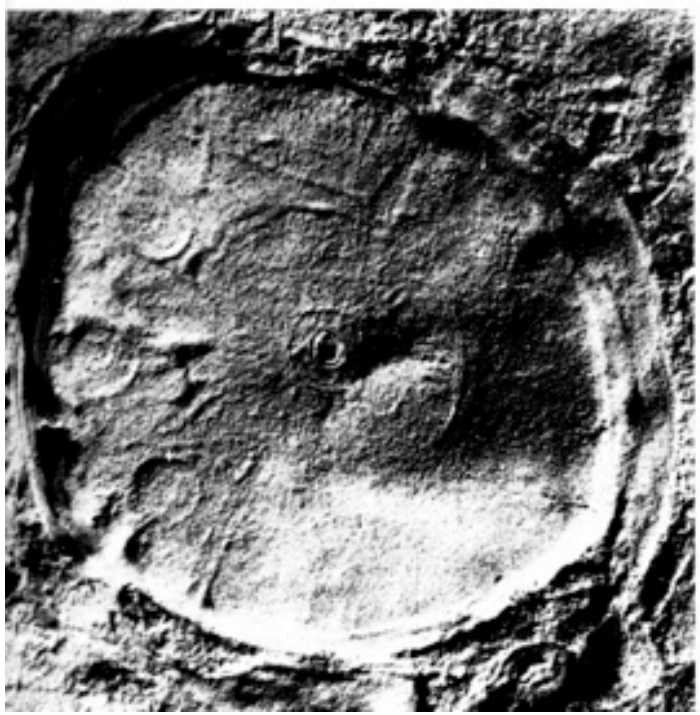
A

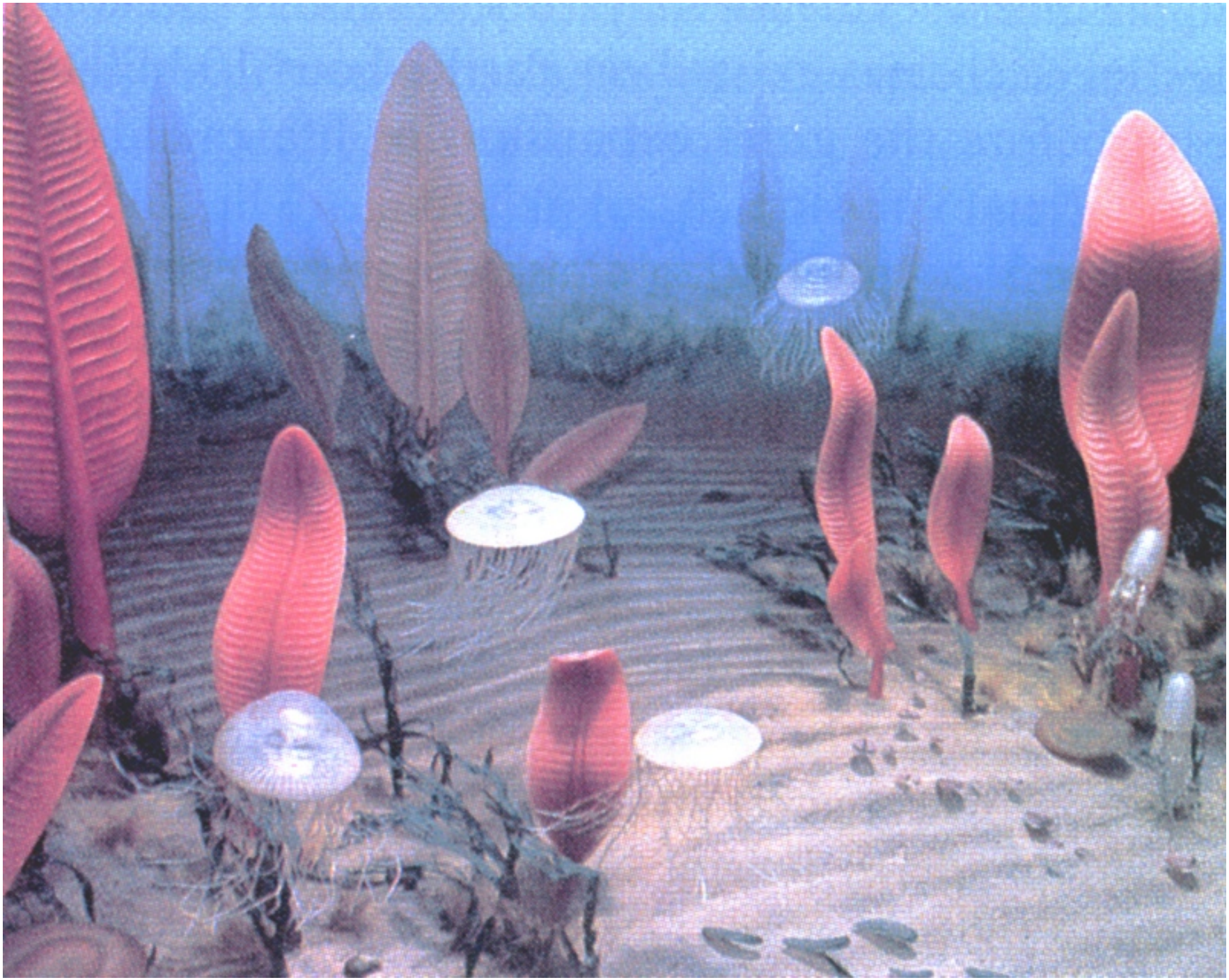
B

Representatives of the late Precambrian Ediacara fauna of Australia. *A.* A problematic flat, segmented form (life size). *B.* An animal that appears to be intermediate in form between a segmented worm and an arthropod (magnified 1.7 times). C. An animal that may be a jellyfish (0.7 life size). *D.* An animal that may be a sea pen (0.6 life size). *E.* Imprint of the underside of what appears to be a primitive soft-bodied mollusk that had a broad, creeping foot.

Ediacara Fauna

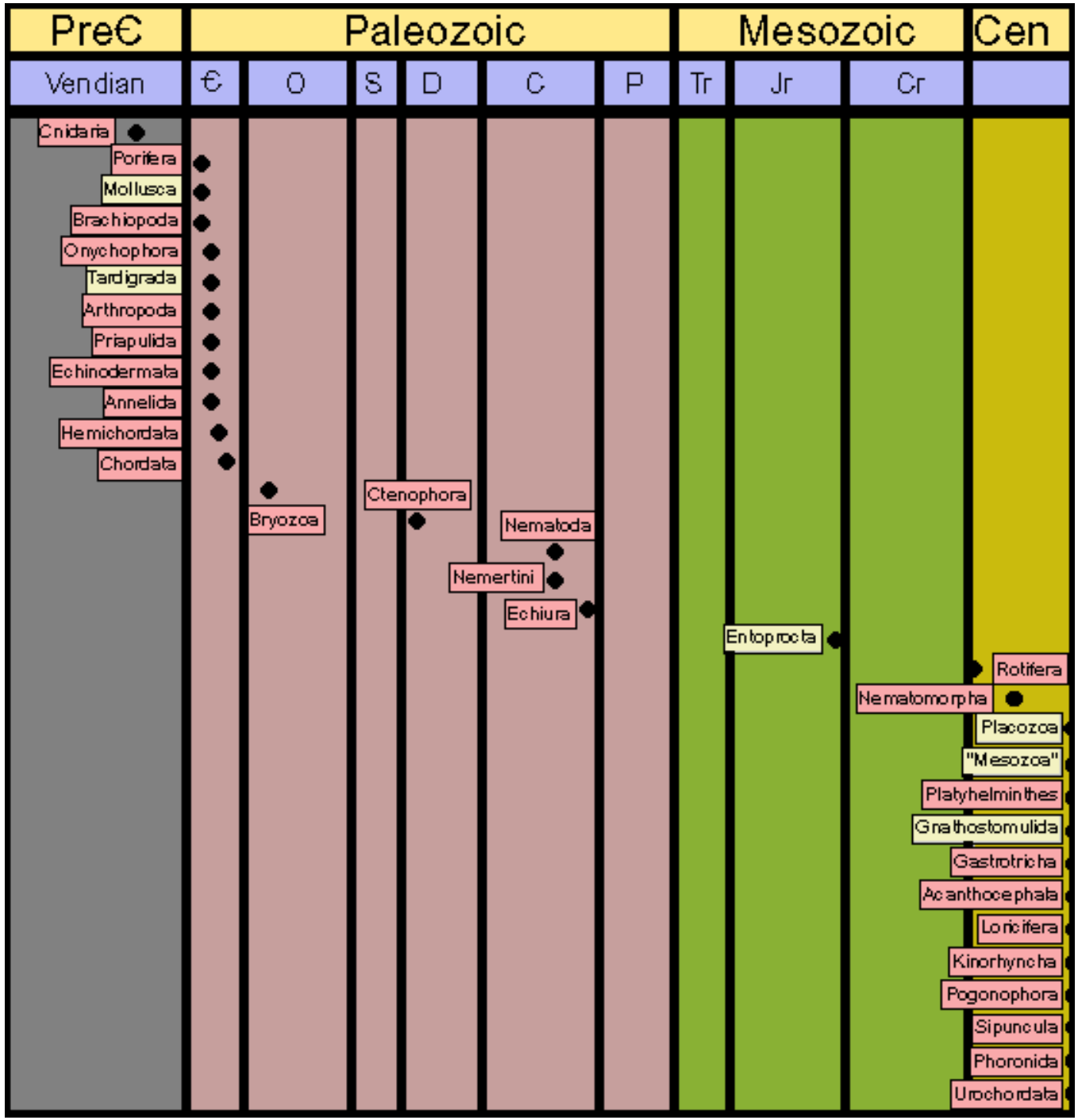


Ediacara Paleocommunity

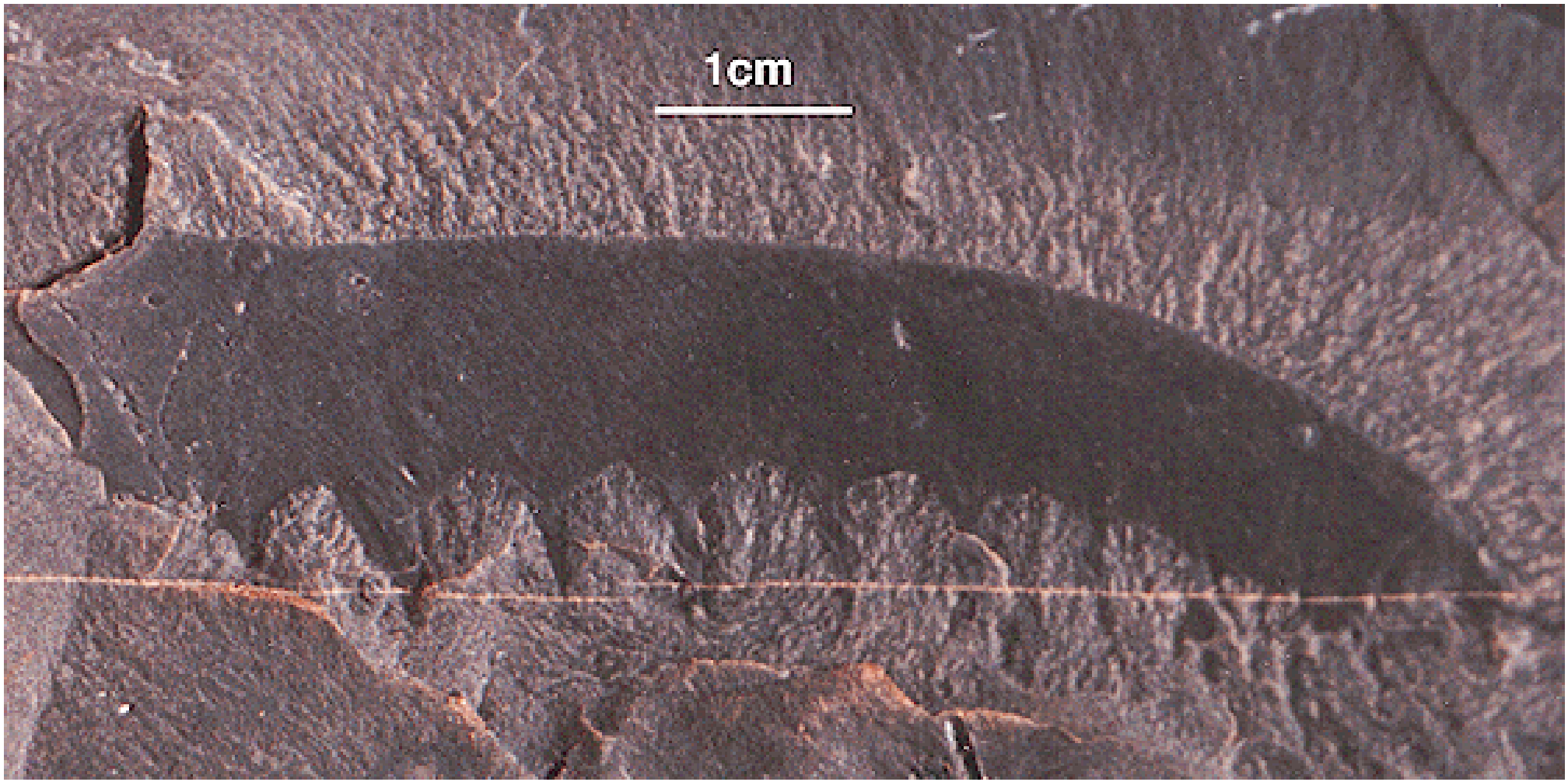


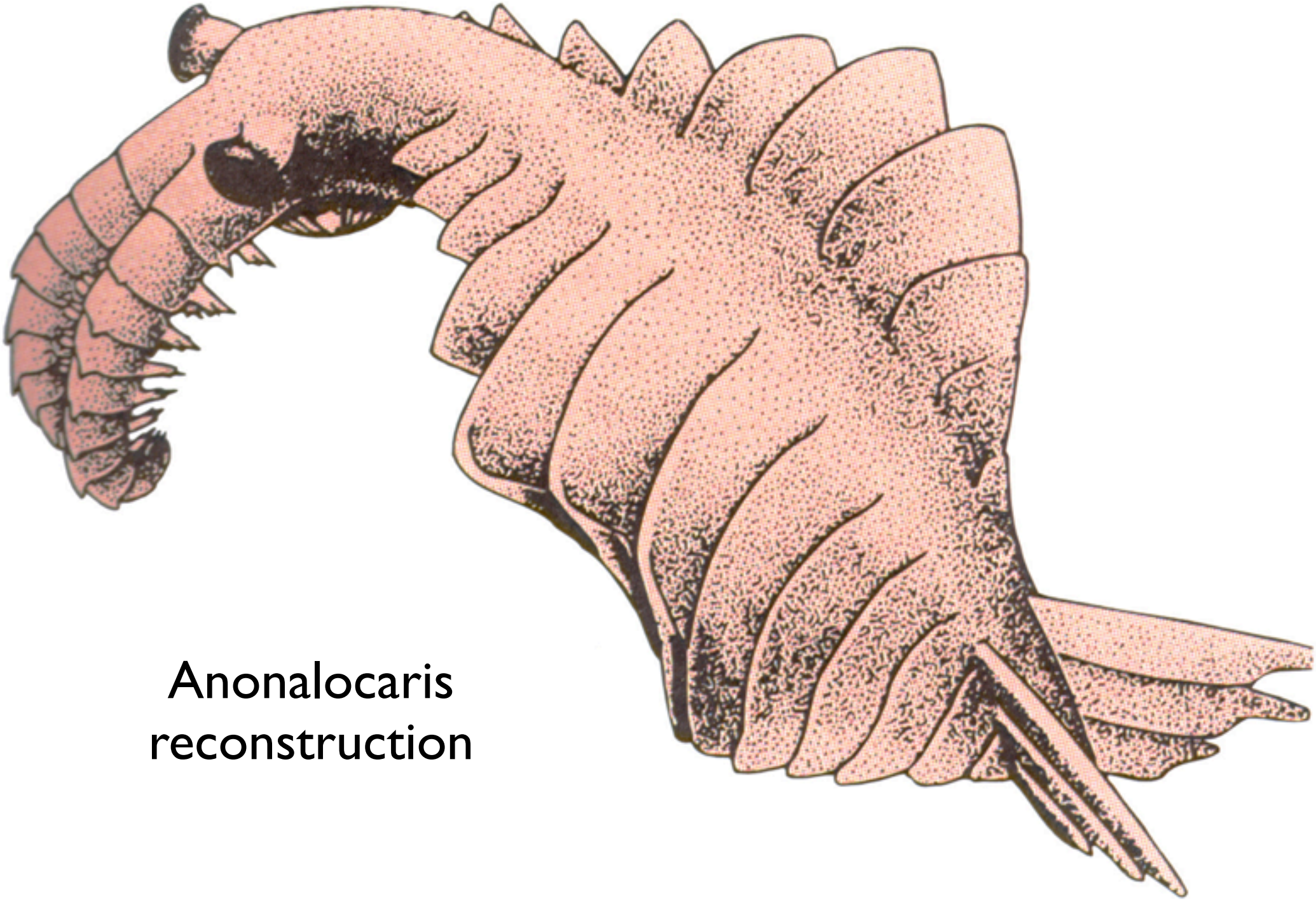
Tommotian Fauna

The First Metazoans



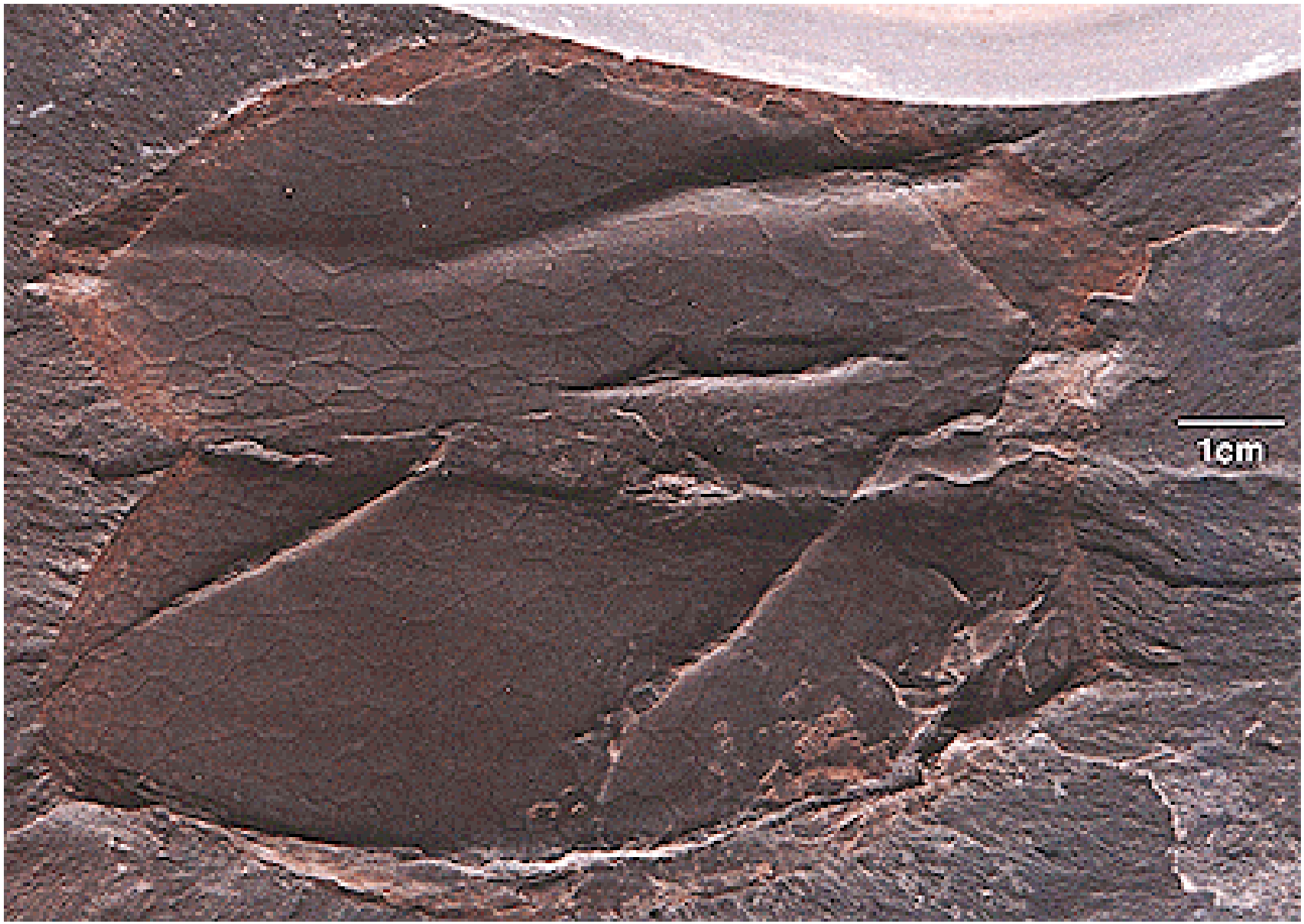
Anomalocaris Carbon Inpression





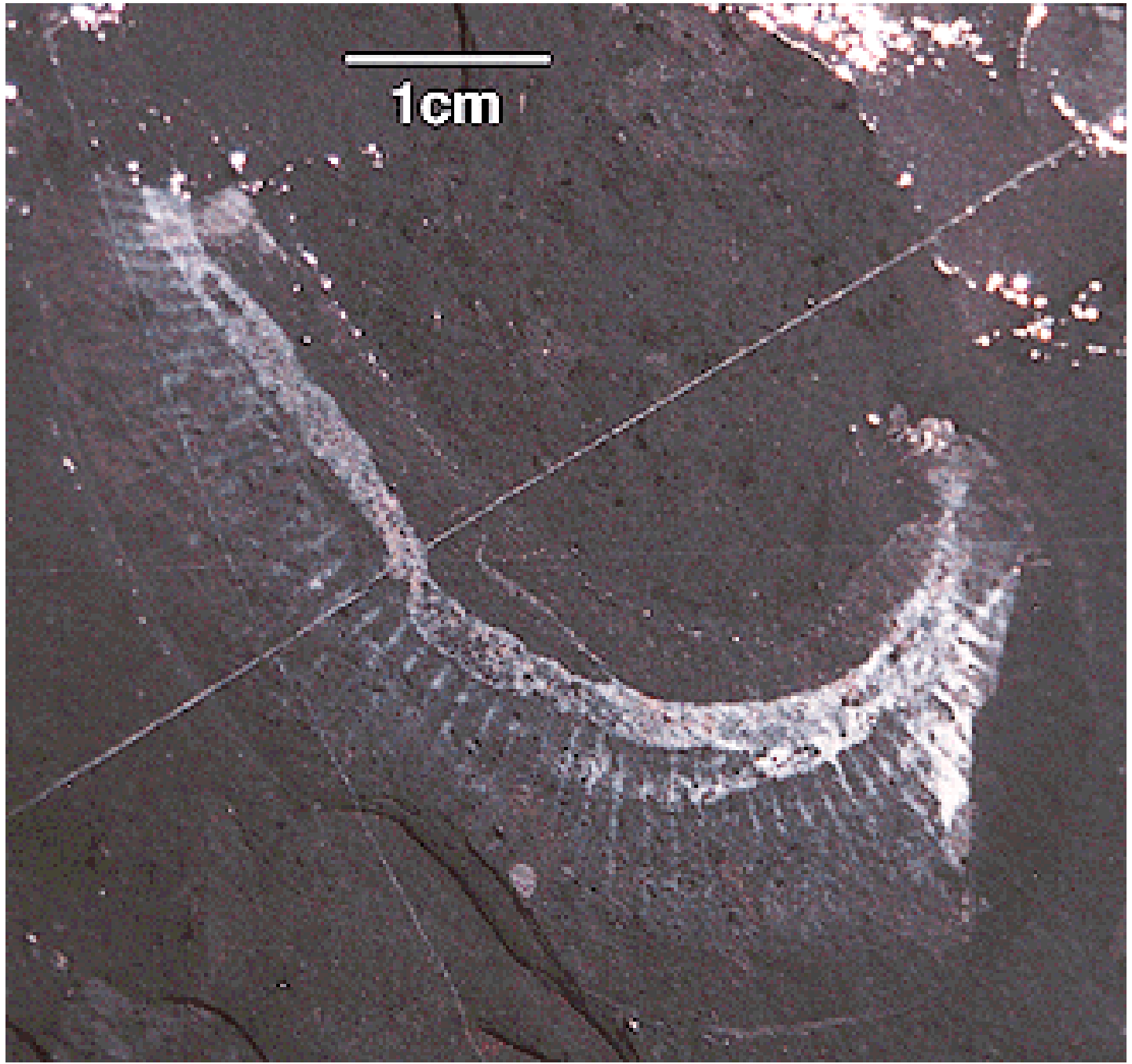
Anonalocaris
reconstruction

Tuzoia (soft-shelled mollusk)

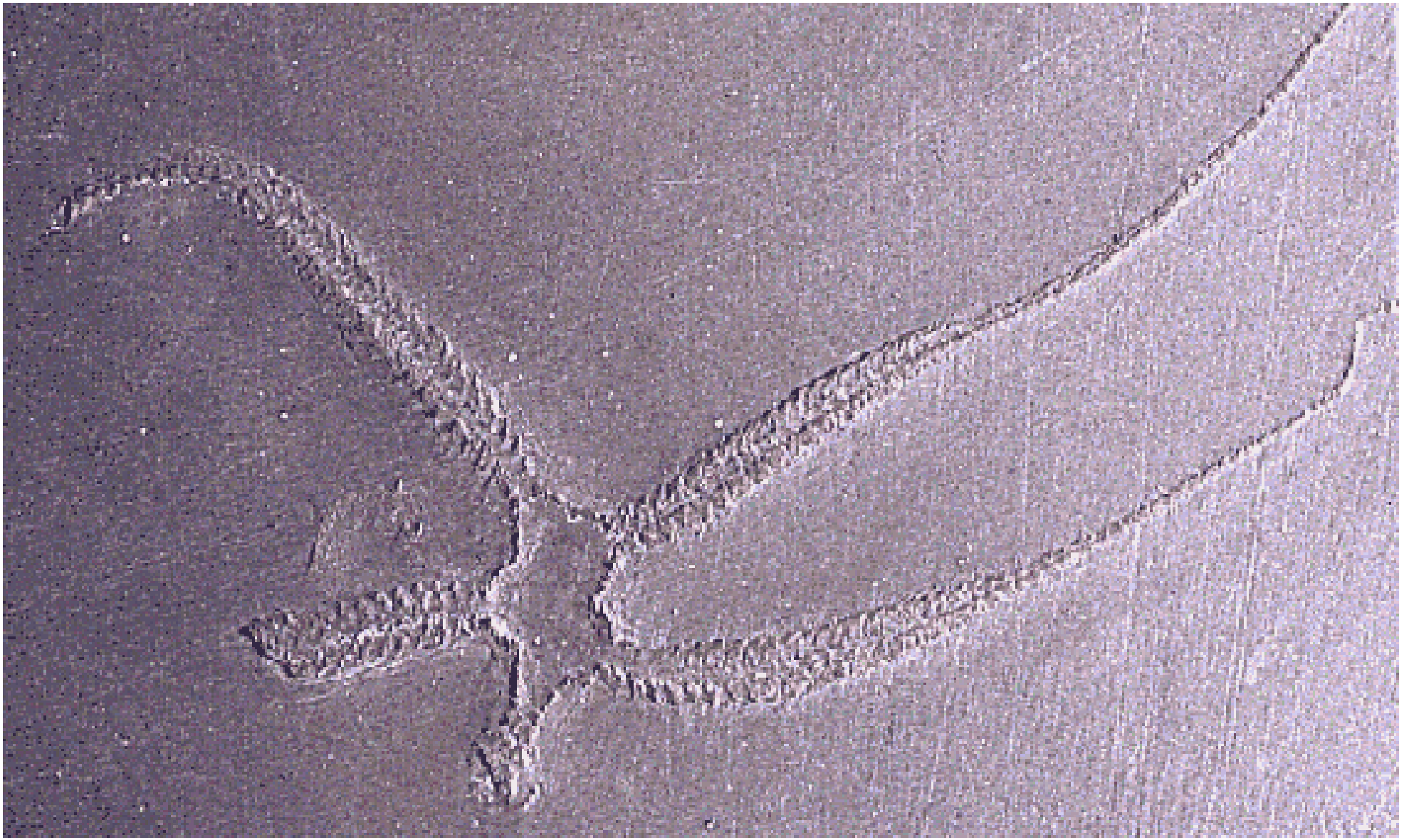


Vauxia (sponge)

Ottoia (sea worm)



Furcaster (starfish)

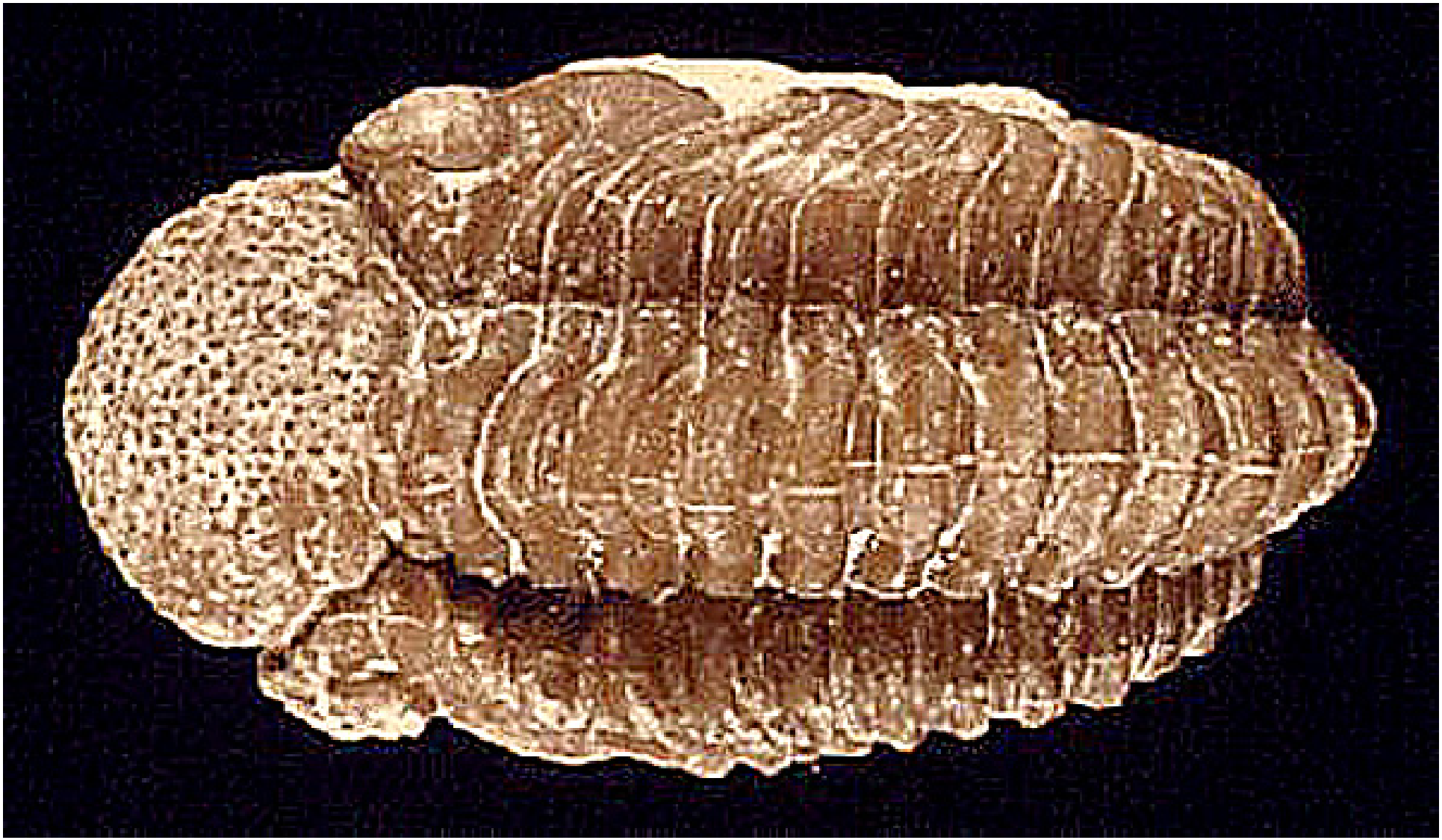


Olenoides (trilobite)

Aeolus (trilobite)

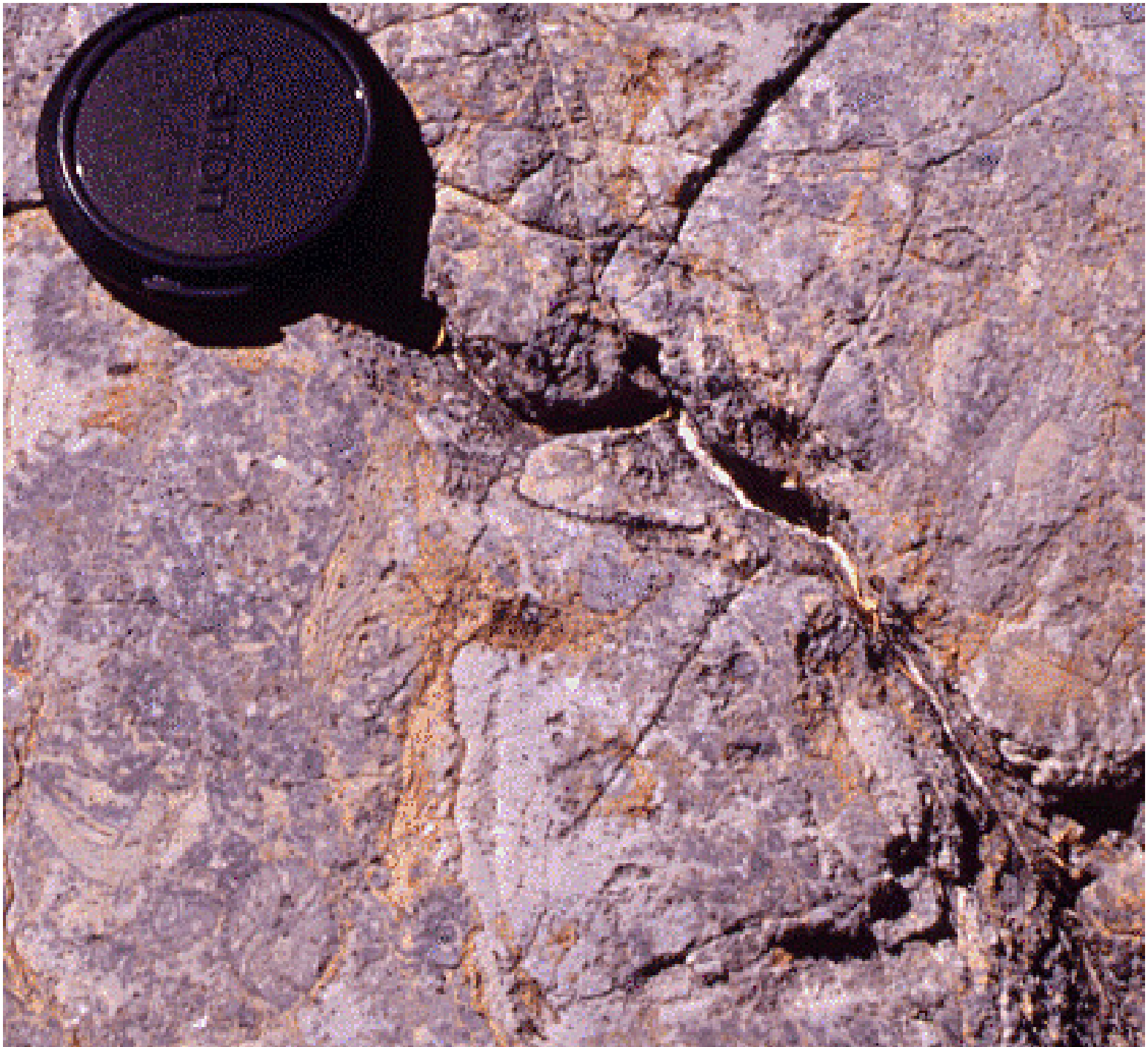
Ogygiopsis (trilobite)

Phacops (trilobite)

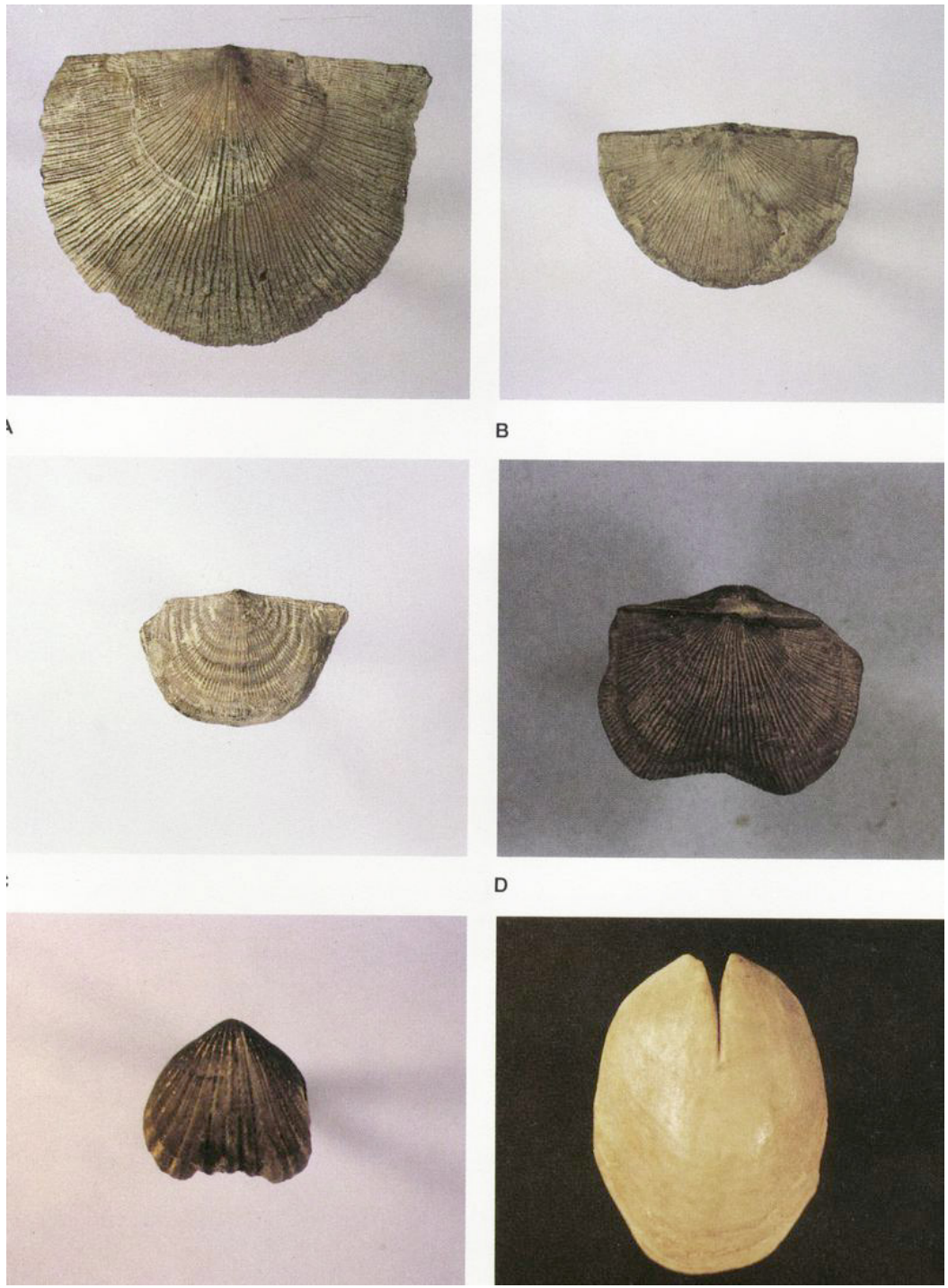


Archeocyathids

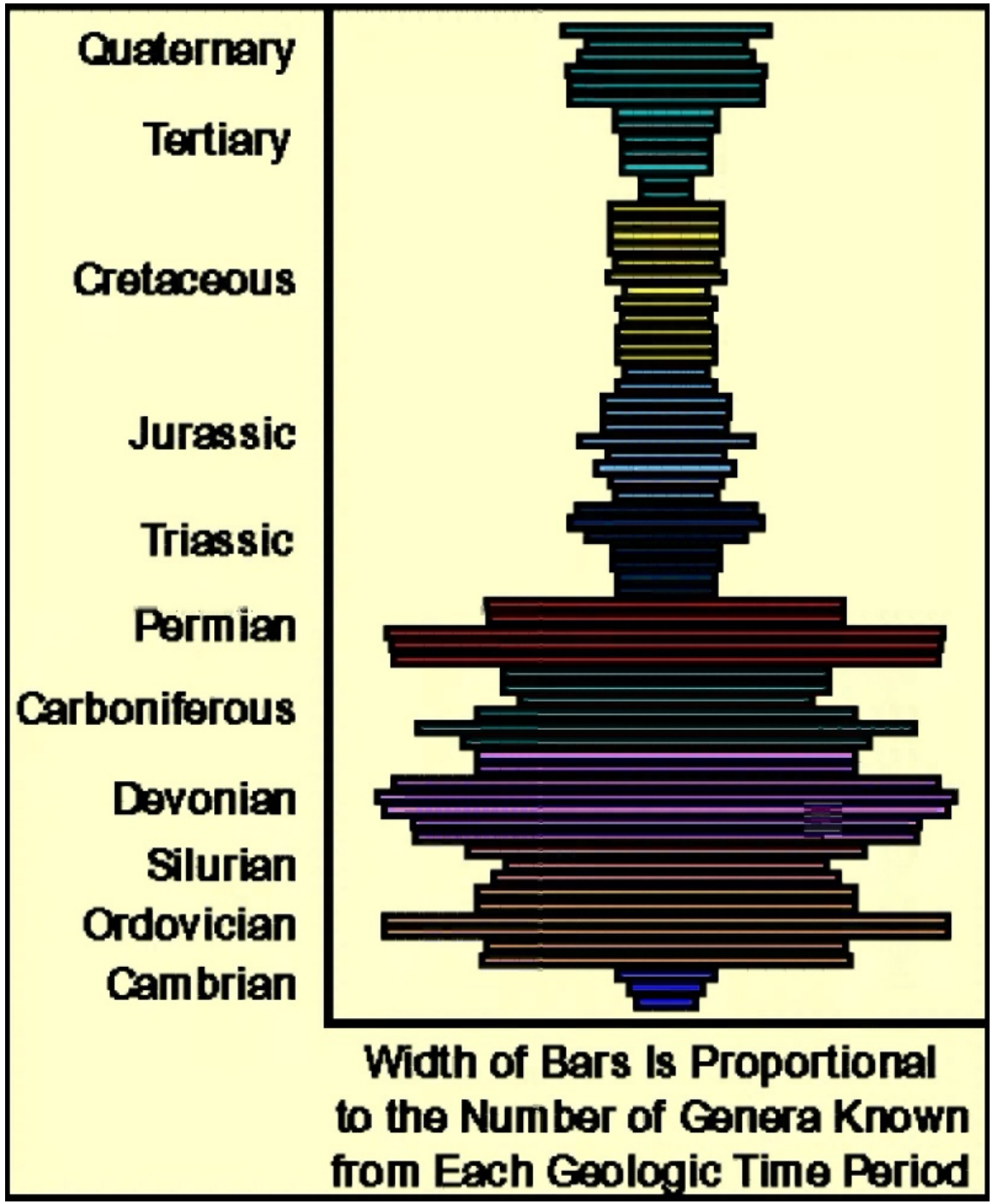
Archeocyathid Reef Rock



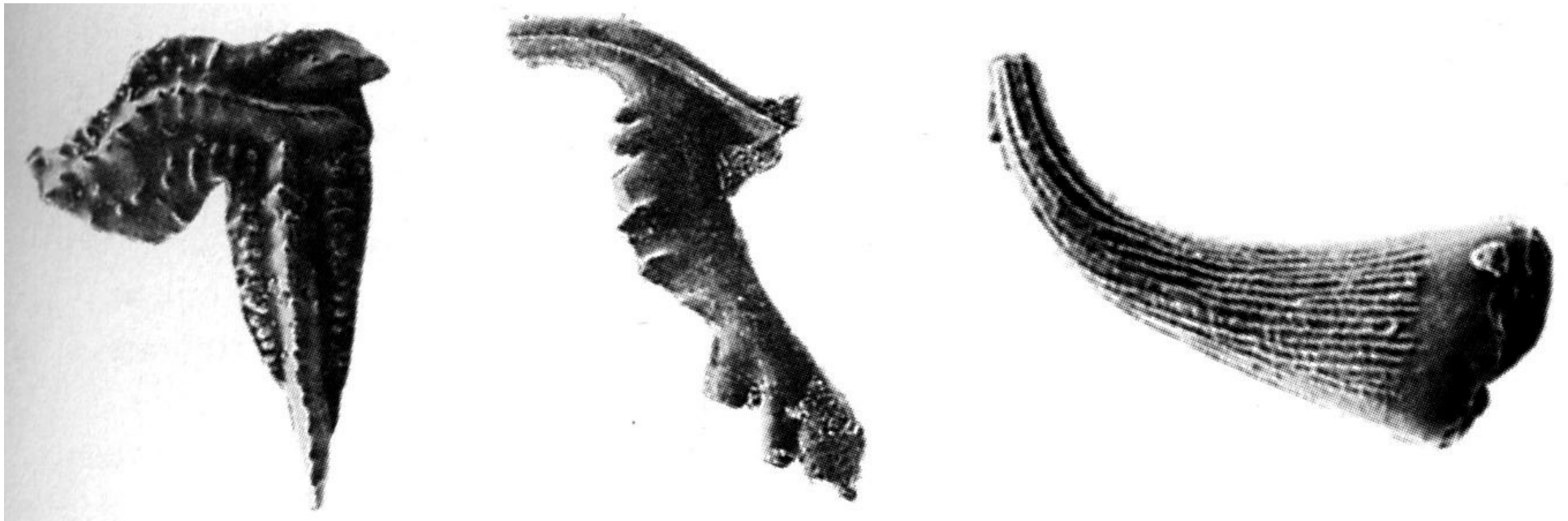
Brachiopods

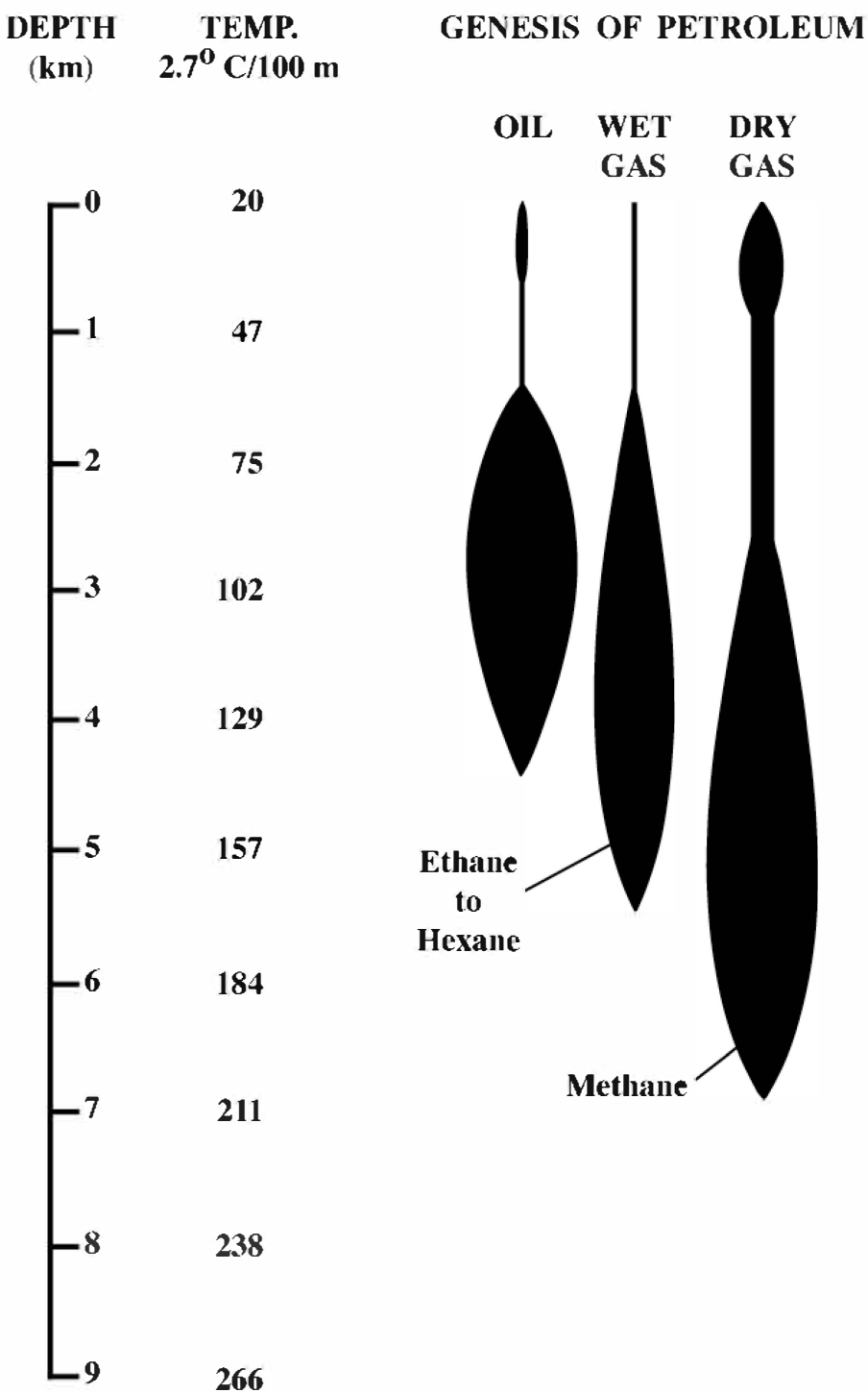


The Brachiopod "Spindle"



Conodonts

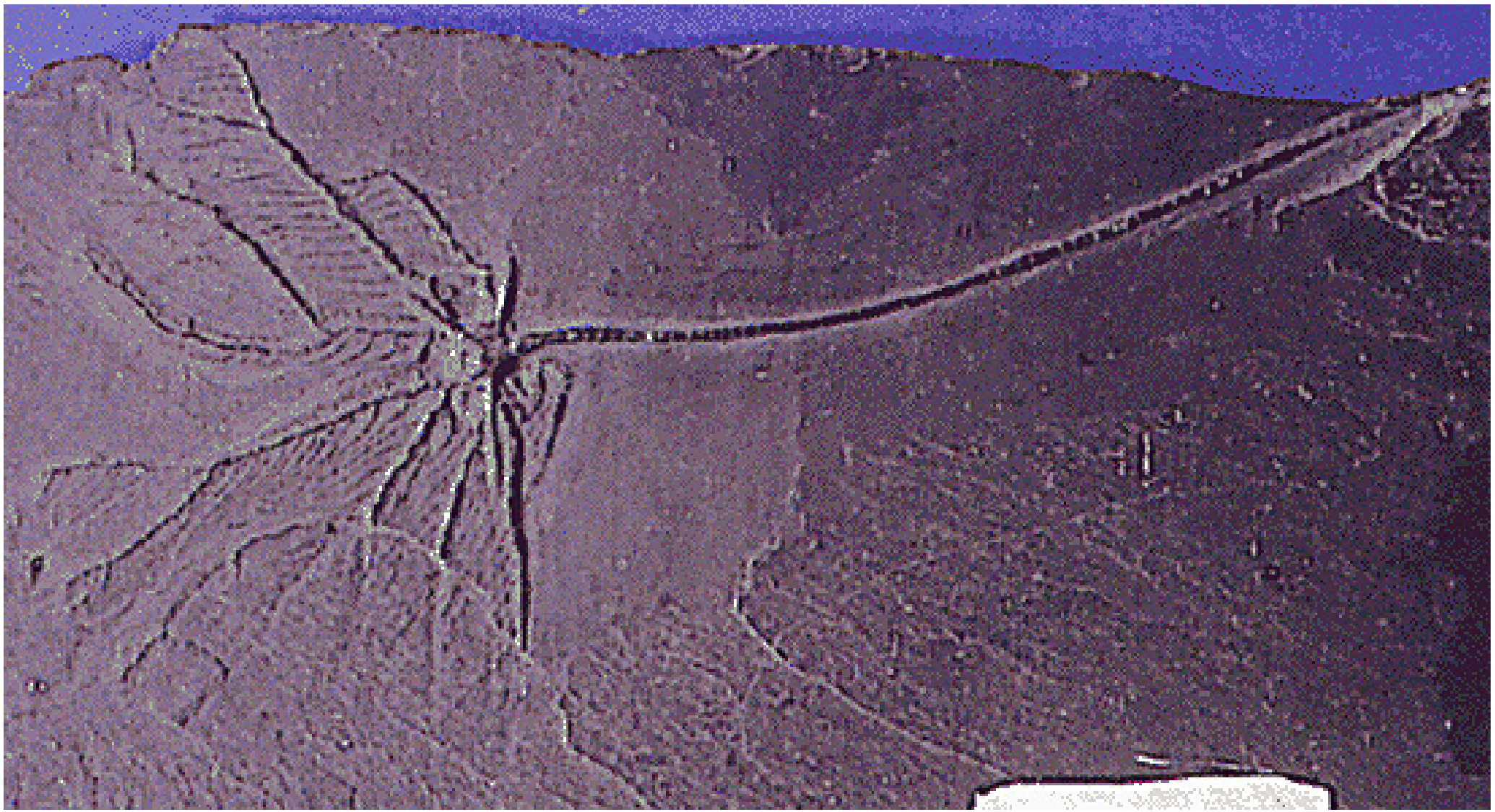



DEPTH
(km)
TEMP.
2.7° C/100 m
GENESIS OF PETROLEUM
OIL
WET
GAS
DRY
GAS
0
1
2
3
4
5
6
7
8
9
20
47
75
102
129
157
184
211
238
266
Ethane
to
Hexane
Methane

Ordovician Paleocommunity

Ordovician "Ramose" Bryozoan

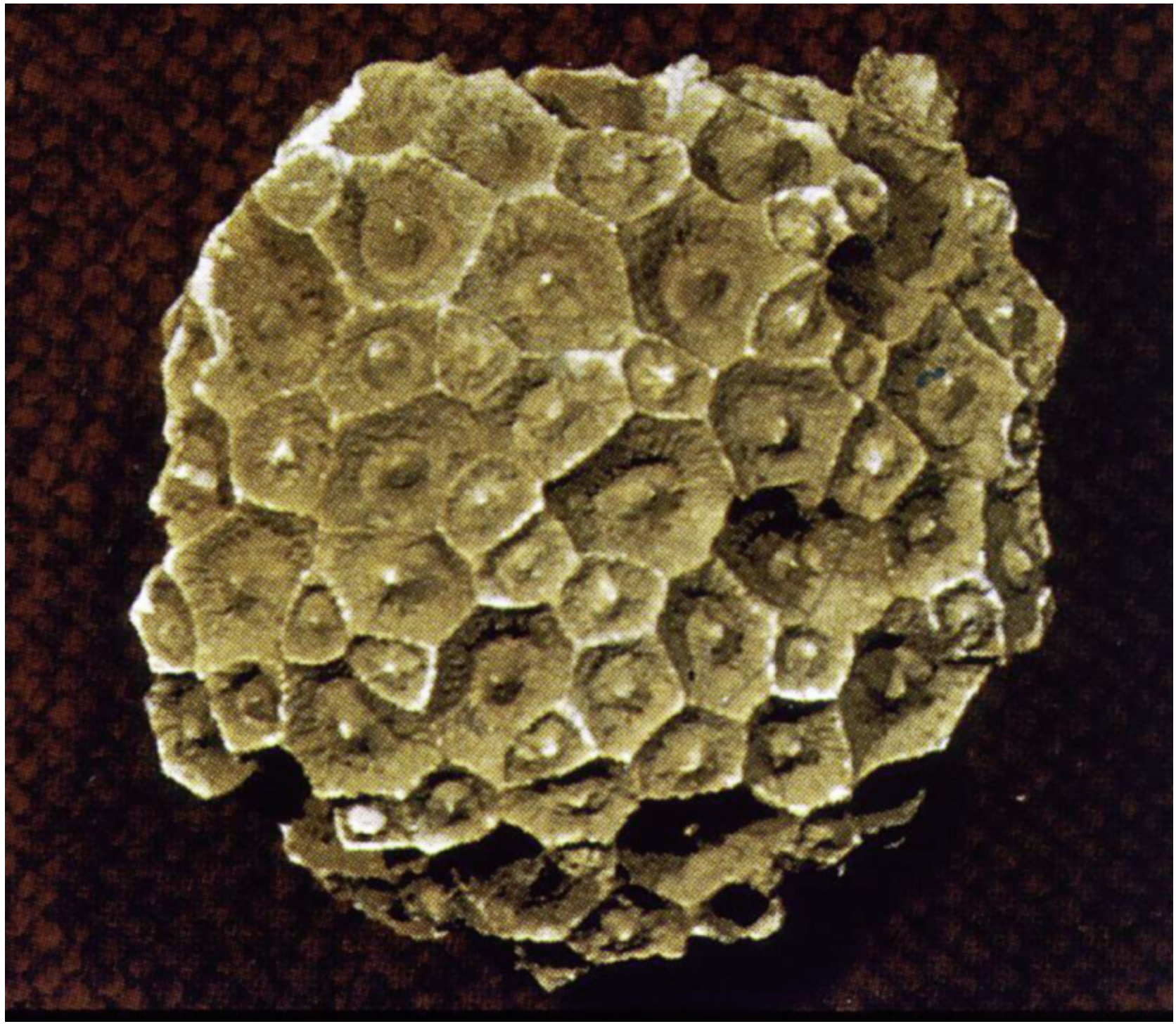
Crinoid



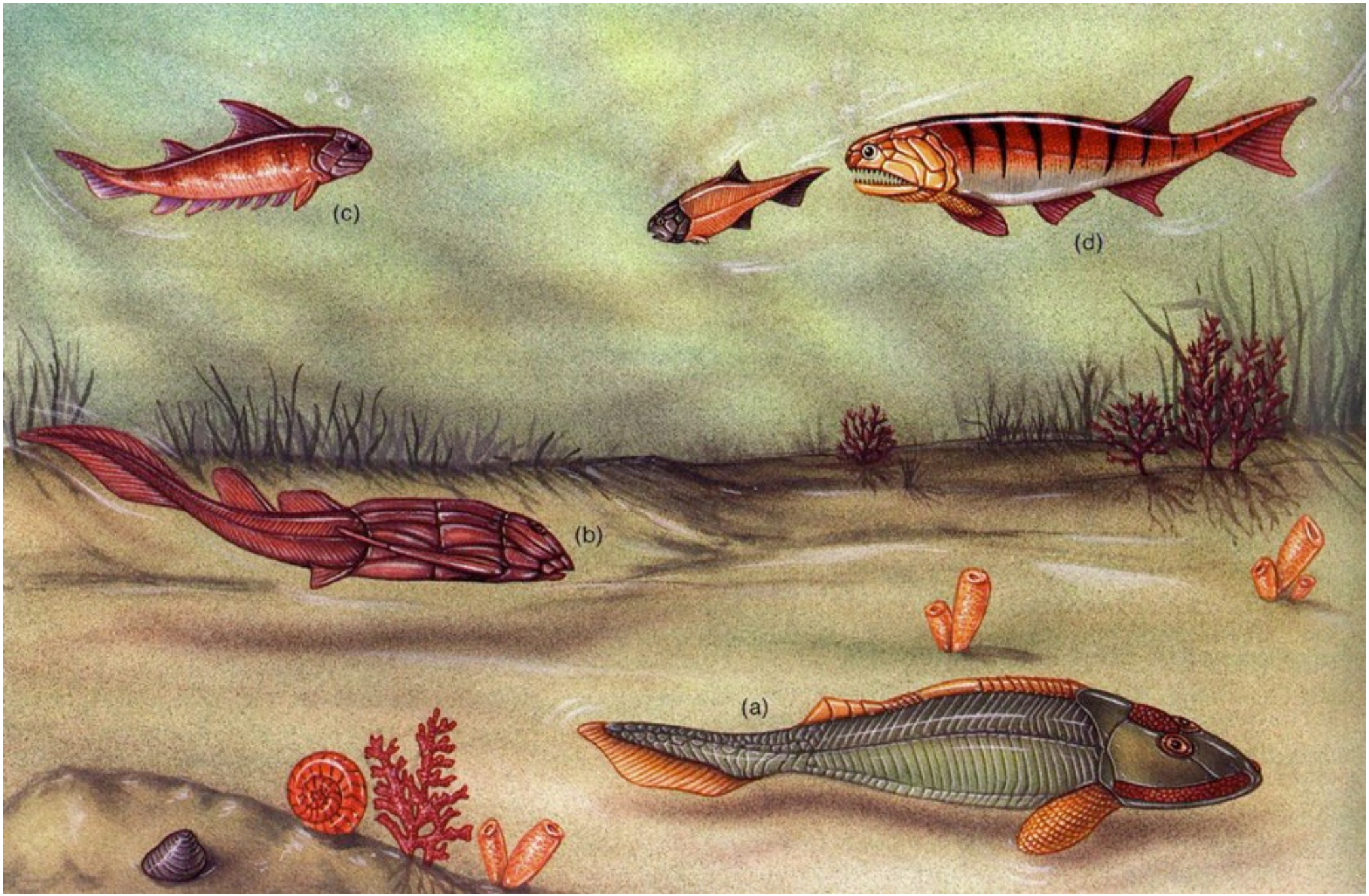
Graphtolite

Rugose “horn” coral

Tabulate coral

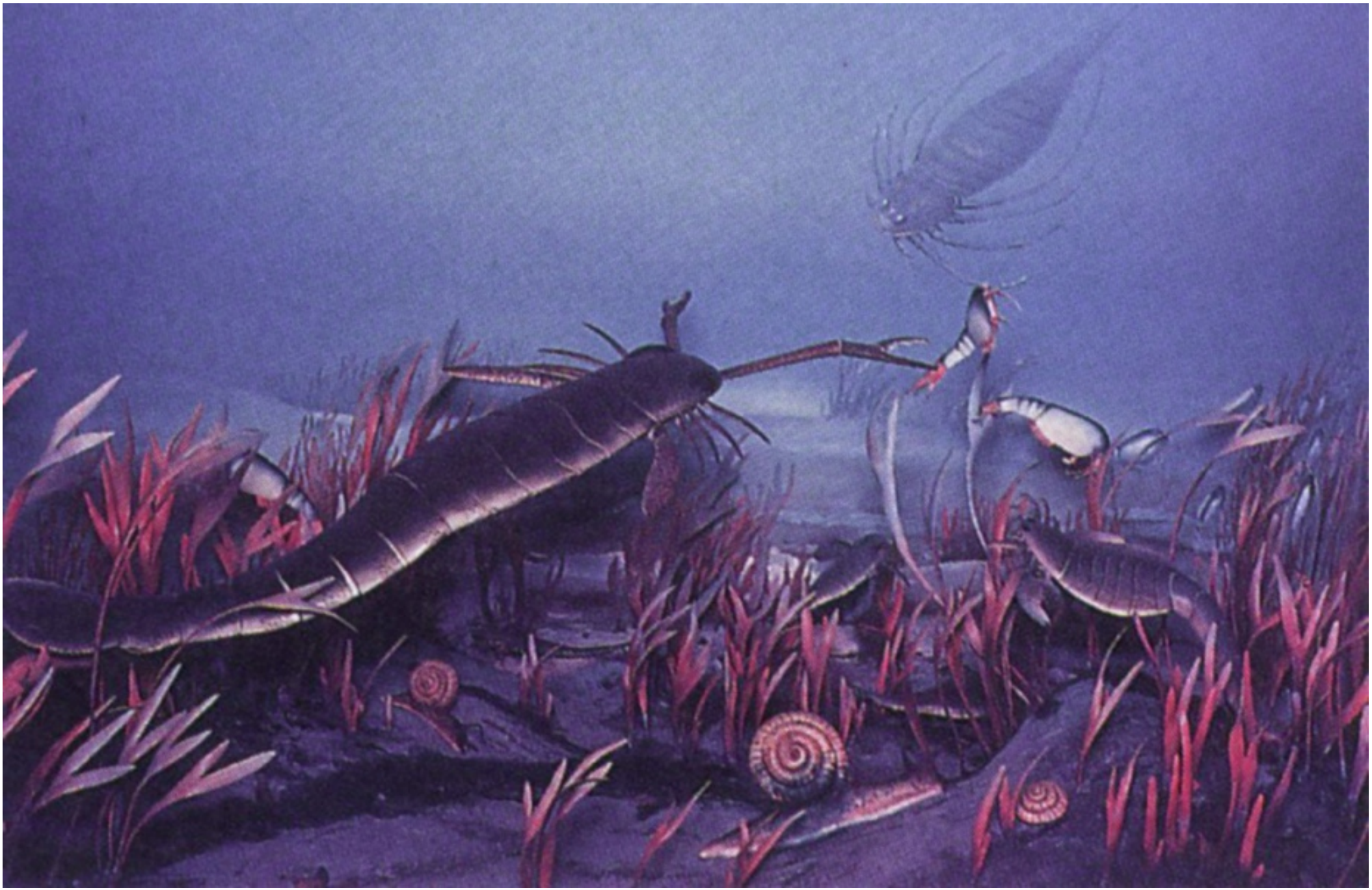


Early Fish

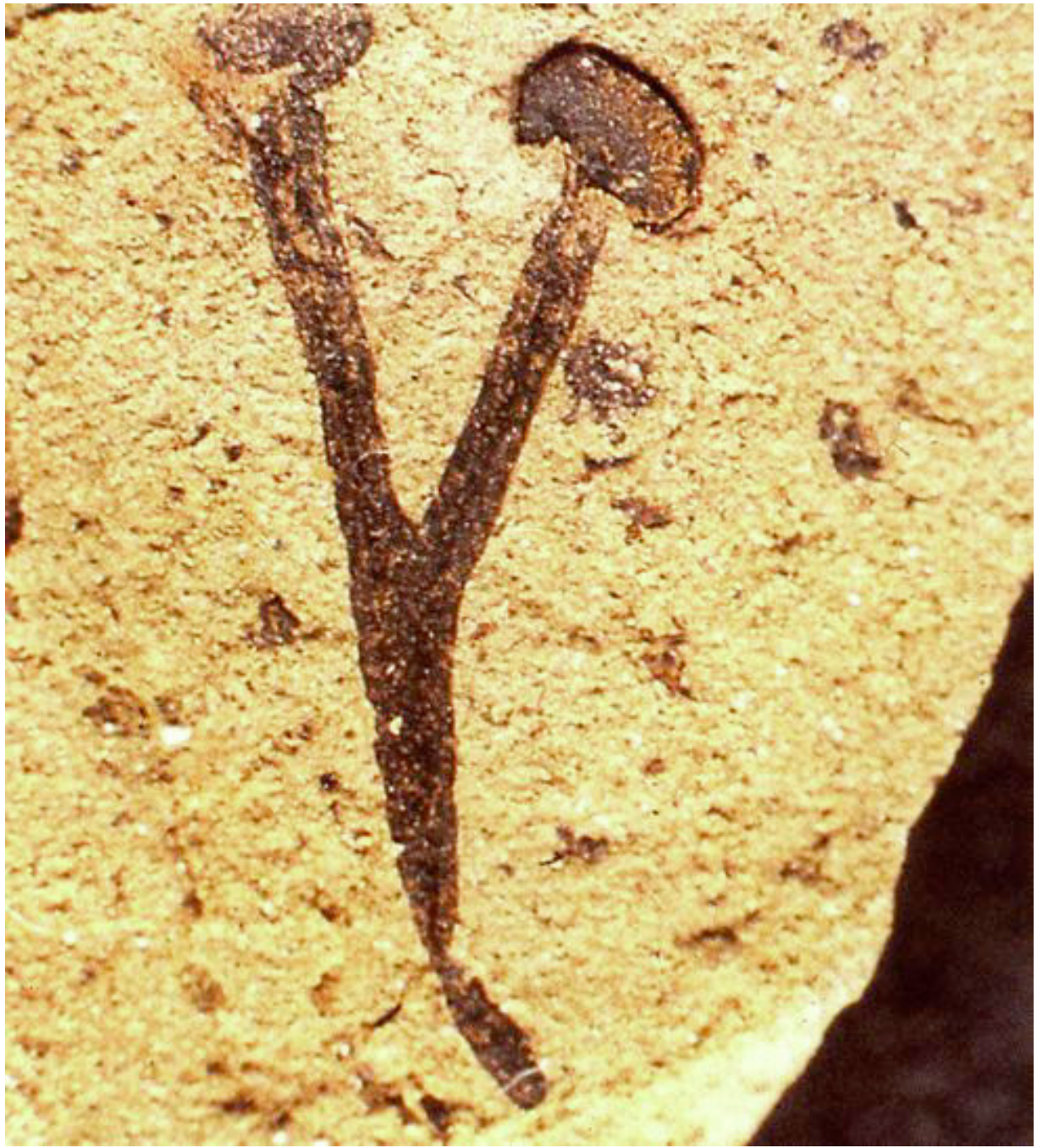


Straight Nautiloid

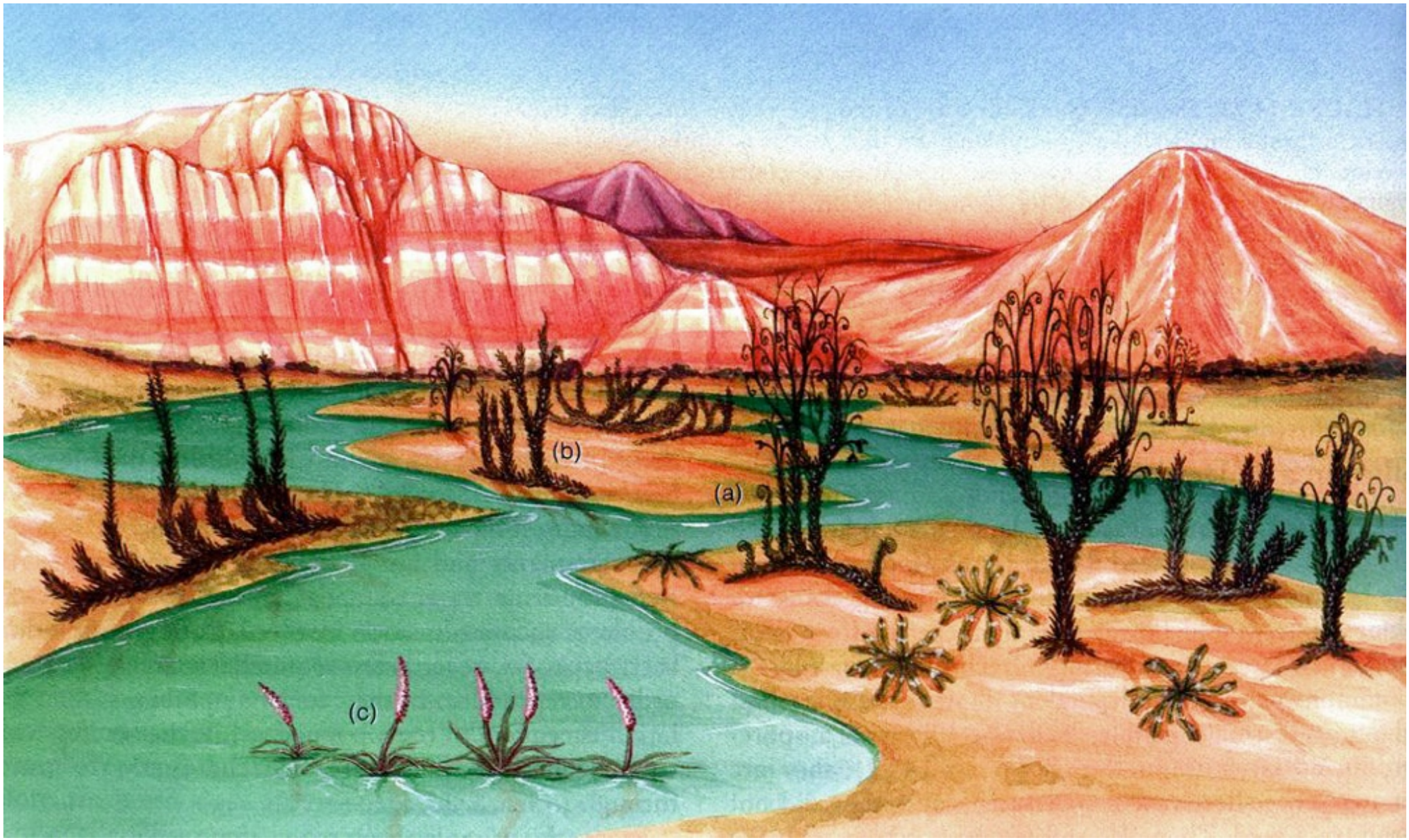
Silurian Paleocommunity



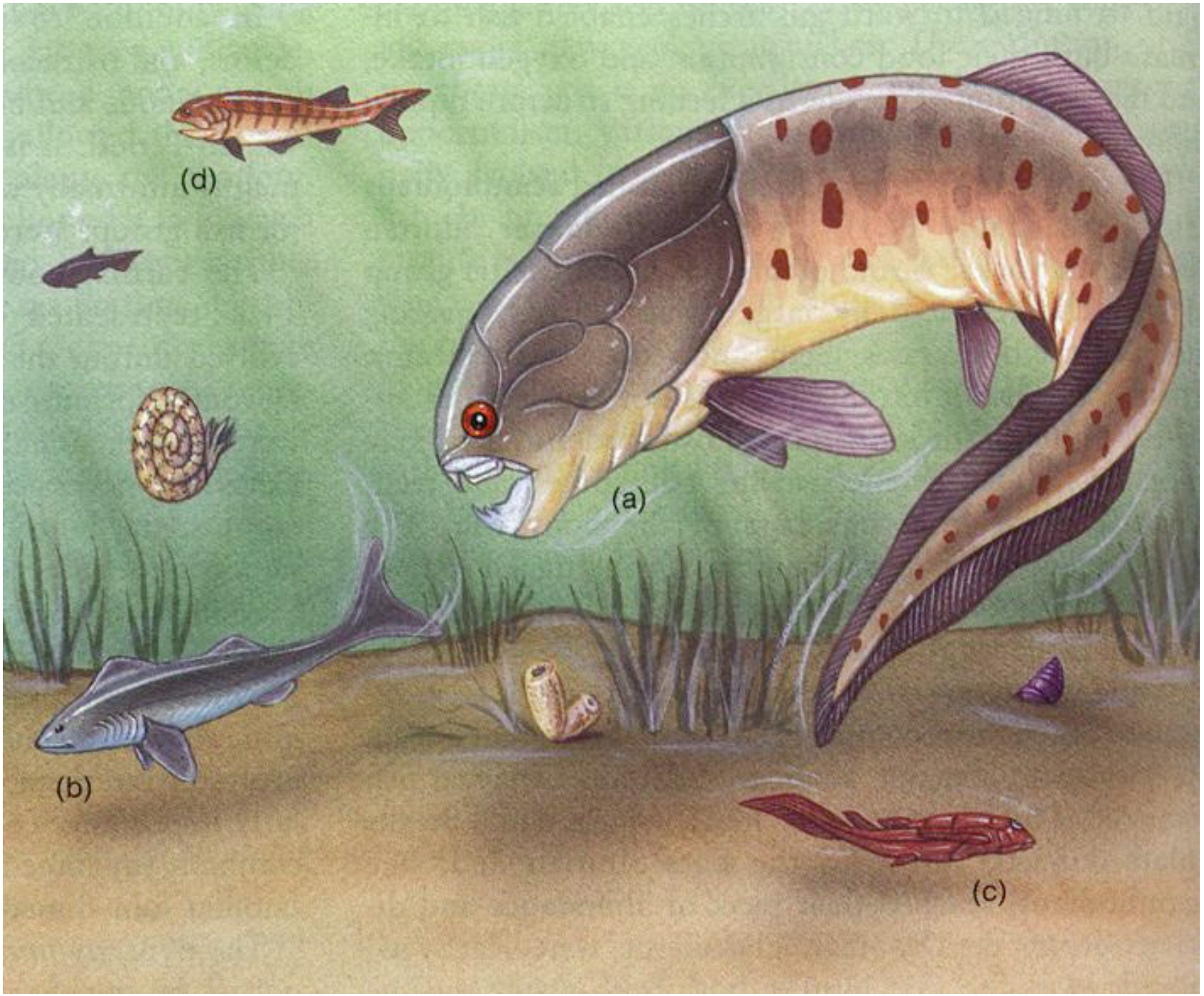
Cooksonia



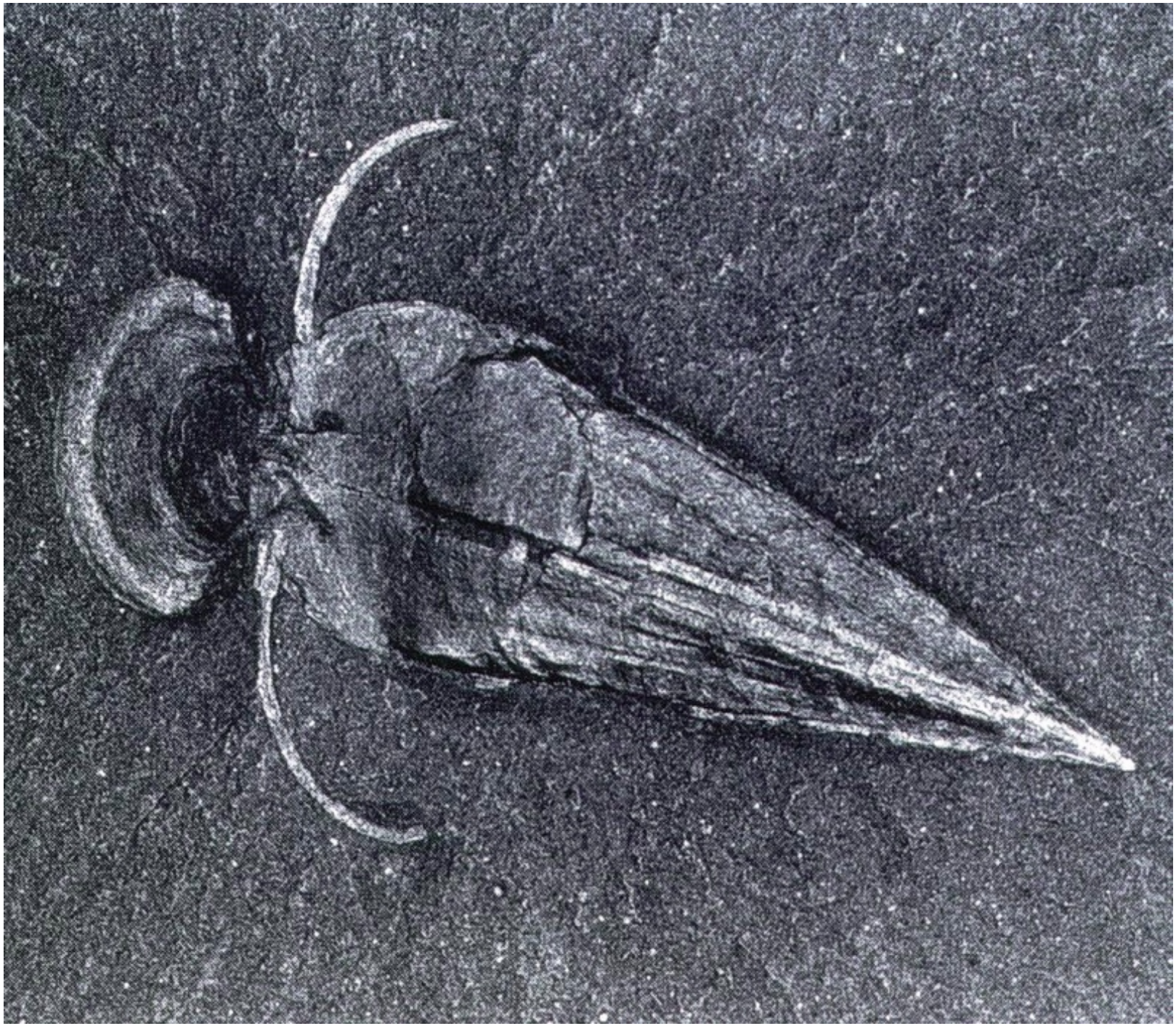
Early Plants



Jawed & Armored Fish

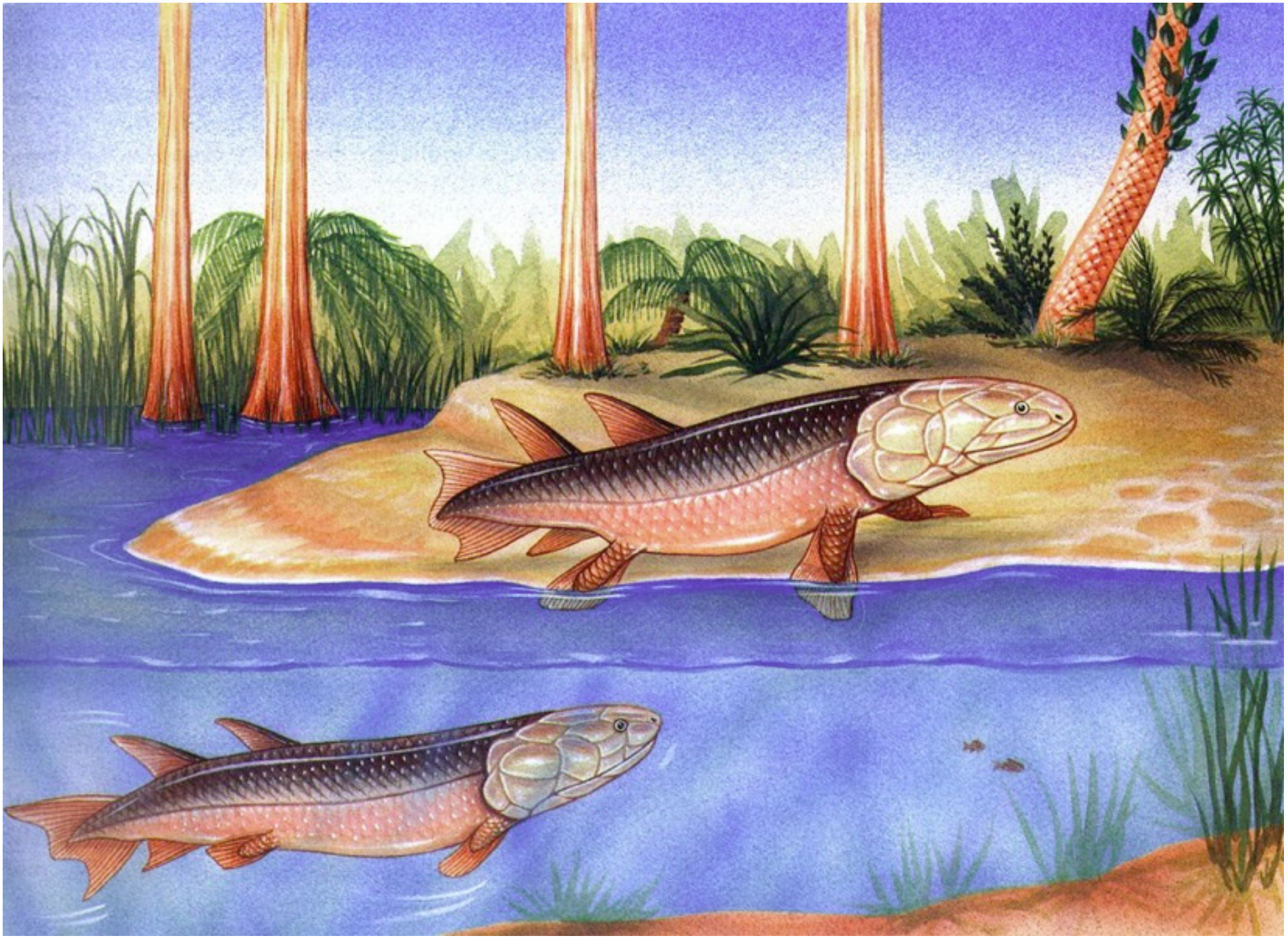


Eurypterus

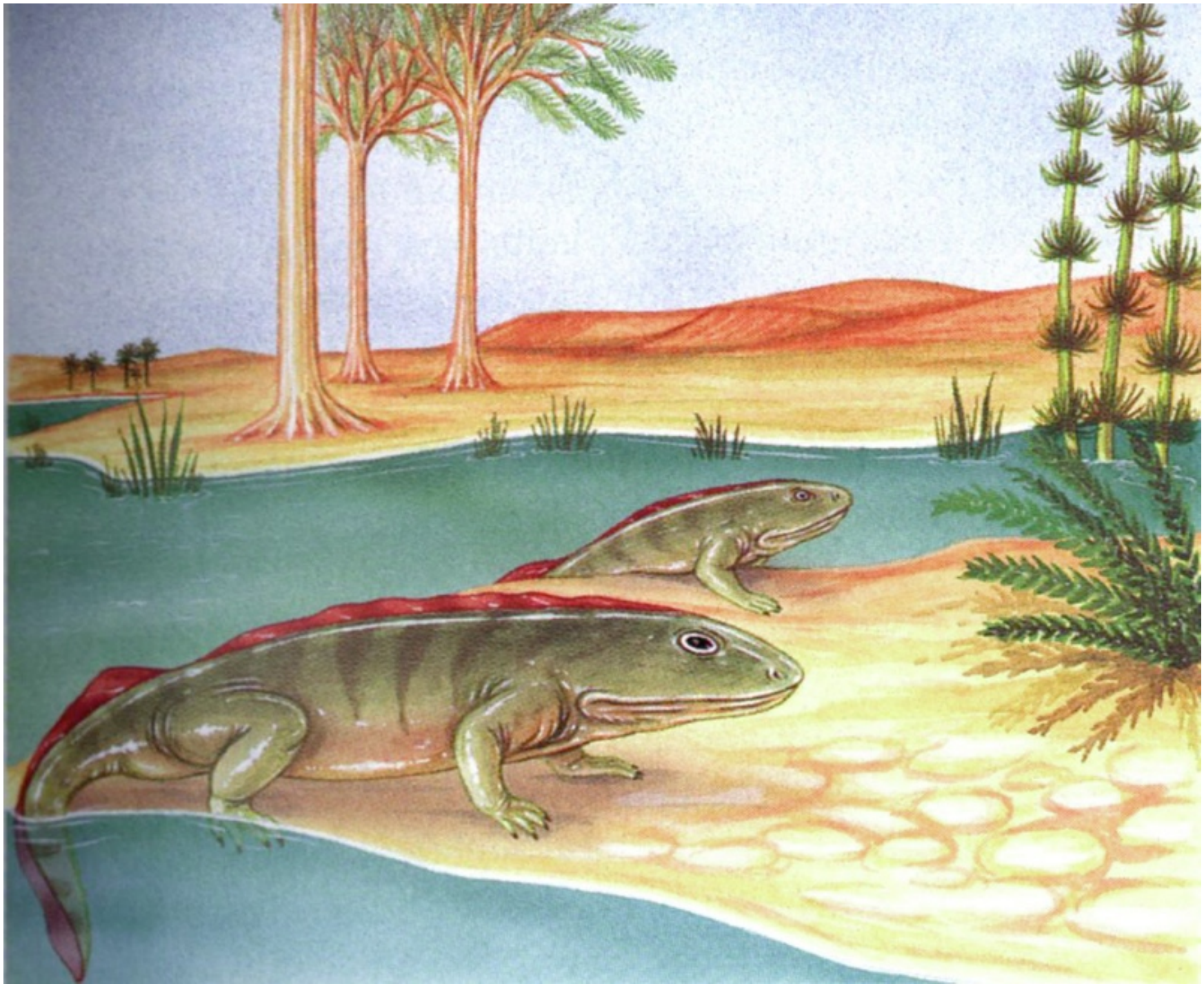


Devonian Marine Paleocommunity

Lobb-finned Fish

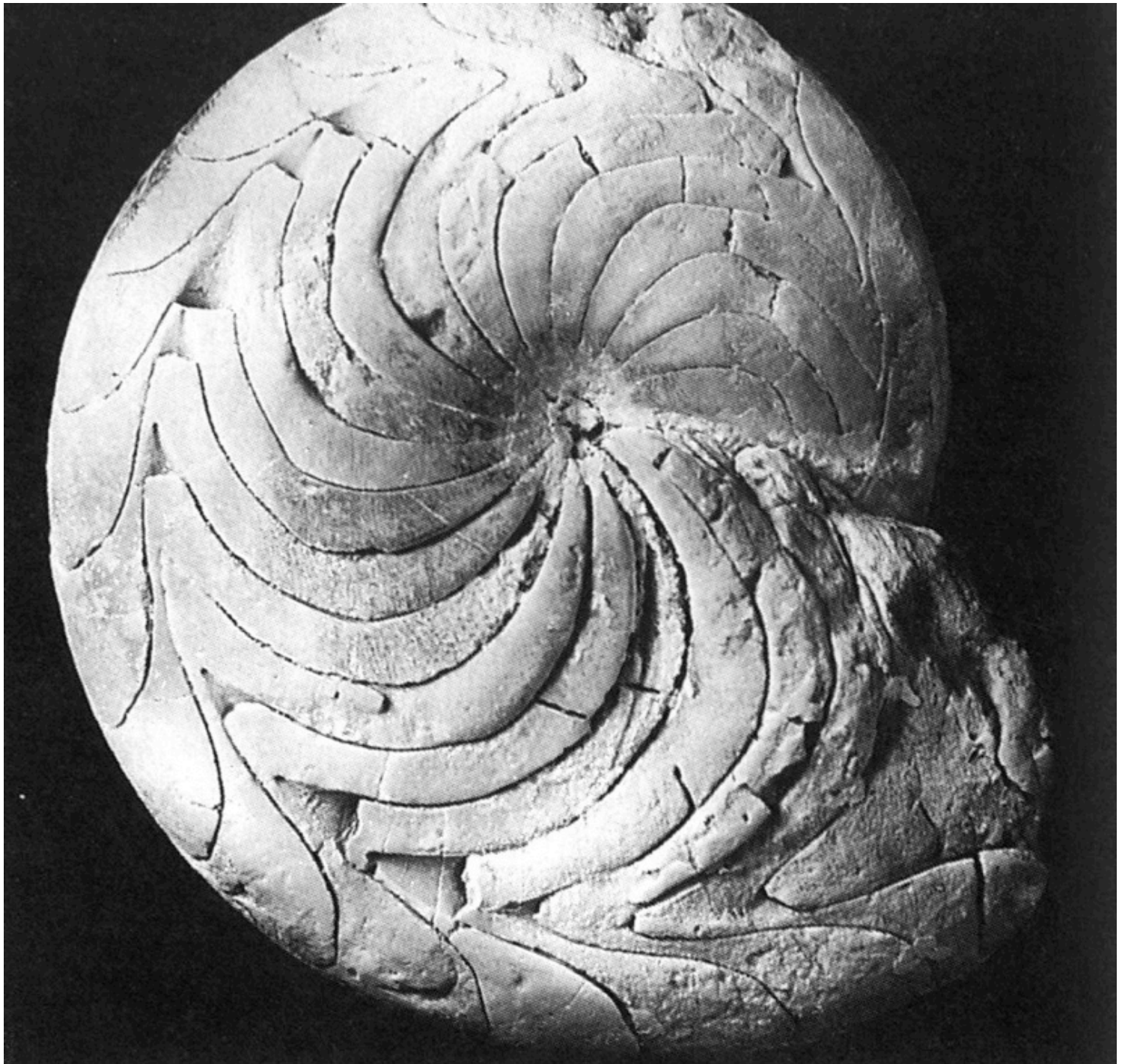


Devonian “tetrapods”

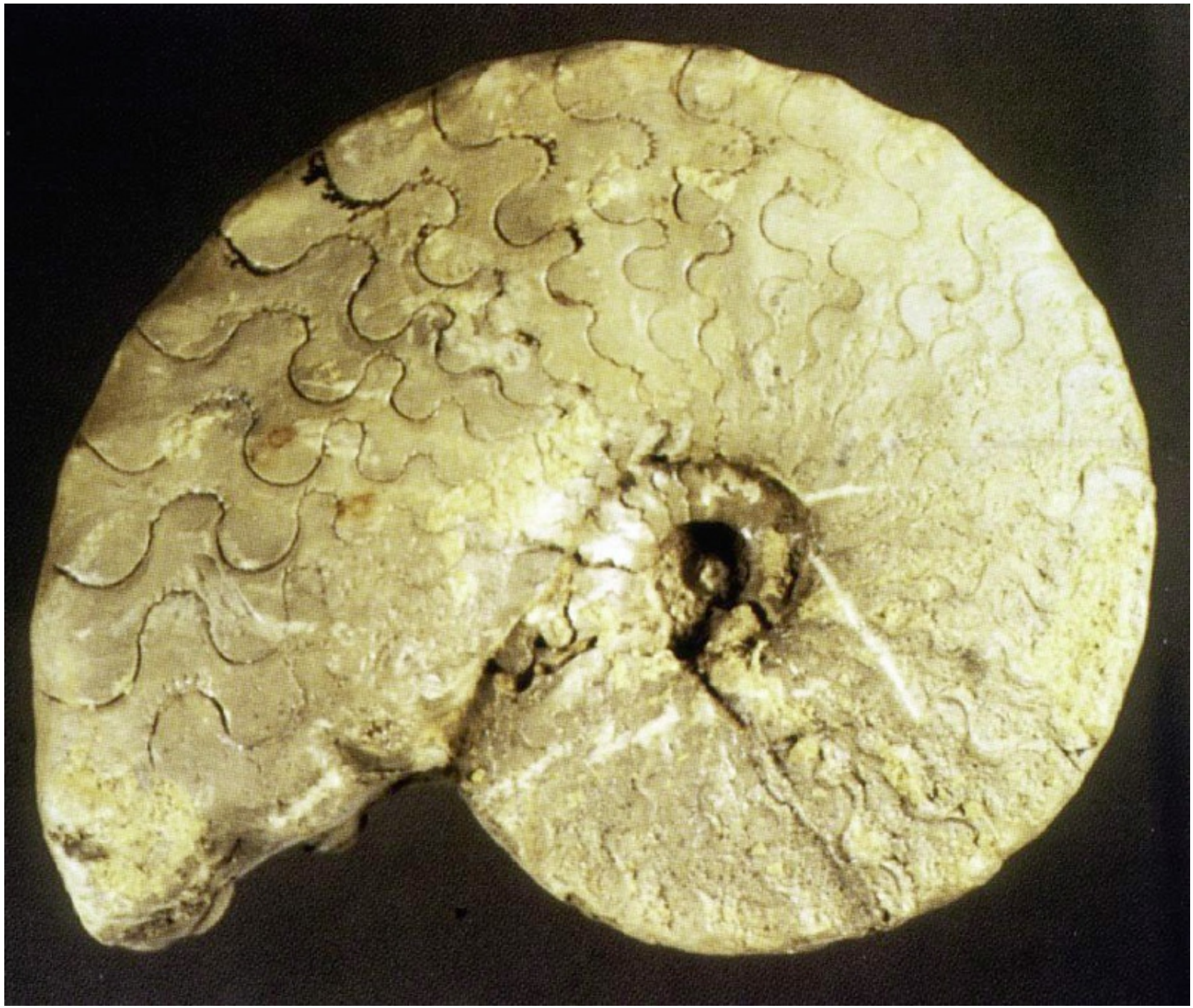


Spiriferid Brachiopods

Goniatitic Ammonoid

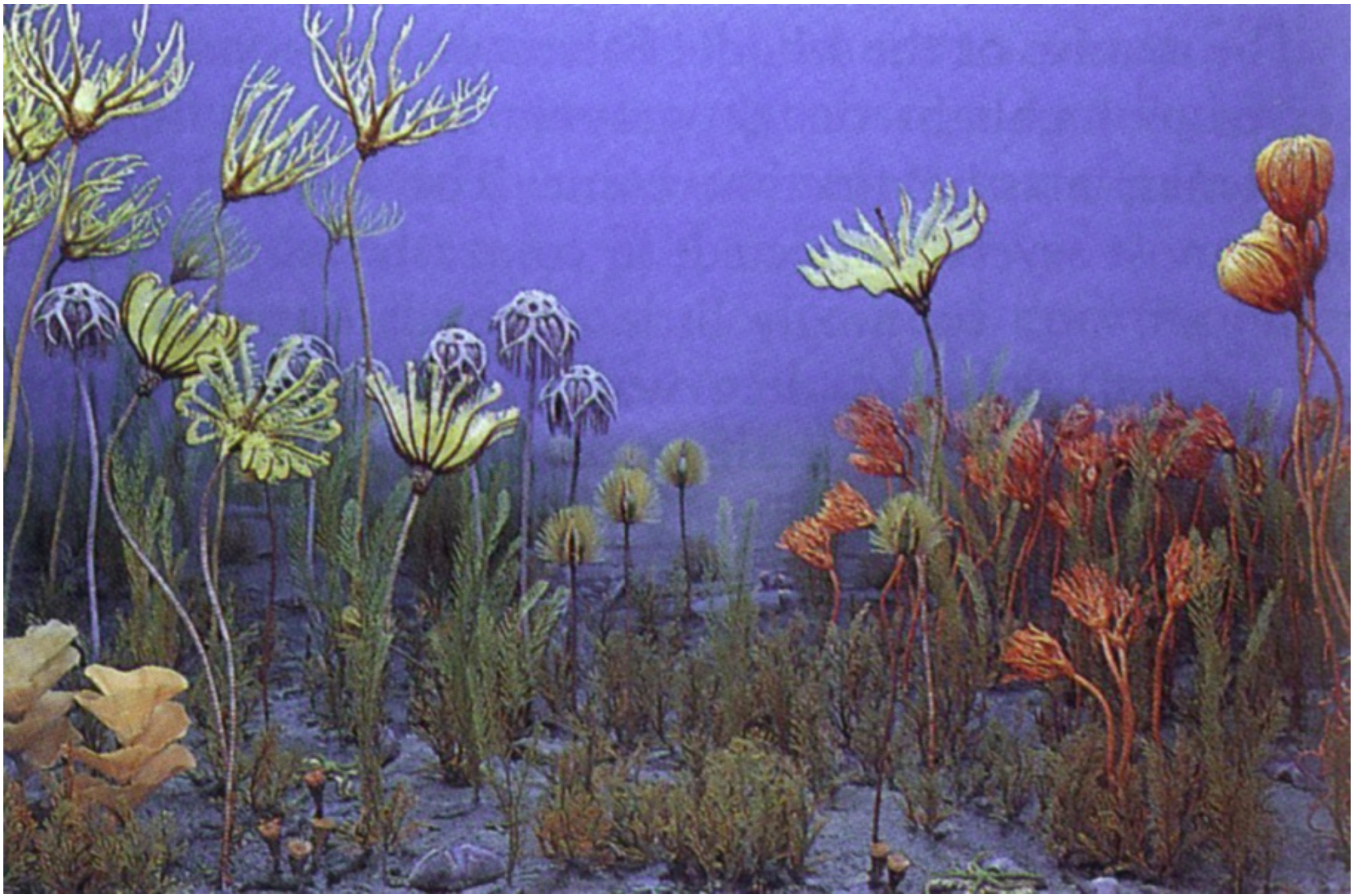


Cerratitic Ammonoid



Ammonitic Ammonoid

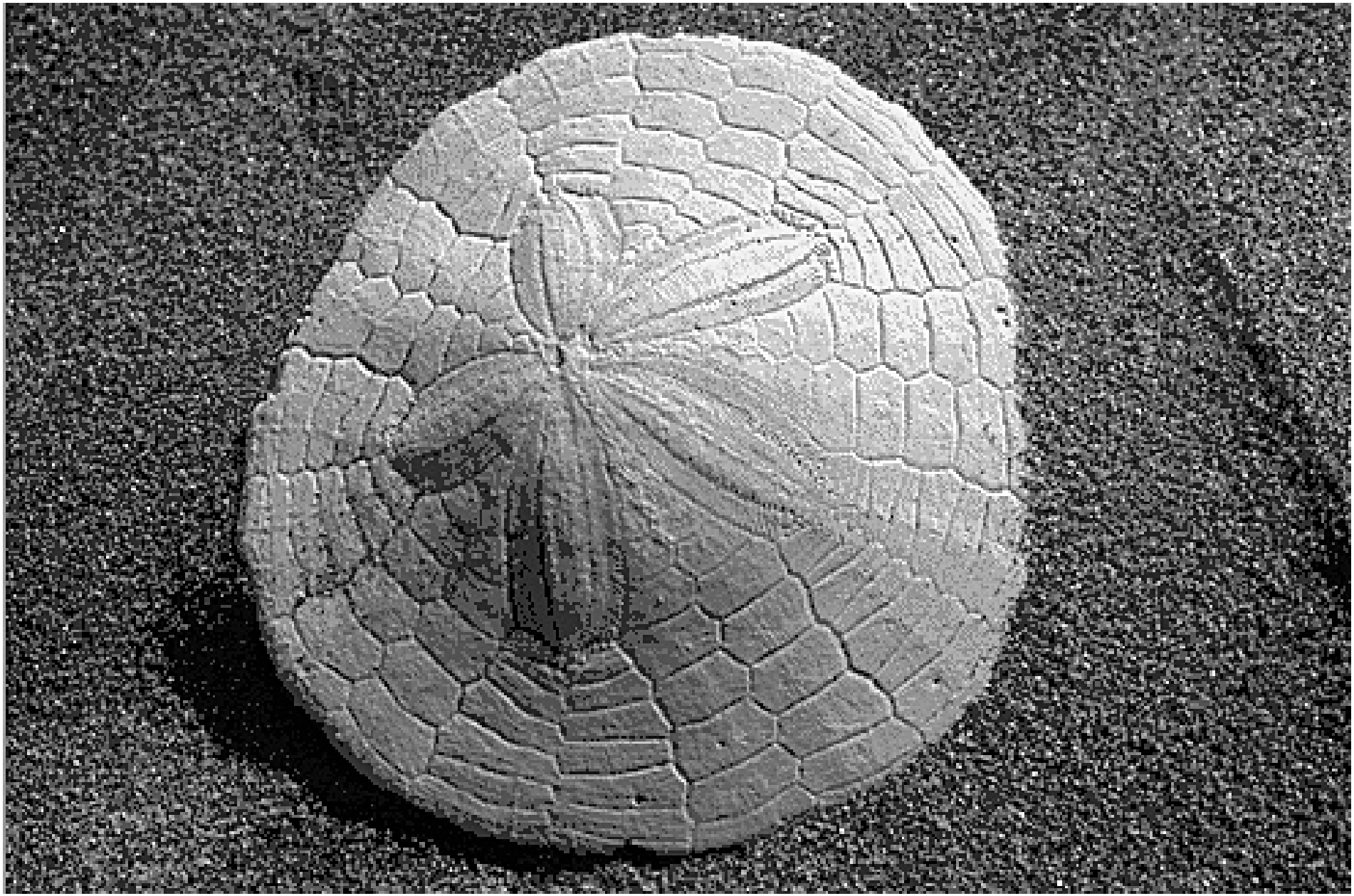
Carboniferous Marine Paleocommunity



Blastoid

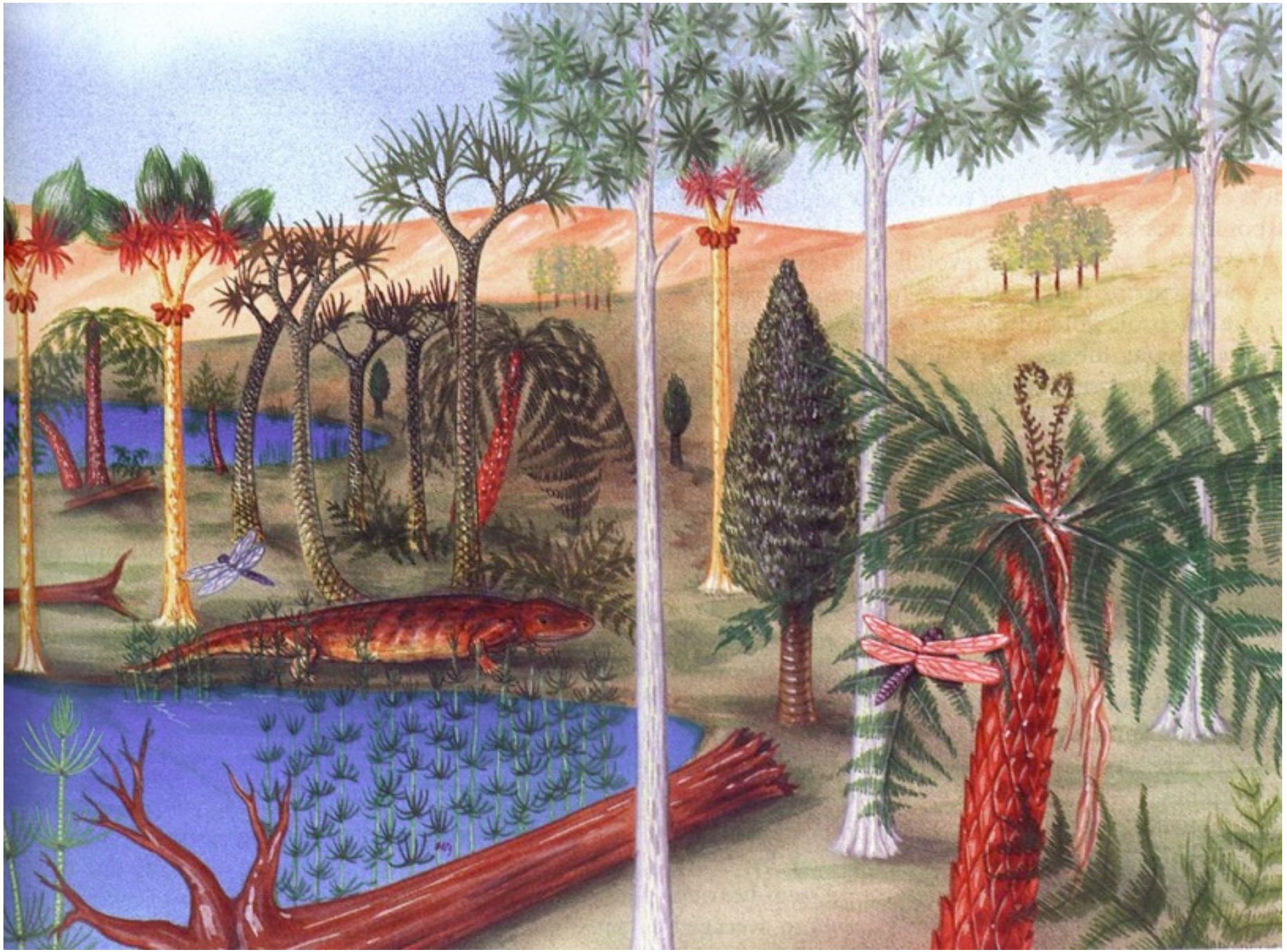
Crinoid

Echinoid (sand dollar)



Gymnospherm

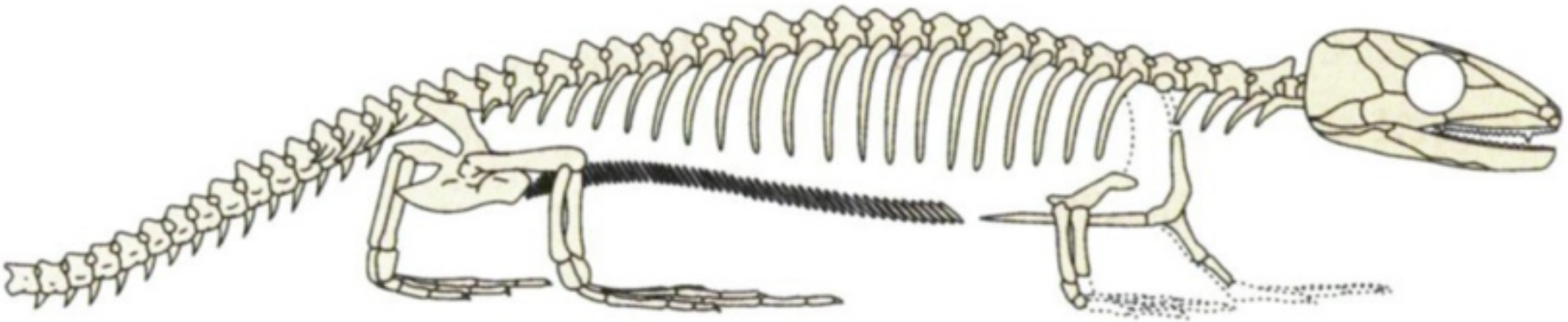
Carboniferous Forests

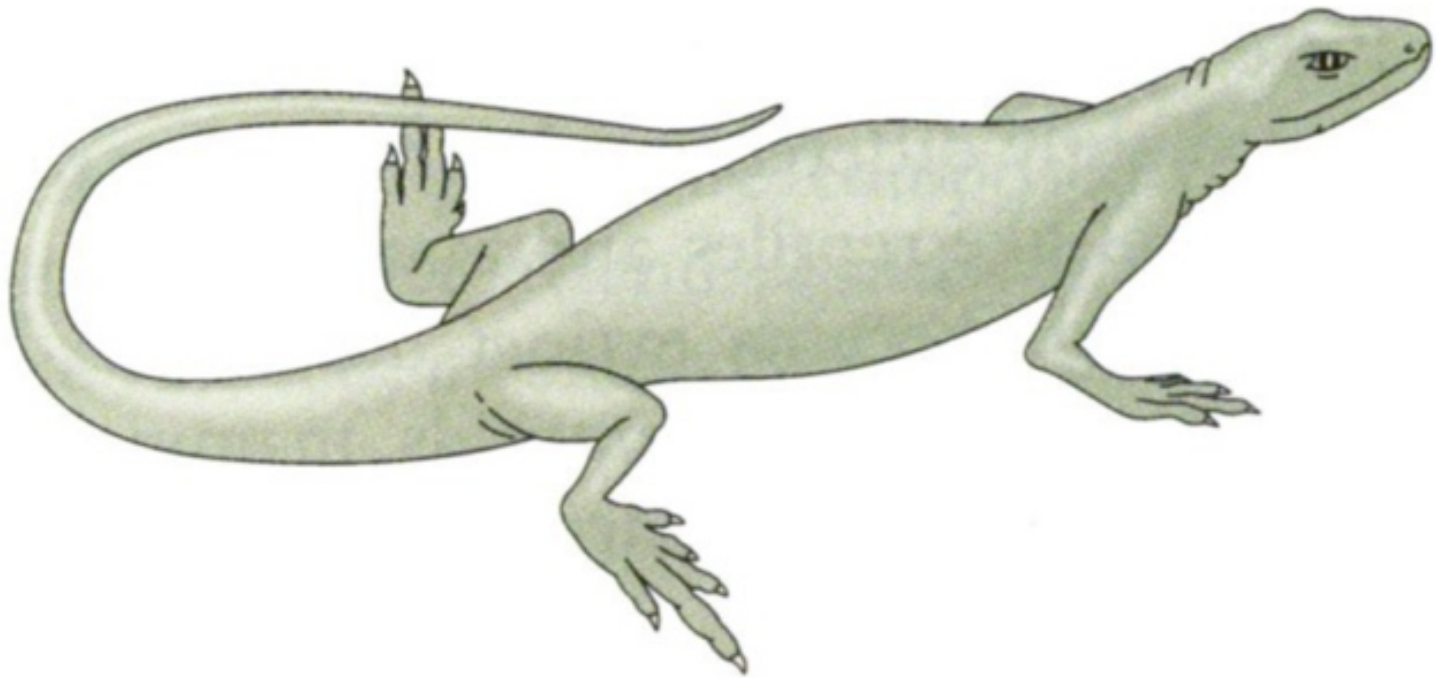


Lepidodendron Branch

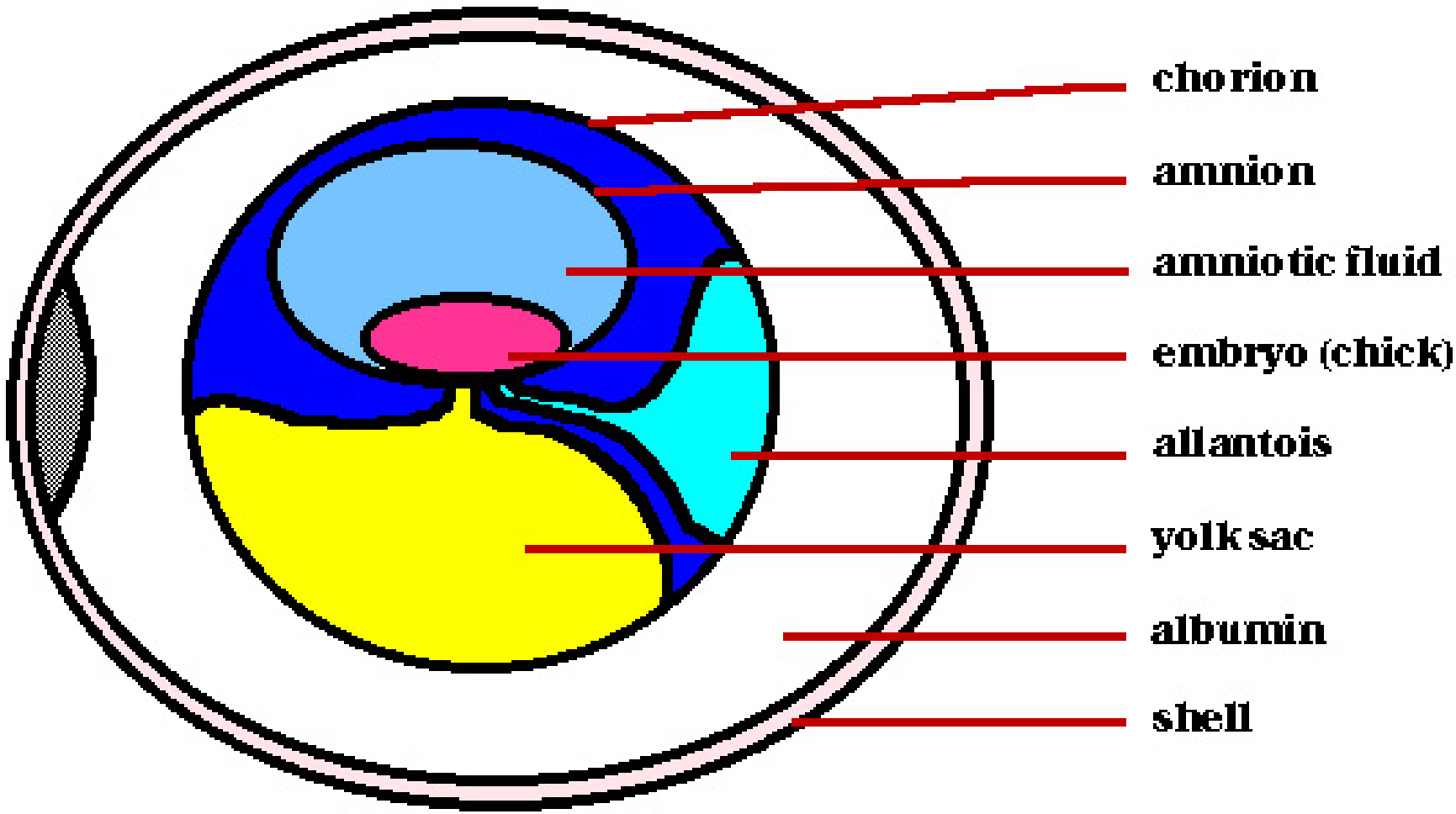
Fossil Fern Stump

Captorhinomorph (early reptile)





Amniotic Egg



Finback Reptiles

Therapsid Reptiles