

Turtles by the pollutions that humans have created

[Environment](#), [Ecology](#)



Turtles have existed a very long time ago meaning they have seen the rise and fall of dinosaurs and the rise of humanity. Scientists think that turtles have existed for around 230 million years (Mosaic 29). Roughly, sea turtles were 65 million years ago (Dobbs 1). This family has survived the passage of time and is threatened by the pollutions that humans have created to the ocean. The six sea turtles that occur on the coasts of America are actually threatened.

Sea turtles are very important to the ecosystem, but humans, directly and indirectly, endanger this family. If humans do not stop their destructive habits, we can lose the influence of sea turtles on seafarers. Sea turtles play an important role in the ecology of the ocean, and without turtles, we can see an ecological collapse in the oceans. Sea turtles are one of the few animals in the sea that eat sea grass (Godfrey).

Sea turtles act as grazing animals that cut short grass and help maintain the health of the family of seaweed (Godfrey). In recent decades, there has been a decline in the sea grass family. This decrease may be related to the decrease in the number of sea turtles (Godfrey).

Seagrass is important because it is a fertile ground for many species of fish, shellfish and crustaceans (Godfrey). The beaches and sand dunes are known for not having many nutrients. When the sea turtles reach the land, they bury their eggs well in the sand of the beaches.

However, not all nests hatch, not all eggs in a nest breeding, and not all hatchlings in a nest will leave the nest (Godfrey). All dead hatching is a great source of nutrients for the beaches; the shells of the young are also a good

<https://assignbuster.com/turtles-by-the-pollutions-that-humans-have-created/>

source (Godfrey). If sea turtles become extinct, beaches and sand dunes will lose many nutrients. Many cultures have representations of sea turtles. The ancient Chinese scriptures described sea turtles as exotic delicacies (Musick 5). Ancient Greece used turtle shields for combing and brushing, mainly used by the upper class (mosaic 5).

“ The Mochicas of ancient Peru worshiped the sea and its animals, and on many occasions they represented sea turtles” (Shore). The habitats of sea turtles are always changing. Either they are lost by human entertainment or altered by human structures. Turtles are affected by these changes in habitats in different negative ways. The beach armament is a solid structure that is built to protect the properties of sand dunes (mosaic 389).

Beach armoring, if it is discarded enough, impairs the nesting capacity of the turtles to go to the nesting sites (Mosaic 389). This can make nesting turtles decide not to live that particular year. The biggest threat to build the beach is the loss of the nesting area (mosaic 389). Feeding the beach is another way to change the habitat of sea turtles. Feeding the beach where humans throw or pump sand on eroded beaches (mosaic 389). This usually happens only on the most advanced beaches. Feeding on the beach is better than putting the beach together, but replacing the original nesting sites instead of preserving them (Mosaic 390). The beaches that have been fed can have high levels of mud, silt and carapace that make them too compressed for the children to leave the nest (Mosaic 390).

The various elements in the sand or drip pump can have an effect on the sex of hatching; since sex is determined by temperature (Dobbs 390).

The vehicles represent many threats to turtles in general. Sea turtles are threatened by vehicles.

Heavy vehicles on beaches can crush developing eggs and pre-emergent hatchlings (Musick 390). Tire tracks from vehicles can trap the young, leaving them exhausted and, therefore, easier prey for predators. “

Loggerhead turtles can escape from a footprint of 3 cm in depth, but cannot escape from a rim groove of similar depth” (390). The effect of human foot trafficking on sea turtles has not been widely studied; the Perceived impacts are used as a basis for the translocation of nests (390).

Pedestrian traffic has the potential to destroy marine nests and damage emerging offspring (391). In the past, human visitation during the night have been detrimental to the nesting of turtles and hatchlings, but “ turtle watchers” have reduced this effect to a large extent. Turtle watchers are volunteers who literally observe the nesting and hatching of turtles (391). They are providing educational and conversational potentials (391).” There are some indications that the strong economic incentive to attract a large number of tourists to some important nesting beaches may not coincide with the need to minimize the disturbance of nesting females and emerging hatchlings” (391).

Artificial lighting can come from a variety of different sources; ranging from lamp posts to hotel rooms on the beach.

Artificial lighting interrupts important behaviors, including the choice of the nesting site and the nocturnal behavior of the marine finding of both the offspring and the nesting females (391). Direct and indirect experimental evidence has shown that artificial lighting on beaches discourages sea

turtles from nesting (391). Nesting that occurs around artificial lighting can have a high mortality (Klemens 108). The young are attracted by artificial rays and are overcome by exhaustion, dehydration and predation (Klemens 109). “ The effects of illumination vary with the lunar cycle and are greater during the period of the new moon” (109). There are many solutions for this enigma.

Light sources may have lower wattage levels or be shielded, redirected, lowered, recessed or repositioned to protect the light from the beach (110). Yellow incandescent bulbs are a good alternative solution (110). In conclusion, artificial lighting has a detrimental effect on sea turtles and should be noticed by humans and changed to eliminate an effect on sea turtles.

Nine percent of sea turtle strandings in the United States, the Gulf of Mexico, the coasts of the Atlantic, Puerto Rico and the United States Virgin Islands between 1986 and 1993 were related to propeller and boat attacks (Musick 392). On the coasts of Florida, from 1991 to 1993, about 338 of 2156 strandings were caused by boat crashes (392). Some of the attacks could have been after the death of the sea turtle; the data shows that this is an important effect on the mortality rate of sea turtles. Surprisingly, the Sargasso Sea itself has approximately 70, 000 metric tons of tar (Musick 392). Sea turtles are constantly around the pollution of oil and tar due to currents in the seas.”.

.. Sea turtles that continually emerge in search of air in a spot of oil to breathe will experience less immersion times and their growth rate will

belower" (Shore). The breathing method of sea turtles allows oil vapors to enter their lungs and, sometimes, they eat a contaminated food or a ball of tar that carries it to their intestines (Milton). Nesting beaches can also be affected by oil and tar pollution. Oil deposits on beaches could affect embryos in the egg nest (Milton). In addition, the oil could pose a mortal danger to the offspring.

Oil and tar always affect the seas in a negative way. The impact they have on sea turtles is a big concern and should not be taken lightly. Humans have and are still polluting the seas with plastic and non-biodegradable waste. Many animals in the sea are affected by debris, this does not exclude sea turtles. Sea turtles are entangled in debris that eventually lead to their death. The result of the study of the debris intake by green, loggerhead, and leatherback turtles in southern Brazil showed the total of sea turtles that was found to have ingested plastic which were a stranded of 92 sea turtles, of which 56 green turtles, 16 loggerhead turtles and 2 leatherback turtles were measured, and 38, 10 and 2 intestinal contents were collected, respectively. (Bugoni, 1331) This indicates that most of the sea turtles have been affected by the human's action. Sea turtle entanglement generally occurs with desert fishing gear (Musick 396).

Leatherback turtles have been found trapped in active crab pots, lobster pots, and even in bucean lines (398). The production and use of plastic has increased in the last forty years. There has been an increase in metric tons of plastics in the oceans (398). Tangle can reduce the movement that makes the turtle more vulnerable for predation. Remnants can also become

entangled around their heads or fins and kill the sea turtle (398).

Ten percent of all mortalities of sea turtles are due to shrimp fishing (Musick 399).

The shrimp trawl is, according to the research, the most important factor in the mortality of sea turtles related to human impacts. Sea turtles get trapped in these traps and can not take air and die. The shrimp trawl was killing such an enormous amount of sea turtles, that is why in 1978 the National Marine Fisheries Service of the United States and the Sea Grant Program developed the sea turtle excluder device (TED) (Musick 399). Then, in 1987, the regulations required the seasonal use of TED in high seas shrimp trawlers from the coast of North Carolina to Texas (Milton 115).

TED has reduced the mortality rate of many of the sea turtle species. On the coast of South Carolina; It is believed that TED reduces the annual mortality rate of loggerhead turtles by forty-four percent (Musick 399). Sea turtles are important to the ecosystem of our oceans, but human beings constantly impact this superfamily.

Although most of these impacts are not intentional, they still affect sea turtles in a detrimental way. If humans do not change their actions, we will lose this important and interesting family.