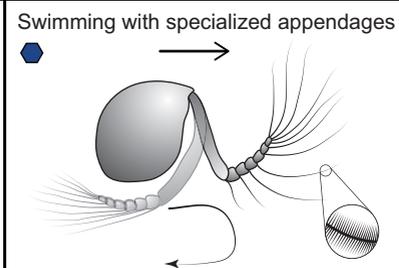
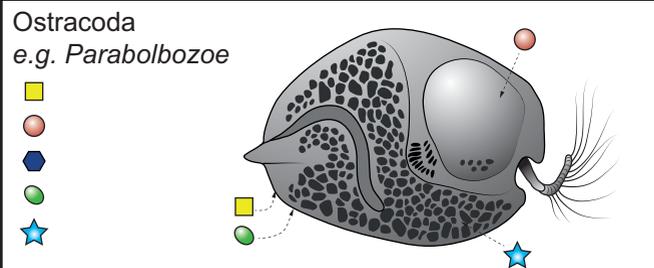
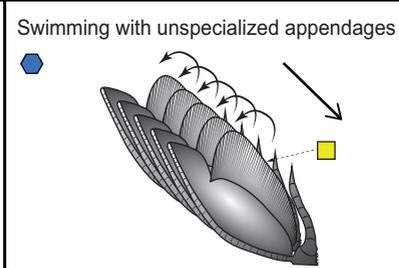
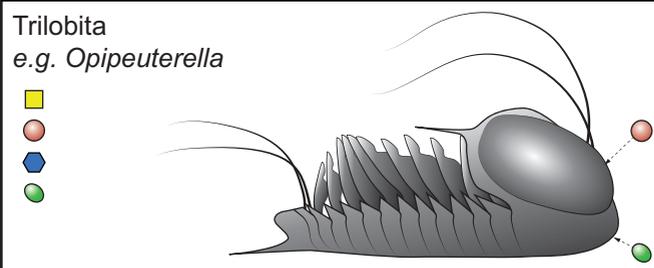
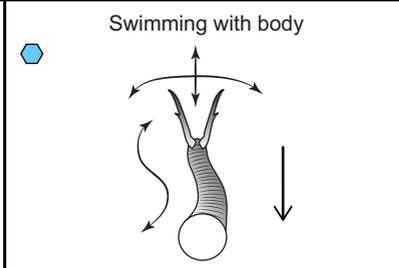
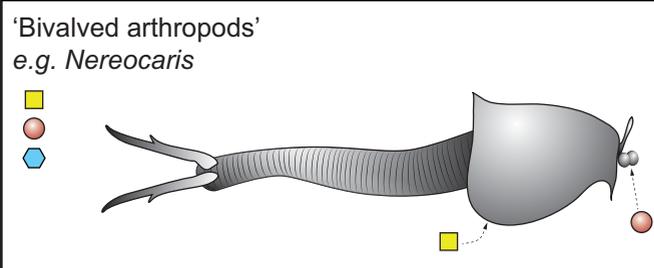
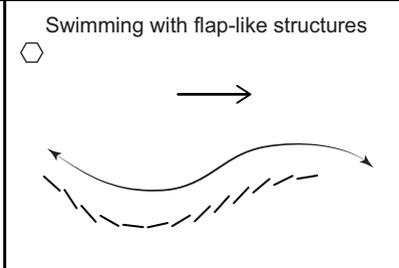
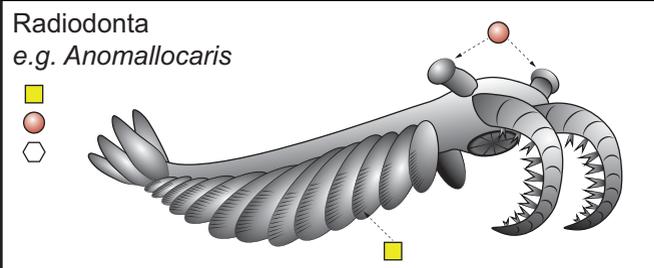
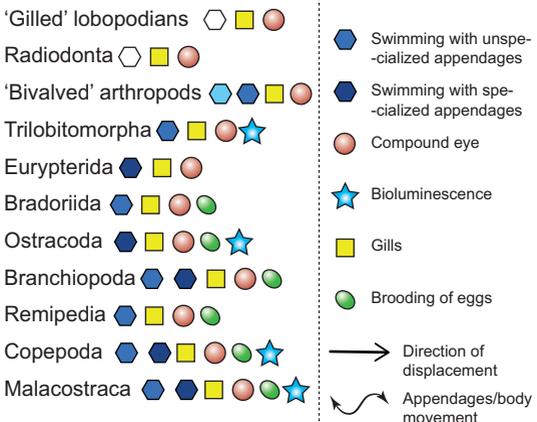
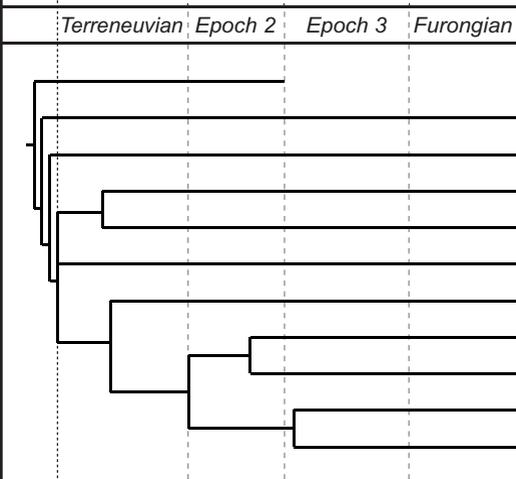
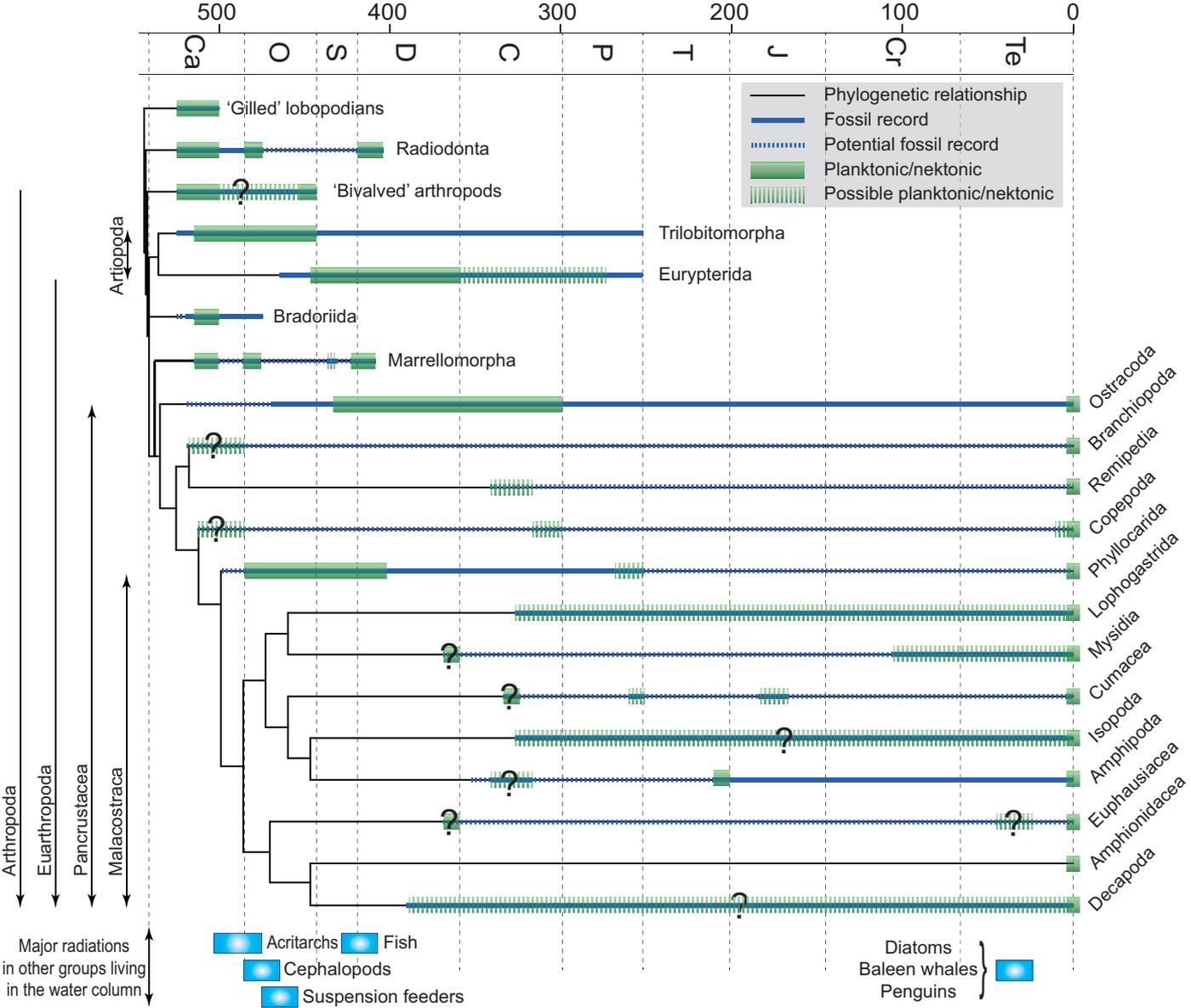
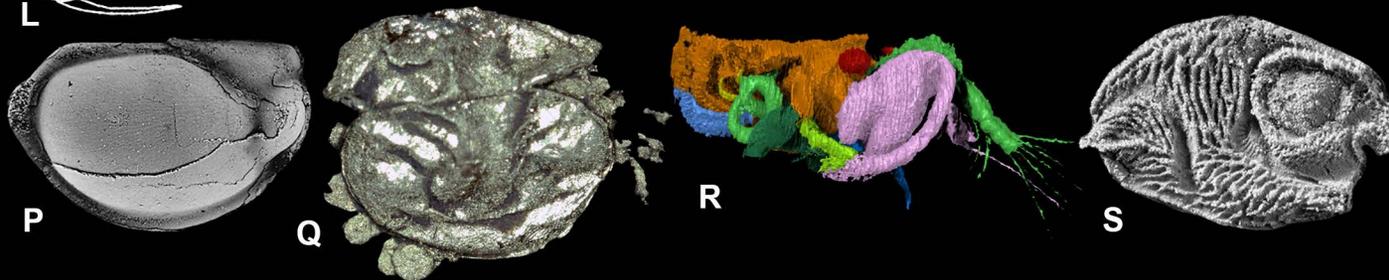
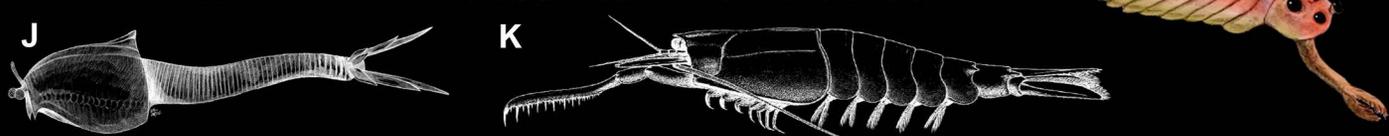
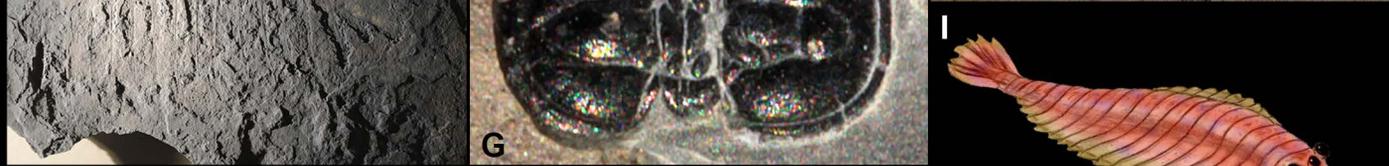
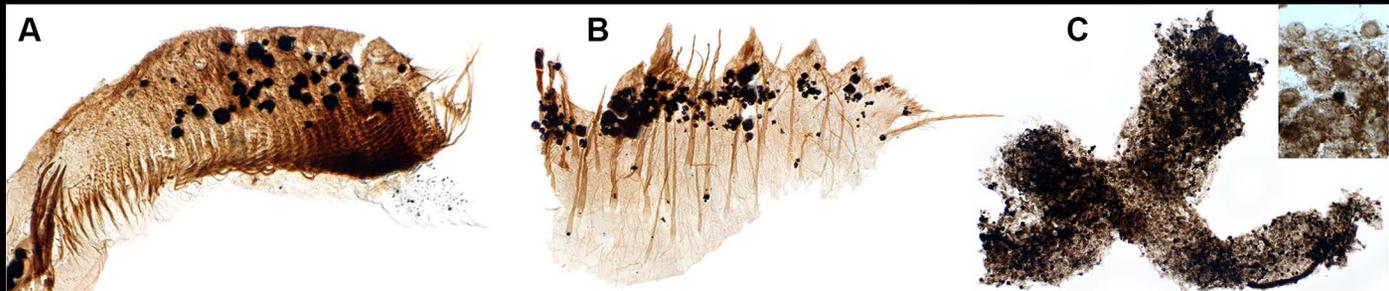
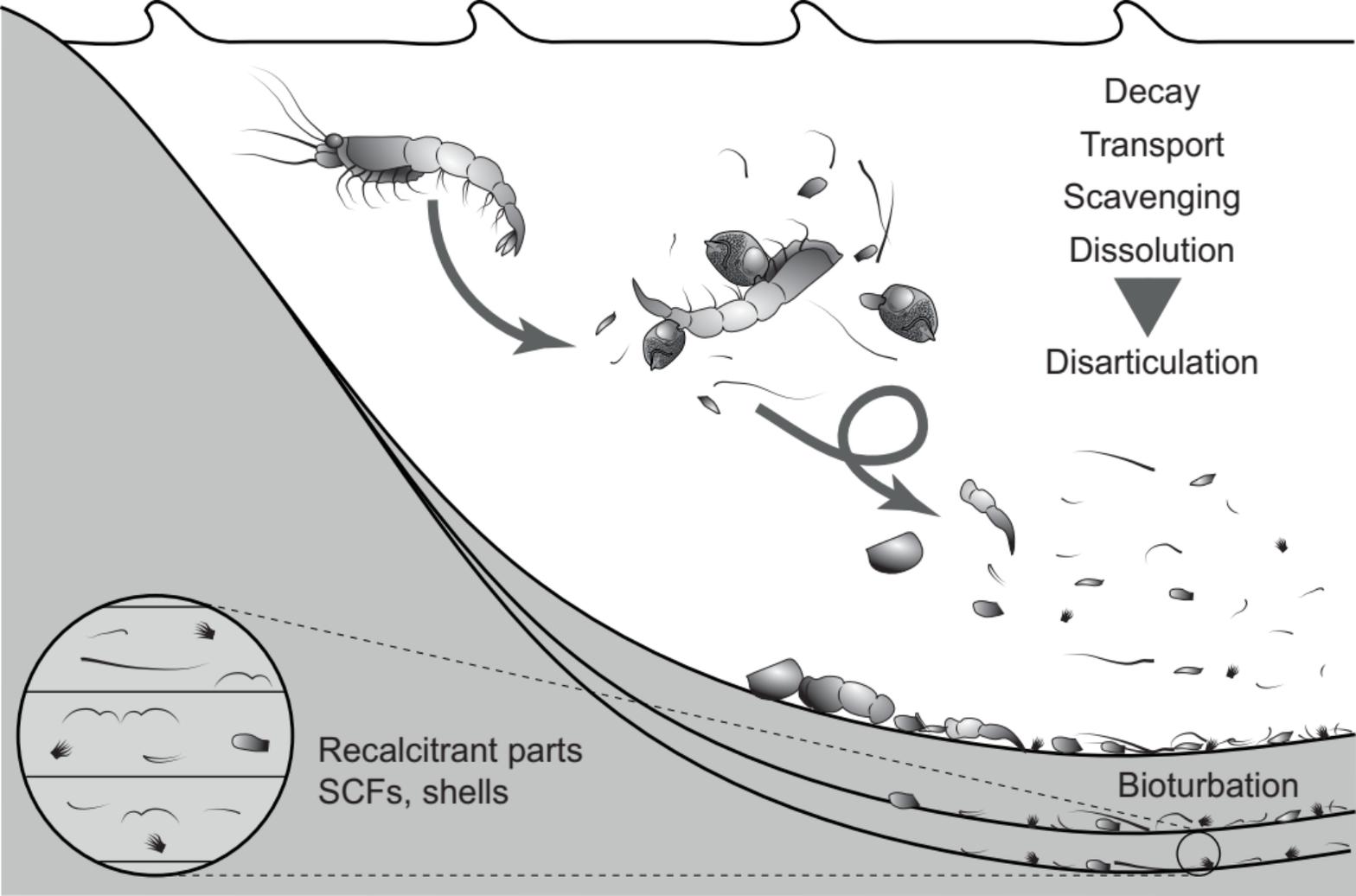


CAMBRIAN









ARTHROPODS IN THE PELAGIC FOOD WEB

↙ Feeding on

RECENT

EARLY PALAEOZOIC

Tertiary consumers
>200 mm
(top predators)

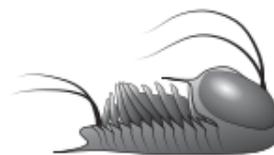
No
arthropods



Radiodonta
Eurypterida
Gilled lobopodians

Secondary consumers
20-200 mm
(macrozooplankton)

Ostracoda

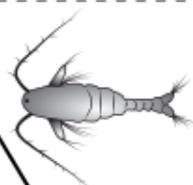


'Bivalved arthropods'
Radiodonta Ostracoda

Malacostraca

Primary consumers
0.2-20 mm
(mesozooplankton)

Copepoda



Bradoriida Ostracoda

Remipedia

Ostracoda

Copepoda

Malacostraca

Malacostraca

Branchiopoda

Trilobitomorpha

Branchiopoda

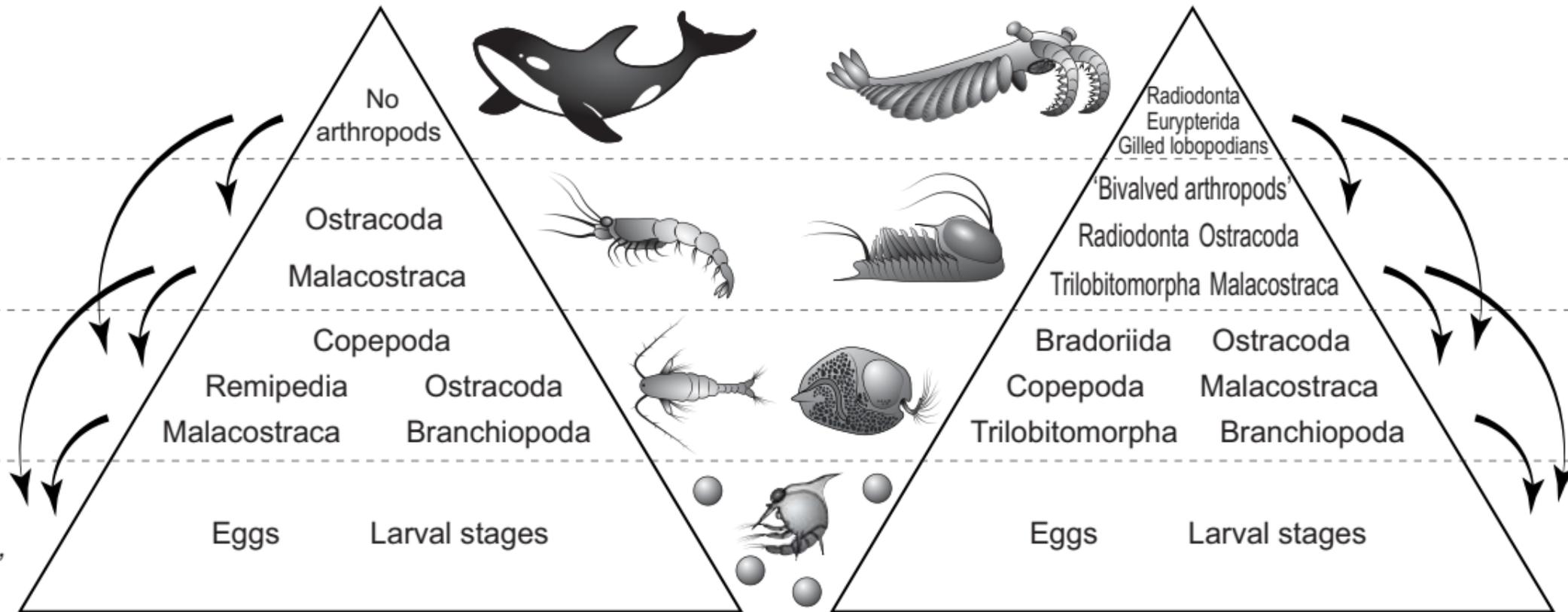
<0.2 mm
(picoplankton, phytoplankton,
microzooplankton)

Eggs

Larval stages

Eggs

Larval stages



TAXA IN THE WATER COLUMN		RANGE IN THE WATER COLUMN	LIFESTYLE	ANATOMICAL PREADAPTATIONS	FEEDING HABITS	TROPHIC LEVEL	REPRODUCTIVE STRATEGY			
HIGHER TAXA	EXAMPLES									
Basal arthropods	'Gilled lobopodians'	<i>Pambdelurion</i> <i>Kerygmachela</i> <i>Opabinia</i>	Cambrian	demersal	efficient eyes ? swimming capabilities, predatorial appendages, efficient respiration ?	predator	tertiary consumer	unknown		
	Radiodonta	<i>Anomalocaris</i> <i>Tamisiocaris</i> <i>Schinderhannes</i>	Cambrian to Devonian	demersal pelagic ?	efficient eyes, swimming capabilities, predatorial/filtering appendages, efficient respiration?	predator suspensivore	secondary consumer tertiary consumer	unknown		
	'Bivalved arthropods' (excluding Bradoriida and ostracoda)	<i>Nereocaris</i> <i>Erjiecaris</i> <i>Isoxys / Tuzoia</i>	Cambrian	demersal pelagic ?	efficient eyes, swimming capabilities, buoyant body? predatorial appendages, efficient respiration?	predator ?	primary consumer secondary consumer tertiary consumer	unknown		
	Arthropoda	Trilobitomorpha	Agnostida	<i>Ptychagnostus</i>	Cambrian to Ordovician	planktonic				
			Ptychopariida	<i>Ctenopyge</i>	Cambrian	planktonic				
			Corynexochida	<i>Thoracocare</i>	Cambrian	pelagic	efficient eyes, swimming capabilities, buoyant body, predatorial appendages ? efficient respiration ?	predator suspensivore parasite	primary consumer secondary consumer tertiary consumer	brooding of eggs planktonic larval stage
			Redlichiida	<i>Beishanella</i>	Cambrian	pelagic				
			Burlingiidae	<i>Schmalenseeia</i>	Cambrian	planktonic				
			Proetida	<i>Carolinites</i>	Ordovician	pelagic				
			Asaphida	<i>Pricyclopyge</i>	Ordovician	pelagic				
Arthropoda	Ostracoda	Eurypterida	<i>Adelophthalmus</i> <i>Pterygotus</i> <i>Acutiramus</i>	Ordovician to Permian	demersal	efficient eyes, swimming capabilities, predatorial appendages	predator	secondary consumer tertiary consumer	unknown	
		Bradoriida	<i>Anabaroichillina</i>	Cambrian	planktonic	efficient? eyes, swimming capabilities, buoyant body, predatorial appendages, efficient respiration?	predator ? suspensivore ?	primary consumer secondary consumer	brooding of eggs ?	
		Halocyprida	no fossil record	no fossil record	demersal pelagic planktonic	efficient eyes, swimming capabilities, buoyant body, predatorial appendages, efficient respiration	predator suspensivore parasite	primary consumer secondary consumer	brooding of eggs	
			Myodocopida	<i>Bolbozoe / Richteria</i>	Silurian to Recent					
		Branchiopoda	known from appendages only	Cambrian ? to Recent	demersal planktonic	efficient eyes, swimming capabilities, buoyant body, predatorial appendages, efficient respiration	predator? suspensivore parasite?	primary consumer secondary consumer	brooding of eggs	
		Remipedia	no fossil record in the water column	no fossil record in the water column	demersal planktonic	swimming capabilities, buoyant body, predatorial appendages?	predator suspensivore parasite	primary consumer secondary consumer	brooding of eggs ? planktonic larval stage	
		Copepoda	known from appendages only	Cambrian ? to Recent	demersal planktonic	eyes, swimming capabilities, buoyant body, predatorial appendages	predator suspensivore parasite	primary consumer secondary consumer	brooding of eggs	
		Pancrustacea	Malacostraca	Phyllocarida	<i>Caryocaris</i>	Ordovician to Recent				
					Amphipoda	<i>Rosagammarus</i> ?	Triassic ? to Recent			
				Peracarida	Isopoda	no fossil record in the water column	no fossil record in the water column			
Mysidia	<i>Siriella</i> ?				Jurassic ? to Recent	demersal pelagic planktonic	efficient eyes, swimming capabilities, buoyant body, predatorial appendages, efficient respiration	predator suspensivore parasite	primary consumer secondary consumer tertiary consumer	brooding of eggs planktonic larval stage
Lophogastrida	<i>Schimperella</i> ?				Carb. ? to Recent					
Cumacea	<i>Carbocuma</i> ?			Carb. ? to Recent						
Eucarida	Euphausiacea			no fossil record	no fossil record					
	Amphionidacea	no fossil record	no fossil record							
Decapoda	<i>Aciculopoda</i> ?	Devonian ? to Recent								