

Introduction

The Hawaiian Green Sea Turtle has been swimming in the Oceans for over 90 million years. They have survived asteroids, the Ice Age and other natural disasters. The ancient child held the sea turtle or Honu in high regards and although they were used as a food source, the Kapu system ensured their existence for future generations. The Europeans broke the Kapu and hunted the turtle both for its meat and its valuable shell. It wasn't until the 1970's that hunting Sea Turtles was outlawed. Although the turtle is now protected it is in crisis and these ancient beings may be lost forever. I hope with this paper I can present some facts about the Hawaiian Sea Turtle and some of the dangers it faces. I feel the best approach to saving the Honu is to create an awareness of the problems and hope that a growing concern will lead to change.

The Story of the Turtle Girl

On the big island of Hawaii there is a bay called Punalu'u. It is deep and sheltered from the prevailing winds. It has a beach where fishing canoes can land in good weather. It has survived tidal waves that have destroyed other beaches.

Punalu'u means diving springs and was named for the drinking water that the natives had to dive (or lu'u) down in the bay to an underground spring (or puna). In ancient times the people of Punalu'u would go to the spring at Ninoli for drinking water but the ogress Kai'kapu settled there, this is when they began diving for water in the bay. Men would take gourds out to where the fresh cold water was near the bottom of the bay, unstop his container, fill them and return to the shore. There came a time when stormy weather kept the men from diving. From the ocean to Punalu'u came two supernatural turtles Honu-po'o-kea (turtle with the white head) and Honu'ea (turtle with the reddish brown shell). The mother, Honu-po'o-kea gave birth to an object that looked like a piece of Kauila wood. She buried it in the sand and the turtles dug into the earth and made a spring; then returned to the sea. When the object hatched it was a turtle with a shell the color of polished Kauila wood. The mother and daughter lived in the spring until the baby grew up. The spring came to be named "The rising water of Kauila. The turtle girl could assume human form and play with the children. The children would come to fish in the spring and Kauila would watch and make sure they did not fall in. The people loved her for her protection and her sweet drinking water. Kauila would return to turtle form when she went back into the spring and people knew when bubbles came up in the spring that the turtle girl was asleep in her home. The people of Punalu'u honored the turtle girl and the water was then only used for drinking purposes.

The Green Sea Turtle is listed and protected under the U.S. Endangered Species Act. The Honu is a long range migrant breeder. Because of the nutritional limitations of its mainly herbivorous diet it has a delayed sexual maturity and slow growth. These turtles live in near shore areas where they eat sea grass or lo loa and macroalgae. They rest underwater on ledges and places that shelter and protect them. The adult females migrate to reproduce at intervals of 2,3,4 years or longer. The adult males migrate to mate on an annual basis. 90% of all reproduction by the green sea turtle takes place at French Frigate Shoals which is approximately at the midpoint of the Hawaiiian Archipelago. The round trip migration is a total of 1600 miles. The French Frigate Shoals is a crescent ring of coral and is a national wildlife refuge. The nesting season extends from late April through September, peaking during June and July. Mating takes place in shallow protected waters close to the islets where the females will come ashore to lay their eggs. During the season anywhere from one to seven clutches are laid by each female at intervals of 11-18 days. An average of 100 eggs per female. Once hatchlings emerge from the nest they swim quickly out to where the westerly currents transport them to a pelagic habitat. They begin their oceanic phase of development, that may last for up to three years or longer. Here they live at or near the surface and feed on macroplankton. When turtles reach 35-40 cm. they return to nearshore areas and their diet changes. They begin to eat sea grass or loloa that grows on the bottom.

The Hawaiian Green Sea Turtle are among a very few of the sea turtles to bask on the shoreline. The reason for this behavior may be to avoid the tiger shark or to conserve energy.

Threats to the Green Sea Turtle

Turtles are threatened by a number of things. Hawaiian Green Sea Turtles are exploited for food and commerce. Until the 1950's the French frigate Shoals were harvested and the nesting and basking turtles were killed and shipped to Honolulu. The tiger shark is also a threat to the sea turtle. Turtles are killed in drift nets and caught in fishing lines. Coastal development threatens the nesting places. Their habitat has been changed by pollution and much of the algae that is their food is being destroyed.

A new concern has been the fibro-papillomas found n the sea turtles. There has been an eruption of these tumors on Green Sea Turtles in both Florida and Hawaii. These fibrous tumors debilitate, disfigure and are life threatening to the affected turtles. They often occur on the eyes, in the mouth and on the flippers making it difficult or imposssible to see, eat or swim. The cause of the disease is unknown. Pollutants are suspected of being a factor in this frightening disease.

There is research being done to determine the cause and possible cure. Fibro-papilloma may seriously affect the abundance of breeding adults and may lead to the decline in turtle population.

Monitoring the turtles in an attempt to learn more about the population has been undertaken. The capturing, tagging and releasing of turtles allows researchers to track migration and record changes in the size and occurances of tumors among the Hawaiian Green Sea Turtles.

Turtle Petroglyphs and Motifs

The significance of the turtle in polynesian culture can be seen in the petroglyphs found throughout the islands. In Hawaii, the Marquesas, Neker island and New Caledonia, petroglyphs of turtles demonstrate the role they played in Island life and lore. Turtles held a central role in certain ceremonies held at religious sites. In Tiamotu Islands in Eastern Polynesia turtles were disembowled at the temple site. Then they were cooked in special ovens and eaten by the priest. A similar ceremony in Central Polynesia brought turtle meat to the community meeting place and was served to the chiefs (Turtle motifs were found tatooed on the knees of a Rarotongan Chief when the rest of his tatoos were geometric patterns).

Taboos regarding the consumption of turtle by anyone except those of high status are known in Society Islands, Tuamotus, Cook Islands, Hawaii, Easter Island, Lau Island, Fiji and Melanesia.

Turtle petroglyphs exist throughout Polynesia on stones used on the exterior wall construction of elite residences, engraved turtle motifs are found on borders near raised stone structures of religious significance.

Although the meaning of petroglyphs is not known there does seem to be a connection between the turtle and the passage to the afterworld. The idea that because the turtle can pass from the depths of the ocean to the land where it lays its eggs; it is also able, in a metaphorical sense, to cross the boundary between two seperate worlds. The idea that the Polynesians believed in the ability of the turtle to cross these boundaries is found in chants. One such Melanesian chant translates

The Nether world, the upper world is free of restrictions There is Tu there is Ragi Mata-ike Mataho Sounding in the nether world Sounding in the upper world The contrast of above and below and of island and seaward are common in many polynesian chants. Turtles are associated with Gods because of their ability to transcend boundaries between worlds.

Conclusion

After researching the Hawaiian Green Sea Turtle and learning what I have in this Hawaiian Culture course I can not help but to see a parallel in the negative effects that todays technological world has had on both the Hawaiian Culture and the Honu. Because of greed for land and a disregard for the ocean an ancient being and an ancient culture may disappear forever. Are money, greed and power going to rob us of our ancient cultures and our natural environment? I believe that the natural balance is in play however I see the need for individuals to live in Pono and take responsibility for their actions. By looking to the ancient ways we can learn how to live in harmony with nature. The disease that afflicts the Honu is symbolic of the disease that afflicts our society. We must find a cure for both. Hopefully Honu will survive for another 90 million years in the oceans of Hawaii.