

Common Trawl Fauna in the Chukchi and Beaufort seas

Crustacea

Disclaimer:

This is not a complete guide to the trawl fauna of the Pacific Arctic. There are many other species that are not presented in this guide. Most identifications of the depicted organisms have been verified by a variety of taxonomic experts but small taxonomic features may not be clearly visible in the images and could lead to confusion with similar taxa. As such, it is recommended that identification of new collections may be aided by this guide but that final identifications should be confirmed on vouchers by taxonomic experts.

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MBON
Marine Biodiversity
Observation Network

Crustacea: Balanomorpha

Balanus cretanus



On rocks or epizoic on shells



Balanus nubilus



Large size, often overgrown by sponges or bryozoans

Gooseneck barnacles



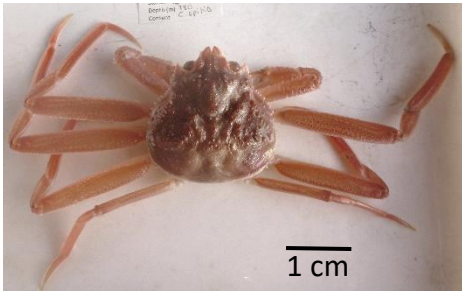
Decapoda: Brachyura

Chionoecetes opilio

Male



Mature female

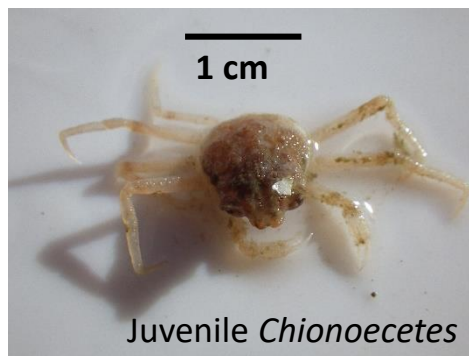
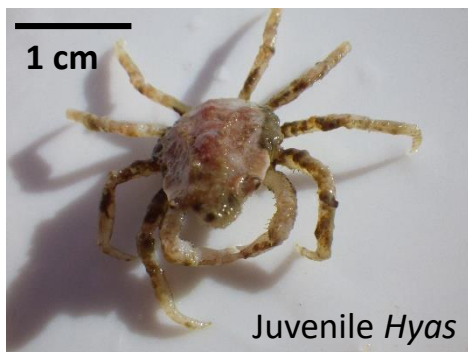


Hyas coarctatus



Overgrown Hyas

Juveniles of the two species can be easily confused. Juvenile *Chionoecetes* have straighter legs than juvenile *Hyas*.



Decapoda: Brachyura

Telmessus cheiragonus



Paralithodes platypus

Blue king crab

Decapoda: Anomura

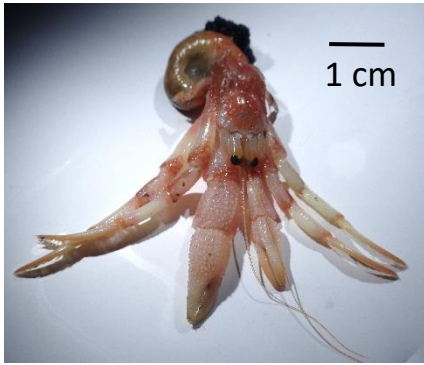


Juvenile



Decapoda: Anomura

Pagurus capillatus



Left claw symmetrical, oval-shaped

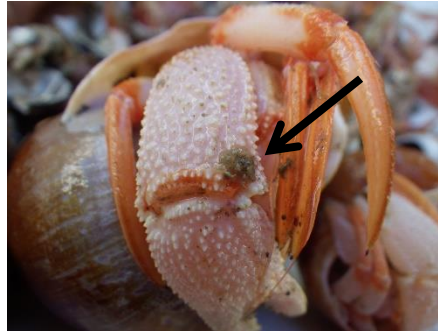
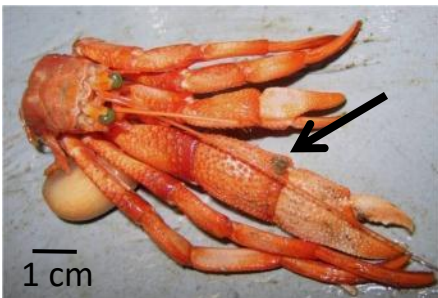
Pagurus trionocheirus



Left claw asymmetrical

Ridge on left claw
Hair-like setae on
cheliped

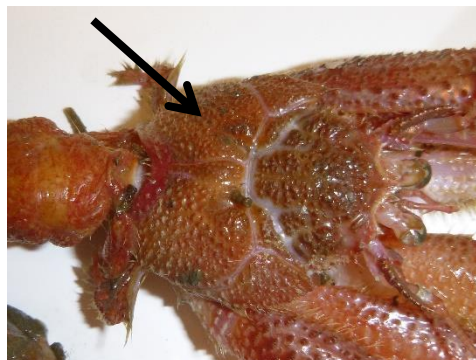
Pagurus rathbuni



Bundle of setae in special
round depression on carpus
of right claw (arrow)

End of dactylus and
propodus of left claw long
and bent downward.

Labidochirus splendescens



Entire dorsal surface of
carapace calcified (arrow)

Iridescent, body often too
large for shell, and long
arms and legs.

Typically in very small snail
shells

Decapoda: Anomura

Pagurus "hairy" - possibly also *P. trigonocheirus*?



Decapoda: Crangonidae

Argis sp.



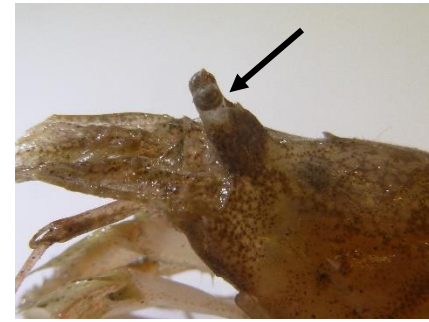
Base of eyes covered by group of robust spines (look “hooded”)

Eye stalks set close together and “sticking up”

Short rostrum



Typical coloration mark



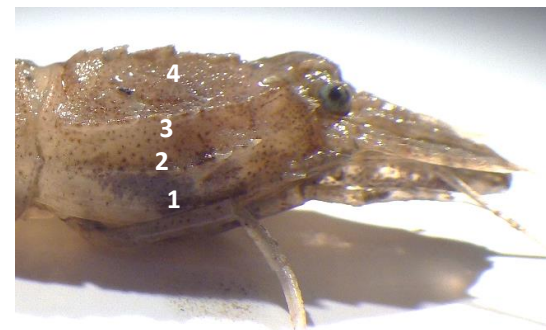
Sabinea septemcarinata



Carapace with 7 denticulate ridges

Pereopod 2 lacking chela

Tip of rostrum blunt

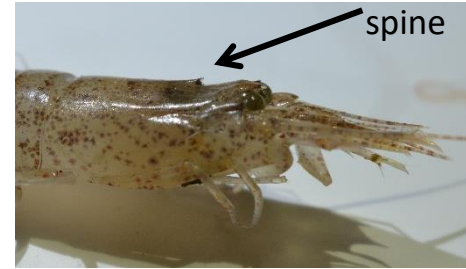
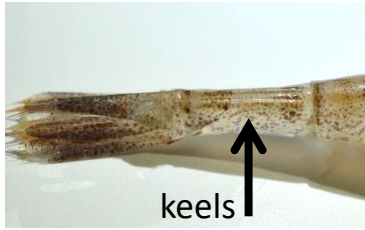


Position of 4 ridges, remaining 3 on other side

Decapoda: Crangonidae

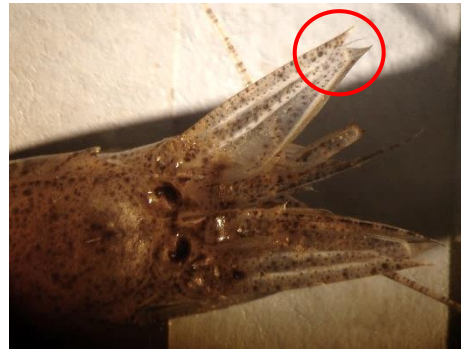
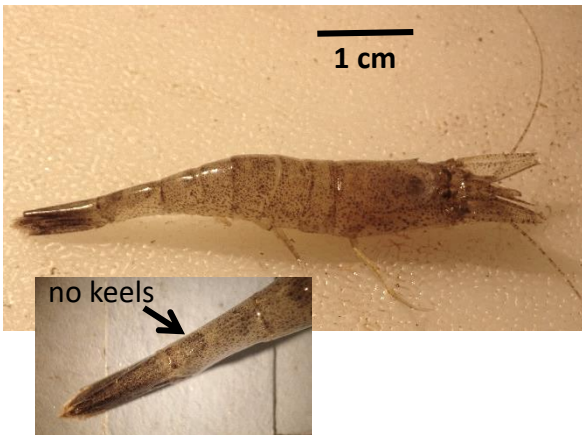
Crangon dalli

One spine on middorsal line of carapace,
two abdominal keels



Crangon septemspinosus

One spine on middorsal line of carapace,
no abdominal keels



Crangon communis

Two spines on middorsal line of carapace



Decapoda: Crangonidae

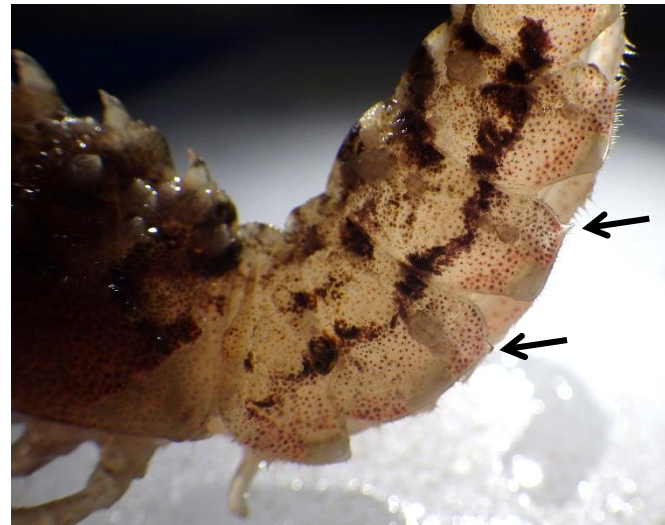
Sclerocrangon ferox



2 sharp spines on lower edge of 2nd and 3rd pleurons

2 hepatic spines on each side.

Sclerocrangon boreas



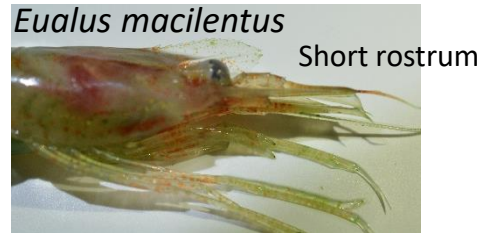
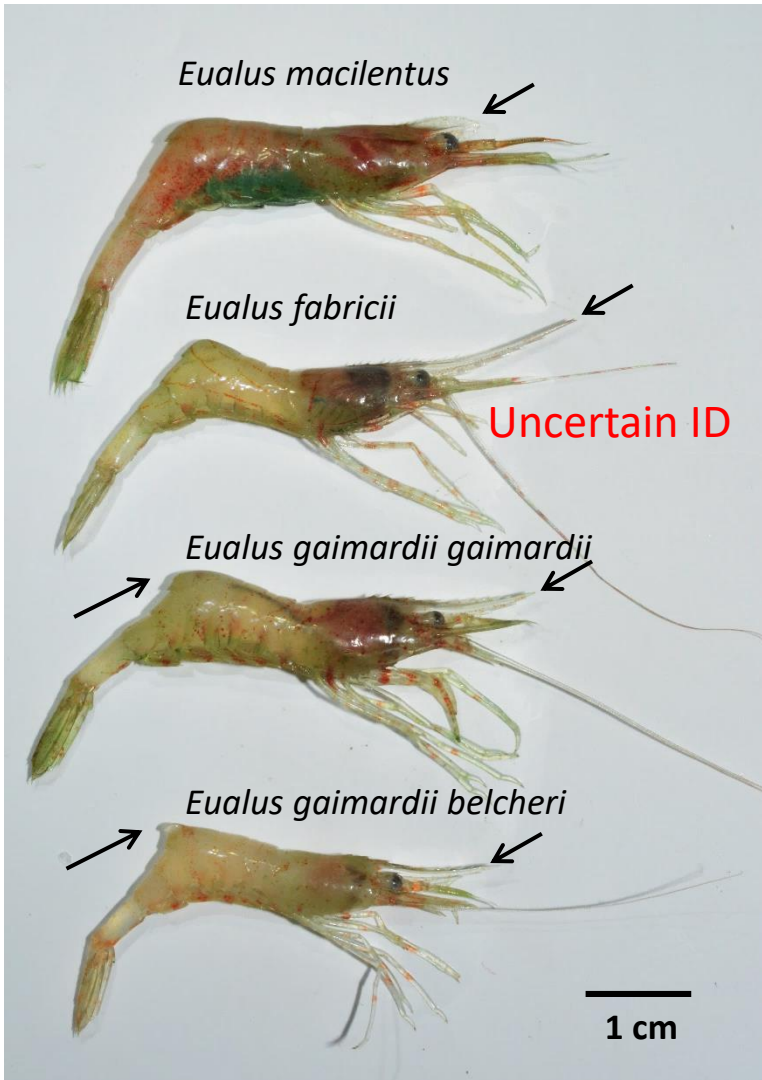
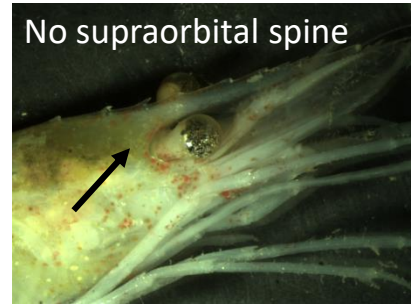
1 small tooth on bottom edge of 2nd and 3rd pleurons (arrows)

1 hepatic spine on each side



Decapoda: Thoridae

Genus *Eualus*: No supraorbital spine on each side of rostrum (genus); third maxilliped with exopodite



Decapoda: Thoridae

Genus *Lebbeus*: One supraorbital spine on each side of rostrum



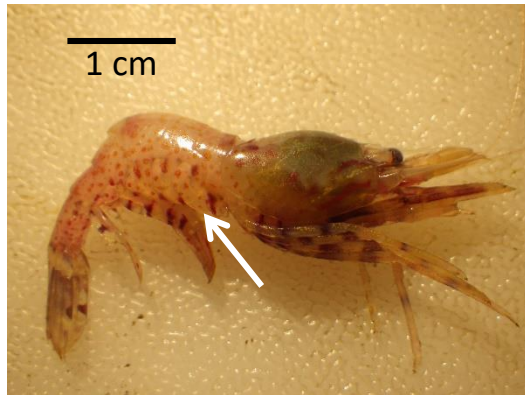
Lebbeus groenlandicus



Spines on pleurons



Lebbeus polaris



Pleurons on first three abdominal segments rounded, without spines

Body speckled with red and gold flecks

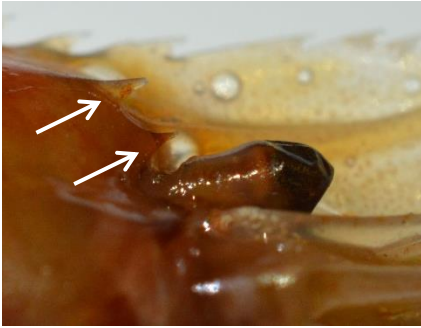


Can be confused at first sight with *Eualus* sp. (but note that *Lebbeus* has one supraorbital spine, while *Eualus* has none). Color pattern in *Lebbeus polaris* is more in the form of spots and less like lines, often with yellow-golden star patterns interspersed

L. polaris males can have straight rostrum and no rostral teeth



Genus *Spirontocaris*



Two supraorbital spines on each side of rostrum

Many species in this genus, difficult to identify

Spirontocaris phippsii



Short rostrum

Dorsal teeth
on carapace
and rostrum
uniform in size

Spirontocaris intermedia



Spirontocaris spinus

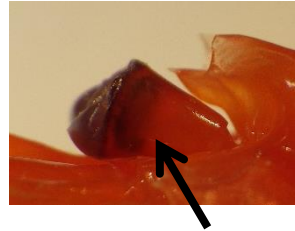


Decapoda: Bythocarididae

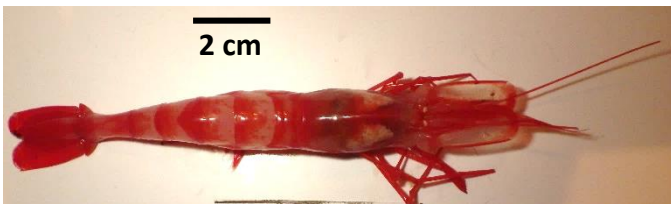
Bythocaris biruli



Eye stalks cone-shaped, dark eyes,
Eye balls wider than stalk
Deep-water species



Bythocaris irene



Eye stalks straight or wider at base,
white eyes, eye balls smaller than stalk
Deep-water species



Both are deep-water species



Decapoda: Pandalidae

Pandalidae:

First pair of pereopods is lacking chela
Long, thin rostrum (may be broken off)
Large eyes

Pandalopsis dispar



Pandalus borealis eous

Genus *Pandalus*: rostrum longer than carapace



Upper edge of rostrum with spines along entire length



Pandalus goniurus

Small lobe on dorsal side of 3rd abdominal segment; distal 1/3 of upper edge of rostrum without spines



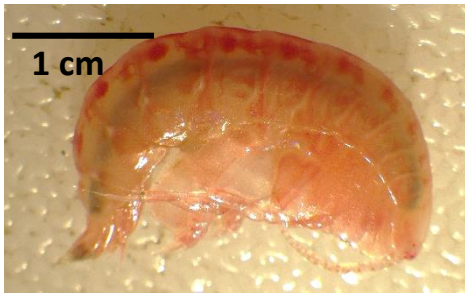
Ampeliscidae

Ampelisca erythrorhabdota



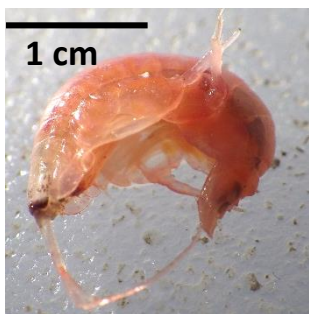
Two pairs of red eyes,
Red markings in distinct lines towards
the end of each segment

Ampelisca macrocephala



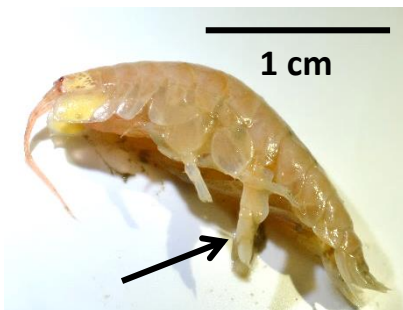
Two pairs of red eyes, dorsal red markings can be more scattered than in
A. erythrorhabdota

Byblis gaimardi



Two pairs of black eyes

Haploops laevis



7th leg distinct

Crustacea: Amphipoda

Anonyx sp.



Distinct black
"keyhole" shaped eyes
Sturdy body, yellowish-
tan coloring
Head lightly pointed

Socarnes bidenticulatus



Similar shape as *Anonyx*
Head more rounded
Keyhole eye not as dark
Red or red mottled
body color



Eurythenes gryllus



Very large, bright red
Yellow, crescent-shaped eyes
Deep-water species

Crustacea: Amphipoda

Onisimus litoralis



Red very round eyes

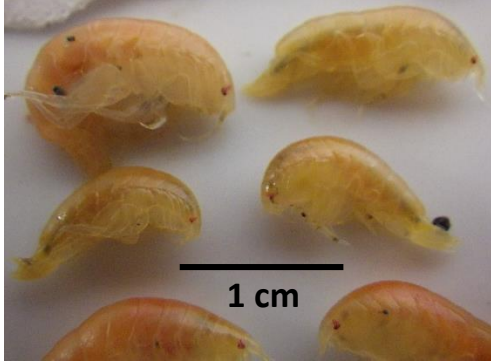
Deep notch on uropod 2

Onisimus c.f. derjugini



Crustacea: Amphipoda

Hippomedon propinquus



Hippomedon sp



Paratryphosites abyssi



Halirages quadrodentatus



Crustacea: Amphipoda

Eusirus holmii



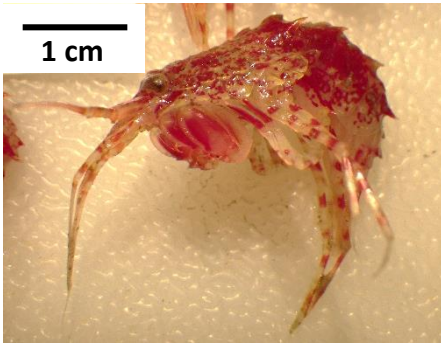
Eusirus cuspidatus



- Red-pink “fluorescent” eyes
- Variable red coloration (sometimes “zebra” stripes)
- Dorsal spines



Rhachotropis aculeata



Distinct with long legs and antennae

Mostly mottled red-tan pattern but can also have distinct stripes or bands

Distinct rows of spines on back



Rhachotropis oculata



Distinct eye shape

Red spots or more solid red

Eyes dark or light

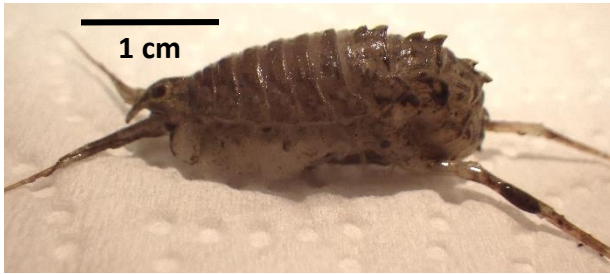


Rhachotropis helleri



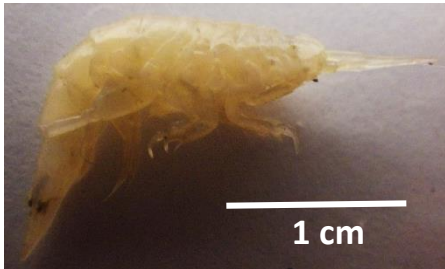
Crustacea: Amphipoda

Acanthostepheia beringiensis



- Grey mottled color, antennae can be red
- Long legs and antennae
- Distinct extended rostrum, spiny back
- Can occur in large numbers

Arrhis phyllonyx



- Antenna 1 peduncle long, $>2x$ head length
- No apparent eye (difficult to identify distinct "head")

Arrhis luthkei



Crustacea: Amphipoda

Paroediceros lynceus



Pink, cyclops-like eye
Gray body color



Melita dentata



With small teeth next to dorsal spine
Legs more lobed/curved in the back than in *M. formosa* (arrow)
Coloration is not a distinguishing feature

Melita formosa



Legs fairly straight
1 dorsal spine

Melita quadrispinosa



Can be pinkish, no bands
(but: color highly variable)

Similar to *M. formosa* but
eye not as well developed,
eyes white

Crustacea: Amphipoda

Stegocephalidae

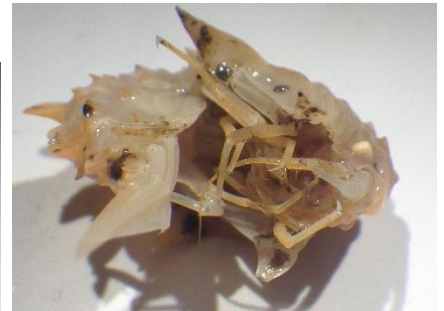
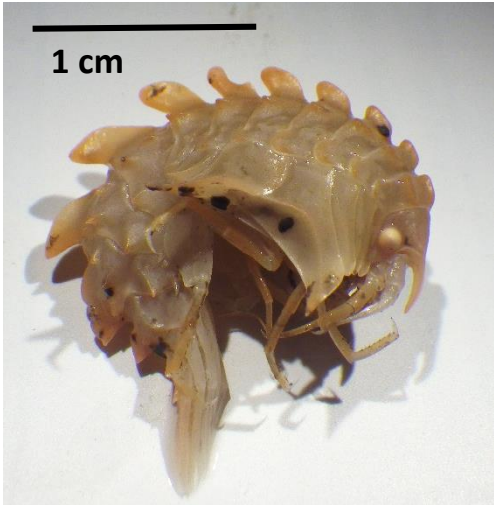
1 cm



Species, even genus, identification difficult (Stegocephalidae)

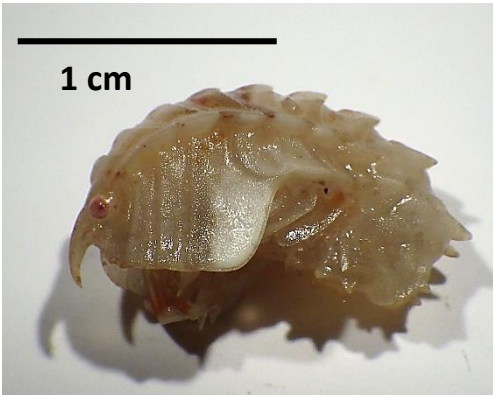
Epimeria loricata

1 cm



Pleustes panoplus

1 cm



Crustacea: Amphipoda

Pleustes cataphractus



Neopleustes pulchellus var. *euacanthus*

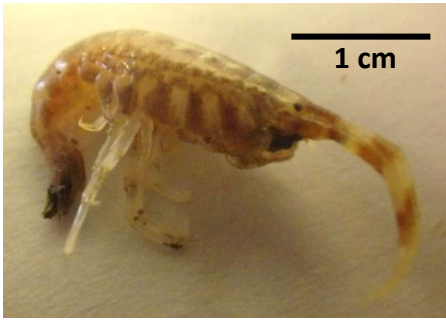


Tmetonyx cicada



Crustacea: Amphipoda

Ischyrocerus sp.



Unciola leucopis



Dorsoventrally compressed body, resembles isopod
Can have red-striped legs

Amathillopsis spinigera



Lateral and dorsal rows of spines
Red antennae and front legs
Long rostrum



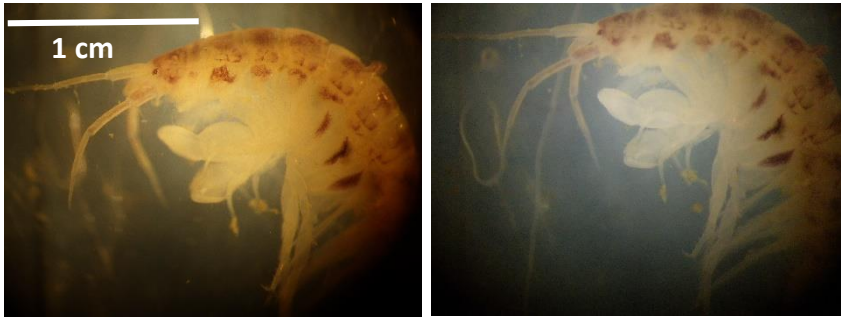
Arctolembos arcticus



White dorsal stripe,
overall brown color
Long thin legs

Crustacea: Amphipoda

Protomeдея sp.



Tmetonyx similis



Weyprechtia heuglini



pink/red large eye
brownish-grey
lateral spine (arrow)

Crustacea: Amphipoda

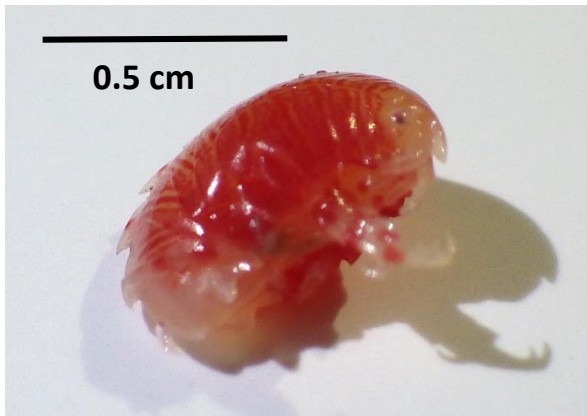
Acanthonotozoma sp.



Acanthonotozoma inflatum



Acanthonotozoma rusanovae



Crustacea: Amphipoda

Atylus carinatus



Atylus smitti



Brown body
Red eye

Atylus bruggeni



Speckled body
White-gray eye

Crustacea: Amphipoda

Maera prionochira

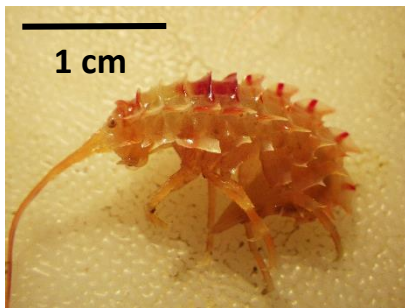


Pontoporeia femorata



Can have bright red or light pink eyes
Last leg pairs build distinct cluster

Paramphithoe polyacantha



Paramphithoe cuspidata



Crustacea: Amphipoda

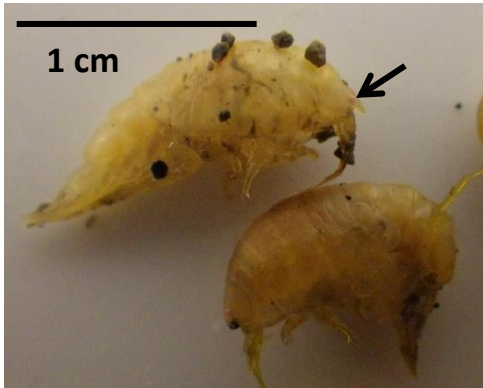
Stephobruzelia cf dentata



Caprellidae

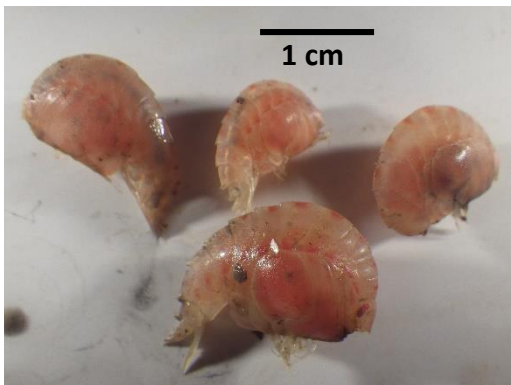


Bathymedon sp.



white body
light pink, round eyes
small rostrum

Lepidepecreum eoum



Crustacea: Amphipoda

Erichthonius sp.



Rozinante fragilis



Live in clumps of muddy tubes

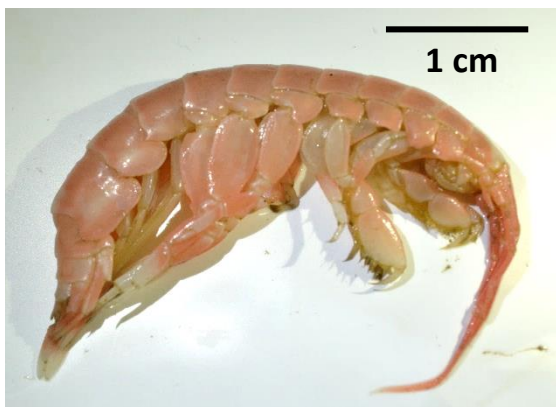
Metopa spitzbergensis



Faint but distinct red inter-segmental lines

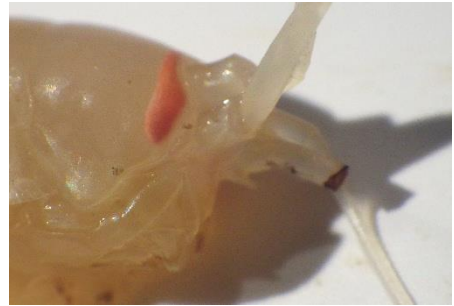
Typically found on hydroids

Ceradocus cf *torelli*

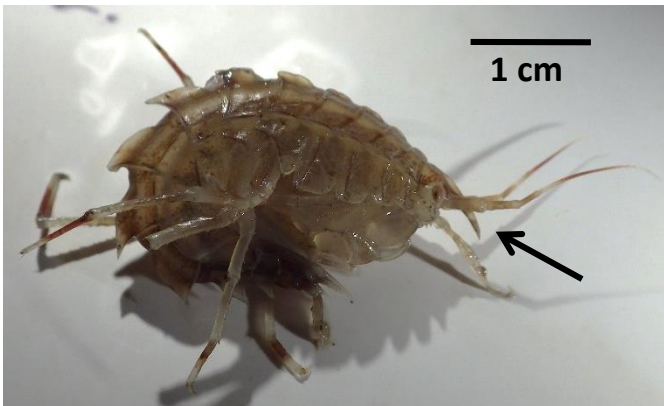


Crustacea: Amphipoda

Pardalisca sp.

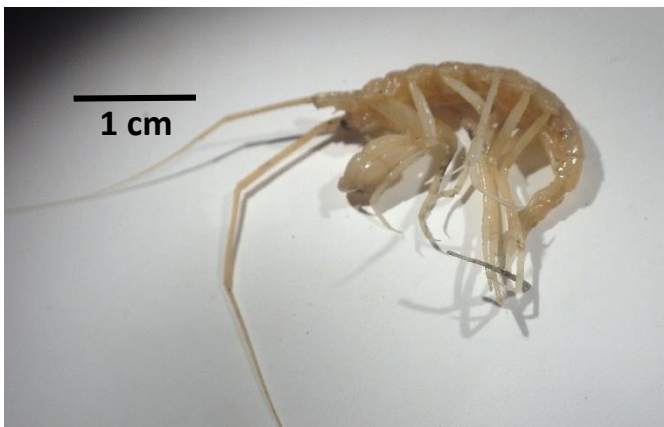


Gammarus loricatus



Spines on back
Rostrum long

Neohela monstrosa



Crustacea: Amphipoda

Anisogammarus (Barrowgammarus) macginitiei

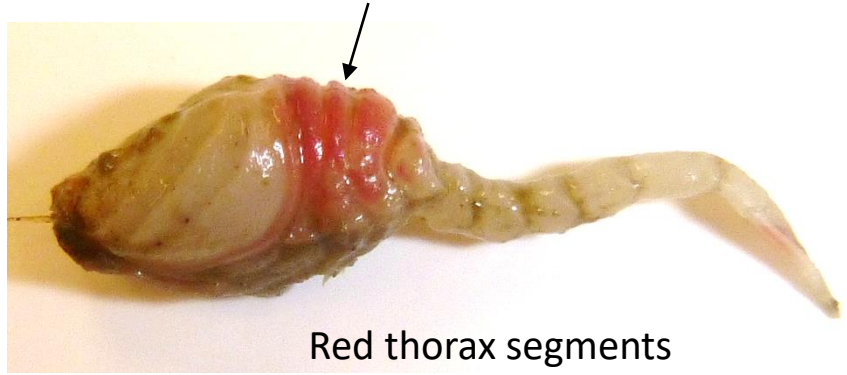


Halirages nilssoni



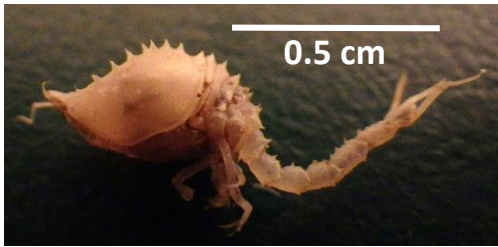
Crustacea: Cumacea

Diastylis alaskensis



Red thorax segments

Diastylis spinulosa



Spiky carapace

Other *Diastylis*:

D. glabra/rathkei complex
More elongated body

Diastylis scorpioides

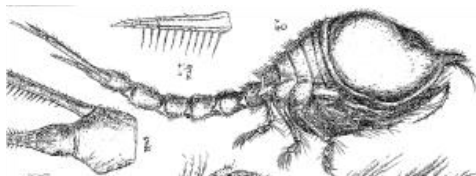


Smooth (no setae)
Carapace with ridges (arrow)
Brownish color, small size

Diastylis goodsiri



"Hairy" with setae
Gray color
Large size



Crustacea: Isopoda

Saduria entomon



Body broad
Eyes present (arrow)



Saduria sabinii



Eyes absent
Body narrower than
in *S. entomon*

Saduria sibirica



Crustacea: Isopoda

Synidotea bicuspidata



May have red-tipped antennae,
at least some red markings on body

Synidotea sp.

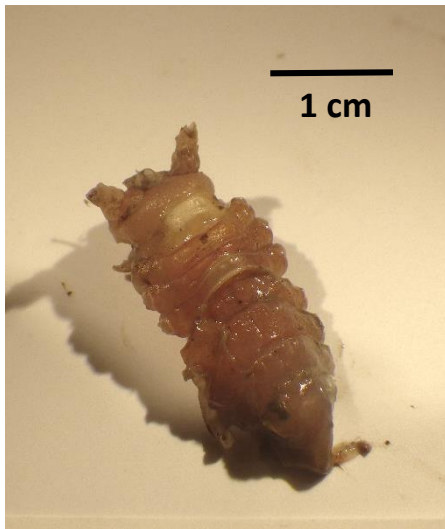


Crustacea: Isopoda

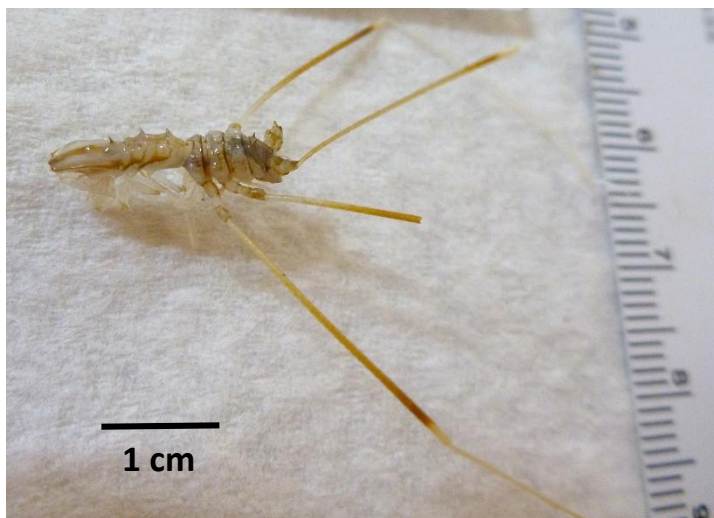
Gnathia arctica



Munnospsurus giganteus



Munnopsis typica



Crustacea: Isopoda

Eurycope cf. inermis



Tecticeps sp



Roll up into a pillbug-shape

Crustacea: Tanaidacea

Tanaidacea



Arthropoda: Pycnogonidae

Colossendeis proboscidea



Very large size
Often red-yellow color



Arthropoda: Pycnogonidae

Boreonymphon robustum



Robust appendages

Nymphon helleri



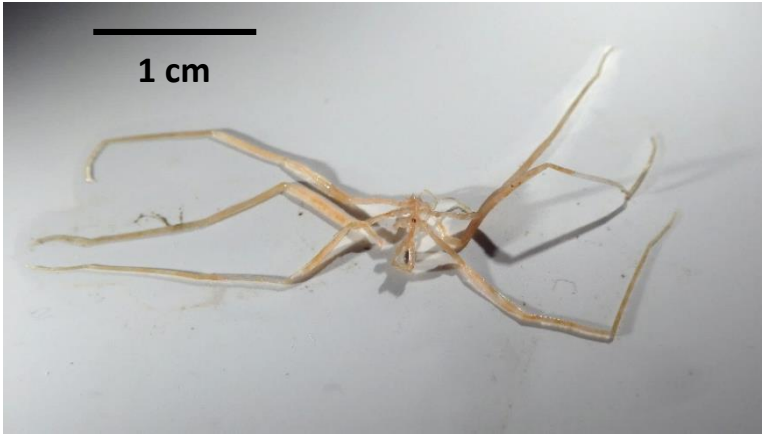
Large, but smaller than *Colossendeis*

Nymphon hirtipes



Arthropoda: Pycnogonidae

Nymphon longitarse



Nymphon brevirostre



Achelia echinata

