4

Craver, Patti

From: Williamson, Alicia NRR
Sent: Friday, March 16, 2012 8:49 AM
To: Imboden, Andy
Cc: Balsam, Briana; Danoff, Karen
Subject: RE: SUNSI review request for ML061390355

Ok, thanx.
Alicia

From: Imboden, Andy NRR
Sent: Friday, March 16, 2012 8:48 AM
To: Williamson, Alicia
Cc: Balsam, Briana; Danoff, Karen
Subject: RE: SUNSI review request for ML061390355

Hi Alicia-
Not that I think this is a problem either, but it's your call because it's from 2006. Nobody currently on NRR staff was involved with Pilgrim in 2006, which is why it was sent to you for SUNSI review. We wouldn't know what the thinking would be for making it non-public in the first place.
Andy

From: Williamson, Alicia
Sent: Friday, March 16, 2012 8:39 AM
To: Imboden, Andy
Cc: Balsam, Briana; Danoff, Karen
Subject: FW: SUNSI review request for ML061390355

Andy
I received the email below about a reference within the Pilgrim EIS.
I don't really think it's a problem to make the document publicly available.
But because I'm out of the loop with Pilgrim, I figured it might be better to let you guys handle this request.
Please let me know if there is anything I can do.
Alicia

From: Danoff, Karen OIS
Sent: Thursday, March 15, 2012 4:35 PM
To: Williamson, Alicia
Subject: SUNSI review request for ML061390355

Hello,

We assist the public with answering questions on, and locating, NRC documents. One of our users (from a local law firm) has called about ML061390355 (it is attached). I found your name as the contact in the ADAMS P8 profile. I realize this document was dated in 2006, but I hope you can assist me. If not, please refer me. I was not sure who else to contact.

B/4

This document is marked as not replicated nor declared a publicly available record, per the document's profile in ADAMS P8. The profile also does not say that a SUNSI review was completed, although it did provide a public release date of June 9, 2006.

Can a SUNSI review be performed on ML061390355? I need to tell my user whether this document can be public or will remain only available to NRC staff.

Thanks,
Karen

Karen Danoff
Reference Librarian
US Nuclear Regulatory Commission
Public Document Room, OWFN-1 F21
OIS/IRSD
301-415-2151
Karen.Danoff@nrc.gov

Prescott, 2000

Conservation Perspectives
the on-line journal of MassSCB

Sea Turtles In New England Waters

by Robert Prescott, Director

Massachusetts Audubon Society: Wellfleet Bay Wildlife Sanctuary

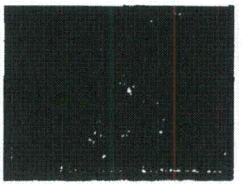
The mention of sea turtles usually conjures up images of warm tropical isles and sunny beaches and, to a certain extent, such images are correct. With the exception of the leatherback, adult sea turtles are tropical or sub-tropical creatures. However, certain species of sea turtles come north as juveniles to feed along the East Coast and return south before the onset of winter.

Although Cape Cod Bay and Nantucket Sound are extensively used by both commercial and pleasure craft, few sight records of sea turtles exist. Even people who spend a great deal of time on the water are surprised to learn that five species of sea turtles are present in our waters. Cape Cod Bay contains one of the largest known concentrations of subadult ridley turtles. We see loggerheads along the shore during the fall. Green turtles come into Nantucket Sound and the waters surrounding Martha's Vineyard on a regular basis. Leatherbacks migrate past the Cape on their way north to feeding grounds in the Arctic. The chance of seeing a hawksbill is so slim that I hesitate to even include it as one of the five species.

General Biology

Having adapted to life in the ocean, sea turtle species differ from their terrestrial and freshwater relatives. Sea turtles have a top shell (carapace) and a bottom shell (plastron), but they cannot hide inside their shells. The carapace is too small -- just a small patch covering a huge body. Instead of clawed feet, sea turtles have long flippers, making it difficult for them to maneuver on land. This isn't a problem because sea turtles live in the ocean for their entire lives; females come ashore only to lay eggs. Compared to their land-bound relatives, sea turtles have evolved to enormous proportions; their buoyancy in water eliminates the problem of gravity.

Life History

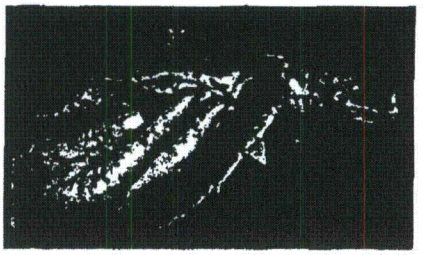


Sea turtles' life histories are similar to those of other turtles, but because their "pond" is the Atlantic, Pacific, or Indian Ocean, we know much less about them. Like other turtles, sea turtles lay their eggs in sand, usually on a tropical beach. In the spring, the female struggles ashore and begins to dig her nest. First she digs a body pit deep enough for herself. Then, using her back flippers, she excavates a flask-shaped chamber where she deposits her eggs. When finished, she fills the holes, trampling and packing the area to hide the nest. She may dig two or three other nests. She then swims off, never to see her young hatch. Most sea turtle species nest every two years, but ridleys nest yearly.

Depending on the species, the eggs hatch within 40-70 dys. The hatchlings linger under the sand until the majority of the eggs have hatched, then the eruption begins. With the lower hatchlings pushing from below, the baby turtles emerge. During their dash to the sea, the soft-shelled hatchlings make an easy meal for predators such as gulls and ghost crabs. Those that reach the ocean face a new set of predators.

Mysterious Juveniles

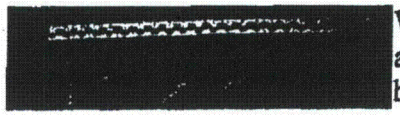
The deepest mystery surrounding sea turtles is what happens to them during their first two years of life. Because they are so small there is no way to tag or keep track of them. No one knows where they go; they head out to sea and just vanish. A growing body of evidence indicates that they head out to seaweed patches and live among this drift. Bodies of hatchlings have been found washed ashore in seaweed, and in the stomachs of sharks and fish. Records of hatchlings are so scanty that their whereabouts are subject of much speculation.



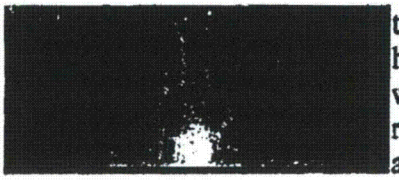
One early speculation was that sea turtles rode north to Cape Cod via the Gulf Stream. With the exception of leatherbacks, however, only a few sea turtles have been seen in the Gulf Stream. Apparently, juvenile or subadult turtles drop out of the Gulf Stream and are frequently found along the coast. Coastal wandering in search of food brings many sea turtles, especially ridleys and loggerheads, to Cape Cod. Others are caught in pound nets in Chesapeake Bay and Long Island Sound. Older and larger individuals have been recorded as far away as Europe.

When sea turtles mature, they return to the tropical areas of their birth, possibly to the very beach where they hatched. After returning, the turtles mate and settle in tropical and sub-tropical waters, wandering no more. (The leatherback is the exception to this scenario as well as the exception to other general turtle facts.)

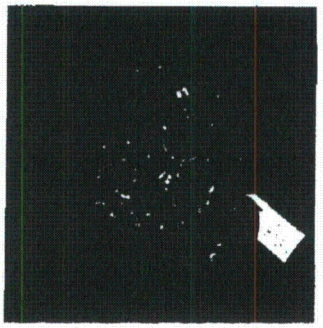
Uncommon Visitors: Hawksbill and Green Turtles



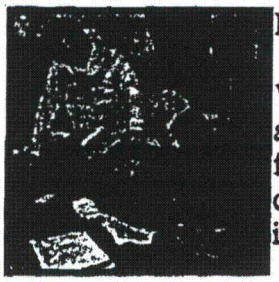
With the exception of the leatherback, sea turtles, especially sub-adults, are difficult to identify. Of the five species possibly found here, only four appear with any regularity. The hawksbill, a truly



tropical turtle, rarely visits our waters. Many historical sitings have been recorded, but close examination suggests the references were to the similarly-appearing ridley. At present, only two records of hawksbill turtle exist for Massachusetts; we can assume that the hawksbill is unlikely to be a regular visitor.



The green turtle probably frequents our waters with some degree of regularity but is not considered common as there are few records for it north of Cape Cod. Green turtles are not actually green; they are brown or mud colored with a mottled or wavy brown shell. The name is derived from the color of the soup made from the fat of this turtle. As with any over-exploited species, adults no longer grow to their full potential. In the past, 800-pound green turtles came ashore to nest; today's turtles are up to 500 pounds. The green turtles found around Cape Cod are three- to four -year-old subadults, 24-30 inches long, and weighing in at about 50lbs. Green turtles are the most herbivorous of all the sea turtles. In tropical waters, they are like underwater cows, converting vegetation into animal protein.

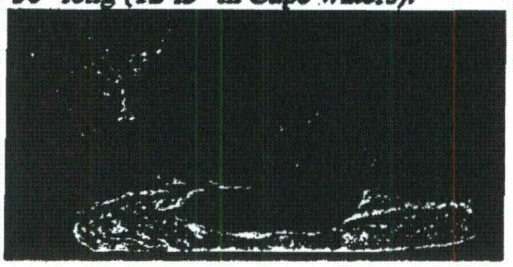


Loggerhead Turtles

Young loggerhead turtles are regular visitors to our northern waters.They also have been recovered in Canada and Europe Subadults range in size from 15" to 36", weighing between 75- 100 pounds. While in our waters, the dark-brown to red-brown loggerhead turtles feed on a variety of foods including hermit and spider crabs, whelks, blue mussels, and moon snails.

Kemp's Ridley

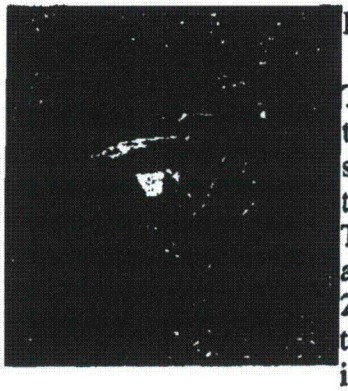
Kemp's Ridley is the smallest sea turtle, growing to only 30" long (12-15" in Cape waters). Among all of the sea turtles, the Kemp's Ridley is shrouded in the deepest mystery. Until 1947, scientists had no idea where it nested. The popular theory of the day was that the ridley was the sterile hybrid offspring of loggerhead and hawksbill turtles.



Kemp's Ridley has the most restricted nesting range of any sea turtle. It is known to nest on only one beach in Tamaulipas, Mexico, on the Gulf at Rancho Nuevo. This concrete-colored resident of the Gulf of Mexico had dwindled from 40,000 nesting females in 1947, to 2,500 in 1974, to fewer than 500 in 1988. Last year, about 1800 ridleys nested, but there is little reason for optimism.

The biggest threat to ridleys today is the shrimp industry. Over 11,000 sea turtles, mostly juvenile ridleys, are caught annually by shrimpers. If this rate of turtle bycatch is allowed to continue, the ridley will become extinct. At the present time, many shrimpers are refusing to use an excluder device that will prevent turtles from being caught.

From stranding records, it seems that Cape Cod Bay is a center of activity for sub-adult ridleys. From analysis of stomach contents of stranded ridleys, we have learned that they are feeding on blue mussels and crabs while in Cape Cod Bay.



Leatherback Turtles

The leatherback is unique in the turtle world. Although it looks like a turtle, it may not be one. The leatherback differs from real turtles in some very important ways. It doesn't have a rigid bony shell like other turtles; its shell is a mosaic of polygonal bones embedded in its skin. This bony dermal shell has seven longitudinal ridges on the carapace and five on the plastron. The leatherback, with a record weight of 2000 pounds, is the heaviest of all reptiles. Today it is extremely rare to find any individuals over 800 pounds. Size alone is enough to identify this blotchy dark-brown to black-skinned reptile.

Another major difference is that the leatherback is warm-blooded. It is able to maintain a body temperature of about 80 degrees F by means of a special heat exchange system: warm outgoing arterial blood passes directly by the incoming colder venous blood. Thus, incoming blood is warmed and little heat is lost.

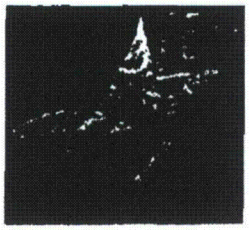
Leatherback nesting beaches, like all Caribbean beaches, are under great pressure from development, which would mean the demise of leatherbacks on those shores. Another threat to leatherbacks is their habit of getting entangled in lobster pots here in the Northeast. It is not clear at this time how big a problem entanglement presents to the population as a whole.

As juveniles, leatherbacks may remain in warmer waters to our south, but as subadults and adults they undertake the longest migration in the reptile world. From the Gulf of Mexico and the Caribbean, leatherbacks head north to feeding grounds near the Arctic Sea where they feed extensively on jellyfish. They often stop in Cape Cod Bay on their return trip south in August and September to feed on jellyfish and comb jellies in our waters.

Finding and Protecting Sea Turtles

Each fall beginning in November, sea turtles wash ashore along Cape Cod Bay. When the wind blows from the northwest and the Bay water is below 50 degrees F, we can usually count on finding one or more turtles washed ashore anywhere along the bay beaches. It very important to recover all of the stranded turtles, dead or alive. While a stranded sea turtle may look dead, chances are it is still alive; with proper treatment at the sanctuary and at the New England Aquarium, it will recover and can be rehabilitated and released. If you find a turtle along a beach or if you are interested in helping walk some of the bay beaches, please call MAS Wellfleet Bay Sanctuary at 508 349-2615. By accumulating data over many years, we hope to solve some of the mysteries surrounding sea turtles.

All sea turtles are protected by the Marine Turtle Protection Act. It is illegal to molest, harass, catch, or kill them, or to possess any part of a sea turtle. Scientists are still trying to put together the remaining pieces of the sea turtle puzzle, so if you observe or find a sea turtle, report it. Every piece of information fills in one more gap in the total picture.



Sea turtle sightings should be reported to: Robert Prescott

Massachuseetts Audubon Society
Box 236
South Wellfleet, MA 02663

508-349-2615

Home | Calendar | Committees | ePublications | Membership | Links | Site Map | Inquiry & Comments | SCB