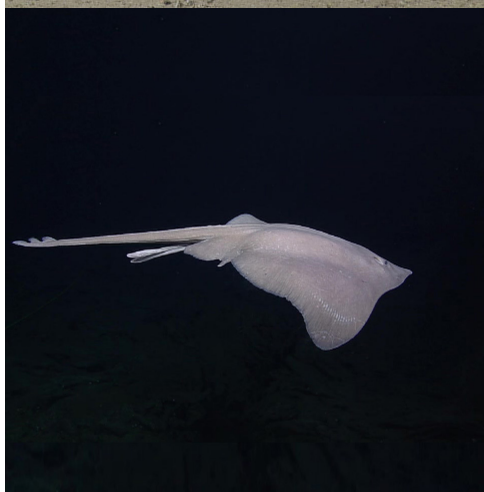


OCEAN NETWORKS CANADA
MARINE LIFE
FIELD GUIDE
Second Edition - March 2017



MARINE LIFE FIELD GUIDE

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Ocean Networks Canada

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Chapter 1

INTRODUCTION



About this guide

The Marine Life Field Guide, second edition, is a visual reference guide designed for tablet computers introducing the deep-sea creatures of the north-east Pacific Ocean. These species—some newly discovered or little-known—are observed through cameras installed on the Ocean Networks Canada subsea observatories, as well as during semi-annual expeditions. Undersea videos are captured by remotely-operated vehicles (ROVs) diving to almost three kilometres below the ocean surface, where lifeforms thrive in complete darkness.

This deep-sea digital guide offers rare glimpses of ocean life. In this edition, we have added more than 100 new images (including 43 species not included in the first edition) for a total of 270 images. The species range from the flapjack octopus to the bloody-belly comb jellies; from delicate sea spiders in hydrothermal vents to otherworldly sea cucumbers on the seafloor. More than half of the pictures were taken at depths of over 1,000 metres.

The guide is a “living book” that will be updated regularly with new creatures, images, videos, and information for use by scientists, students, and the public. Even with the highest quality photographs available today, some diagnostic characters of the species will never be confirmed using imagery alone. We also seek input from experts to provide corrections, and any feedback that will help to keep the guide as accurate as possible.

Provide comments or feedback to www.oceannetworks.ca.

About Ocean Networks Canada

Ocean Networks Canada (ONC), an initiative of the University of Victoria, operates world-leading ocean observatories on Canada’s west coast and in the Arctic.

ONC’s network of observatory systems gather and share information about the marine environments, expanding our senses, and allowing us to see, hear, and measure what is happening on and beneath the waves. At each location, a node or instrument platform is connected to the Internet wirelessly, or via an underwater cable. The information collected by the instruments is sent to the University of Victoria where it is archived and made freely available on the ONC website, allowing scientists, educators, students, and anyone with an Internet connection to explore the ocean and understand the planet.

FIELDS USED IN THIS GUIDE



Broad skate
Amblyraja badia

Location	Endeavour
Depth	2127 metres
Date	15 June 2012
Image ID	169
Confidence	● ○ ○
Comments	

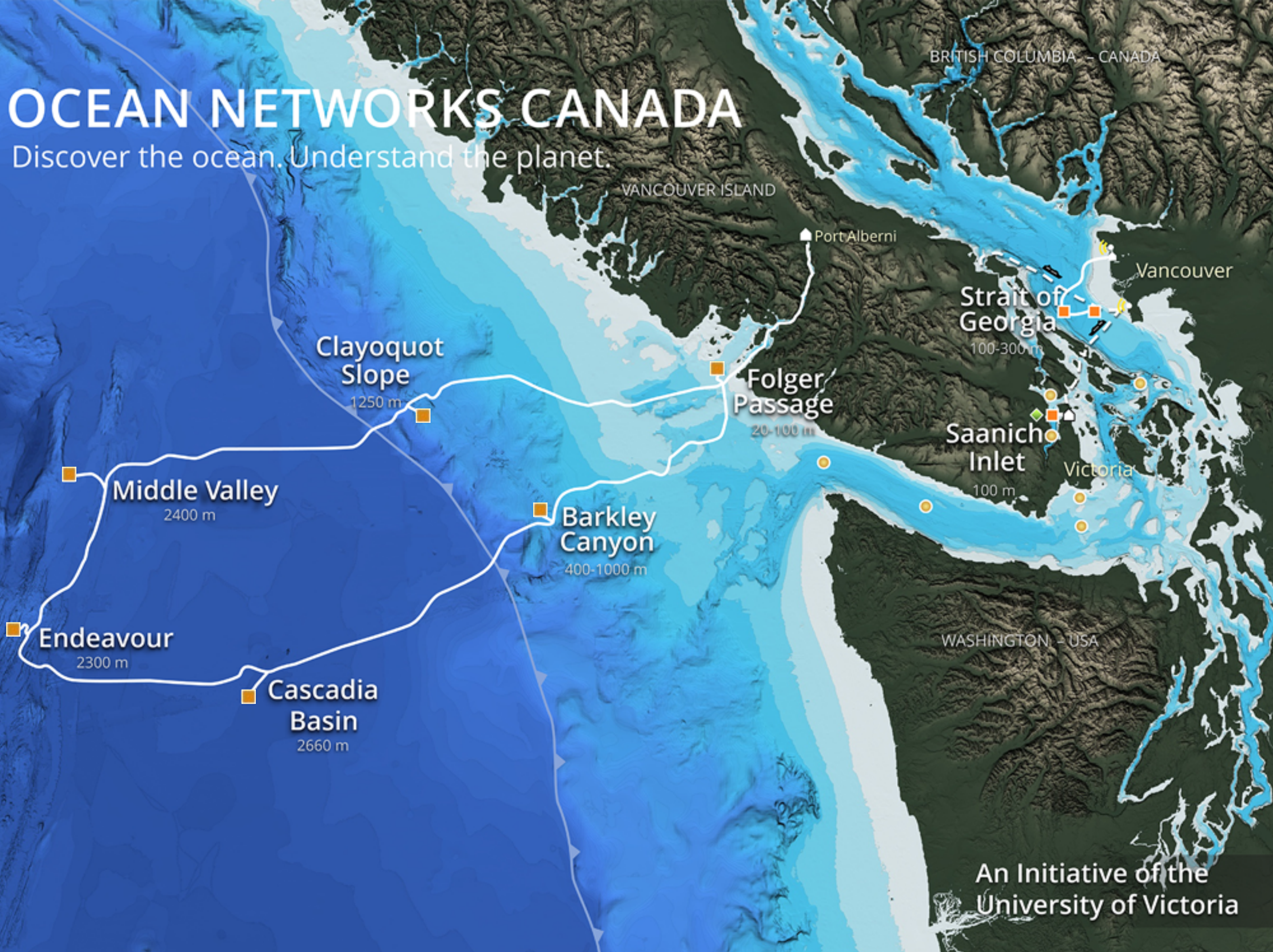
A similar image is available in the Davidson Seamount Taxonomic Guide from the Office of National Marine Sanctuaries.

- ①
- ②
- ③
- ④
- ⑤
- ⑥
- ⑦
- ⑧

- ① Common name(s) or commonly used taxonomic rank when the common name is undetermined.
 - ② Scientific name. For a lower rank than genus, we have included the information in the “Comments” section.
 - ③ Photographic location (see reference map on page 5).
 - ④ ROV depth at which the picture was taken.
 - ⑤ Date on which the picture was taken.
 - ⑥ Reference number.
 - ⑦ Rating scale indicates the confidence level regarding species identification from 0 dots (least confident) to 3 dots (most confident).
 - ⑧ Key features of the species, interesting behaviour, diagnostic characteristics, etc.
- * You can see two green dots on some of the pictures. This is a 10-centimetre laser scale from the ROV.

OCEAN NETWORKS CANADA

Discover the ocean. Understand the planet.



An Initiative of the
University of Victoria

PORIFERANS

Sponges (phylum Porifera) are an exclusively aquatic and, with a few exceptions, a filter-feeding group of animals. The group consists of approximately 15,000 extant species in three distinct groups. Adult sponges can be asymmetrical or radially symmetrical and come in a variety of sizes, colours, and shapes. Despite this great diversity in appearance, all sponges share a physical feature unique among animals: they have cells that can move freely and change forms, allowing the sponges to continuously reshape their bodies. (Encyclopedia of Life, 2016)



GLASS SPONGES



Round lipped boot sponge
Staurocalyptus dowlingi

Location Endeavour
Depth 2308 metres
Date 19 July 2011
Image ID 1
Confidence ●○○

Comments

Staurocalyptus dowlingi and *Rhabdocalyptus dawsoni* can sometimes look virtually identical in a photo in the same habitat. They require specimens in hand for identification.



Sharp lipped boot sponge
Rhabdocalyptus dawsoni

Location Endeavour
Depth 2161 metres
Date 24 July 2011
Image ID 2
Confidence ●○○

Comments

Staurocalyptus dowlingi and *Rhabdocalyptus dawsoni* can sometimes look virtually identical in a photo in the same habitat. They require specimens in hand for identification.



Glass sponge
Staurocalyptus sp.

Location Barkley Canyon
Depth 959 metres
Date 8 August 2006
Image ID 3
Confidence ●○○

Comments

Many boot sponges in this area share similar morphology; an image alone is inadequate to separate them.

GLASS SPONGES



Fluted funnel sponge
Poliopogon mendocino

Location Endeavour
Depth 2304 metres
Date 20 July 2011
Image ID 4
Confidence ●●○

Comments

Poliopogon mendocino is known only from one specimen collected from Mendocino Ridge, North California.



Stalked glass sponge
Caulophacus sp.

Location Endeavour
Depth 2170 metres
Date 14 September 2010
Image ID 8
Confidence ●●○

Comments

There are no identified species of *Caulophacus* known from this region.



Glass sponge
Saccocalyx pedunculatus

Location Endeavour
Depth 2324 metres
Date 10 July 2011
Image ID 6
Confidence ●○○

Comments

This is probably a morph of the common stalked deep-water species known from off North California.

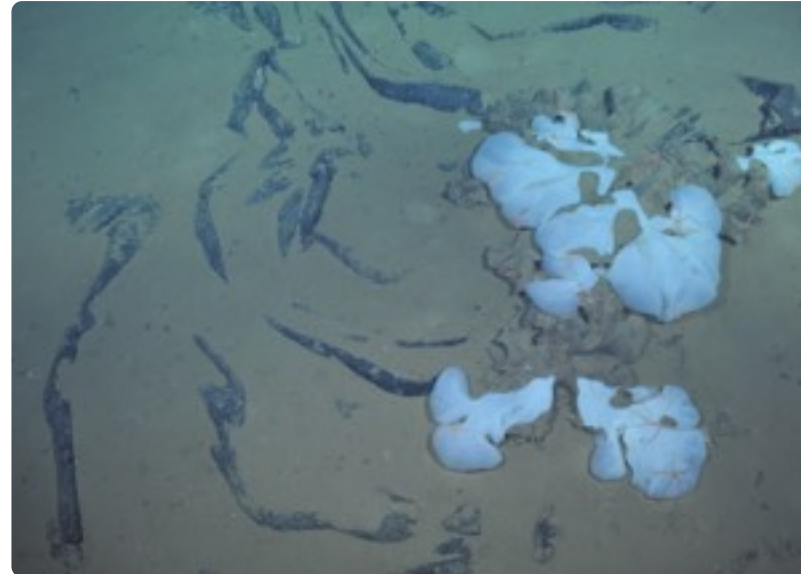
GLASS SPONGES



Glass sponge
Acanthascus sp.

Location Barkley Canyon
Depth 937 metres
Date 16 September 2009
Image ID 7
Confidence ●○○

Comments
No species with this morphology have been previously described for this location.



Creeping glass sponge
Atlantisella sp.

Location Endeavour
Depth 2310 metres
Date 20 June 2012
Image ID 11
Confidence ●●○

Comments
A similar image is available in the Davidson Seamount Taxonomic Guide from the Office of National Marine Sanctuaries.

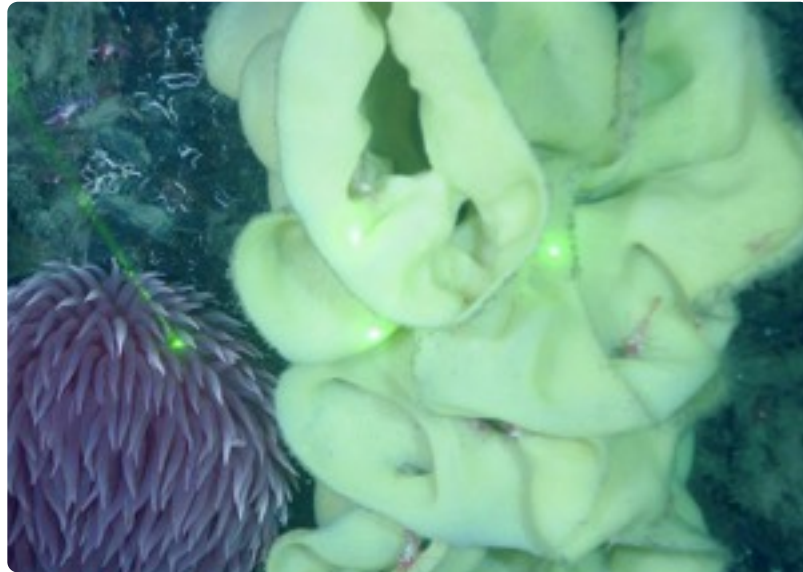


Glass sponge
Aphrocallistes vastus

Location Barkley Canyon
Depth 515 metres
Date 16 September 2013
Image ID 12
Confidence ●○○

Comments

GLASS SPONGES



Glass sponge
Bathydorus sp. (possibly *Staurocalyptus* sp.)

Location Barkley Canyon
Depth 904 metres
Date 8 August 2006
Image ID 10
Confidence ●○○

Comments
There is pom-pom anemone (*Liponema brevicorne*) on the left.



Unidentified glass sponge

Location Endeavour
Depth 2318 metres
Date 20 July 2011
Image ID 5
Confidence ○○○

Comments
May not be a glass sponge. No glass sponges with this morphology have been previously described so far from the region.



Unidentified glass sponge

Location Endeavour
Depth 2145 metres
Date 22 July 2011
Image ID 9
Confidence ○○○

Comments
Possibly a demosponge.



DEMOSPONGES



Demosponge
Sphaerotylus n. sp.

Location Endeavour
Depth 2142 metres
Date 14 September 2011
Image ID 20
Confidence ●●○
Comments



Demosponge
Asbestopluma sp.

Location Endeavour
Depth 2135 metres
Date 23 July 2011
Image ID 21
Confidence ●●○
Comments
Asbestopluma sp. are the white arm-like structures.



Unidentified demosponge

Location Endeavour
Depth 2134 metres
Date 10 July 2011
Image ID 13
Confidence ○○○
Comments

DEMOSPONGES



Unidentified demosponge

Location Endeavour
Depth 2149 metres
Date 20 September 2010
Image ID 19
Confidence ○○○
Comments



Unidentified demosponge

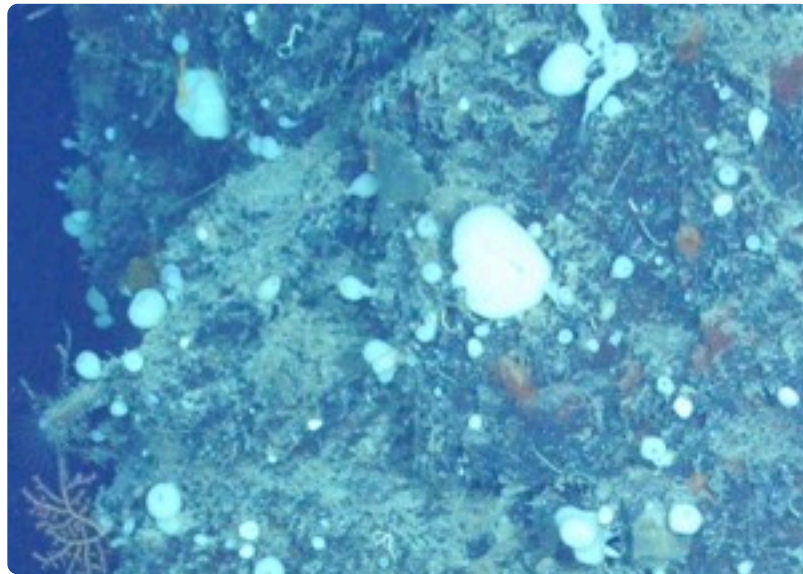
Location Barkley Canyon
Depth 402 metres
Date 23 July 2011
Image ID 14
Confidence ○○○
Comments



Unidentified demosponge

Location Endeavour
Depth 2171 metres
Date 23 July 2011
Image ID 15
Confidence ○○○
Comments

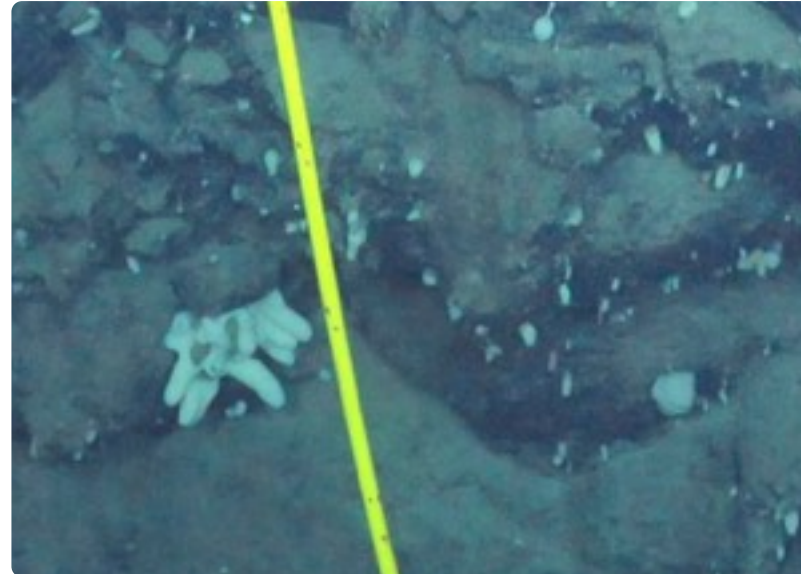
DEMOSPONGES



Unidentified demosponge

Location Endeavour
Depth 2136 metres
Date 24 July 2011
Image ID 16
Confidence ○○○
Comments

Likely juvenile sponges.



Unidentified demosponge

Location Endeavour
Depth 2097 metres
Date 21 July 2011
Image ID 17
Confidence ○○○
Comments



Unidentified demosponge

Location Endeavour
Depth 2145 metres
Date 22 July 2011
Image ID 18
Confidence ○○○
Comments

The orange, five-armed organisms are brittle stars.

CTENOPHORES

Ctenophores (commonly known as comb jellies) are gelatinous marine animals. They are similar in many ways to jellyfish, but lack stinging cnidae and their movement is via the coordinated beating of cilia (“combs”) instead of muscular contractions. They occur throughout the ocean, at all depths and are mostly planktonic, though a few are benthic. Comb jellies are efficient predators, consuming zooplankton such as fish eggs, copepods, amphipods, and larvae. Some eat jellyfish, salps, and other ctenophores.

(Encyclopedia of Life, 2016)



COMB JELLIES



Comb jelly
Bolinopsis infundibulum

Location Barkley Canyon
Depth 889 metres
Date 20 September 2011
Image ID 65-1
Confidence ●●○
Comments

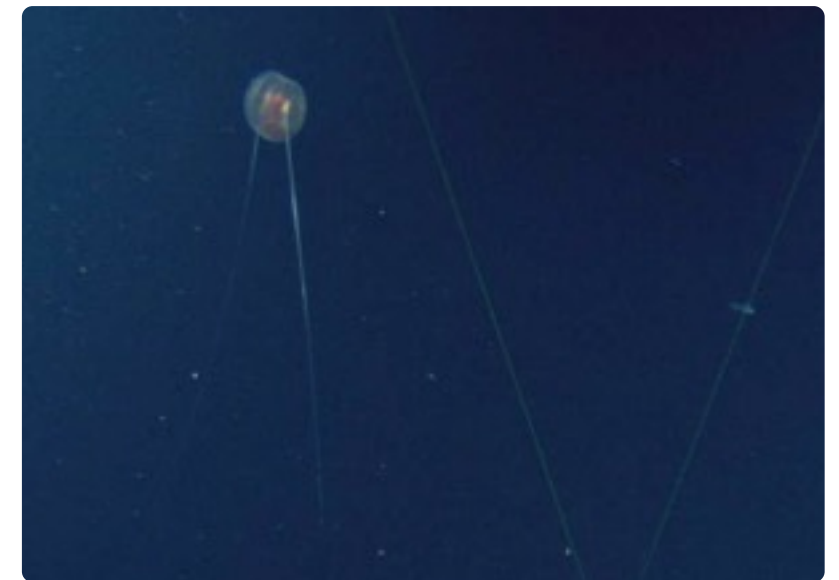
● ●



Comb jelly
Lampocteis sp.

Location Endeavour
Depth 2325 metres
Date 13 September 2011
Image ID 66
Confidence ●●○
Comments

● ● ○



Comb jelly
Aulacoctena sp.

Location Cascadia Basin
Depth 2490 metres
Date 10 June 2012
Image ID 70
Confidence ●●○
Comments

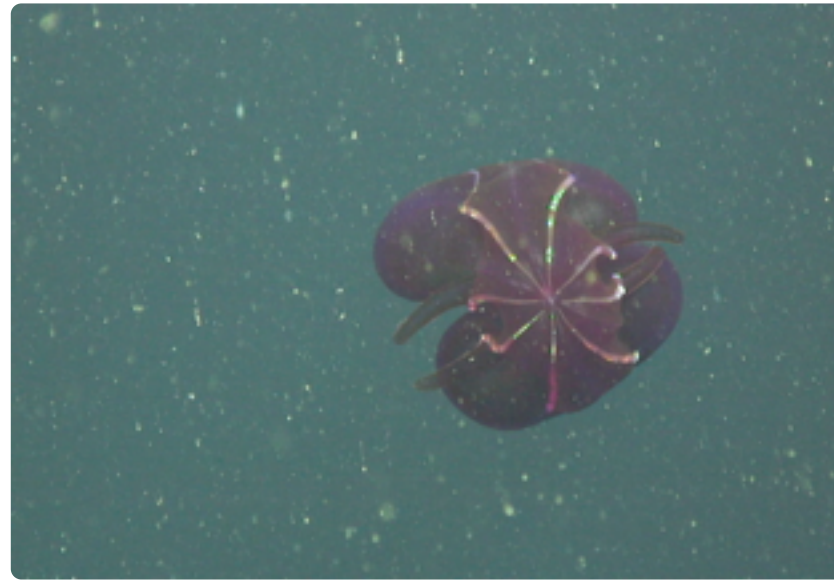
● ● ○

COMB JELLIES



Bloodybelly comb jelly
Lampocteis cruentiventer

Location Cascadia Basin
Depth 2606 metres
Date 22 June 2012
Image ID 67-1
Confidence ●●○
Comments



Bloodybelly comb jelly
Lampocteis cruentiventer

Location Endeavour
Depth 2363 metres
Date 20 June 2016
Image ID J0892
Confidence ●●○
Comments



Unidentified comb jelly

Location Cascadia Basin
Depth 2657 metres
Date 23 September 2012
Image ID 68
Confidence ○○○
Comments



COMB JELLIES

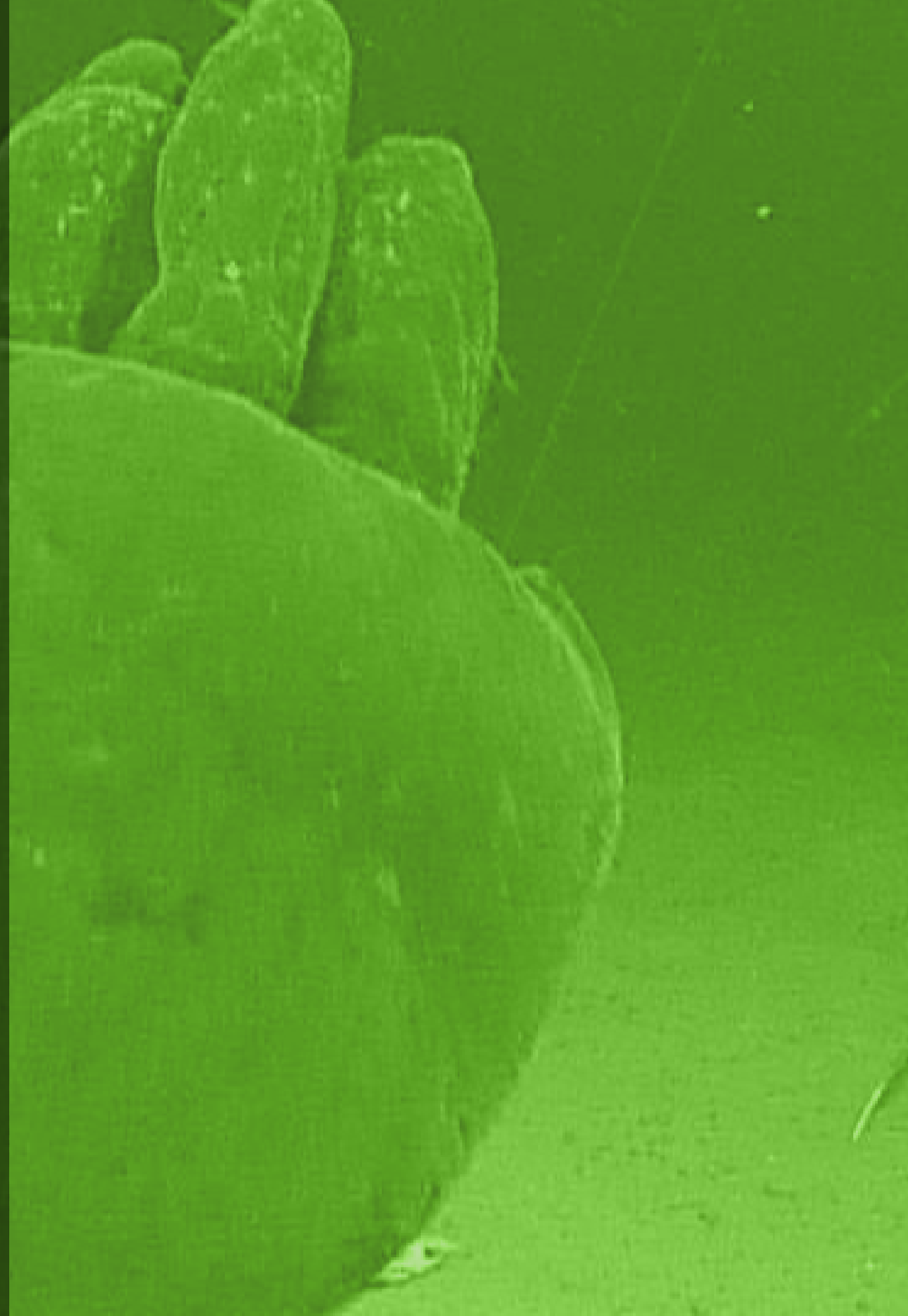


Unidentified comb jelly

Location	Barkley Canyon
Depth	892 metres
Date	24 June 2012
Image ID	69
Confidence	○○○
Comments	

CNIDARIANS

Cnidarians are a diverse group of aquatic animals. More than 9,000 species are part of the phylum Cnidaria, and all species are aquatic. This interesting group of invertebrates includes many charismatic organisms such as hydras, sea fans, jellyfishes, sea anemones, corals, and the Portuguese man-of-war. Cnidarians all have some type of specialized stinging cell organelle. Cnidarian bodies typically take one of two forms: the polyp or the medusa. While the polyp form is adapted for a sedentary or sessile lifestyle, the medusa form is adapted for floating or free-swimming. (Encyclopedia of Life, 2016)



SEA ANEMONES



Corallimorph anemone
Corallimorphus pilatus

Location Barkley Canyon
Depth 393 metres
Date 12 July 2011
Image ID 25-1
Confidence ●○○
Comments

This species has been included in the sea anemone category because of its physical similarity, but it belongs to another order, the Corallimorpharia.



Sea anemone
Actinauge verrillii

Location Barkley Canyon
Depth 394 metres
Date 12 July 2011
Image ID 35-1
Confidence ●●○
Comments



Pom-Pom anemone
Liponema brevicorne

Location Barkley Canyon
Depth 398 metres
Date 13 July 2011
Image ID 24-1
Confidence ●●○
Comments





Unidentified sea anemone

Location Barkley Canyon
Depth 396 metres
Date 14 July 2011
Image ID 22
Confidence ○○○
Comments

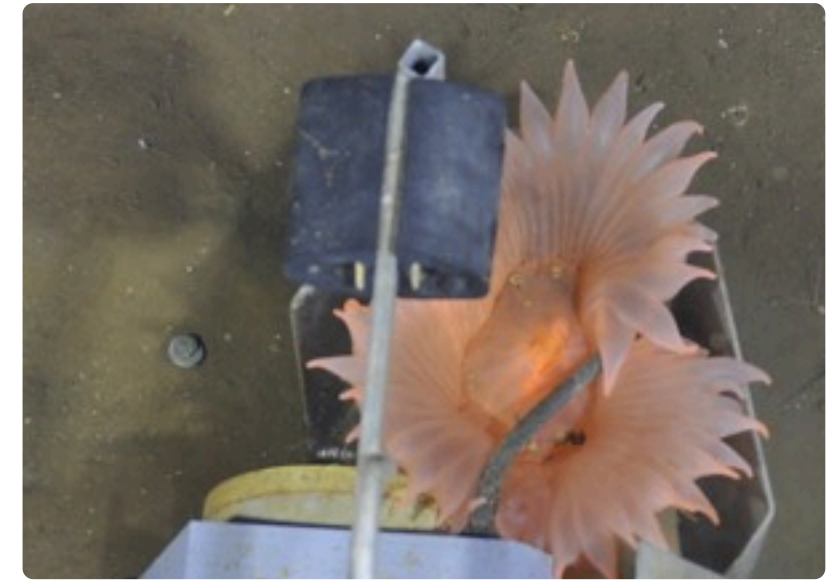
Specimen is on a deep-sea cable.



Unidentified sea anemone

Location Barkley Canyon
Depth 394 metres
Date 12 July 2011
Image ID 23
Confidence ○○○
Comments

Specimen is a member of Actinostolidae.



Unidentified sea anemone

Location Cascadia Basin
Depth 2539 metres
Date 7 July 2011
Image ID 27
Confidence ○○○
Comments

Specimen is on a deep-sea instrument.

SEA ANEMONES



Unidentified sea anemone



Location Barkley Canyon
Depth 395 metres
Date 12 July 2011
Image ID 28
Confidence ○○○
Comments

The sea anemone is on a sea pen.



Unidentified sea anemone

Location Barkley Canyon
Depth 391 metres
Date 12 July 2011
Image ID 29
Confidence ○○○
Comments

Specimen is a member of Actiniidae.



Unidentified sea anemone

Location Cascadia Basin
Depth 2658 metres
Date 4 June 2012
Image ID 30-1
Confidence ○○○
Comments

Specimen might be *Bolocera* sp. The anemone is on a deep-sea cable.



SEA ANEMONES



Unidentified sea anemone

Location Unknown
Depth 1728 metres
Date 13 August 2006
Image ID 31
Confidence ○○○
Comments

Specimen is a member of the Hormathiidae.



Unidentified sea anemone

Location Barkley Canyon
Depth 1987 metres
Date 12 September 2013
Image ID 32-1
Confidence ○○○
Comments

A specimen has been collected by ONC and is with the Royal BC Museum for identification.



Unidentified sea anemone

Location Cascadia Basin
Depth 2658 metres
Date 4 June 2012
Image ID 33
Confidence ○○○
Comments

SEA ANEMONES



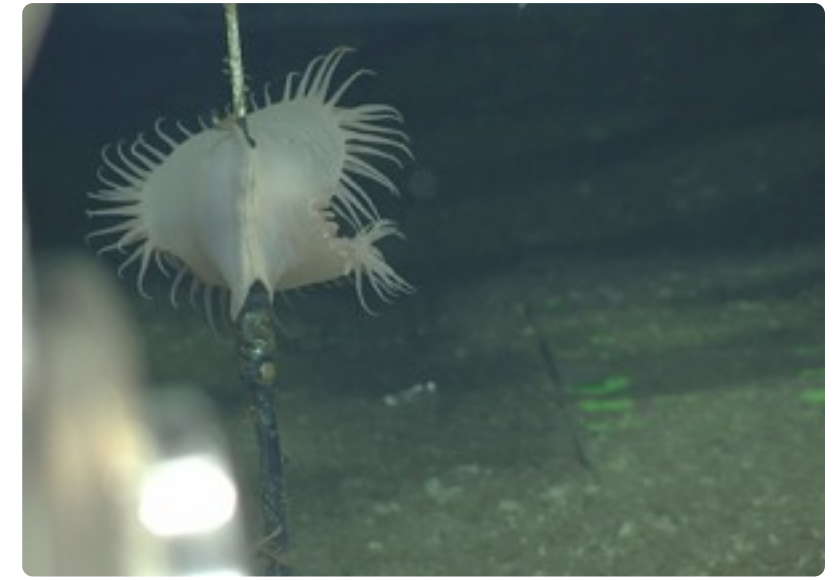
Unidentified sea anemone

Location Cascadia Basin
Depth 2631 metres
Date 5 June 2012
Image ID 34
Confidence ○○○
Comments



Unidentified sea anemone

Location Barkley Canyon
Depth Unknown
Date July 2009
Image ID 26
Confidence ○○○
Comments



Unidentified sea anemone

Location Cascadia Basin
Depth 2660 metres
Date 24 June 2012
Image ID 36
Confidence ○○○
Comments

SEA ANEMONES



Unidentified sea anemone

Location Barkley Canyon
Depth 1990 metres
Date 13 September 2013
Image ID 37-1
Confidence ○○○
Comments

• •

SOFT CORALS



Droopy sea pen
Umbellula lindahli

Location Cascadia Basin
Depth 2660 metres
Date 1 September 2009
Image ID 38
Confidence ●○○
Comments



Sea pen
Anthoptilum grandiflorum

Location Barkley Canyon
Depth 397 metres
Date 13 July 2011
Image ID 39
Confidence ●○○
Comments



Unidentified sea whip

Location Saanich Inlet
Depth 54 metres
Date 6 September 2013
Image ID 40
Confidence ○○○
Comments

SOFT CORALS



Corals
Swiftia sp., *Parastenella* sp.

Location Endeavour
Depth 2106 metres
Date 16 September 2010
Image ID 55
Confidence ●●○

Comments

The red one is *Swiftia* sp. probably *S. pacifica* and the white is a member of the Primnoidae, probably *Parastenella* sp.



Coral
Parastenella sp.

Location Endeavour
Depth 2207 metres
Date 20 September 2010
Image ID 56
Confidence ●●○

Comments



Coral
Chrysogorgia sp.

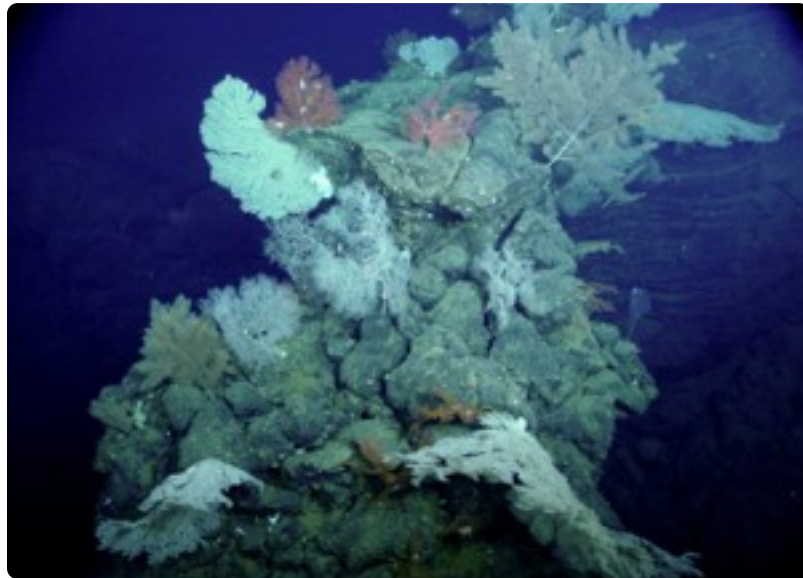
Location Endeavour
Depth 2274 metres
Date 14 June 2012
Image ID 57-1
Confidence ●●○

Comments

Species might be *Chrysogorgia pinnata*.

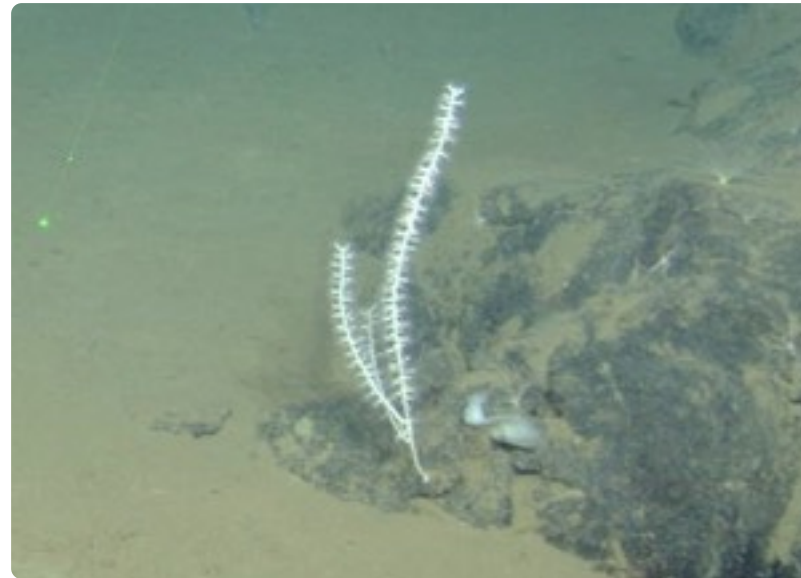


SOFT CORALS



Corals
Parastenella sp., *Chrysogorgia* sp.,
Swiftia sp. and undetermined species

Location Endeavour
Depth 2282 metres
Date 7 October 2010
Image ID 58
Confidence ●○○
Comments



Bamboo coral
Keratoisis sp.

Location Endeavour
Depth 2317 metres
Date 13 September 2011
Image ID 60
Confidence ●●○
Comments
 Specimen is a member of the Isididae.



Soft coral
Anthomastus sp.

Location Endeavour
Depth 2242 metres
Date 14 June 2012
Image ID 63
Confidence ●○○
Comments

STONY CORALS



Corals
Parantipathes sp. (and *Swiftia pacifica*)

Location Endeavour
Depth 2101 metres
Date 26 September 2010
Image ID 59
Confidence ●○○

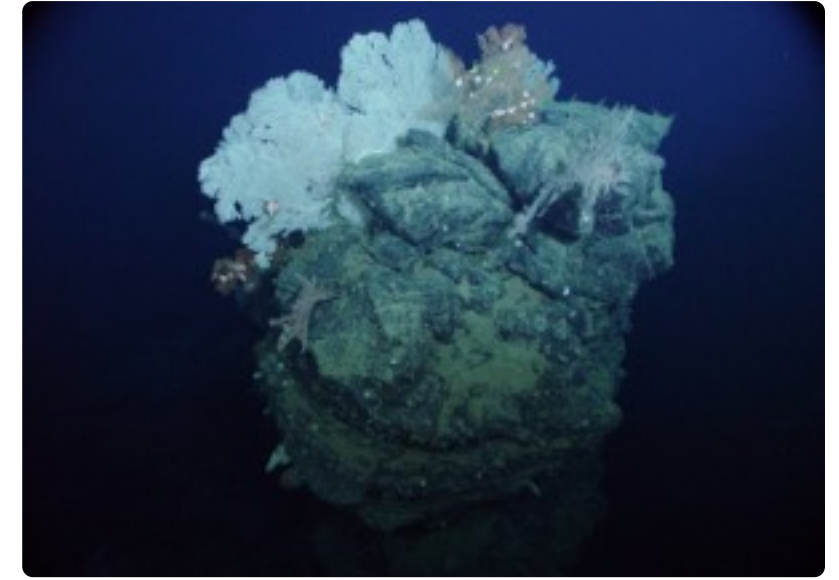
Comments
On the right is a black coral, probably *Parantipathes* sp. The left one is probably *Swiftia pacifica* (a soft coral).



Coral
Paragorgia sp.

Location Endeavour
Depth 2227 metres
Date 8 October 2010
Image ID 53
Confidence ●●○

Comments



Corals
Lillipathes sp. (with *Parastenella* sp. and *Swiftia* sp.)

Location Endeavour
Depth 2279 metres
Date 7 October 2010
Image ID 54
Confidence ●●○

Comments
Lower right are black corals, maybe *Lillipathes* sp. The others are soft corals: the white is probably *Parastenella* sp.; the red is probably a *Swiftia* sp.



STONY CORALS



Unidentified black coral



Location Endeavour
Depth 2227 metres
Date 8 October 2010
Image ID 52
Confidence ○○○
Comment

Specimen is a member of the Antipatharia.

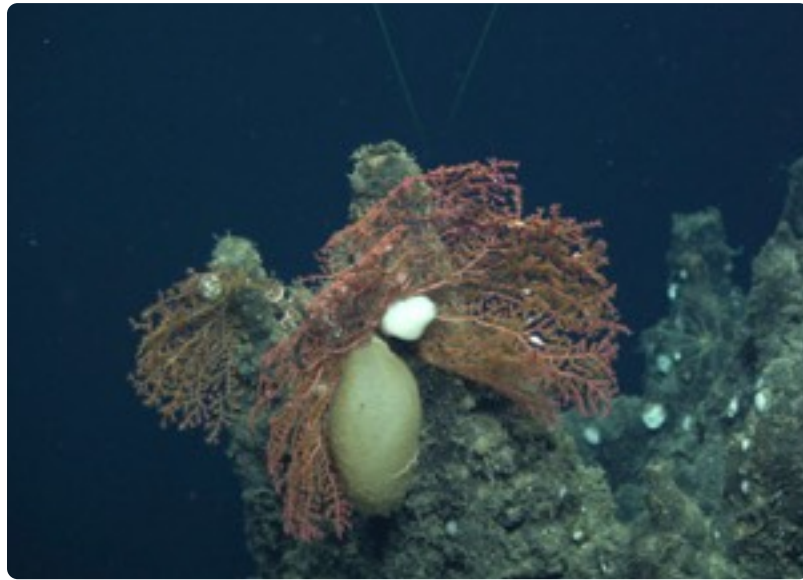


Unidentified black coral

Location Barkley Hydrates
Depth 814 metres
Date 12 September 2013
Image ID 61
Confidence ○○○
Comments

A specimen from the same area was collected in 2013.

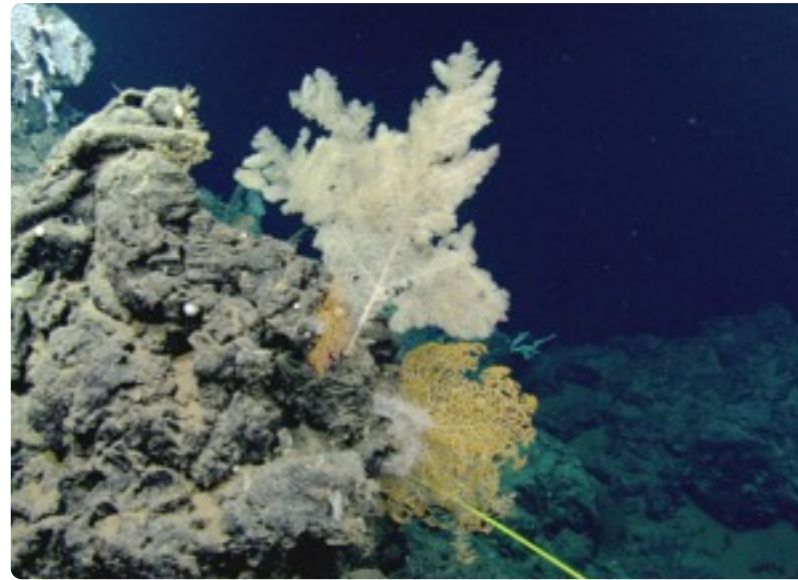
CORALS



Unidentified coral

Location Endeavour
Depth 2145 metres
Date 15 June 2012
Image ID 62
Confidence ○○○
Comments

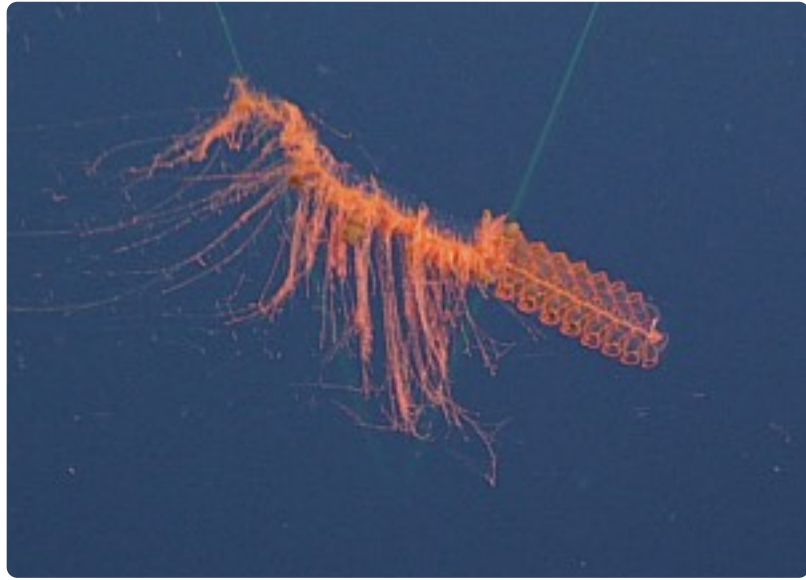
There are also sponges visible in the picture.



Unidentified coral

Location Endeavour
Depth 2271 metres
Date 14 June 2012
Image ID 64
Confidence ○○○
Comments

SIPHONOPHORES



Siphonophore
Marrus sp.

Location Endeavour
Depth 894 metres
Date 23 July 2011
Image ID 51
Confidence ●●○
Comments

Possibly *Marrus orthocanna*.



Unidentified siphonophore

Location Endeavour
Depth 29 metres
Date 10 July 2011
Image ID 50-1
Confidence ○○○
Comments

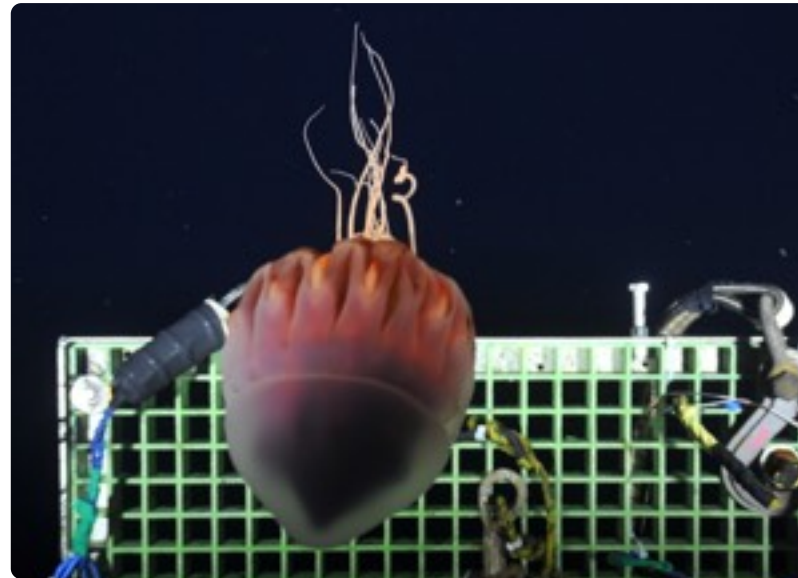


JELLYFISH



Jellyfish
Poralia rufescens

Location Barkley Canyon
Depth 985 metres
Date 14 July 2011
Image ID 41-1
Confidence ●●●
Comments ● ●



Helmet jellyfish
Periphylla periphylla

Location Cascadia Basin
Depth 2162 metres
Date 5 July 2011
Image ID 42-1
Confidence ●○○
Comments ● ● ●



Big red
Tiburonia granrojo

Location Clayoquot Slope
Depth 1255 metres
Date 12 July 2011
Image ID 43-1
Confidence ●●●
Comments ● ●

JELLYFISH



Jellyfish
Atolla sp.

Location Endeavour
Depth 1979 metres
Date 15 June 2012
Image ID 44-1
Confidence ●●●
Comments

● ● ● ●



Jellyfish
Chromatonema sp. and *Modeeria* sp.

Location Endeavour
Depth 2130 metres
Date 17 June 2012
Image ID 45
Confidence ○○○
Comments

The red one is *Chromatonema* sp. and the orange one is *Modeeria* sp.



Jellyfish
Botrycnema brucei (possibly *Haliscera bigelowi*)

Location Endeavour
Depth 1963 metres
Date 7 October 2010
Image ID 46
Confidence ●○○
Comments

A better picture is needed to be able to identify the species, but it is possibly *Haliscera bigelowi*.

JELLYFISH



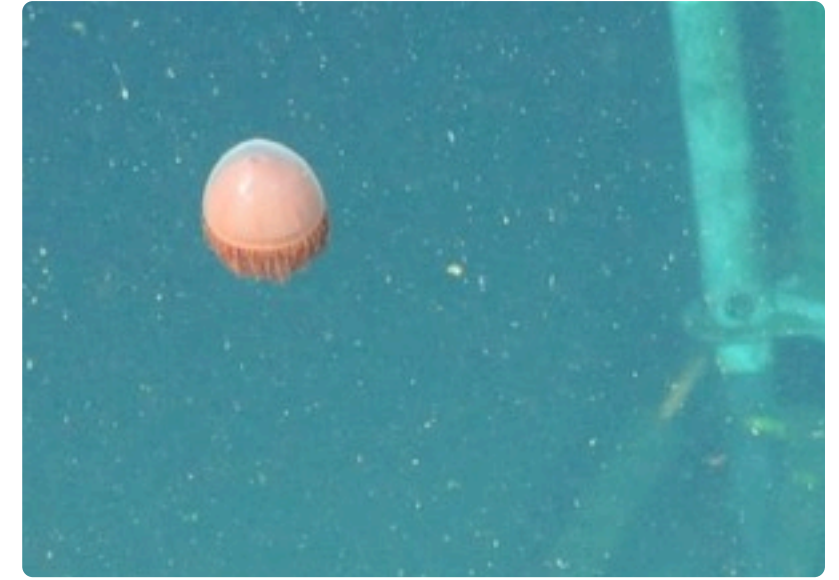
Dinner plate jellyfish
Solmissus sp.

Location Barkley Canyon
Depth 1214 metres
Date 10 September 2013
Image ID 47-1
Confidence ●○○
Comments



Jellyfish
Aeginura sp.

Location Endeavour
Depth 1971 metres
Date 15 June 2012
Image ID 48-1
Confidence ●○○
Comments

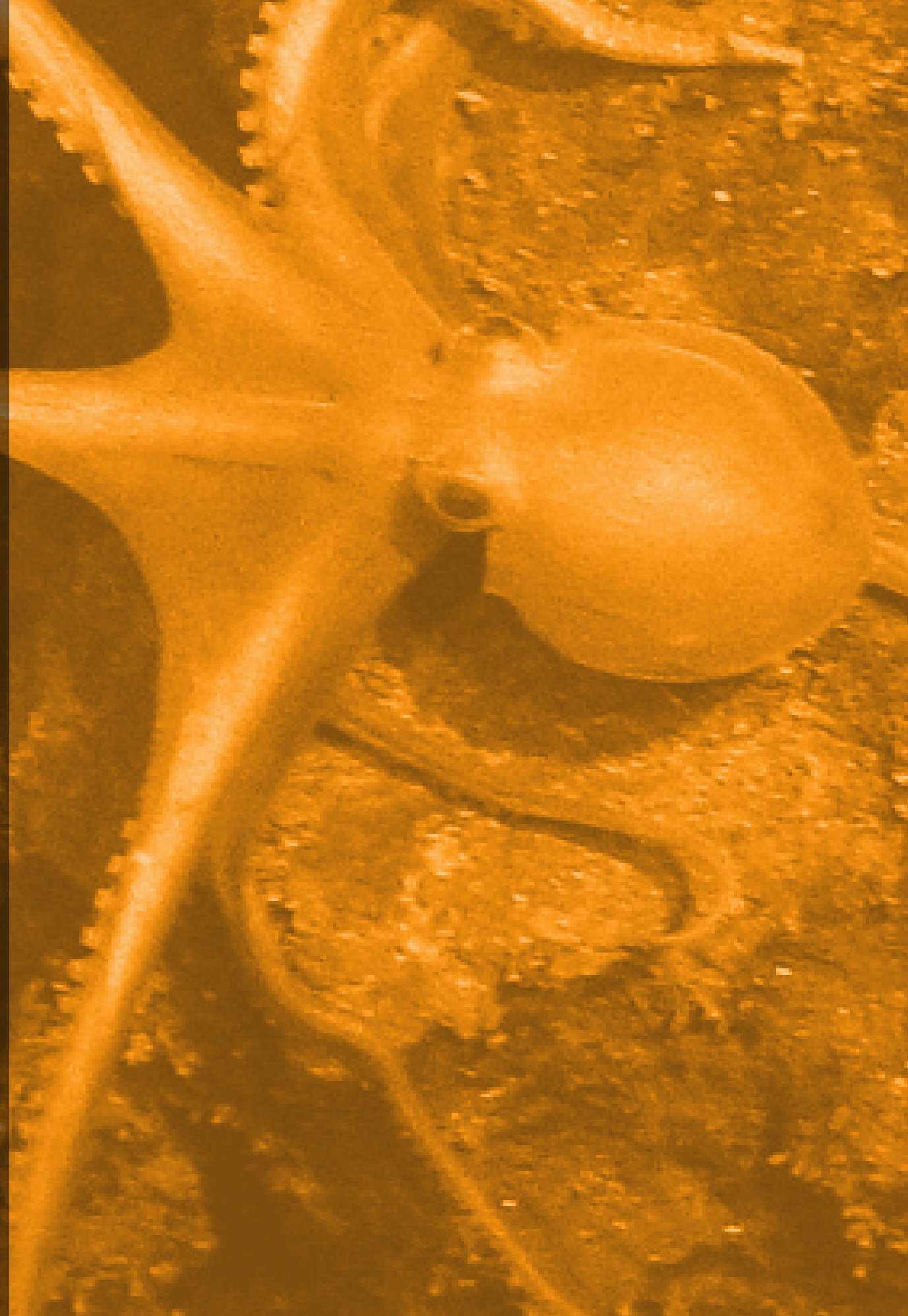


Jellyfish
Voragonema sp.

Location Barkley Canyon
Depth 402 metres
Date 23 July 2011
Image ID 49
Confidence ●○○
Comments

MOLLUSCS

The phylum Mollusca contains some of the most familiar invertebrates, including snails, slugs, clams, mussels, and octopuses. Molluscs have adapted to terrestrial, marine and freshwater habitats all over the globe, although most molluscs are marine. Nearly 100,000 mollusc species are known (excluding the large number of extinct species known only as fossils) and it is clear that many thousands of species of extant species remain undescribed. (Encyclopedia of Life, 2016)



GASTROPODS



Gastropods
Buccinum thermophilum

Location Endeavour
Depth 2273 metres
Date 21 July 2011
Image ID 82
Confidence ●●○

Comments
 A higher resolution image is required to identify this species.



Gastropod
Buccinum viridum

Location Barkley Canyon
Depth 987 metres
Date 2 June 2012
Image ID 84
Confidence ●●●

Comments
 This specimen was collected by ONC and identified by the Royal BC Museum.



Limpet
Lepetodrilus fucensis

Location Endeavour
Depth 2273 metres
Date 21 July 2011
Image ID 83
Confidence ●●●

Comments

OCTOPUSES



Octopus
Graneledone boreopacifica

Location Endeavour
Depth 2327 metres
Date 20 September 2010
Image ID 71-1
Confidence ●●●
Comments



Octopus
Benthoctopus canthylus

Location Endeavour
Depth 2313 metres
Date 6 August 2009
Image ID 72-1
Confidence ●●●
Comments



Giant Pacific octopus
Enteroctopus dofleini

Location Barkley Canyon
Depth 397 metres
Date 25 June 2012
Image ID 73-1
Confidence ●●●
Comments



OCTOPUSES



Flapjack octopus
Opisthoteuthis sp.

Location Barkley Canyon
Depth 885 metres
Date 10 September 2013
Image ID 74
Confidence ●●●
Comments



Flapjack octopus
Opisthoteuthis sp.

Location Endeavour
Depth 2090 metres
Date 23 May 2016
Image ID H1504
Confidence ●●●
Comments

SQUID



Squid
Gonatus sp.

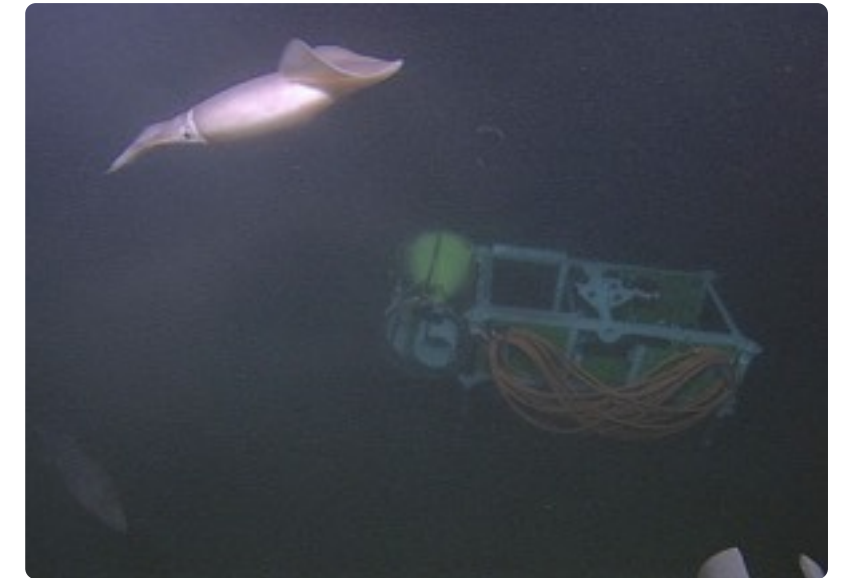
Location Endeavour
Depth 476 metres
Date 11 July 2011
Image ID 75-1
Confidence ●●○
Comments

● ●



Boreopacific armhook squid
Gonatopsis borealis

Location Endeavour
Depth 99 metres
Date 11 July 2011
Image ID 76
Confidence ●●●
Comments



Humboldt squid
Dosidicus gigas

Location Barkley Canyon
Depth 394 metres
Date 8 September 2009
Image ID 77
Confidence ●●○
Comments

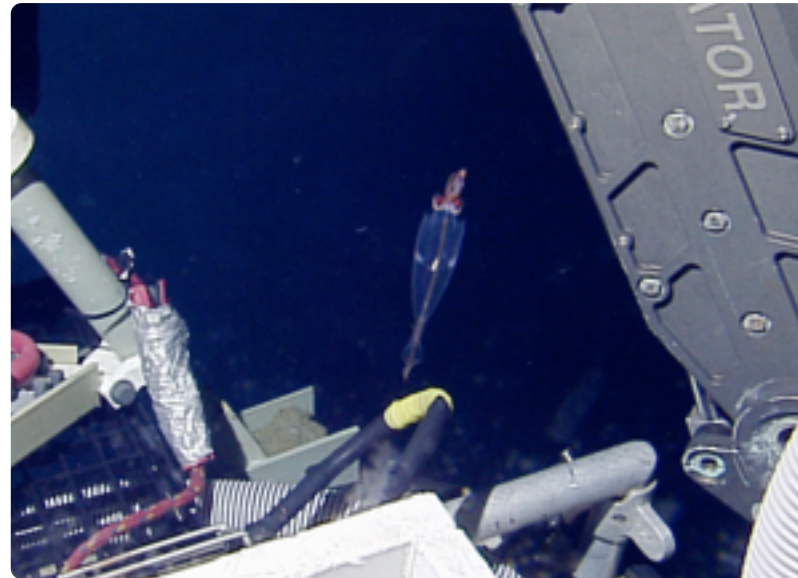
The Humboldt squid are not historically found in BC waters. In 2009, they were very abundant, migrating from equatorial waters to feed.

SQUID



Cockatoo squid
Galiteuthis phyllura

Location Clayoquot Slope
Depth 445 metres
Date 12 July 2011
Image ID 78
Confidence ●○○
Comments



Cockatoo squid
Galiteuthis phyllura

Location Clayoquot Slope
Depth 441 metres
Date 13 May 2016
Image ID H1493
Confidence ●○○
Comments



Squid
Gonatopsis sp.

Location Endeavour
Depth 521 metres
Date 13 June 2012
Image ID 80
Confidence ●○○
Comments

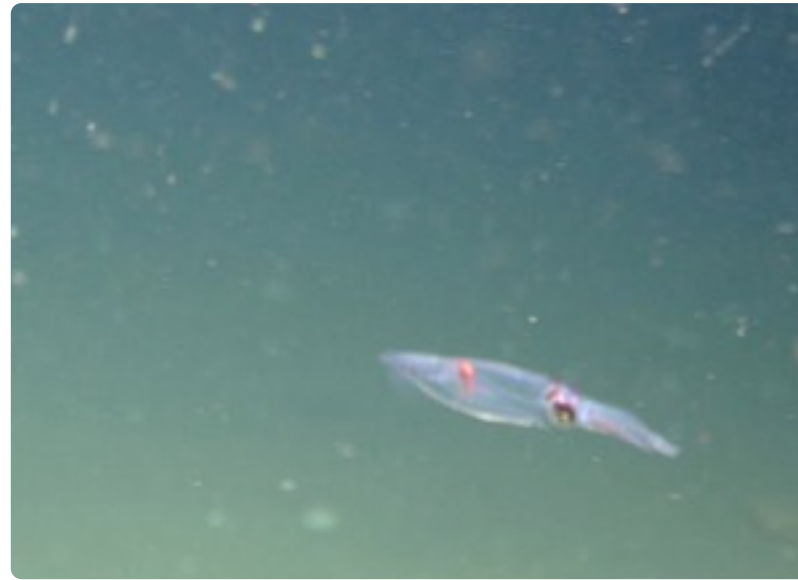
SQUID



Squid
Gonatus sp.



Location Barkley Canyon
Depth 371 metres
Date 31 May 2012
Image ID 81
Confidence ●●○
Comments

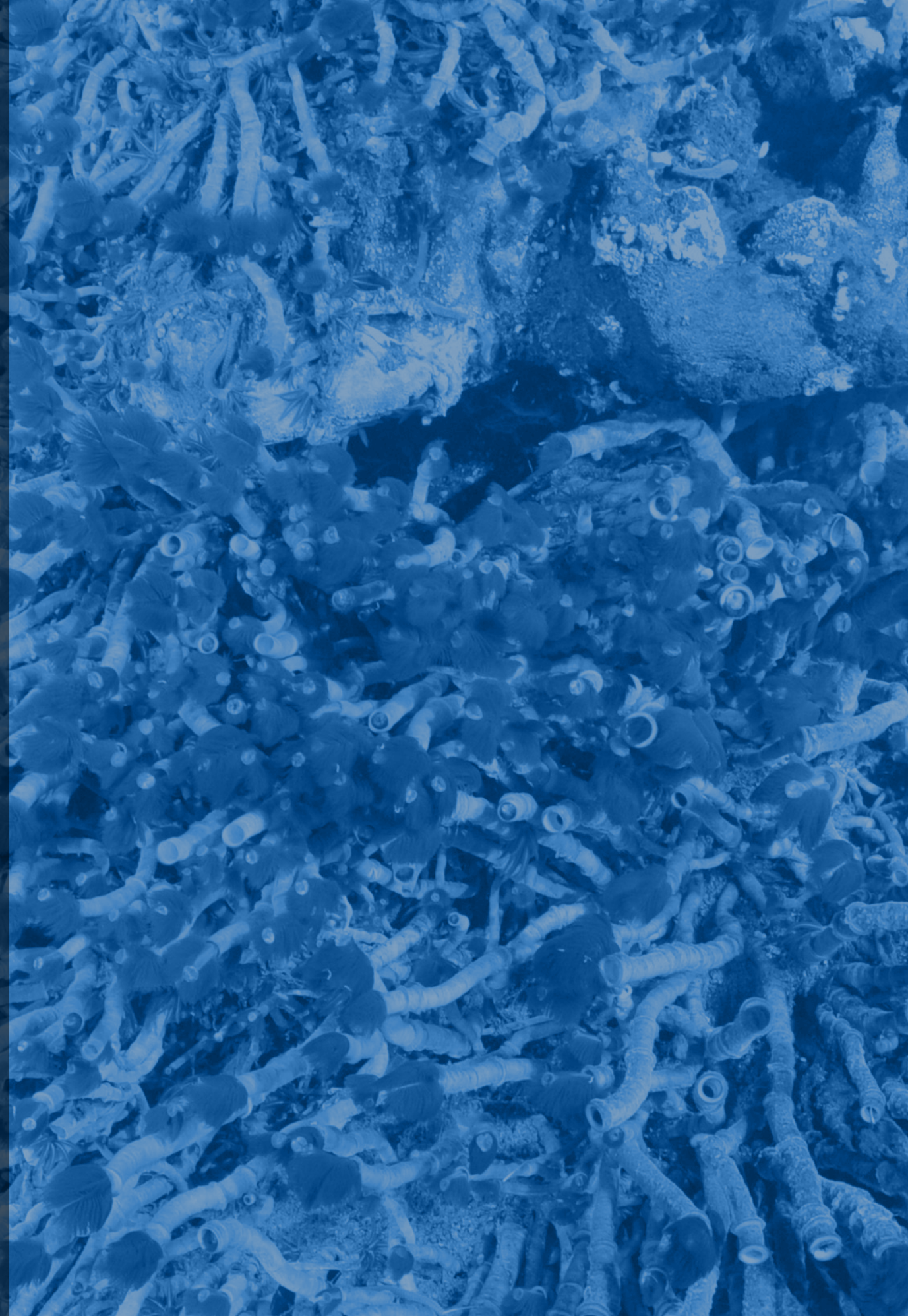


Gonathid squid

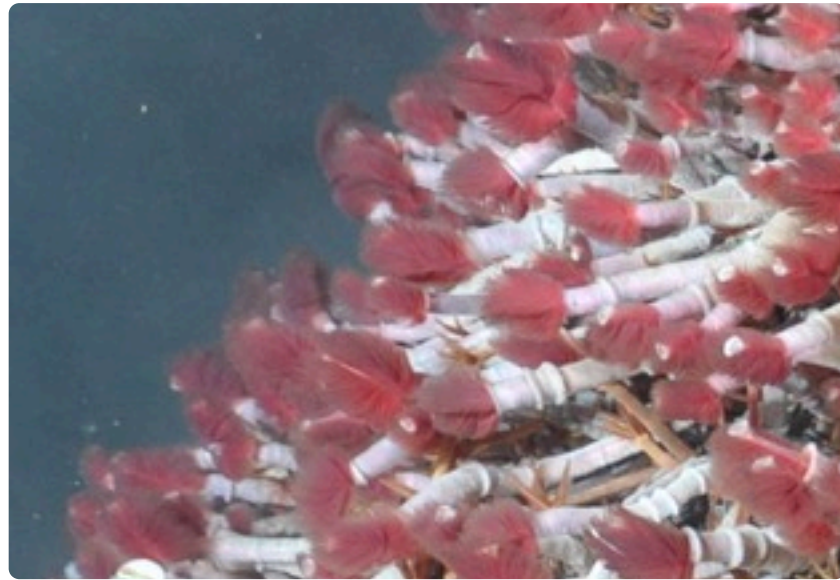
Location Barkley Canyon
Depth 396 metres
Date 30 May 2012
Image ID 79
Confidence ●●○
Comments

ANNELIDS

Annelida is a group commonly referred to as segmented worms. Polychaetes comprise the bulk of the diversity of Annelida and are found in nearly every marine habitat, from intertidal algal mats downwards. There are even pelagic polychaetes that swim or drift, preying on other plankton, and a few groups occurring in fresh water and moist terrestrial surroundings. (Encyclopedia of Life, 2016)

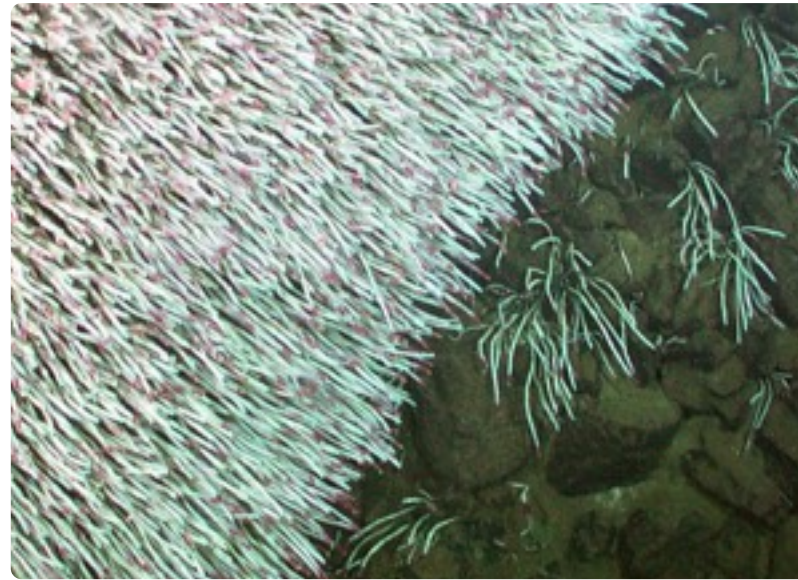


POLYCHAETES



Short fat tubeworms
Ridgeia piscesae

Location Endeavour
Depth 2132 metres
Date 23 July 2011
Image ID 139
Confidence ●●●
Comments



Long skinny tubeworms
Ridgeia piscesae

Location Endeavour
Depth 2164 metres
Date 19 September 2011
Image ID 140
Confidence ●●●
Comments



Polychaetes
Branchinotogluma tunicliffae

Location Endeavour
Depth 2273 metres
Date 21 July 2011
Image ID 141
Confidence ●●●
Comments

The pink scaled worms you see in this picture, *Branchinotogluma tunicliffae*, are named for Dr. Verena Tunicliffe who led a joint expedition that made the first observations of hydrothermal vent communities off the west coast of Canada.

POLYCHAETES



Tailed Pacific transparent worm
Tomopteris sp.

Location Endeavour
Depth 535 metres
Date 23 July 2011
Image ID 142
Confidence ●●○
Comments



Green bomber worm
Swima sp.

Location Endeavour
Depth 2146 metres
Date 12 September 2011
Image ID 144
Confidence ●●○
Comments



Unidentified scale worm

Location Endeavour
Depth 2146 metres
Date 12 September 2011
Image ID 143
Confidence ○○○
Comments

ARTHROPODS

Arthropods are bilaterally symmetrical (there is a left/right symmetry), their bodies are made up from a series of segments, and they have paired and usually jointed appendages on some or all of the body segments. The body is protected by a tough organic or organic-mineral cuticle which functions as an exoskeleton. In order to grow, arthropods periodically shed their cuticle by a process called ecdysis. (Encyclopedia of Life, 2016)



SEA SPIDERS



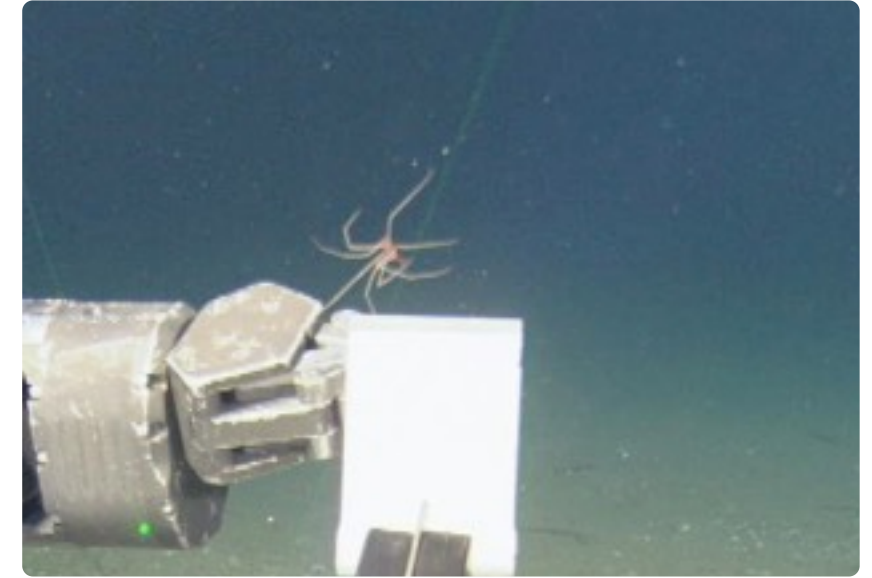
Sea spider
Sericosura verenae

Location Endeavour
Depth 2188 metres
Date 8 July 2011
Image ID 101
Confidence ●●●
Comments



Giant sea spider
Colossendeis colossea

Location Cascadia Basin
Depth 2644 metres
Date 7 June 2012
Image ID 102-1
Confidence ●●●
Comments
Colossendeis colossea has a seventh palp article elongate.



Unidentified sea spider

Location Cascadia Basin
Depth 2659 metres
Date 12 September 2011
Image ID 100
Confidence ○○○
Comments

Specimen is a member of the Pycnogonida.

SHRIMP



Shrimp
Pandalopsis sp.

Location Barkley Canyon
Depth 1770 metres
Date 13 August 2006
Image ID 94
Confidence ●●○
Comments

Species might be *Pandalopsis ampla*.



Shrimp
Pandalopsis sp.

Location Barkley Canyon
Depth 615 metres
Date 12 August 2006
Image ID 95
Confidence ●●○
Comments

Species might be *Pandalopsis dispar*. The shrimp are shown on a sponge.



Bigeye coastal shrimp
Heptacarpus sitchensis

Location Cascadia Basin
Depth 2660 metres
Date 24 June 2012
Image ID 98-1
Confidence ●●○
Comments

● ●

SHRIMP



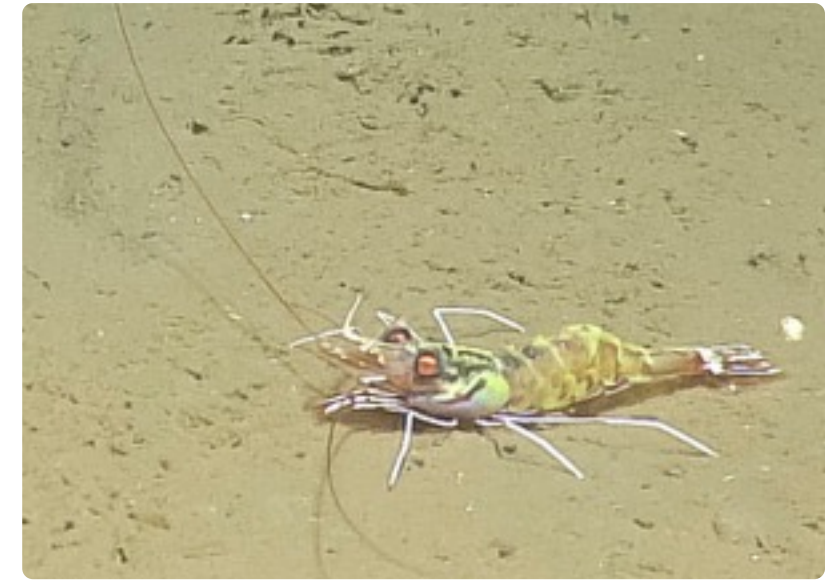
Unidentified shrimp

Location Cascadia Basin
Depth 2660 metres
Date 24 June 2012
Image ID 97
Confidence ○○○
Comments



Unidentified shrimp

Location Endeavour
Depth 1960 metres
Date 15 June 2012
Image ID 96
Confidence ○○○
Comments



Unidentified shrimp

Location Barkley Canyon
Depth 580 metres
Date 16 September 2013
Image ID 99
Confidence ○○○
Comments

CRABS



Shortspine king crab
Paralomis multispina

Location Clayoquot Slope
Depth 1259 metres
Date 12 July 2011
Image ID 85
Confidence ●●●
Comments

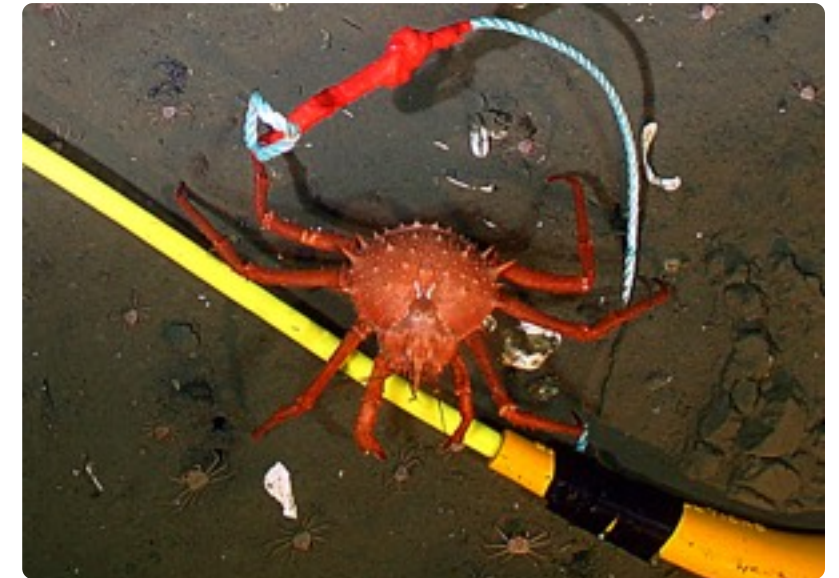
This species has three pairs of walking legs and regular sized spines on its carapace.



Abyssal king crab
Paralomis verrilli

Location Clayoquot Slope
Depth 1257 metres
Date 2 July 2011
Image ID 86
Confidence ●●○
Comments

Three pairs of walking legs. Specimen is shown on an instrument platform.

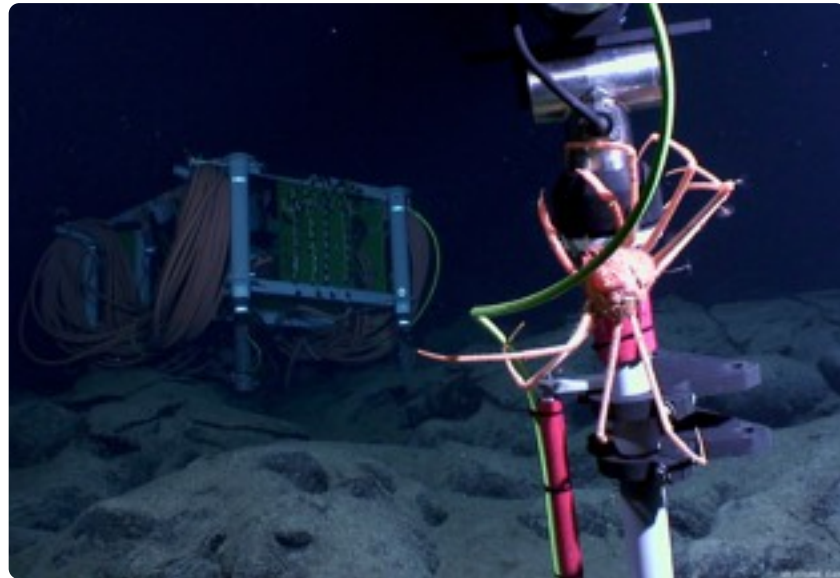


Scarlet king crab
Lithodes couesi

Location Barkley Canyon
Depth 873 metres
Date 27 August 2009
Image ID 87
Confidence ●●●
Comments

This species has three pairs of walking legs and irregular sized spines on its carapace (longer spines on the outside edge).

CRABS



Deep-sea spider crab
Macroregonia macrochira



Location Endeavour
Depth 2195 metres
Date 22 September 2010
Image ID 88
Confidence ●●○

Comments
 Four pairs of walking legs, which are long and slender (characteristic of all spider crabs). Specimen is on a deep-sea instrument.



Grooved tanner crab
Chionoecetes tanneri



Location Clayoquot Slope
Depth 1255 metres
Date 3 June 2012
Image ID 89-1
Confidence ●●●

Comments
 Four pairs of walking legs.



Unidentified hermit crab

Location Clayoquot Slope
Depth 1271 metres
Date 10 August 2006
Image ID 90
Confidence ○○○

Comments
 Specimen is a member of the Paguroidea.



CRABS



Squat lobster
Munidopsis quadrata

Location Barkley Canyon
Depth 987 metres
Date 2 June 2012
Image ID 92
Confidence ●●●
Comments

This specimen was collected by ONC and identified by the Royal BC Museum.



Unidentified squat lobster
(galatheid crab)

Location Endeavour
Depth 2323 metres
Date 17 June 2012
Image ID 91
Confidence ○○○
Comments



Unidentified squat lobster
(galatheid crab)

Location Endeavour
Depth 2119 metres
Date 26 September 2010
Image ID 93
Confidence ○○○
Comments

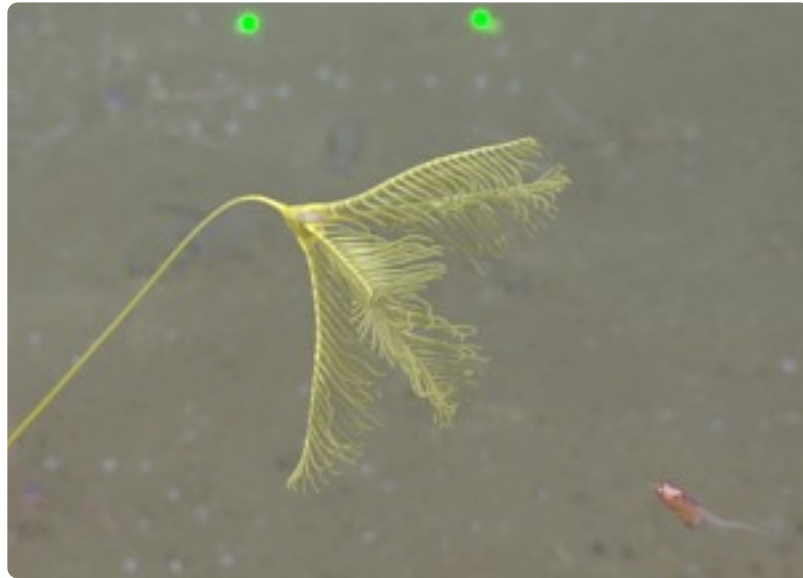
Chapter 8

ECHINODERMS

Echinodermata is an entirely marine taxon, occurring throughout the world's oceans and includes sea stars, brittle stars, sea urchins, sand dollars, sea cucumbers, and sea lilies. All of these animals are radially or biradially symmetric, and they fill a variety of niches in marine environments as particle feeders, browsers, scavengers, and predators. (Encyclopedia of Life, 2016)



CRINOIDS



Yellow stalked crinoid
Hyocrinus sp.

Location Endeavour
Depth 2323 metres
Date 10 July 2011
Image ID 122-1
Confidence ●●●

Comments

An alternative common name is sea lily. Specimen is a member of the Hyocrinidae.



Feather star
Psathyrometra fragilis

Location Barkley Canyon
Depth 896 metres
Date 2 June 2012
Image ID 123
Confidence ●●●

Comments

This specimen was collected by ONC and identified by the Royal BC Museum.



Unidentified feather star

Location Endeavour
Depth 2145 metres
Date 22 July 2011
Image ID 121-1
Confidence ○○○

Comments

Specimen is a member of the Antedonidae. Feather stars refer to the unstalked forms.



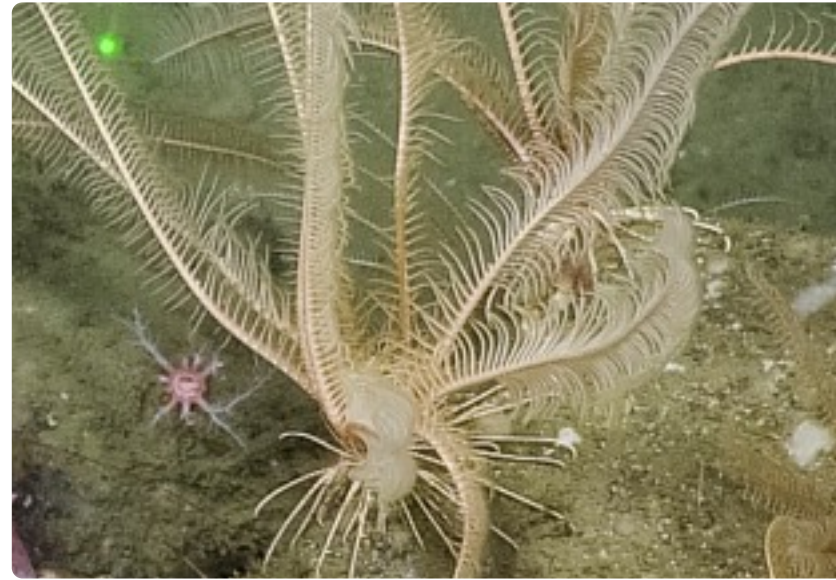
CRINOIDS



Unidentified feather star

Location Barkley Canyon
Depth 868 metres
Date 10 September 2013
Image ID 124
Confidence ○○○

Comments
Specimen is a member of the Antedonidae. Feather stars refer to the unstalked forms.



Unidentified feather star

Location Barkley Canyon
Depth 214 metres
Date 15 September 2013
Image ID 125
Confidence ○○○

Comments
Specimen is a member of the Antedonidae. Feather stars refer to the unstalked forms.

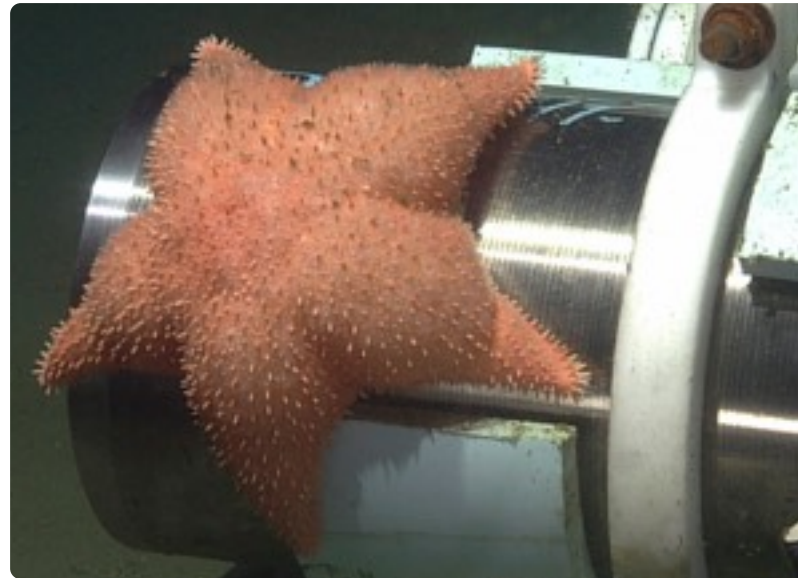
SEA STARS



Sea star
Nearchaster aciculosus

Location Barkley Canyon
Depth 872 metres
Date 20 July 2011
Image ID 103-1
Confidence ●●●
Comments

● ●



Pincushion star
Hippasteria sp.

Location Clayoquot Slope
Depth 1260 metres
Date 9 September 2013
Image ID 104-1
Confidence ●○○
Comments

● ● ●



Pincushion star
Hippasteria californica

Location Barkley Canyon
Depth 810 m
Date 9 September 2013
Image ID 105
Confidence ●●○
Comments

SEA STARS



Sea star
Hymenaster sp.

Location Cascadia Basin
Depth 2659 metres
Date 23 June 2012
Image ID 112
Confidence ●○○
Comments



Sea star
Pedicellaster sp. or *Tarsaster* sp.

Location Barkley Canyon
Depth 398 metres
Date 16 July 2011
Image ID 107
Confidence ●●○
Comments
Specimen is shown on a connector.



Sun star
Rathbunaster californicus

Location Barkley Canyon
Depth 397 metres
Date 12 July 2011
Image ID 108
Confidence ●●●
Comments

SEA STARS



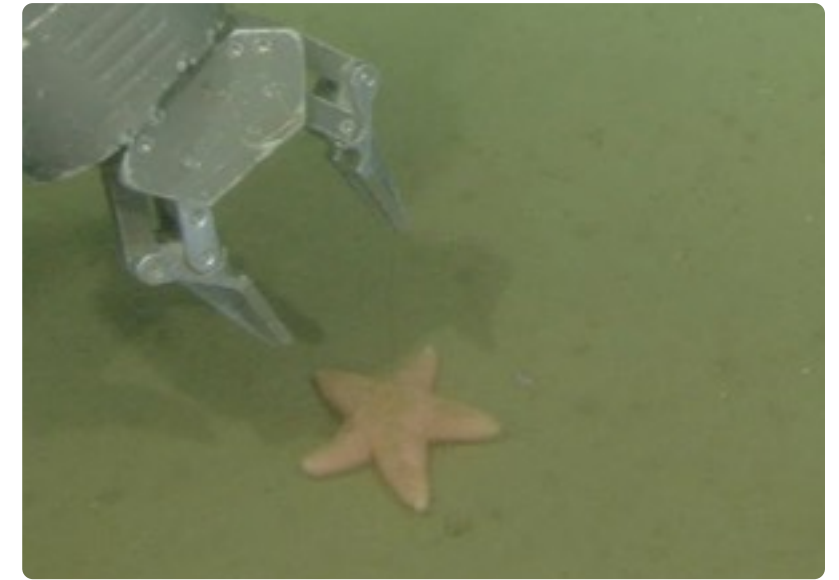
Sea star
Mediaster sp. (possibly *Ceramaster* sp.)

Location Endeavour
Depth 2290 metres
Date 20 July 2011
Image ID 109
Confidence ●○○
Comments



Sea star
Ampheraster sp.

Location Barkley Canyon
Depth 898 metres
Date 17 September 2011
Image ID 110
Confidence ●○○
Comments
 Specimen is on a deep-sea cable. Specimen is a member of the Pedicellasteridae.



Sea star
Pteraster trigonodon

Location Barkley Canyon
Depth 897 metres
Date 30 May 2012
Image ID 114
Confidence ●●●
Comments
 This specimen was collected by ONC and identified by the Royal BC Museum.

SEA STARS



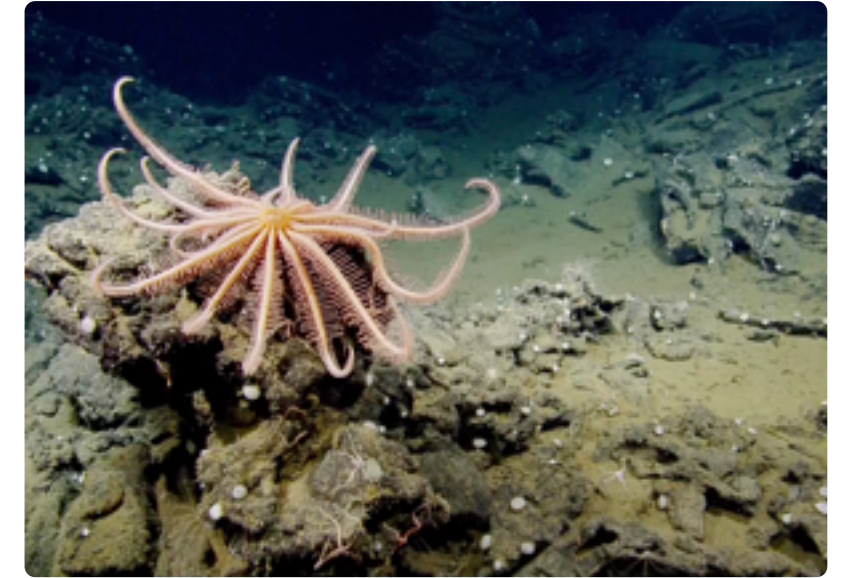
Sea star
Pedicellaster sp.

Location Barkley Canyon
Depth 397 metres
Date 25 June 2012
Image ID 115
Confidence ●●○
Comments



Brisingid sea star
Brisinga sp.

Location Endeavour
Depth 2158 metres
Date 23 July 2011
Image ID 116
Confidence ●●●
Comments



Brisingid sea star
Brisinga sp.

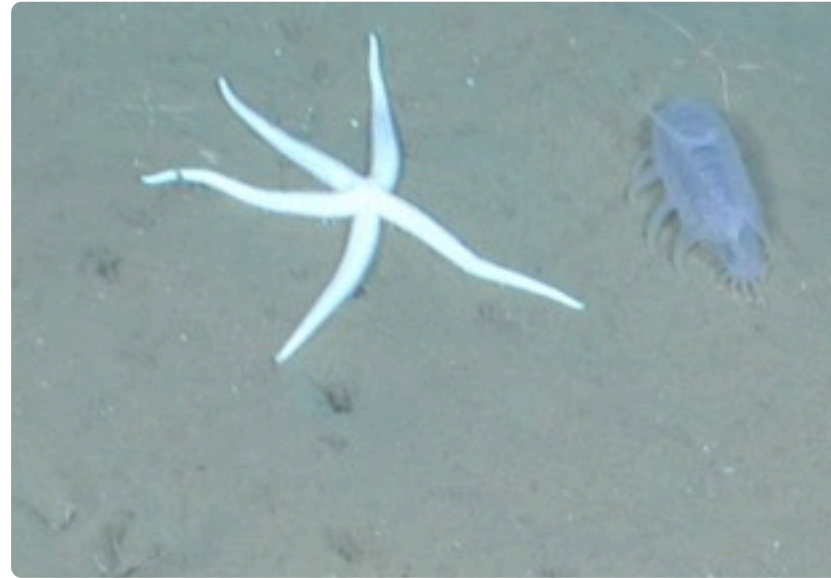
Location Endeavour
Depth 2150 metres
Date 23 May 2016
Image ID H1502-2
Confidence ●●●
Comments

SEA STARS



Sea star
Mediaster sp.

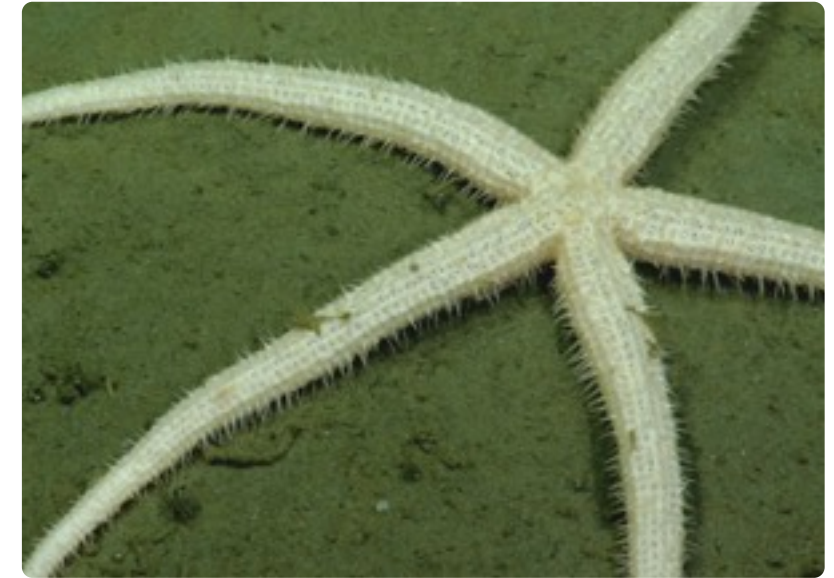
Location Endeavour
Depth 2221 metres
Date 14 June 2012
Image ID 113
Confidence ● ○ ○
Comments



Unidentified sea star

Location Clayoquot Slope
Depth 1295 metres
Date 12 July 2011
Image ID 106
Confidence ○ ○ ○
Comments

Specimen could be either a member of the Zoroasteridae or the Pedicellasteridae.



Unidentified sea star

Location Clayoquot Slope
Depth 1312 metres
Date 2 June 2012
Image ID 111-1
Confidence ○ ○ ○
Comments

● ●

BRITTLE STARS



Brittle star
Spinophiura jolliveti

Location Endeavour
Depth 2144 metres
Date 22 July 2011
Image ID 117
Confidence ●●○
Comments



Brittle star
Spinophiura jolliveti

Location Endeavour
Depth 2149 metres
Date 20 September 2010
Image ID 118
Confidence ●●○
Comments



Brittle star
Asteronyx sp.

Location Clayoquot Slope
Depth 1253 metres
Date 3 June 2012
Image ID 119-1
Confidence ●●●
Comments

The brittle star has climbed up this sea pen, a feeding strategy to capture particles that drift past. Brittle star species might be *Asteronyx longifissus* or *Asteronyx loveni*.

BRITTLE STARS



Unidentified brittle star

Location	Endeavour
Depth	2228 metres
Date	14 June 2012
Image ID	120
Confidence	○○○
Comments	

SEA URCHINS



Sea urchin
Tromikosoma sp. or *Sperosoma* sp.

Location Endeavour
Depth 2324 metres
Date 10 July 2011
Image ID 126-1
Confidence ●○○

Comments
Specimen is a member of the Echinothurioida.



Sea urchin
Tromikosoma sp. or possibly *Sperosoma* sp.

Location Endeavour
Depth 2229 metres
Date 21 July 2011
Image ID 127
Confidence ●○○

Comments
Specimen is a member of the Echinothurioida.



Fragile pink urchin
Strongylocentrotus fragilis

Location Barkley Canyon
Depth 169 metres
Date 14 September 2013
Image ID 128-1
Confidence ●●●

Comments



SEA CUCUMBERS



Sea pig
Scotoplanes globosa

Location Endeavour
Depth 2322 metres
Date 13 September 2011
Image ID 129
Confidence ●●●
Comments



Holothurian
Peniagone sp. or Amperima sp.

Location Endeavour
Depth 2322 metres
Date 13 September 2011
Image ID 130-1
Confidence ●●○
Comments



Holothurian
Peniagone sp. or Amperima sp.

Location Endeavour
Depth 2195 metres
Date 29 September 2011
Image ID 131
Confidence ●●○
Comments

SEA CUCUMBERS



Deep-sea cucumber
Pannychia moseleyi

Location Barkley Canyon
Depth 1997 metres
Date 13 September 2013
Image ID 132-1
Confidence ●●●
Comments ● ●



Sea cucumber
Psychropotes longicauda

Location Cascadia Basin
Depth 2658 metres
Date 24 June 2012
Image ID 135-1
Confidence ●○○
Comments ● ●



Sea cucumber
Paelopatides sp.

Location Cascadia Basin
Depth 2640 metres
Date 7 June 2012
Image ID 136-1
Confidence ●●○
Comments ● ●



SEA CUCUMBERS



Giant orange sea cucumber
Apostichopus leukothele

Location Barkley Canyon
Depth 198 metres
Date 14 September 2013
Image ID 138
Confidence ●●○
Comments



Unidentified sea cucumber

Location Endeavour
Depth 2322 metres
Date 10 July 2011
Image ID 133
Confidence ○○○
Comments



Unidentified sea cucumber

Location Cascadia Basin
Depth 2659 metres
Date 8 June 2012
Image ID 137
Confidence ○○○
Comments

SEA CUCUMBERS



Unidentified sea cucumber

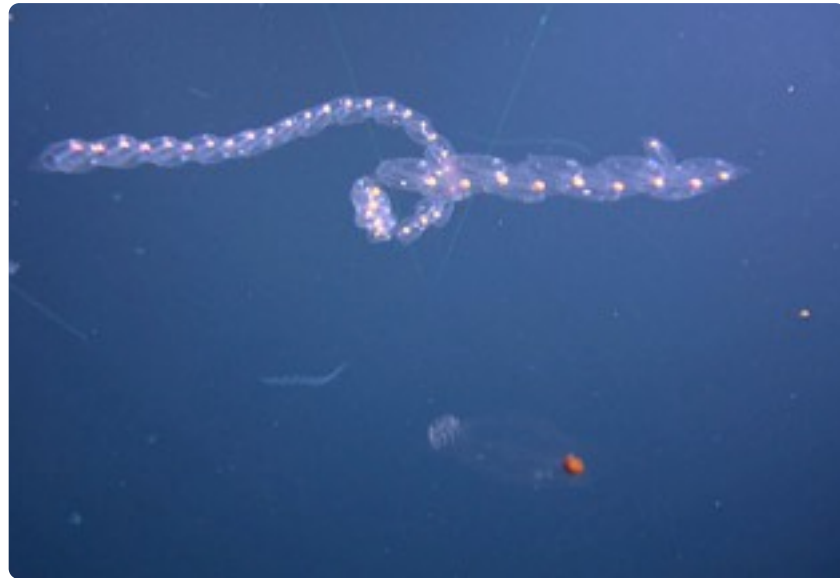
Location	Cascadia Basin
Depth	2659 metres
Date	12 September 2011
Image ID	134
Confidence	○○○
Comments	

CHORDATES

The phylum Chordata includes the well-known vertebrates (fishes, amphibians, reptiles, birds, and mammals). Vertebrates and hagfishes together comprise the taxon Craniata. The remaining chordates are the tunicates, lancelets, and, possibly, some odd extinct groups. With few exceptions, chordates are active animals with bilaterally symmetric bodies that are longitudinally differentiated into head, trunk, and tail. The most distinctive morphological features are the notochord, nerve cord, and visceral clefts and arches. (Encyclopedia of Life, 2016)



TUNICATES



Unidentified tunicates (salps)

Location Clayoquot Slope
Depth 80 metres
Date 12 July 2011
Image ID 145
Confidence ○○○
Comments

Although salps appear similar to gelatinous animals such as cnidarians and ctenophores because of their simple body form and planktonic behavior, they are structurally most closely related to vertebrates, animals with true backbones.



Unidentified tunicates (salps)

Location Barkley Canyon
Depth 30 metres
Date 16 September 2010
Image ID 146
Confidence ○○○
Comments



Unidentified tunicates (salps)

Location Endeavour
Depth Unknown
Date 14 June 2012
Image ID 147
Confidence ○○○
Comments

HAGFISH



Hagfish
Eptatretus sp.

Location Barkley Canyon
Depth 859 metres
Date 11 September 2013
Image ID 174-1
Confidence ●●●

Comments
Species might be *Eptatretus stoutii*. Long slender bodies like a snake. Can be attached to fish. Often found curled in a ball. Very common in Barkley Canyon.

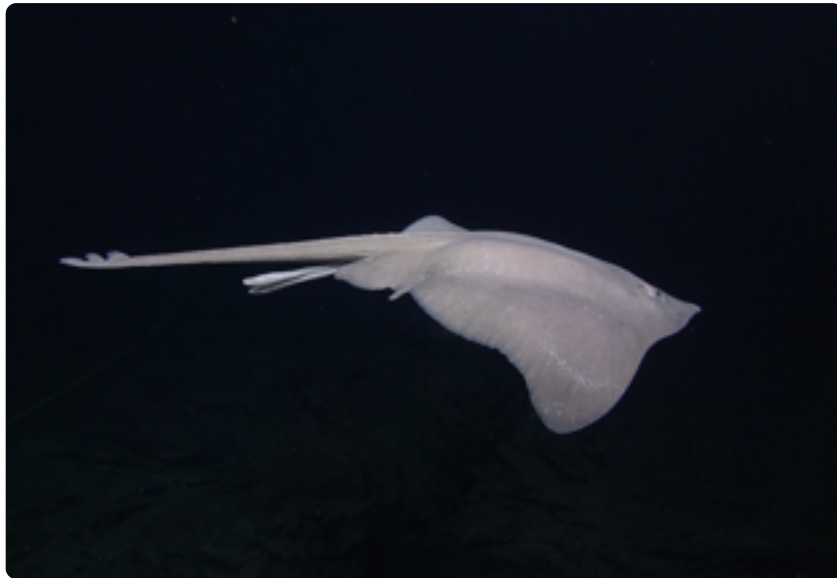


Hagfish
Eptatretus sp.

Location Barkley Canyon
Depth 401 metres
Date 12 July 2011
Image ID 175
Confidence ●●●

Comments
Long slender bodies like a snake. Can be attached to fish. Often found curled in a ball. Very common in Barkley Canyon.

SKATES



Deep sea skate
Bathyraja abyssicola

Location Endeavour
Depth 2189 metres
Date 10 July 2011
Image ID 165
Confidence ●●●
Comments

Three spines mid dorsal.



Aleutian skate
Bathyraja aleutica

Location Barkley Canyon
Depth 399 metres
Date 13 July 2011
Image ID 166
Confidence ●○○
Comments

Broad nose (not pointy). It might be a sandpaper skate (*Bathyraja interrupta*) which would have a rough surface like sandpaper (sharp scales).



Longnose skate
Raja rhina

Location Barkley Canyon
Depth 396 metres
Date 30 May 2012
Image ID 167-1
Confidence ●●●
Comments

Usually two distinct black dots on back, Long pointy snout, ventral side grey. Very common everywhere.



SKATES



Roughtail skate
Bathyraja trachura

Location Barkley Canyon
Depth 983 metres
Date 17 May 2010
Image ID 168
Confidence ●●○

Comments
 Broad nose (not pointy like the longnose skate). Sharp scales on surface. Dorsal spines all the way down mid dorsal line.



Broad skate
Amblyraja badia

Location Endeavour
Depth 2127 metres
Date 15 June 2012
Image ID 169
Confidence ●○○

Comments
 A similar image is available in the Davidson Seamount Taxonomic Guide from the Office of National Marine Sanctuaries.



SHARKS



Pacific spiny dogfish
Squalus suckleyi



Location Barkley Canyon
Depth 126 metres
Date 2 June 2012
Image ID 192-1
Confidence ●●○

Comments

Two dorsal fins each with one spine on leading edge.
No anal fin.



BUTTERFISH



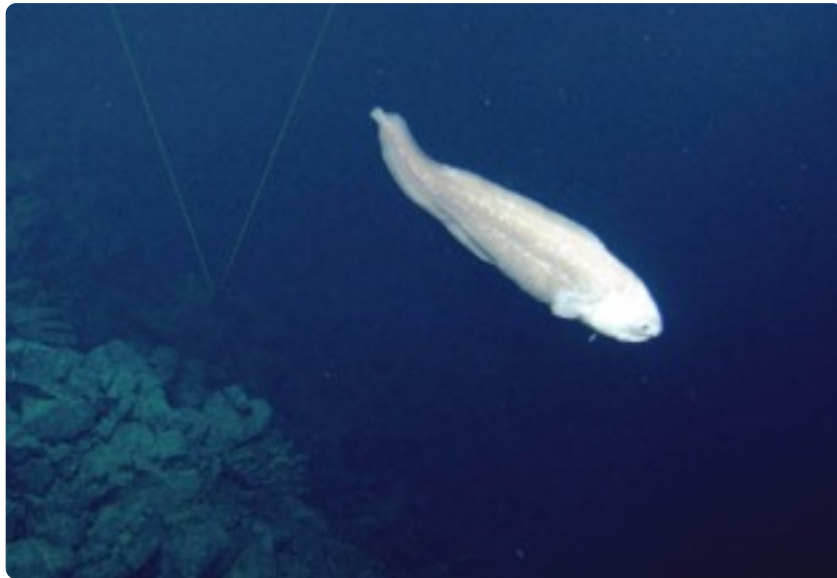
Pacific pompano
Peprilus simillimus

Location Endeavour
Depth 60 metres
Date 25 September 2011
Image ID 176
Confidence ●●○

Comments

Shaped like a tuna. Caudal fin deeply forked. Very compressed body. Long low dorsal and anal fins.

CUSK-EELS

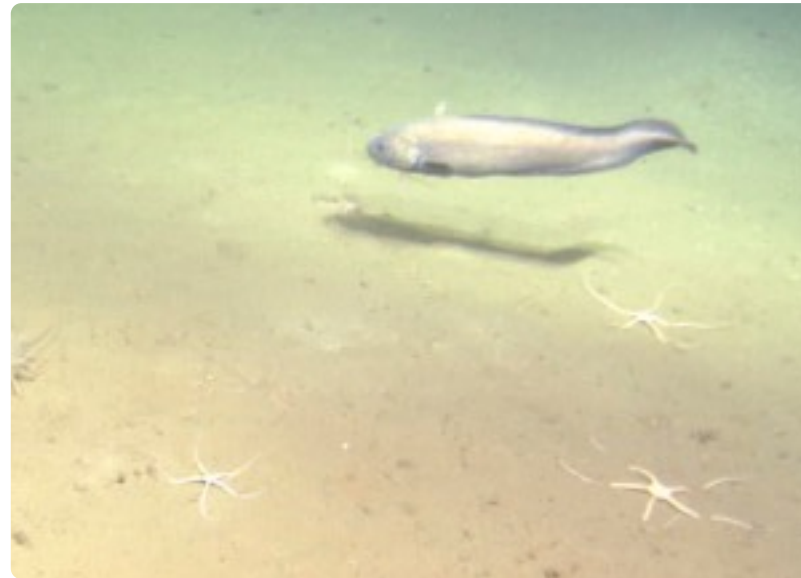


Unidentified cusk-eel



Location Endeavour
Depth 2275 metres
Date 14 June 2012
Image ID 180
Confidence ○○○

Comments
Specimen is a member of the Ophidioidei.



Unidentified cusk-eel

Location Endeavour
Depth 2321 metres
Date 21 June 2012
Image ID 181
Confidence ○○○

Comments
Specimen is a member of the Ophidioidei.



Unidentified cusk-eel

Location Endeavour
Depth Unknown
Date Unknown
Image ID 182
Confidence ○○○

Comments
Specimen is a member of the Ophidioidei.

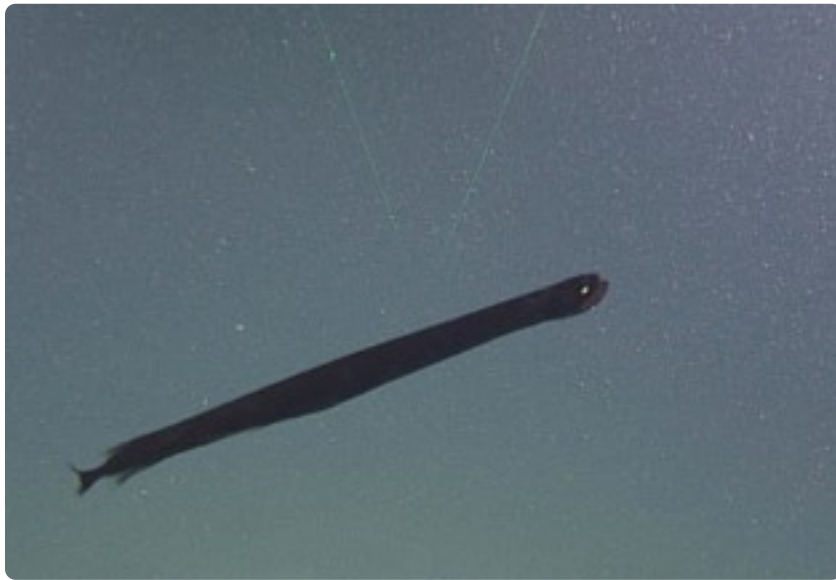
CUSK-EELS



Pudgy cusk-eel
Spectrunculus grandis

Location	Endeavour
Depth	2329 metres
Date	23 May 2016
Image ID	H1504-1
Confidence	● ● ●
Comments	

DRAGONFISH



Longfin dragonfish
Tactostoma macropus



Location Barkley Canyon
Depth 578 metres
Date 16 September 2013
Image ID 149
Confidence ●●○

Comments

This species has photophores, or light organs, under its eyes.

EELPOUTS



Eelpout
Lycenchelys sp.

Location Barkley Canyon
Depth 864 metres
Date 12 September 2013
Image ID 184-1
Confidence ●○○
Comments

● ●



Eelpout
Lycenchelys sp.

Location Barkley Canyon
Depth 890 metres
Date 25 June 2012
Image ID 185-1
Confidence ●○○
Comments

● ●



Eelpout
Pachycara gymninium

Location Endeavour
Depth 2273 metres
Date 21 July 2011
Image ID 186
Confidence ●●○
Comments

EELPOUTS



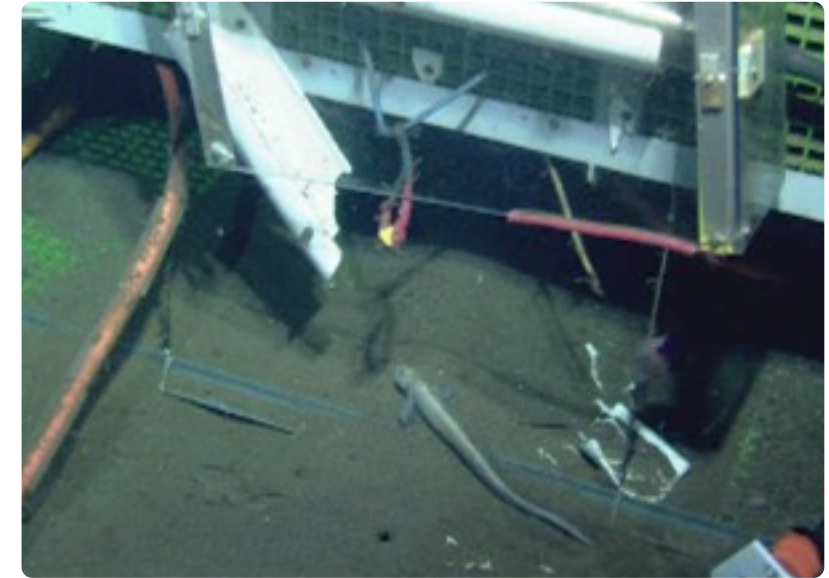
Bigfin eelpout
Lycodes cortezianus

Location Barkley Canyon
Depth 213 metres
Date 15 September 2013
Image ID 190
Confidence ●○○
Comments



Unidentified eelpout

Location Clayoquot Slope
Depth 1289 metres
Date 3 June 2012
Image ID 188
Confidence ○○○
Comments



Unidentified eelpout

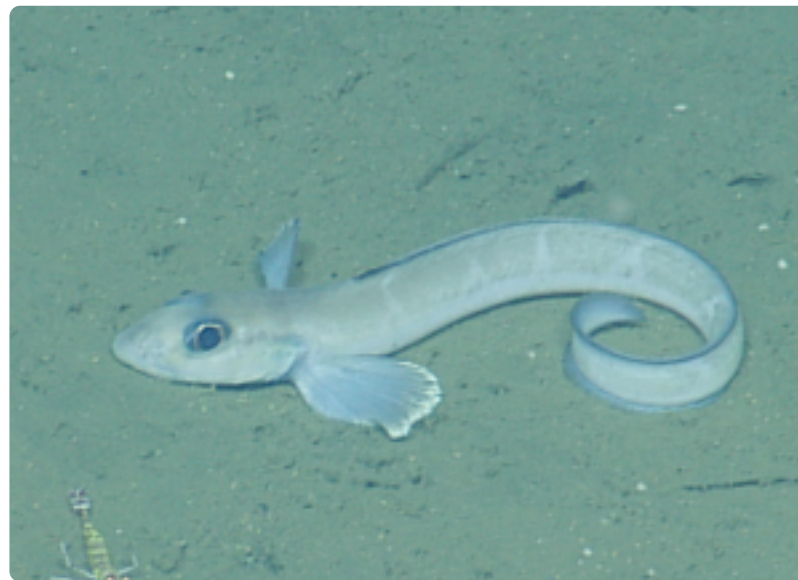
Location Cascadia Basin
Depth 2659 metres
Date 6 June 2012
Image ID 189
Confidence ○○○
Comments

EELPOUTS



Unidentified eelpout

Location Endeavour
Depth Unknown
Date 15 June 2012
Image ID 187
Confidence ○○○
Comments



Unidentified eelpout

Location Barkley Canyon
Depth 656 metres
Date 15 May 2016
Image ID H1498
Confidence ○○○
Comments
Good view of head shape and fin positioning.

LANTERNFISH

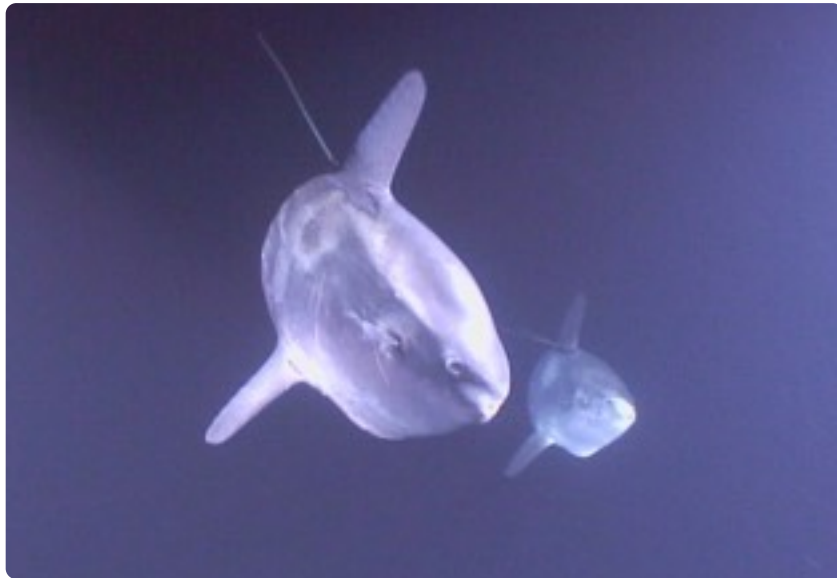


Unidentified lanternfish

Location Barkley Canyon
Depth 614 metres
Date 10 September 2013
Image ID 148
Confidence ○○○
Comments

Specimen is a member of the Myctophidae.

MOLAS



Ocean sunfish
Mola mola



Location Endeavour
Depth 21 metres
Date 2 October 2011
Image ID 191
Confidence ●●●

Comments

Very large fish, with an average length of 1.8 metres (this example is a juvenile). At the surface, these fish lay horizontally. Dorsal and ventral fins are far back on the body.

MORID CODS



Pacific flatnose
Antimora microlepis

Location Barkley Canyon
Depth 1728 metres
Date 13 August 2006
Image ID 164
Confidence ●●●

Comments

First segment of dorsal fin is long, the rest of the dorsal fin extends to the end of the body. Slender caudal peduncle.

POACHERS



Blackfin poacher
Bathyagonus nigripinnis

Location Barkley Canyon
Depth 396 metres
Date 18 July 2011
Image ID 183-1
Confidence ●●○

Comments

Black fins (caudal, pectoral, and dorsal). Scales are replaced by spine-bearing plates. Body length up to 20 cm. Large eyes.



RATTAILS (GRENADIERS)



Roughscale rattail or Pacific grenadier
Coryphaenoides acrolepis

Location Clayoquot Slope
Depth 1254 metres
Date 6 September 2009
Image ID 158-1
Confidence ●●●
Comments

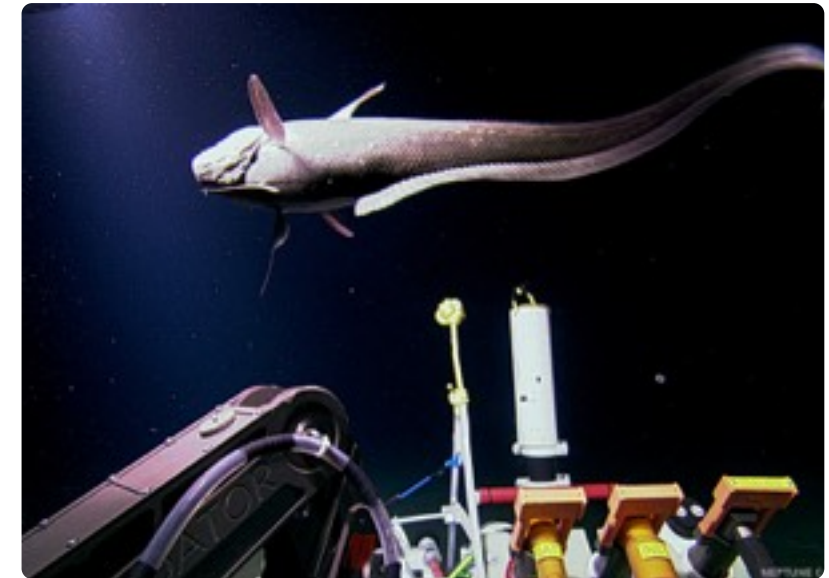
Long, thin tail that comes to a point. Dorsal and anal fins extend the length of tail. Barbel present on chin. Species is very common at deep locations.

● ●



Bearded rattail
Coryphaenoides liocephalus

Location Cascadia Basin
Depth 2658 metres
Date 22 June 2012
Image ID 160
Confidence ●○○
Comments



Rattail
Coryphaenoides sp.

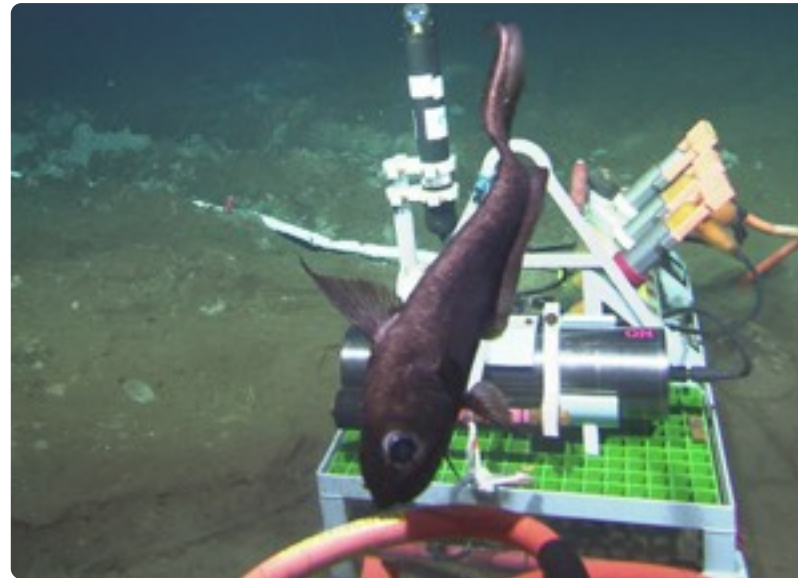
Location Cascadia Basin
Depth 2660 metres
Date 14 September 2009
Image ID 159
Confidence ●●●
Comments

RATTAILS (GRENADIERS)



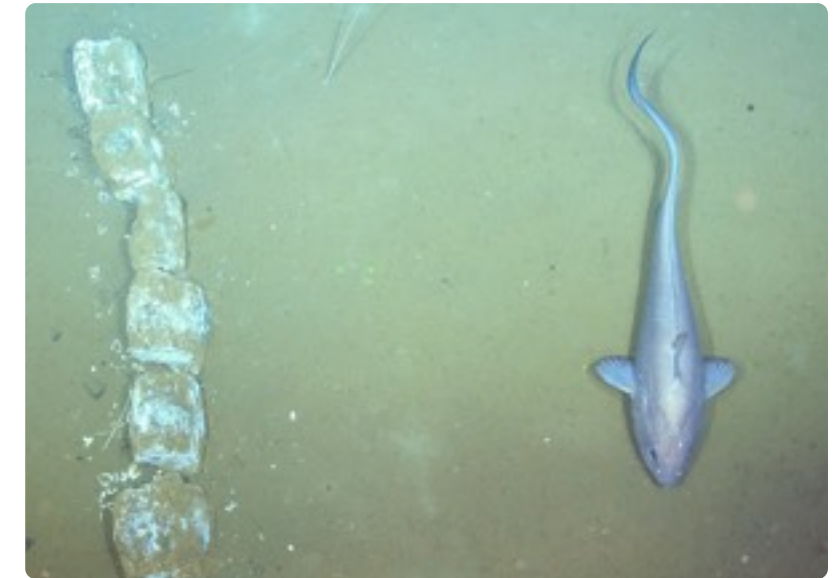
Rattail
Coryphaenoides sp.

Location Cascadia Basin
Depth 2637 metres
Date 7 June 2012
Image ID 161
Confidence ●●●
Comments



Rattail
Coryphaenoides sp.

Location Cascadia Basin
Depth 2659 metres
Date 22 June 2012
Image ID 162
Confidence ●●●
Comments



Rattail
Coryphaenoides sp.

Location Clayoquot Slope
Depth 1285 metres
Date 3 June 2012
Image ID 163
Confidence ●●●
Comments

RIGHTEYE FLOUNDERS



Deep-sea sole
Embassichthys bathybius

Location Barkley Canyon
Depth 873 metres
Date 17 September 2011
Image ID 170-1
Confidence ●●●
Comments

Very round body, short caudal peduncle. Middle section of body is very compressed and creates distinct lines on dorsal and ventral sides. Large eyes. Body is usually a dark purple colour with lots of spots.



Dover sole
Microstomus pacificus

Location Barkley Canyon
Depth 396 metres
Date 13 July 2011
Image ID 171-1
Confidence ●●●
Comments

More slender body than deep sea sole. Very "puffy" eyes. Body can be many different colours. They are slimy, if you ever get to hold one. Fairly common.



Pacific halibut
Hippoglossus stenolepis

Location Barkley Canyon
Depth 397 metres
Date 14 September 2010
Image ID 172-1
Confidence ●●●
Comments

Very thick body (can get very large, more than 45 kg). Double crescent shape to tail. Ventral side is white. Fairly common.



RIGHTEYE FLOUNDERS



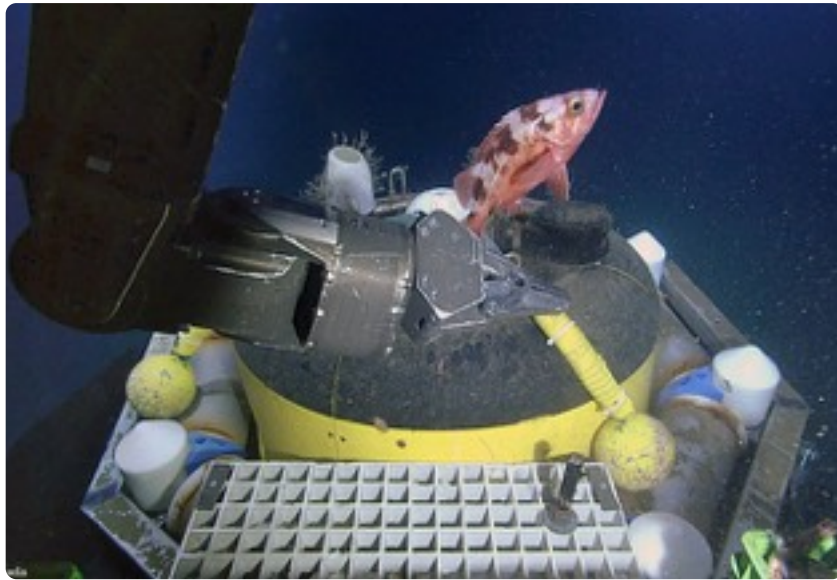
Rex sole
Glyptocephalus zachirus

Location Barkley Canyon
Depth 396 metres
Date 12 July 2011
Image ID 173
Confidence ●●●

Comments

Slender body. Pectoral fin is long and wispy (like a witch's hat).

ROCKFISH



Darkblotched rockfish
Sebastes crameri

Location Barkley Canyon
Depth 390 metres
Date 14 May 2010
Image ID 151
Confidence ●●●
Comments

Large dark blotches on the dorsal side, the middle body blotch making an H. Deep bodied. Large schools at Barkley Upper slope are mainly darkblotched.



Pacific ocean perch
Sebastes alutus

Location Barkley Canyon
Depth 393 metres
Date 12 July 2011
Image ID 152
Confidence ●●●
Comments

Large downward facing symphyseal knob (knob on lower jaw), slender bodied, indent on head in between eyes.

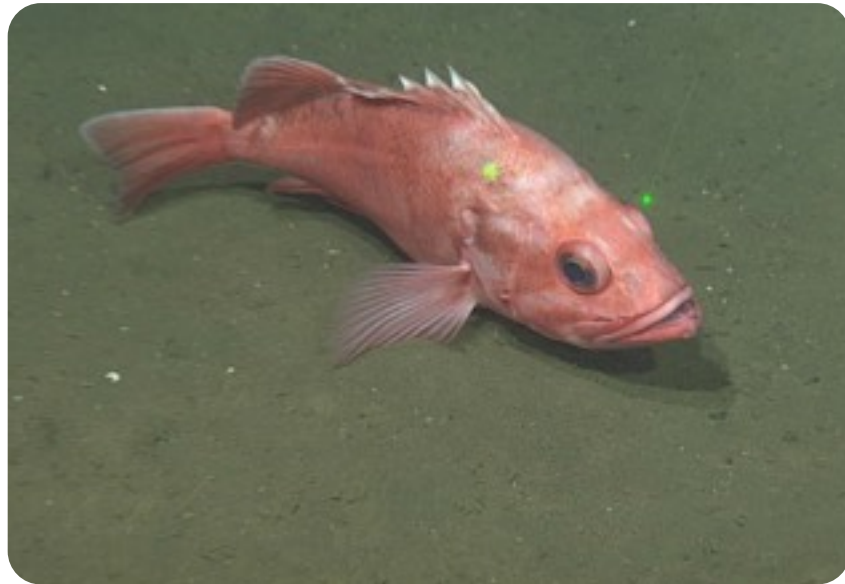


Blackgill rockfish
Sebastes melanostomus

Location Barkley Canyon
Depth 400 metres
Date 14 May 2010
Image ID 153
Confidence ●○○
Comments

Specimen is on a deep-sea instrument.

ROCKFISH



Blackspotted rockfish
Sebastes melanostictus

Location Barkley Canyon
Depth 394 metres
Date 12 July 2011
Image ID 154
Confidence ●●○
Comments



Blackspotted rockfish
Sebastes melanostictus

Location Barkley Canyon
Depth 394 metres
Date 15 September 2013
Image ID 157
Confidence ●●○
Comments



Thornyhead
Sebastes sp.

Location Clayoquot Slope
Depth 1259 metres
Date 12 July 2011
Image ID 155
Confidence ●●●
Comments

Head is 1/3 body size. Thornyheads are usually found lying on seafloor, and are common in deep waters. Specimen might be a longspine thornyhead: longspines only get up to about 20 cm long and there is one long dorsal fin spine.

ROCKFISH



Shortspine thornyhead

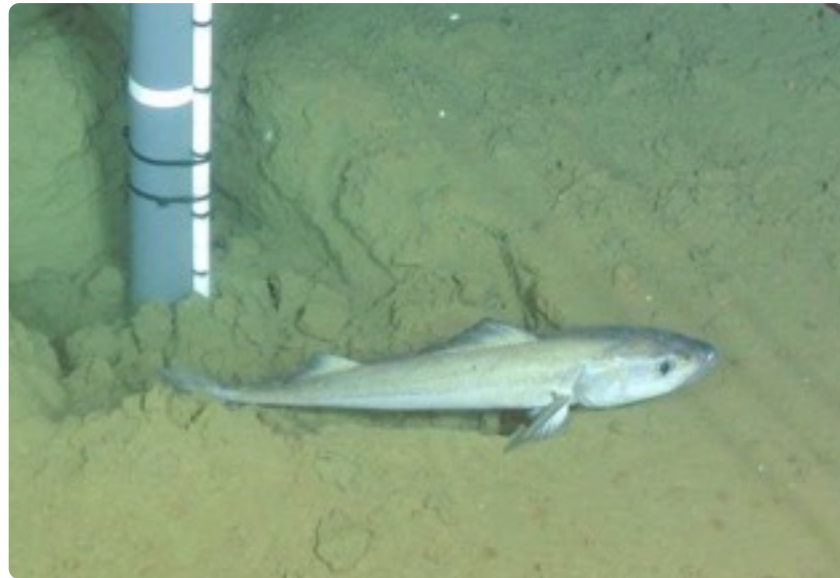
Sebastolobus alascanus

Location Barkley Canyon
Depth 862 metres
Date 31 May 2012
Image ID 156
Confidence ●●●

Comments

Bright red with some black on fins. The 3rd spine not much longer than 2nd.

SABLEFISH



Sablefish
Anoplopoma fimbria

Location Barkley Canyon
Depth 892 metres
Date 20 September 2011
Image ID 150-1
Confidence ●●●
Comments

Two dorsal fins, broad round head, grey, common.



Sablefish
Anoplopoma fimbria

Location Barkley Canyon
Depth 892 metres
Date 14 July 2011
Image ID 150-2
Confidence ●●●
Comments

Two dorsal fins, broad round head, grey, common.

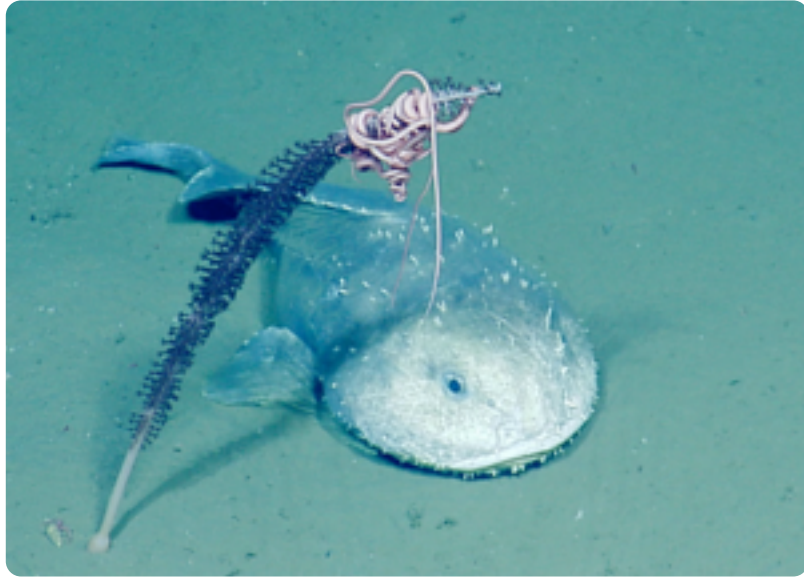


Sablefish
Anoplopoma fimbria

Location Barkley Canyon
Depth 396 metres
Date 30 May 2012
Image ID 150-3
Confidence ●●●
Comments

Two dorsal fins, broad round head, grey, common.

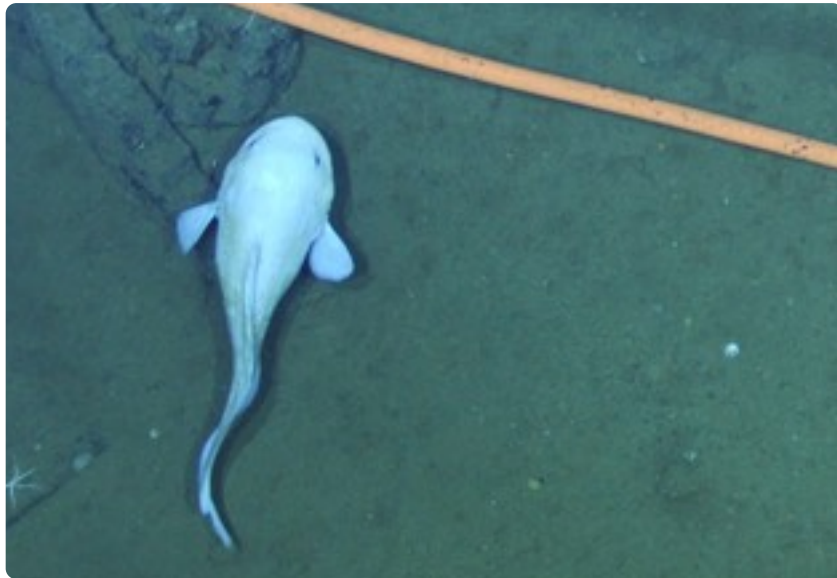
SCULPINS



Blob sculpin
Psychrolutes phrictus

Location	Clayoquot Slope
Depth	1255 metres
Date	18 May 2016
Image ID	H1502
Confidence	●●○
Comments	

SNAILFISH

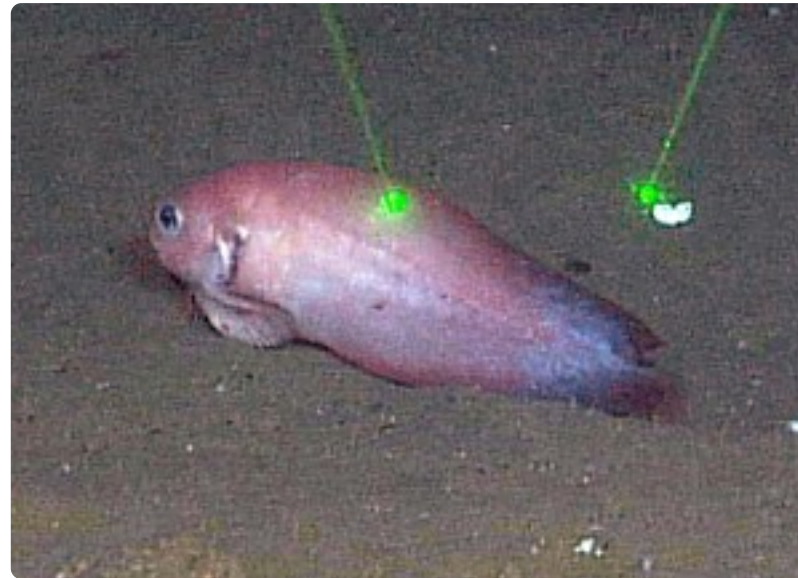


Abyssal snailfish
Careproctus ovigerus

Location Endeavour
Depth 2155 metres
Date 16 June 2012
Image ID 177-1
Confidence ●●○
Comments

Easily recognizable with a distinct body shape.

● ●



Blacktail snailfish
Careproctus melanurus

Location Barkley Canyon
Depth 385 metres
Date 13 July 2011
Image ID 178
Confidence ●●●
Comments

Pink with black tail. "Flabby" looking fish, with very broad pectoral fins.



Unidentified snailfish

Location Cascadia Basin
Depth 2660 metres
Date 23 June 2012
Image ID 179
Confidence ○○○
Comments

CETACEANS



Pacific white-sided dolphin
Lagenorhynchus obliquidens

Location Barkley Canyon
Depth 21 metres
Date 27 August 2009
Image ID 193
Confidence ●●●
Comments

Chapter 10

OTHER

This section presents other phyla or interesting deep-sea observations.

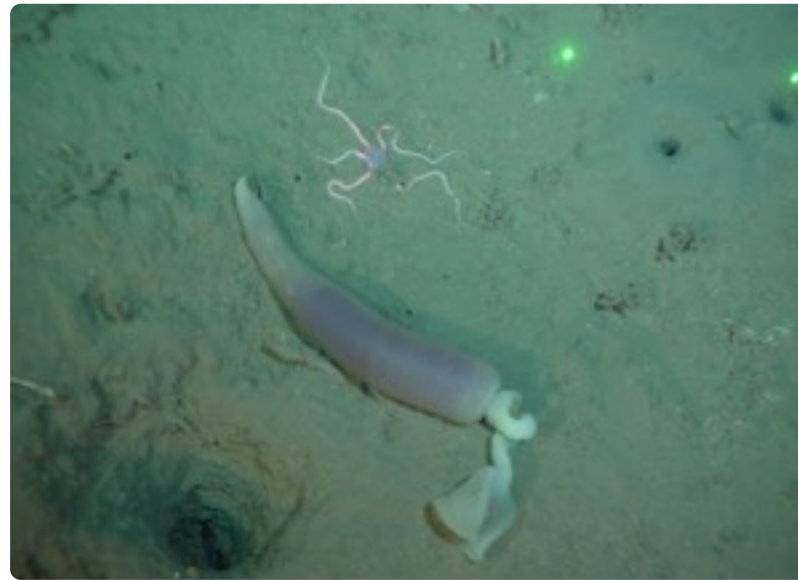




Unidentified acorn worm

Location Endeavour
Depth 2206 metres
Date 7 October 2010
Image ID 194
Confidence ●●●
Comments

Specimen is a member of the Torquaratoridae.



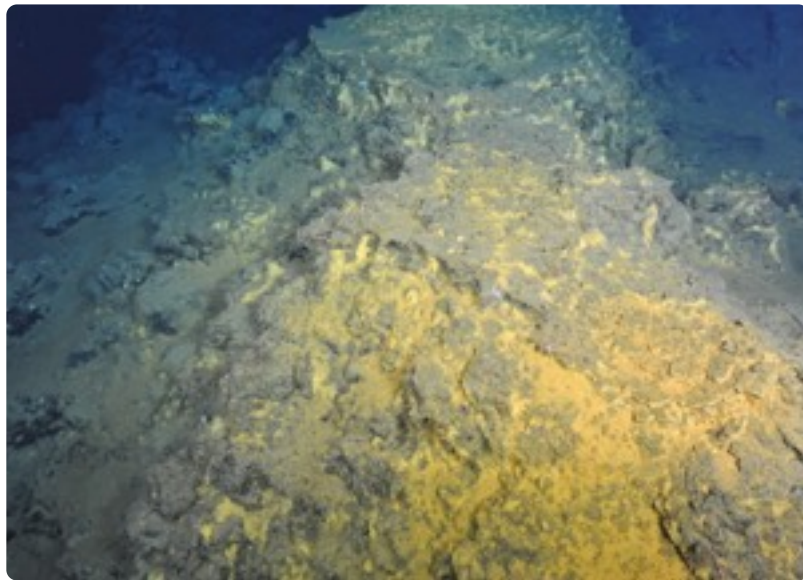
Pink spoon worm
Arhynchite pugettensis

Location Barkley Canyon
Depth 1775 metres
Date 13 August 2006
Image ID 195
Confidence ●●○
Comments



Bacterial mat

Location Endeavour
Depth 2196 metres
Date 29 September 2011
Image ID 196
Confidence ●●●
Comments

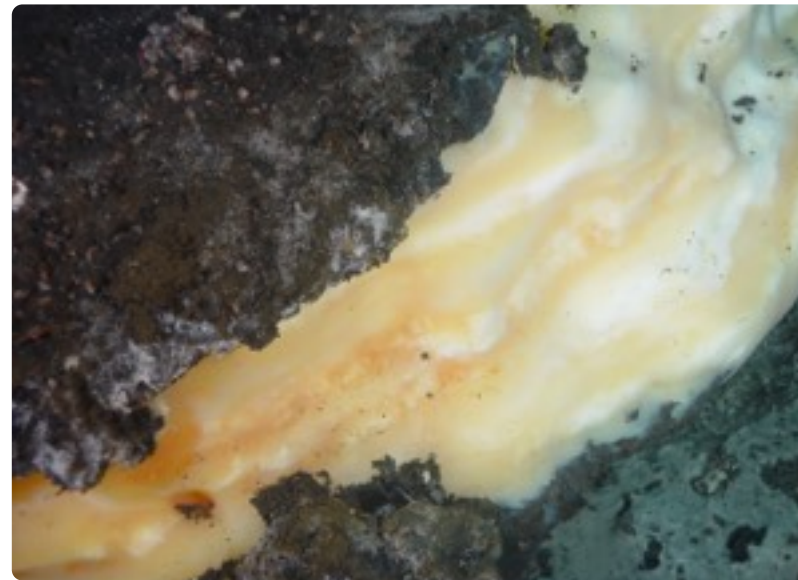


Sulphides

Location Endeavour
Depth 2161 metres
Date 23 July 2011
Image ID 197
Confidence ●●○

Comments

Sulphides originate at hot vents in the ocean where sulphide-enriched water flows out of the seabed, cools, and precipitates sulphide particles which sink to the seafloor.



Methane hydrates

Location Barkley Canyon
Depth 862 metres
Date 9 August 2006
Image ID 198
Confidence ●●●

Comments

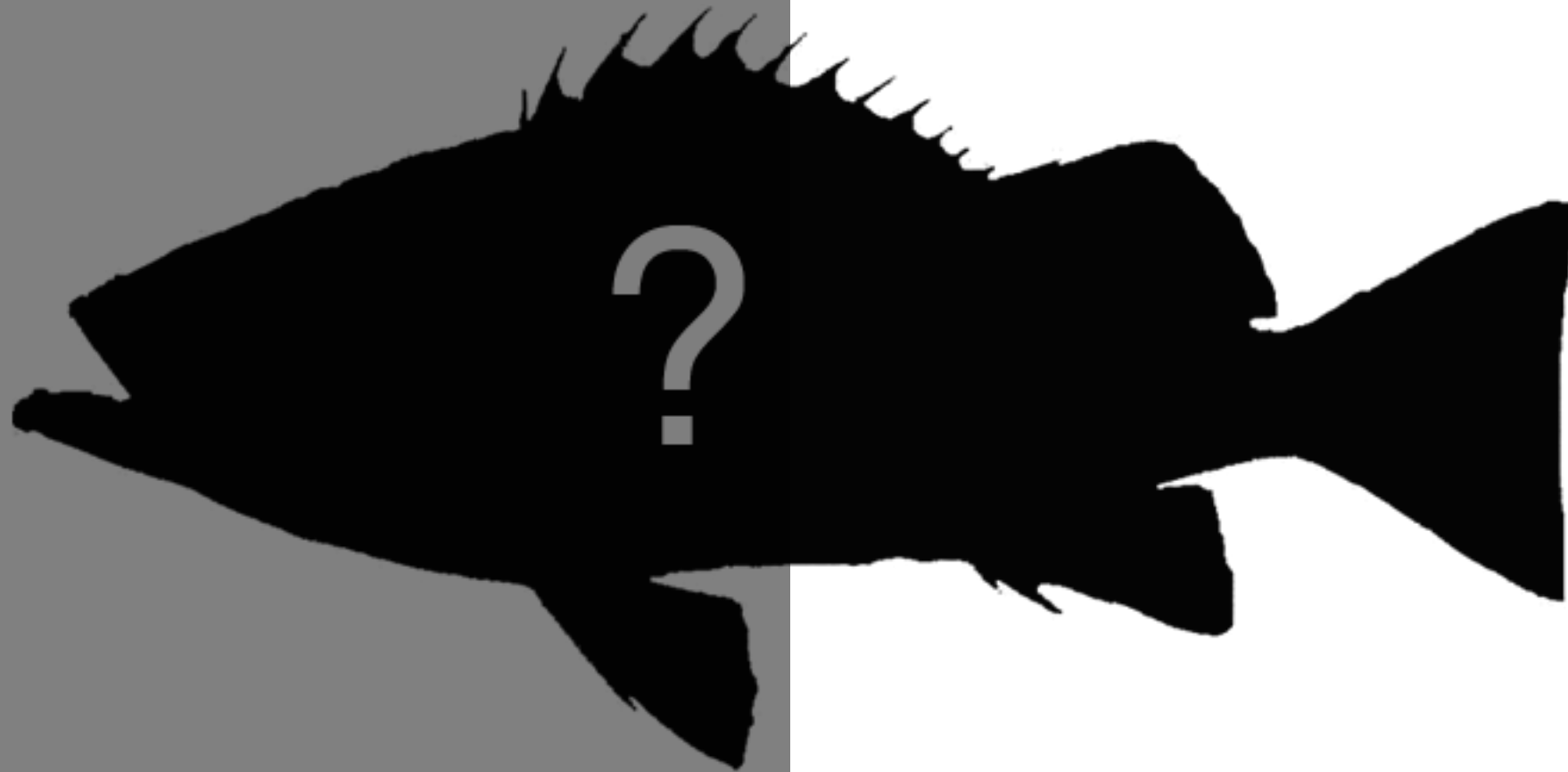
Methane hydrates are comprised of methane gas molecules trapped within cages of water molecules. This gives them a crystalline structure resembling ice. They can appear white to yellow in seafloor mounds and in layers beneath the seafloor.

HYDROTHERMAL VENT ORGANISMS

Tap on text boxes to zoom.

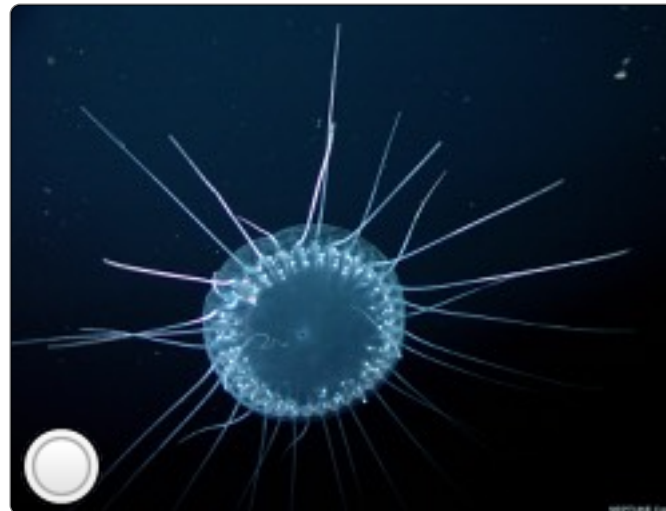
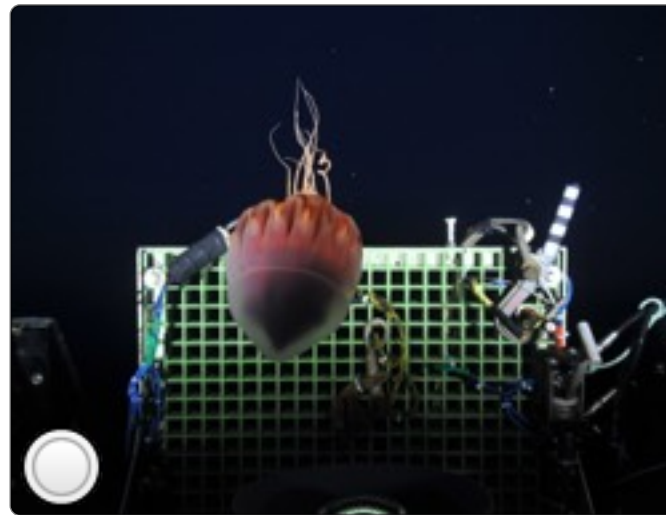


QUIZ



Question 1 of 5

Which one is not a jellyfish?



Check Answer



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