

# **Pacific Viperfish**

The Pacific viperfish feeds on lanternfish and squid. It has a very large mouth and fang-like teeth. Once the viperfish catches something, it won't get away. Its size ranges from 22-30 cm. Notice the two rows of photophores. Look at the long, thin ray on the back (dorsal) fin. How might the ray help attract a tasty meal?

### Deep Sea Squid

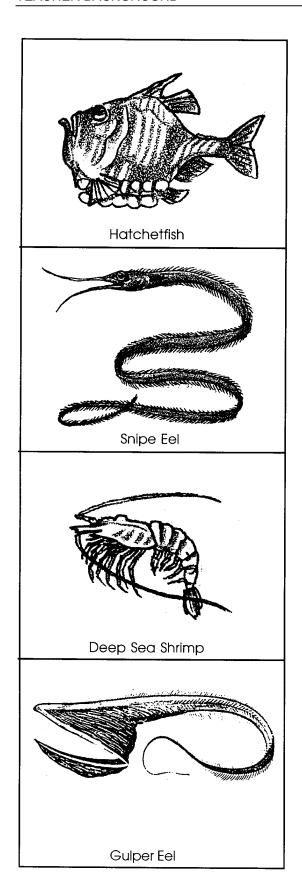
This squid can grow to 30 cm in length. Its photophores adjust to match the ocean twilight. It can move very quickly forward or backward. The two longest tentacles grab and hold its prey. The smaller tentacles move the prey to its mouth. The eyes are of different sizes. Scientists don't know why. Do you have any ideas?

### Lanternfish

The lanternfish is very common in the deep water. It lives where there is some light. It has very large eyes. The lanternfish swims up and down every day. It stays in the deep water during the day. It moves closer to the surface at night. Scientists think lanternfish may move like this to feed. They are not sure. Its photophores may help it find and communicate with other lanternfish. It grows to about 13cm in length.

#### Anglerfish

The anglerfish can grow to 10 cm in length. It has an appendage that looks like a fishing pole and lure. The "lure" is a large photophore. It may help attract prey. It is hard to find and keep mates in the deep sea. The anglerfish has a solution. The adult male anglerfish attaches himself to the female by biting on to her. Once attached, his body becomes part of hers. They mate for life.



#### Hatchetfish

The small hatchetfish (to 6 cm) has upward facing eyes. They allow it to see its food in the dimly lit waters above. Once food is spotted, the hatchetfish makes a couple of quick strokes. Then its upward facing mouth can grab its prey. The hatchetfish has photophores on the bottom side. The light helps hide its outline. Other fish swimming below the hatchetfish see the light and not the hatchetfish's silhouette. This kind of coloring is called countershading.

## Snipe Eel

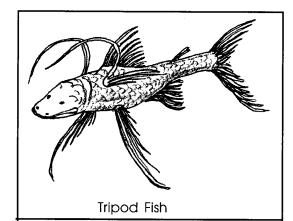
The snipe eel grows to 140 cm in length. It is among the biggest deep sea fish. It has a very long beak-like mouth. The mouth has bristles along the edges. For a long time scientists wondered how the snipe eel used these bristles. Finally, they observed the snipe eel feeding. The snipe eel waves its head back and forth in the water. The bristles act like Velcro to snag deep sea shrimp by the antennae.

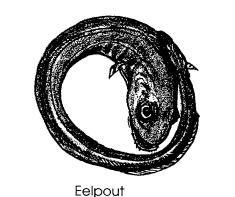
# **Deep Sea Shrimp**

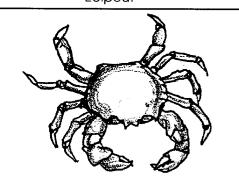
The bright red Deep Sea Shrimp is only 4 cm long. It seems much longer because of its very long antennae. These antennae may sense different chemicals in the water. The chemicals help the shrimp find food and mates. They may also help it avoid predators. The Deep Sea Shrimp has red photophores on its underside. The photophores countershade the shrimp.

#### **Gulper Eel**

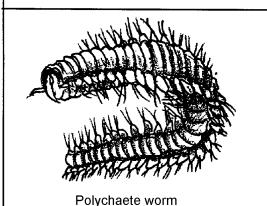
The gulper eel has a very large mouth. It also has a stomach that can stretch. This lets the gulper eel eat prey equal to itself in size. The gulper eel can grow to 76 cm. Most gulper eels are about 40 cm long.







Brachyuran crab



## **Tripod Fish**

The dull brown tripod fish lives on the ocean floor. The pelvic fins are very long, about half the length of these fish which can grow to 29 cm. The pelvic fins and long tail help the tripod fish skim along the ocean floor. Tripod fish eat zooplankton. Threads on the fins sense the zooplankton in the water when they brush into the fins.

#### **Eelpout**

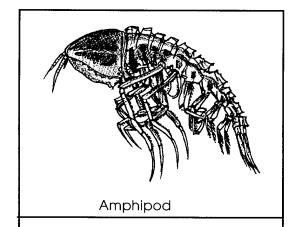
The translucent eelpout is a common deep water fish. It has a very uncommon behavior. When this fish is startled, it rolls up into a donut shape. Scientists wonder how this helps them survive. Some think it makes the eelpout look like a stinging jellyfish. The eelpout grows to 18 cm. It eats any animal it can fit into its mouth.

# Brachyuran crab

The bracchuran crab is found throughout the deep sea vent community scavenging whatever it can find. Growing up to 20 cm (8") wide, this crab may become a predator on tubeworms and other animals.

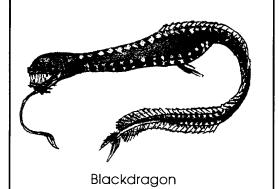
#### Polychaete worm

These tiny worms grow to only 2 mm (about 1/8") in length. They are segmented and have bristles on their segments. These red worms feed on deep sea vent bacteria.



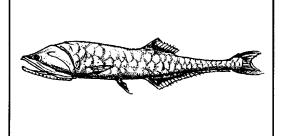
# **Amphipod**

A large (up to 15 cm) relative of the common beach hopper, this amphipod flits around the deep sea. Its giant compound eyes help it search for food. Glowing with a cool, white light, its body is transparent. The light may help it find a mate.



# Blackdragon

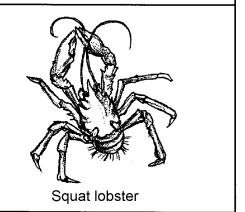
In spite of the long whisker, this is a female blackdragon. She feeds at the sea surface, swimming hundreds of feet up and back each night. Females may grow to 38 cm, males are smaller. Male blackdragons do not feed at all. They don't even have a stomach! They only live long enough to mate.



Bristlemouth

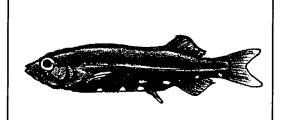
# **Bristlemouth**

Growing to about 8 cm in length, these are the most abundant fishes in the world. A bristlemouth eats tiny plankton which it catches on the thousands of fine bristles that line its mouth. A row of photophores on its underside help it hide from predators below.



## **Squat Lobster**

Growing up to 50 cm (20") wide, including its legs, this large, white scavenging crab really does resemble a lobster. It is found throughout the vent community eating whatever it can find.



Shining tubeshoulder

# Shining Tubeshoulder

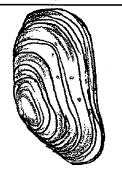
Photophores light the belly of this shiny black fish. Growing to 33 cm in length, this fish has an odd tube on each shoulder. The tubes can release a glowing slime. The slime may confuse its predators. At night, the young of these fish swim upwards to feed on shrimp.



Tadpole snailfish

# Tadpole snailfish

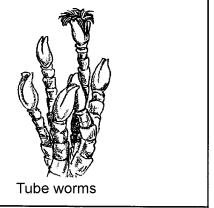
Looking very much like a frog tadpole, this small fish (up to 6 cm) scoops up shrimp as it swims. Its soft body makes it a favorite meal for other deep sea fish.



Giant clam

## Giant clam

This large white clam can grow up to 24 cm (10") in length. It grows quite rapidly and lives along cracks at vents. It feeds on food made by bacteria living in its gills.



## **Tube worms**

These tube worms can grow up to an amazing 2 meters in length. Their bright red, soft bodies are supported by white tubes. These worms have no mouth, no gut, and no digestive system.