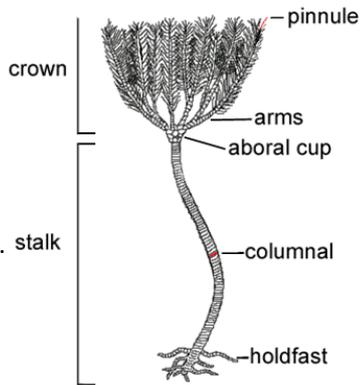


FOSSILS FOUND IN SOUTH WALES CAVES

The caves of south wales have numerous fossils in them. Most are not easily identifiable as they are distorted or just small fragments. This handout aims to help identify and explain what is found and what the living animal looked like. Some of the fossils are of totally extinct creatures, others have relatives living today. Other fossils are found but are less common.

CRINOIDS

Crinoids are distantly related to starfish. They are commonly called sea lillies but they are not flowers. A few still exist today. The columnal sections are the parts that we often see in caves.



A Living example



In Bagshaw Cavern

GASTROPODS

Gastropods the snails, slugs, whelks, limpets and similar. They live in a multitude of environments. Usually with just one shell which is quite often spiral. The fossil on the right is made of quartz which has replaced the shell of gastropod and is a cross section through the spiral shell.



In Porth yr Ogof

NAUTILOIDS

Nautiloids were straight, conical molluscs. They are the ancestors of modern day squids. The siphuncle is a tube that runs the entire length of the shell, through each of the chambers. This tube had two functions. Once filled with water, the nautiloid could force the water out, propelling itself backward with a kind of jet propulsion. By releasing the water and leaving air space, the tube could serve as a buoyancy device allowing the animal to rise and lower itself to different depths. Later they became coiled resembling ammonites.



Polished fossil above with a living example below



TREES

Siambru Ddu cave near Blaenavon is unusual because it is on the Grit/Limestone boundary. There are numerous tree fossils preserved in this cave the largest are about two metres long.



BRACHIOPODS

AND

BIVALVES

Brachiopods and bivalves are often confused and often impossible to tell apart if the fossil is just fragments of the living creature. Brachiopod shells are each symmetrical about the midline but they are most often not equal to each other. In contrast bivalves are asymmetrical about the midline with each valve or shell. Brachiopods were very abundant in the Carboniferous seas. One characteristic unique to brachiopods is the pedicle. It is a long thin fleshy appendage. The pedicle is used to burrow into the sea floor as an anchor.



Living lingual brachiopod



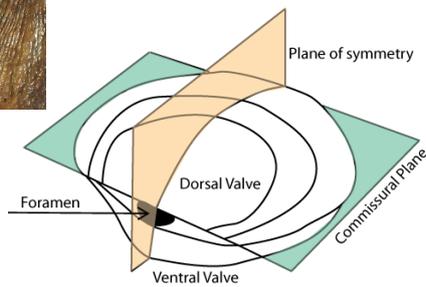
Living cockle bivalve



In Ogof Clogwyn



In Bridge Cave

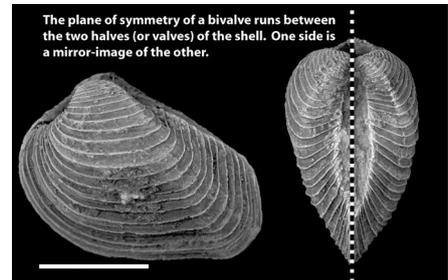


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In Honeymead Hole



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CORALS

Corals are simple animals. The polyp, the soft part of the coral, is surrounded by the hard external skeleton which is made from calcium carbonate and is the most likely part to be preserved as a fossil. Corals can be solitary or live in colonies. They can be attached to the sea bed or free living. They are still abundant today in warm shallow seas.



In Llygad Llchwyr



In Pwll Dwfn



In Ogof Clogwyn