

Those unique living fossils

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Young World

While many species have evolved to adapt to the changing environment there are others that have never felt the need to do so...

We earthlings are lucky as our planet has the perfect conditions to support life. It has oxygen and water and is the right distance from the sun — not too near to burn into a blazing inferno nor too far to not feel its warmth and freeze into a permanent ice block. And what a diversity of life! Many of these species have

evolved over millions of years to adapt suitably to their environment. Other species had been formed so perfectly that they did not need to undergo any changes or adaptations even after millions of years. They have successfully withstood the test of time. These perfectly-formed species were named as 'living fossils' by biologist Charles Darwin.

The cockroach, that often visits our kitchens, is one such example. But let us move towards the ocean. You will come across three interesting living fossils: the coelacanth, a fish, the pearly nautilus, a mollusc, and the horse-shoe crab, an arthropod very much like the spider.

Catch a debate between these three as to who is the best.

Pearly nautilus: I am the best, neither of you can match my looks, what with my beautiful mother-of-pearl spiral shell with red stripes.

Horseshoe crab: Hah! Beauty is skin deep.

Pearly nautilus: Sour grapes. Your skin is more like an armoured tank-like covering. Did you know mathematicians consider the geometry of my spiral home to be incredibly perfect?

Horseshoe crab: Do you know how many eggs the females of our species can lay at a time? Thousands and thousands.

Coelacanth: But most of those eggs are eaten up by the sea birds — the turnstones and the sanderlings. Hardly any of your eggs survive to propagate your species.

Pearly nautilus: What a waste!

Horseshoe crab: Oh no, that's not called waste. Nothing is wasted in nature. I am generous enough to provide food for others. In fact, I play a vital role in the web of life. How would those birds muster energy for their long migrations without the nutrition provided by my eggs?

Coelacanth: Speaking of importance, don't you know, we coelacanths caused a great sensation way back in 1938 when we were rediscovered by humans in South Africa? Before that, humans had given us up as being extinct.

Pearly nautilus: So what if they rediscovered you. See how I can swish and swirl about in the water by jet propulsion. You only seem to be trotting about like a horse.

Coelacanth: Well, I am special, believed to be the predecessor of four-legged land amphibians. That is why I have eight thick-lobed fins unlike other fish who have fewer and thinner fins. Can you do acrobatics like me?

(The coelacanth demonstrates by performing a headstand and then swims with his belly up.)

Horseshoe crab: (looking at the coelacanth with his compound eyes and breathing heavily through his papery 'book-gills'): I would rather not try such stunts. I am happy swimming the way I do using my long spiny tail as rudder when I am in the sea and my five pairs of legs to crawl on the sand.

Pearly nautilus: But I know your secret. Although you call yourself a crab, you are actually a spider in the guise of a crab.

Horseshoe crab: True, we are more like spiders. But I suppose our armour-like carapace makes us look like crabs. The carapace protects us from predators.

Pearly nautilus: As for you coelacanth, the meaning of your name is 'hollow spine'. But not only do you have a hollow spine, you seem to have an empty head too. I happen to know that you have a pea-sized brain; the rest of your head is occupied by fat!

Horseshoe crab: Now, now, let's not get personal.

Each of us is special,

Unique in our creation

Nature has ensured,

We are formed to perfection.

It's in our uniqueness that

There is variety, the spice of life