

# Krøyer's Deep Sea Angler Fish

## Common Name

The Krøyer's Deep Sea Angler Fish gets its common name from the Danish zoologist that discovered and studied it, Henrik Nikolai Krøyer. Henrik was born on March 22, 1799, and died on November 14, 1870. Krøyer did not give the common name to the *C. holboelli*. However, he did give it its scientific name. He named it after a Danish Royal Navy officer, Carl Peter Holbøll.

## Classification

The Krøyer's Deep Sea Angler Fish belongs to the phylum Chordate, the order Lophiiformes, the family Ceratiidae, the genus *Ceratias*, and the species *C. holboelli*. As a member of the phylum Chordate it has a bilateral body plan (symmetrical down the middle), the presence of a notochord, or in the case of the *C. holboelli*, a spine, pharyngeal slits, more commonly known as gill slits, a muscular tail, and an endostyle (produces mucus in the pharynx to help with food digestion). Being a member of the class



actinopterygii means that the *C. holbelli* is a ray-finned fish. Ray-finned fishes are classified by their fins which consist of hard, bony rays that stick out of the body of the fish, and the webbed skin between the rays. Most "classic" fishes are in this class. The order lophiiformes contains all angler fish. Anglers are fishes that have some type of lure to attract prey protruding from their bodies. This includes all types of angler fishes (like frogfishes), not just the classic deep sea anglers. The fish that belong to the family Ceratiidae are the classic angler fish like the one portrayed in Finding Nemo. The name derives from the geek

word "keras" which means "horn." It is called so while fish in this family have bioluminescent lures projecting from their foreheads. Another trait of this family is that the males are substantially smaller than the females and often time require a female to survive. The Triplewart Seadevil and the *C. holboelli* are the best know of the four fishes in the genus *ceratias* and Krøyer's Deep Sea Angler Fish is the *C. holboelli*!

### **Habitat**

As stated in the name of the Krøyer's Deep Sea Angler Fish, it is a deep sea fish. This means it lives between 3,300-6,600 feet below the ocean's surface. It is also limited the the deep seas between the 67°N latitude line and the 10°S latitude line.

### **Bioluminescents**

As a member of the family Ceratiidae the *C. holboelli* has a bioluminescent lure protruding from its forehead. This lure attracts prey, such as small fish as it glows blue green. Other than this interaction with other species, the *c. holboelli* does not have relationships with many other animals.



### **Sex Identification**

The male Krøyer's Deep Sea Angler Fish is most easily identified by its small size

(usually about 7 centimeters). Due to their small size, they have an incomplete digestive system, and therefore require a female angler for survival and are considered to be parasitic because of this trait. However, they have incredible olfactory senses (smell) so that they can find female angler fish.

The female, on the other hand, are much bigger. They average the length of seventy-seven centimeters. The classic, menacing, vicious looking fish that most people think of when they think about angler fish, is always the female angler fish. The females stomachs can hold up to three times their size of food.

### **Reproduction**

Perhaps the most interesting habit of the *C. holboelli* is their reproduction methods. Because of the incomplete digestive systems of the male fish, they must live off the female angler fish. Once the male finds a female with its superb sense of smell, it begins gnawing the female. While the male is biting the female, an enzyme in its saliva dissolves the flesh of both fish to fuse them together. Eventually, the male is absorbed into the female, until it is nothing but a pair of gonads. Once the female has fully absorbed the male, she is able to fertilize her own eggs as she can release sperm and eggs at the same time. There is an educational and funny comic on this at <http://theoatmeal.com/comics/angler>.

<http://mohimarinebio.pbworks.com/w/page/35620936/Krøyer's%20Deep%20Sea%20Angler%20Fish%20by%20Savannah%20Schneider>