The hawksbill turtle

The Hawksbill Turtle Eretmochelys imbricata Shane Stoughton GS 108 Oceanography Suzanne Bannan September 05, 2012 INTRODUCTION Sea turtles were making their appearance about 65 million years ago, also the time that dinosaurs were being wiped out. These magnificent creatures did not succumb to extinction like their dinosaur counterparts primarily because they were submerged beneath the ocean when the asteroids struck Earth. This is one of main reasons I chose the specific sea turtle The Hawksbill Turtle. The scientific name of The Hawksbill turtle is eretmochelys imbricata.

This sea turtle gets its name from its hooked beak formed by its yellowish jaws. The Hawksbill Turtle is one of nature's longest surviving creatures. This fact sparks the interest of many people into wanting to learn more about sea turtles. One unfortunate fact of life for this turtle is that they have always been creatures of high demand with their shells prized for their use in jewelry and beads and their bodies for meat. As with other sea turtles, one of the best ways to monitor the status of populations is to survey nesting beaches over many years.

However, because hawksbills usually nest in small numbers and often on remote beaches, it is very difficult to estimate the population size. Like many sea turtles, hawksbills are a critically endangered species due mostly to human impact. Hawksbill eggs are still eaten around the world despite the turtle's international protected status, and they are often killed for their flesh and their stunning shells. (NatGeo 2012) The decline of this species is primarily due to human exploitation for tortoiseshell. While the legal hawksbill shell trade ended when Japan agreed to stop importing shell in 1993, a significant illegal trade continues.

Other threats include loss or degradation of nesting habitat from coastal development and beach armoring; disorientation of hatchlings by beachfront lighting; nest predation by native and non-native predators; degradation of foraging habitat; marinepollutionand debris; watercraft strikes; and incidental take from commercial fishing operations. (FWS 2012) The most important thing that can be done for this species is to make the public aware of their actions that harm the turtles and how they can change their ways. One surprising threat to sea turtles is the balloons that people let go.

These balloons often float over the ocean before popping, and sea turtles can choke on the pieces of the balloon that fall into the water. Floating balloons look like jellyfish to sea turtles. Where can we find the Hawksbill Turtle? When it comes to where sea turtles are found, it can vary from very shallow waters, to greater depths of the ocean. Hawksbills are found mainly in the tropical regions of the Atlantic and Pacific Oceans. In the western hemisphere, nests have been reported as far north as Massachusetts, with some being present in the Long Island Sound.

However, between the Carolinas and New Jersey, very few Hawksbill Turtles have been sighted, much less recorded. Hawksbill Turtles are also found around the Oceanic Islands, and the Indian Ocean. Hawksbills use different habitats at different stages of their life cycle. It is widely believed that posthatchling hawksbills are pelagic and take shelter in weedlines around convergence zones. Sargassum and floating debris such as styrofoam, tar balls, and plastic bits (all common components of weedlines) are consistently found in the stomachs of youngsters that strand in Texas.

It is likely the weedlines in the Gulf of Mexico serve as a habitat for hawksbill that enter the US waters. (Turtles 2005) After the turtle spends some time growing concealed in the weedlines, these are known as pelagic zones, the creature re-emerges back out in the oceanic waters, (oceanic zone) mostly off coastlines when they reach 20-25 cm in length. This is after the turtle has matured quite a bit considering that the turtles average length throughout the p of its life (30 to 50 years) and can usually reach 2-3 feet (roughly . to 1 meter) in length, which is not particularly large when compared to other species of sea turtles, and weighs anywhere from 100-200 (45-90 kg) pounds. So, long story short, they spend a considerable amount of time on in the weeds of coastlines before they re-enter deeper oceanic zones. Hawksbill turtles are most commonly found in coral reef habitats where sponges, afoodsource for hawksbills, grow on solid substrate. They also reside in shoals, lagoons of oceanic islands and on continental shelves. MarineBio 2012) In the Caribbean, as hawksbills grow they begin exclusively feeding on only a few types of sponges. However, in the Indo-Pacific, hawksbills continue eating a varied diet that includes sponges, other invertebrates, and algae. The ledges and caves of coral reefs provide shelter for resting hawksbills both during the day and at night. Hawksbills are known to inhabit the same resting spot night after night. Hawksbills are also found around rocky outcrops and high energy shoals, which are also optimum sites for sponge growth.

They are also known to inhabit mangrove-fringed bays and estuaries, particularly along the eastern shore of continents where coral reefs are absent. The main threats that are associated with this turtle’s habitat are:

habitat loss of coral reef communities, harvest of their eggs and meat aka commercial exploitation, increased commercial as well as recreational use of their prime nesting beaches, and accidental capture in commercial fishing nets. Reproduction, nesting, and migration

Males can be distinguished from females by their longer, thicker tail that extends well beyond the posterior part of the carapace. Mating often occurs at the surface in shallow waters near nesting beaches. Males will use their long heavy claws and tail to hold onto the females carapace. Copulation may last for several hours. (allthesea 2012) After the turtles have mated, the female turtles go into a nesting period, at night during the months between May and October the turtles will find a secluded small island somewhere to select a place to lay her eggs.

They make sure that when choosing a site in which to lay their eggs that it is some distance away from the high tide line and more often than not choose a site underneath the brush on the island. They then begin to dig a pit about the size of their body with their fore and hind flippers creating a chamber for the eggs. After the turtle has laid all of her eggs, she will then refill the pit with sand covering the newly laid eggs and promptly return back into the ocean.

Hawksbills only nest every two to three years but can lay up to six clutches of eggs within one breeding season, which on average lasts anywhere between 14-21 day increments. Females who re-nest often return to the same island where they originally laid their eggs, and it can also be within a few meters of the last nest. Most clutches average about 130 eggs, but they range anywhere from a few to as many as 230 eggs! The Hawksbill Turtle

migrates up to 2400 km between foraging areas and nesting beaches (Miller et al. 1998).

The recovery of flipper tags suggests that Hawksbill Turtles are highly migratory, as animals that were tagged in the northern Great Barrier Reef have been recaptured in foraging areas in the southern Gulf of Carpentaria, south-eastern Indonesia and southern Papua New Guinea (Limpus in press, as cited in DEWHA 2008). Individual turtles foraging in the same area do not necessarily take the same migration route (Limpus 1992). Nesting populations in eastern Queensland migrate from the Solomon Islands, Indonesia, Papua New Guinea, and Vanuatu (Miller et al. 1998; Parmenter 1983).

Captures of tagged turtles have also shown that individual Hawksbills also move between Papua New Guinea and the Solomon Islands (Vaughan & Spring 1980). Satellite tracking has shown that Hawksbill Turtles nesting on Varanus Island and Rosemary Island in Western Australia feed between 50 km and 450 km from their nesting beaches (Pendoley 2005). (environment2012) Works Cited http://www. fws. gov/northflorida/SeaTurtles/Turtle%20Factsheets/Hawksbill-Sea-Turtle. htm " The Hawksbill Turtle (Eretmochelys Imbricata). " The Hawksbill Turtle. Web. 22 Aug. 2012. . Hawksbill Sea Turtle. " National Geographic. Web. 22 Aug. 2012. . " Hawksbill Sea Turtles, Eretmochelys Imbricata. " At MarineBio. org. Web. 22 Aug. 2012. . " Hawksbill Sea Turtle. " : Size, Color, Distribution, Feeding. Web. 22 Aug. 2012. . " Biodiversity. " Eretmochelys Imbricata a?? Hawksbill Turtle. Web. 22 Aug. 2012. .