

## And God Created.....The Cookie Cutter Shark

In the oceans are many marvelous creatures fashioned by the Almighty that continue to fascinate and astonish. The cookie cutter shark is indeed one these most unusual creatures that leave us with a sense of wonder and awe at the majesty of the Creator. Let's look at what is known about this predator of the world's oceans.

Among the sharks of the world are some vastly unusual species both large and small. The cookie cutter shark is one of the smaller (15-20 inches) types that lives in the deep oceans of the world. And while many species of sharks are sleek, swift and powerful swimmers this shark is a very weak and slow swimmer, but that has not limited the success of this creature because God has designed it with other special tricks and talents.

Like many deep ocean organisms, this small shark has cells that carry on bioluminescence, producing light like the firefly. These light producing cells are only found on the bottom of the sharks' body which when they give off their glow would hide the shark from predators by blending into the light filtering down from the surface waters. This is useful when predators that might try to attack from underneath. These cells cover all parts of the cookie cutter's belly except for one small area. This area is just below the mouth and is totally lacking in any bioluminescent cells. This particular ability is not really that unique for deep sea creatures as many have it and it is suspected that most if not all deep sea creatures have some type of bioluminescence of hiding. But the cookie cutter shark's light pattern is different from most organisms. With that blank spot on the bottom of it's body is totally unique and is called counterillumination. While other organisms do have this most do not have the ability carried to such an extreme extent. Some will have just small patches of bioluminescent cells but not mostly covering the organism. What would be the reason for this total cover except for one small spot.

The reason for this arrangement seems to be related to the way God designed the cookie cutter shark to get its food. This shark seems to let its food come to it and is that food big! Big and fast sea creatures like tuna, swordfish, and porpoises are it's prey. How can a 15 inch shark eat a 500 pound swordfish? Well, the design here is not to eat the whole thing but just take bites out and there in lies the beauty of this shark. Using the dark patch that from below might appear to be a slow moving fish, the large predators swim up and instead of getting to eat they end up have a mellow ball sized and shaped chunk of flesh taken out. This is done by the cookie cutter shark is its unusual mouth parts. The jaws of all sharks open very wide and extend out of its mouth in order to tear off flesh, but the cookie cutter's jaws come out further and do produce a circular mellow ball shape wound. This is aided by the swift movement of the prey. As the tuna swooshes upward in an attempted attack, the shark's teeth sink in and slide around in a curving scoop, very similar to the action of melon baller. While this wound is not lethal, a whole school of cookie cutter sharks, which is how they travel, would make several rather annoying injuries to the prey.

So the cookie cutter shark uses it bioluminescent cells to hide from as well as to attract the food for this shark. God has given the cookie cutter shark amazing abilities and it stands as evidence of the Intelligent Designer that God is.