

In The Ocean Deep

by Despina Rosales

Most things on our earth - including humans - are solar-powered. What I mean is, without the sun, we'd be goners. But there are places that the sun *never* reaches. One of those places is the depths of the ocean below about 1000 metres: an entire ecosystem without light.

These depths of the ocean have loads of whacky-looking creatures. Believe me, if these animals didn't actually exist you'd never be able to imagine them. Let's take a tour around the deepest part of the oceans in our specially-designed deep-sea diving *bathyscaphe* (a small submarine designed for deep-sea research and exploration) and check out some of these extraordinary creatures.

The Lowdown On Deep-Sea Fish

There's good reason why deep-sea fish are so peculiar-looking: the high water pressure, severe coldness and permanent darkness of the deep sea caused deep sea fishes' bodies to develop in various ways that help them survive. Their names often relate to these distinctive features.

Our first encounter is with the tripod fish. Note its pelvic and tail fins, and the elongated rays that make it look like a tripod. The tripod fish also has bat-like pectoral fins.

Now we see the deep-sea angler. It is called an angler because it has a long fin on the top of its head with a luminous bulb on the end of it. The angler uses this fin and bulb like a fishing rod and lure. The angler bends its fin forward, dangling the bulb in near its mouth. When another fish is lured by the wiggling luminous bulb, the deep-sea angler gobbles it up!

The next fish you can see is the swallower. Watch carefully - it has a somewhat unattractive special trait. The swallower can distend its stomach so that it can eat fish two or three times its size.

Now we come to a truly bizarre fish - the dragonfish. This creature looks more like a snake than a fish, and it has very large hinged teeth that can life flat when it swallows its prey. The female has a chin barbel with a luminous tip that, like the deep-sea angler's 'fishing rod' and 'lure', is used to attract prey. Young dragonfish have eyes set on the ends of stalks - all the better to see you with.

Straight ahead is the viperfish. Look closely - can you see its thin, transparent fangs? They are long and barbed. In fact, they're so big that they stick out when it shuts its mouth. The viperfish also has an extra joint in its head that increases its gape, and as it opens its jaw, its heart and gills are pushed backwards and downwards, out of the way of the incoming food.

The nasty-looking fellow you can see to our right is the loosejaw. This fish's special qualities are that it has no membranes joining its jaws and tongue, and no floor in its mouth. Its jaws are protractile, which means they can be pushed out to catch prey. Now that's a loose jaw!

And here we have the longnose lancetfish. Its dorsal fin stretches for about two-thirds of its length and sits upright like a sail. It's quite a stunning sight, don't you think?

Last but not least - the snipe eel. See how slender it is. The female snipe eel has long, skinny jaws that it can't fully close, but the males - when they reach sexual maturity - end up with shortened jaws and no teeth at all."

OK folks, it's time to leave these dark waters, head back to the surface and re-power on that solar energy!