-gray margins. The coloration of the plastron is generally yellowish to tan.

### Habitat

Loggerheads occupy three different ecosystems during their lives:

- beaches (terrestrial zone)
- water (oceanic zone)
- nearshore coastal areas ("neritic" zone)

Loggerheads nest on ocean beaches, generally preferring high energy, relatively narrow, steeply sloped, coarse-grained beaches.

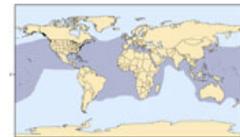
Immediately after hatchlings emerge from the nest, they begin a period of frenzied activity. During this active period, hatchlings move from their nest to the surf, swim, and are swept through the surf zone, and continue swimming away from land for up to several days.

After this swim frenzy period, post-hatchling loggerheads take up residence in areas where surface waters converge to form local downwellings. These areas are often characterized by accumulations of floating material, such as seaweed (for example, *Sargassum*), and, in the southeast U.S., are common between the Gulf Stream and the southeast U.S. coast, and between the Loop Current and the Gulf Coast of Florida. Post-hatchlings within this habitat are observed to be low-energy float-and-wait foragers that feed on a wide variety of floating items (Witherington 2002). As post-hatchlings, loggerheads may linger for months in waters just off the nesting beach or become transported by ocean currents within the Gulf of Mexico and North Atlantic. Work by Lohmann and Lohmann (1994b, 1996) and Lohmann et al. (1999) suggests that loggerheads may continue some oriented swimming in order to keep from being swept into cold North Atlantic currents. Scientists are also remotely tracking neonate loggerhead sea turtles using small, solar-powered satellite tags.

Once individuals get transported by ocean currents farther offshore, they've entered the oceanic zone. Within the North Atlantic, juvenile loggerheads have been primarily studied in the waters around the Azores and Madeira (Bolten 2003). Other populations exist (for example, in the region of the Grand Banks off Newfoundland), but data on these populations are limited. The juvenile turtles around the Azores and Madeira



Loggerhead Turtle escaping a net equipped with turtle excluder device (TED) (*Caretta caretta*)  
Photo: NOAA



Loggerhead Range Map  
(click for larger view PDF)

### Did You Know?

- **Critical Habitat Finalized for Northwest Atlantic DPS of Loggerhead Turtle**
- Pacific loggerheads migrate over 7,500 miles (12,000 km) between nesting beaches in Japan and feeding grounds off the coast of Mexico!
- During the 3 months or so that a female loggerhead breeds, she will travel hundreds of miles to nest, lay 35 lbs (16 kg) of eggs--or more!--and swim back to her home foraging area, all without eating anything significant.
- From hatchling to adult, a loggerhead increases its weight more than 6,000 times!
- Although they are good swimmers, loggerheads have callus-like traction scales beneath their flippers that allow them to "walk" on the ocean floor.

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spend the majority of their time in the top 15 feet (5 m) of the water column.

Somewhere between 7-12 years old, oceanic juveniles migrate to nearshore coastal areas (neritic zone) and continue maturing until adulthood. In addition to providing critically important habitat for juveniles, the neritic zone also provides crucial foraging habitat, inter-nesting habitat, and migratory habitat for adult loggerheads in the western North Atlantic. To a large extent, these habitats overlap with the juvenile stage, the exception being most of the bays, sounds, and estuaries along the Atlantic and Gulf coasts of the U.S. from Massachusetts to Texas, which are infrequently used by adults. However, adult loggerheads are present year-round in Florida Bay, an important feeding area, probably because of relatively easy access to open ocean and migratory routes.

The predominate foraging areas for western North Atlantic adult loggerheads are found throughout the relatively shallow continental shelf waters of the U.S., Bahamas, Cuba, and the Yucatán Peninsula, Mexico. Migration routes from foraging habitats to nesting beaches (and vice versa) for a portion of the population are restricted to the continental shelf, while other routes involve crossing oceanic waters to and from the Bahamas, Cuba, and the Yucatán Peninsula. Seasonal migrations of adult loggerheads along the mid- and southeast U.S. coasts have also been documented.

#### Critical Habitat

NMFS and the U.S. Fish and Wildlife Service **designated critical habitat for the Northwest Atlantic DPS** for loggerhead sea turtles in waters and beach habitat of the Gulf of Mexico and along the coast of the U.S. Atlantic Ocean.



Critical Habitat in Northwest Atlantic

#### Distribution

Loggerheads are circumglobal, occurring throughout the temperate and tropical regions of the Atlantic, Pacific, and Indian Oceans. Loggerheads are the most abundant species of sea turtle found in U.S. coastal waters.

In the Atlantic, the loggerhead turtle's range extends from Newfoundland to as far south as Argentina. During the summer, nesting occurs primarily in the subtropics. Although the major nesting concentrations in the U.S. are found from North Carolina through southwest Florida, minimal nesting occurs outside of this range westward to Texas and northward to Virginia. Adult loggerheads are known to make extensive migrations between foraging areas and nesting beaches. During non-nesting years, adult females from U.S. beaches are distributed in waters off the eastern U.S. and throughout the Gulf of Mexico, Bahamas, Greater Antilles, and Yucatán.

The majority of loggerhead nesting occurs in the western rims of the Atlantic and Indian Oceans. The loggerhead nesting aggregations in Oman, the U.S., and Australia account for about 88% of nesting worldwide. In the southeastern U.S., about 80% of loggerhead nesting occurs in six Florida counties (Brevard, Indian River, St. Lucie, Martin, Palm Beach, and Broward Counties). In Brevard and Indian River Counties, a 20 mile (32.2 km) section of coastline from Melbourne Beach to Wabasso Beach comprises the **Archie Carr National Wildlife Refuge (ACNWR)**. ACNWR is the most important nesting area for loggerhead turtles in the western hemisphere. Twenty-five percent of all loggerhead nesting in the U.S. occurs in the Refuge. Researchers have recorded nesting densities of 1,000 nests per mile (625 nests per km) within the ACNWR.

In the eastern Pacific, loggerheads have been reported as far north as Alaska, and as far south as Chile. In the U.S., occasional sightings are reported from the coasts of Washington and Oregon, but most records are of juveniles off the coast of California. The west coast of Mexico, including the Baja Peninsula, provides critically important developmental habitats for juvenile loggerheads. The only known nesting areas for loggerheads in the North Pacific are found in southern Japan.

#### Population Trends

The most recent reviews show that only two loggerhead nesting beaches have greater than 10,000 females nesting per year: South Florida (U.S.) and Masirah Island (Oman). The status of the Oman nesting colony has not been evaluated recently. Total estimated nesting in the U.S. is approximately 68,000 to 90,000 nests per year. Recent trends in nesting for Florida loggerheads can be found on the **Florida Fish and Wildlife Conservation Commission** site.

The Cape Verde Islands support an intermediately-sized loggerhead nesting assemblage. In 2000, researchers tagged over 1,000 nesting females on just 5 km (3.1 miles) of beach on Boavista Island (Ehrhart et al. 2003). Brazil supports an intermediately-sized loggerhead nesting assemblage. There are about 4,000 nests per year in Brazil (Ehrhart et al. 2003). Loggerhead nesting throughout the Caribbean is sparse.

In the Mediterranean, loggerhead nesting is confined almost exclusively to the eastern portion of the Mediterranean Sea. The main nesting assemblages occur in Cyprus, Greece, and Turkey. However, small numbers of loggerhead nests have been recorded in Egypt, Israel, Italy, Libya, Syria, and Tunisia. Based on the recorded number of nests per year in Cyprus, Greece, Israel, and Turkey, loggerhead nesting in the Mediterranean ranges from about 3,300 to 7,000 nests per season (Margaritoulis et al. 2003).

Loggerheads nest throughout the Indian Ocean and, with the exception of Oman, the number of nesting females is small. Most trends in loggerhead nesting populations in the Indian Ocean are unknown.

Loggerhead populations in Honduras, Mexico, Colombia, Israel, Turkey, Bahamas, Cuba, Greece, Japan, and Panama have been declining. This decline continues and is primarily attributed to incidental capture in fishing gear, directed harvest, coastal development, increased human use of nesting beaches, and pollution.

#### Threats

- incidental capture in fishing gear, primarily in longlines and gillnets, but also in trawls, traps and pots, and dredges
- directed harvest
- **general threats to marine turtles**

Loggerheads face threats on both nesting beaches and in the marine environment. The greatest cause of decline and the continuing primary threat to loggerhead turtle populations worldwide is incidental capture in fishing gear, primarily in longlines and gillnets, but also in trawls, traps and pots, and dredges.

Directed harvest for loggerheads still occurs in many places (for example, the Bahamas, Cuba, and Mexico) and is a serious and continuing threat to loggerhead recovery.

For more information, please visit our **threats to marine turtles** page.

#### Conservation Efforts



Game: Loggerhead Turtle Quest to Nest (click to play)



Loggerhead turtle (*Caretta caretta*)

Photo: Marco Giuliano/ Fondazione Cetacea



Loggerhead Turtle escaping a trawl net equipped with turtle excluder device (TED) (*Caretta caretta*)  
Photo: NOAA

The highly migratory behavior of sea turtles makes them shared resources among many nations. Thus, conservation efforts for sea turtle populations in one country may be jeopardized by activities in another. Protecting sea turtles on U.S. nesting beaches and in U.S. waters alone, therefore, is not sufficient to ensure the continued existence of the species.

Sea turtles are protected by various international treaties and agreements as well as national laws:

- **CITES:** listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Flora and Fauna, which prohibits international trade
- **CMS:** listed in Appendices I and II of the Convention on Migratory Species and are protected under the following auspices of CMS:
  - **IOSEA:** Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia
  - **Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa**
- **SPAW:** protected under Annex II of the Specially Protected Areas and Wildlife Protocol of the Cartagena Convention
- **IAC:** The U.S. is a party of the Inter-American Convention for the Protection and Conservation of Sea Turtles, which is the only international treaty dedicated exclusively to marine turtles

In the U.S., NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS) have joint jurisdiction for leatherback turtles, with NOAA having the lead in the marine environment and USFWS having the lead on the nesting beaches. Both federal agencies, along with many state agencies, have issued regulations to eliminate or reduce threats to sea turtles.

In the Atlantic and Gulf of Mexico, we have required measures to reduce sea turtle bycatch in pelagic longline, mid-Atlantic gillnet, Chesapeake Bay pound net, and southeast shrimp and flounder trawl fisheries, such as

- gear modifications
- changes to fishing practices
- time/ area closures

We have worked closely with the shrimp trawl fishing industry to develop **turtle excluder devices (TEDs)** to reduce the mortality of sea turtles incidentally captured in shrimp trawl gear. TEDs that are large enough to exclude even the largest sea turtles are now required in shrimp trawl nets. Since 1989, the **U.S. has prohibited the importation of shrimp harvested in a manner that adversely affects sea turtles.** The import ban does not apply to nations that have adopted sea turtle protection programs comparable to that of the U.S. (i.e., require and enforce the use of TEDs) or to nations where incidental capture in shrimp fisheries does not present a threat to sea turtles (for example, nations that fish for shrimp in areas where sea turtles do not occur). The **U.S. Department of State** is the principal implementing agency of this law, while we serve as technical advisor. We provide extensive TED training throughout the world.

We are also involved in cooperative gear research projects designed to reduce sea turtle bycatch in the Gulf of Mexico and Atlantic pelagic longline fisheries, the Hawaii-based deep set longline fishery, the Atlantic sea scallop dredge fishery, the Chesapeake Bay pound net fishery, and non-shrimp trawl fisheries in the Atlantic and Gulf.

## Regulatory Overview

The loggerhead turtle was first listed under the **Endangered Species Act (ESA)** as threatened throughout its range on July 28, 1978. In September 2011, NMFS and U.S. Fish and Wildlife Service **listed 9 Distinct Population Segments (DPSs)** [pdf] of loggerhead sea turtles under the ESA. NMFS and USFWS had **proposed to list 9 DPSs** [pdf] of loggerhead sea turtles under the ESA in 2010.

In 2009, NOAA Fisheries and USFWS published an **updated status review** [pdf].

In December 2008, NOAA Fisheries and USFWS finalized the **second revision of the recovery plan** for loggerheads in the U.S. Caribbean, Atlantic, and Gulf of Mexico. We published the original recovery plan in September 1984 and completed the first revision in December 1991.

We implement measures to reduce sea turtle interactions in fisheries by regulations and permits under the ESA and **Magnuson-Stevens Fishery Conservation and Management Act**. In 1992, We finalized regulations to require TEDs in shrimp trawl fisheries to reduce interactions between turtles and trawl gear. Since then, We have modified these regulations as new information became available on increasing the efficiency of TEDs (for example, larger TEDs are now required to exclude larger turtles). Since the early 1990s, We have implemented sea turtle conservation measures including, but not limited to, TEDs in trawl fisheries, large circle hooks in longline fisheries, time and area closures for gillnets, and modifications to pound net leaders. See our **regulations to protect marine turtles**.

## Taxonomy

**Kingdom:** Animalia  
**Phylum:** Chordata  
**Class:** Reptilia  
**Order:** Testudines  
**Family:** Cheloniidae  
**Genus:** *Caretta*  
**Species:** *caretta*



Loggerhead turtle hatchling  
 (*Caretta caretta*)  
 Photo: Mary Wozny, Broward County  
 Florida Sea Turtle Conservation  
 Program

## Key Documents

(All documents are in PDF format.)

Title	Federal Register	Date
<b>Loggerhead Sea Turtle Critical Habitat</b>	<b>filed</b>	07/2014
<ul style="list-style-type: none"> <li>• <b>Biological Report</b> [pdf]</li> <li>• <b>Economic Analysis, including Initial Regulatory Flexibility Act (IRFA) analysis</b> [pdf]</li> <li>• <b>Maps</b></li> <li>• <b>References</b> [pdf]</li> <li>• <b>Proposed Critical Habitat (78 FR 43005)</b></li> </ul>		
Final Rule to List 9 Distinct Population Segments (DPSs) of Loggerhead Sea Turtles Under the ESA	<b>76 FR 58868</b>	09/22/2011
Proposed Rule to List 9 Distinct Population Segments (DPSs) of Loggerhead Sea Turtles Under the ESA	<b>75 FR 12598</b>	03/16/2010

<ul style="list-style-type: none"> <li>• <a href="#">Date Extended for Determining Listing Status</a></li> <li>• <a href="#">Comment period extended</a></li> </ul>	<p><a href="#">76 FR 15932</a></p> <p><a href="#">75 FR 30769</a></p>	<p>03/22/2011</p> <p>06/02/2010</p>
<b>2009 Status Review (and supporting documents)</b>		08/11/2009
<b>2009 Recovery Plan for the Northwest Atlantic Population, Second Revision</b>	<a href="#">74 FR 2995</a>	01/16/2009
<b>2008 Draft Second Revision of Recovery Plan for the Northwest Atlantic Population</b>	<a href="#">73 FR 31066</a>	05/30/2008
<b>Memo: Loggerhead Turtle Expert Working Group Update</b>	n/a	12/04/2007
<b>90-Day Finding for a Petition to Reclassify the Loggerhead Turtle in the North Pacific Ocean as a DPS with Endangered Status and to Designate Critical Habitat</b>	<a href="#">72 FR 64585</a>	11/16/2007
<b>Petition to Designate Western North Atlantic Loggerhead Sea Turtle as a DPS with Endangered Status</b>	n/a	11/15/2007
<b>5-Year Review</b>	n/a	08/31/2007
<b>Petition to Reclassify the Loggerhead Turtle in the North Pacific Ocean as a DPS with Endangered Status and to Designate Critical Habitat</b>	n/a	07/12/2007
Virginia Pound Net Fishery Regulations	<a href="#">71 FR 36024</a>	06/23/2006
<b>1998 Recovery Plan - U.S. Pacific</b>	<a href="#">63 FR 28359</a>	05/22/1998
<b>Status Review of Sea Turtles Listed Under the Endangered Species Act of 1973</b>	<a href="#">61 FR 17</a>	01/02/1996
TED Regulations for Shrimp Trawls	<a href="#">57 FR 57348</a>	12/04/1992
<b>1991 Recovery Plan - U.S. Caribbean, Atlantic, and Gulf of Mexico</b>	n/a	10/29/1991
ESA Listing Rule	<a href="#">43 FR 32800</a>	07/28/1978

**More Information**

- [Kids' Times: Loggerhead Sea Turtle](#)
- [NOAA's National Marine Sanctuaries Encyclopedia](#)
  - [Florida Keys Sanctuary Loggerhead Species Card](#)
  - [Flower Garden Banks Sanctuary Loggerhead Species Card](#)
  - [Hawaiian Islands Humpback Whale Sanctuary Loggerhead Species Card](#)
  - [Northwestern Hawaiian Islands Sanctuary Loggerhead Species Card](#)
- [U.S. Fish and Wildlife Service Loggerhead Turtle Species Profile](#)
- [Sea Turtle Recovery Planning](#)
- [More Sea Turtle Related Links](#)

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