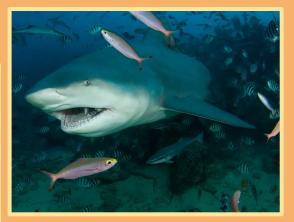


LIFE CYCLE OF A BULL SHARK

- Bull sharks are viviparous meaning that they are able to swim immediately after being born.
- Pups are typically born in litters of 3 to 10 sharks.
- Usually born in shallow freshwater rivers or river mouth with a flat bottom this gives the young shark the most protection from would be predators.
- Females take 10 years to reach sexual maturity while males take 14 years to reach sexual maturity
- As the young sharks mature they gradually go farther out into the open ocean to find food and to swim freely
- Mating season starts at the end of summer and usually lasts for a few months. During that time sharks return to the brackish river mouth. to look for a mate.
- Male bull sharks usually display violent tendencies during the mating ritual and often leave the female with deep scratches on her tail.
- Once the mating ritual is complete and the femail shark is pregnant the gestation period takes between 10 to 12 months
- Finally the female return to the flat bottom river moth or river to give birth to her pups
- One final interesting fact about bull sharks is that after giving birth the mother immediately abandons her children that is why it is important or them to be somewhere where they have natural protection



Shutterstock/chatchai kusolsinchai



https://i1.wp.com/www.dutchsharksociety.org/wp/wp-cont ent/uploads/2013/08/DSS_Peter_Verhoog_Bull-shark.jpg

WHY THEY CAN LIVE IN BRACKISH WATER



- Bull sharks have the unique ability to live in brackish and freshwater
- As stated in the earlier slide bull sharks are born in fresh or brackish water
- Bull sharks inhabit lake nicaragua which is cut off from the pacific ocean
- Bull sharks have developed an advanced osmoregulation process where they can lower the salt concentration in there own body and in turn urinate frequently in order for them to stay balanced.
- Bull sharks do this when the water outside their body is less salty than the water inside their body

WHY ARE THEY CONSIDERED ONE OF THE MOST DANGEROUS SHARKS IN THE WORLD?

- Bull Sharks tend to venture inland into shallow waters, and are commonly found near tropical shorelines that are highly populated by humans.
- They have an ability to migrate and survive for long periods of time in rivers, putting them in closer contact with humans.
- While other sharks are known to attack due to them mistaking humans for food, Bull sharks are known to unprovokingly attack humans.
- Bull Sharks have 69 recorded unprovoked attacks on humans. And according to cbsnews.com and stated in other sources, researchers believe that number is higher due to the fact that Bull Sharks lack certain markings that could help easily define them.

(Not a Bull Shark, a Great White)



Photo Credit: Alamy; from an article "JAWS-DROPPING Do bull sharks or great white sharks attack and kill the most humans? World's most dangerous sharks ranked" by thesun.co.uk

WHY ARE THEY ONE OF THE MOST COMMON SHARK IN THE WORLD



Image: https://oceana.org/marine-life/sharks-rays/bull-shark

- Bull sharks are not picky eaters, they eat anything from oysters to other bull sharks.
- Most marine animals do not have control over the amount of salt that enters their bodies, therefore they can only live in water with certain levels of salinity. But bull sharks are able to regulate the amount of salinity that enters their urine, allowing them to survive in waters of varying levels of salinity like rivers and oceans.
- Unlike Great White sharks, Bull sharks are able to live easily in captivity, allowing their population to grow in aquariums.
- Bull sharks are able to control their digestion. They use this as a survival method, if food choices are slim they are able to slow down their metabolisms so they don't need to eat as often.
- They are also able to distract predators by throwing up their food and making a quick getaway.
- Due to their size, bull sharks do not have many predators, their biggest predators are other bull sharks, and great whites and tiger sharks.

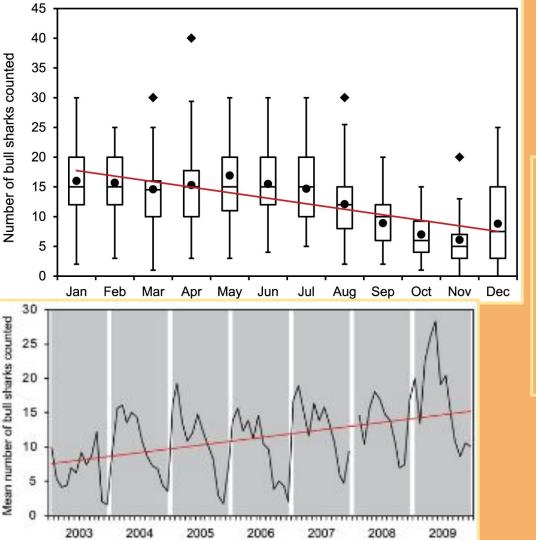




Figure one shows the number of Bull Sharks recorded throughout a year. The number goes down in the month of November. But if you look at figure number two, you will see that the overall recorded number of Bull Sharks throughout the years 2003-2009 does not go down. It is believed that this has something to do with the feeding patterns of the Bull Sharks.

> FIGURE 1: <u>https://doi.org/10.1371/journal.pone.0016597.g002</u> FIGURE 2: <u>https://doi.org/10.1371/journal.pone.0016597.g001</u>

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Cover page clipart photo (cartoon shark): https://www.kindpng.com/imgv/hwobimh_background-shark-sharks-transparent-transparent-background-shark-clipart/