

# Common Trawl Fauna in the Chukchi and Beaufort seas

## Echinodermata

### 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.

**Katrin Iken**, College of Fisheries and Ocean Sciences, University of Alaska Fairbanks, USA (contact: [kbiken@Alaska.edu](mailto:kbiken@Alaska.edu))

**Bodil Bluhm**, UiT The Arctic University of Norway

# Echinodermata: Asteroidea

## *Asterias amurensis*



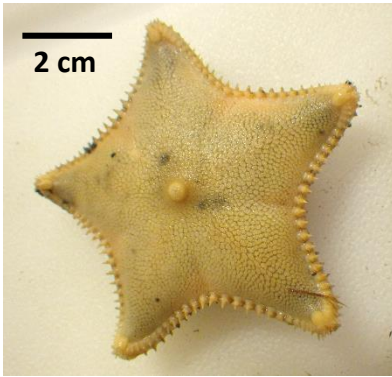
Ridged arms, mostly purple-orange color, sometimes all orange

## *Crossaster papposus*



# Echinodermata: Asteroidea

*Ctenodiscus crispatus*



*Henricia* sp



Small red species, possibly: *Henricia tumida*



# Echinodermata: Asteroidea

## *Leptasterias arctica* 5 arms



Pronounced paxillae, rough and hard body

color variable

Max size usually no more than 10 cm tip to tip

## *Leptasterias groenlandica*



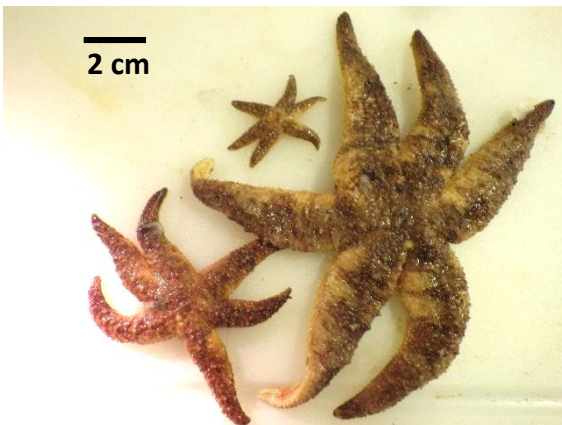
### 5 arms

Less pronounced paxillae

“softer” body surface

Can reach larger size than *L. arctica*

## *Leptasterias polaris* 6 arms



Arm insertion to central disc looks “swollen”

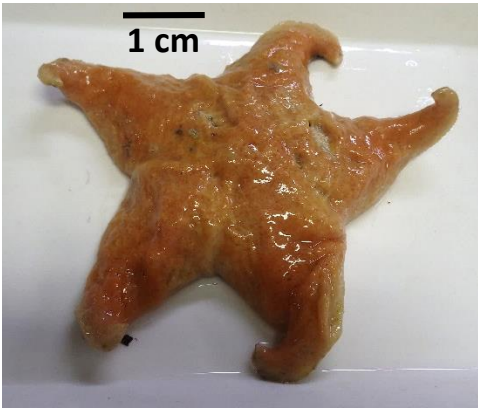
Scattered pronounced paxillae

Often mottled coloration

Can reach large size

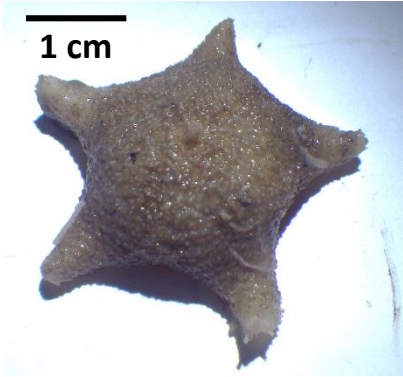
# Echinodermata: Asterozoidea

*Pteraster jordanii*



"slimy" surface

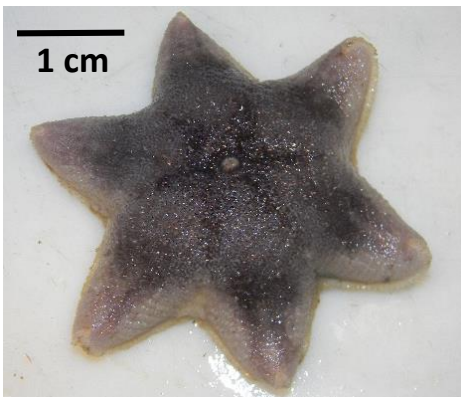
*Pteraster militaris*



5 arms

*Pteraster obscurus*

>5 arms, mostly 6 arms

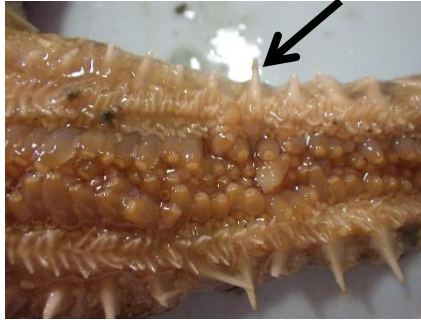


# Echinodermata: Asterozoa

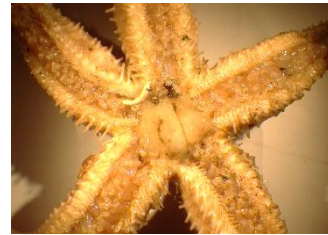
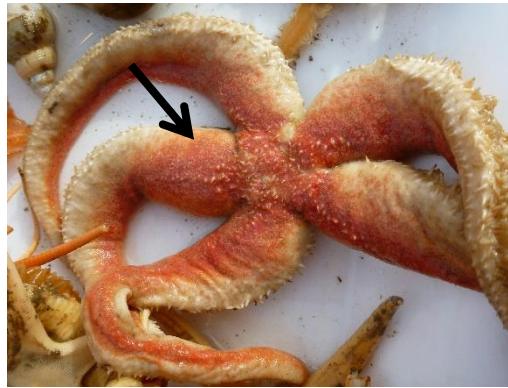
## *Urasterias linckii*



Long spines on oral side of arms

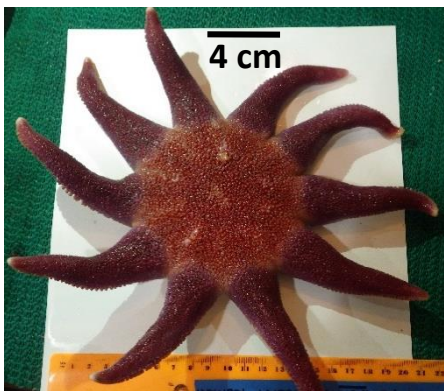


## *Icasterias panopla*



Arm connection to disc can look "swollen" (arrow)

## *Solaster* sp. \*

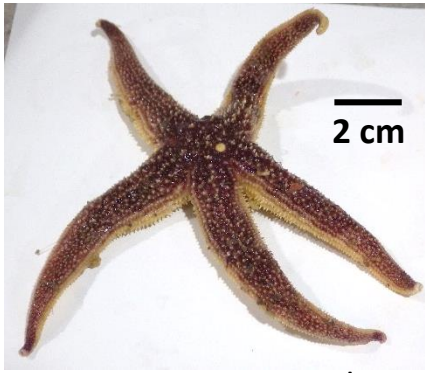


Multi-arm large sea star, color variable

\*Species occurring: *S. dawsoni*, *S. endeca*

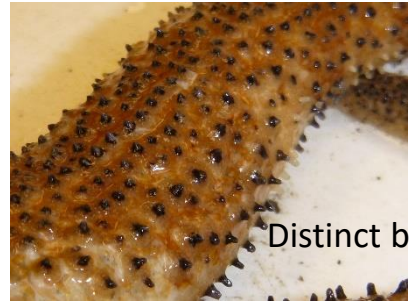
# Echinodermata: Asteroidea

## *Evasterias echinosoma*



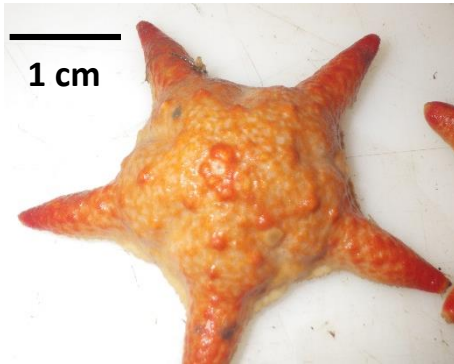
Large size, hard exterior

## *Lethasterias nanimensis*

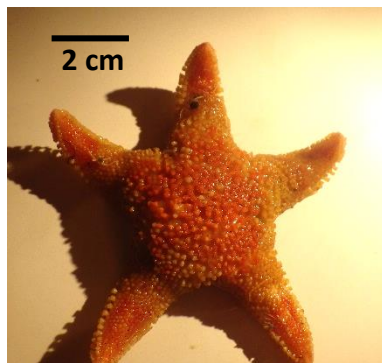


Distinct black dots

## *Poraniomorpha tumida* (previously *Rhegaster tumidus*)



## *Lophaster furcifer*



# Echinodermata: Asteroidea

## *Bathybiaster vexillifer*



Deep-water species

No lateral spines, but ridges

## *Pontaster tenuispinus*



Lateral spines

Often occurs across  
many size classes

Often deep

## *Hymenaster pellucidus*



Transparent body  
Internal skeleton visible



# Echinodermata: Crinoidea

## *Florometra* or *Heliometra* sp



# Echinodermata: Ophiuroidea

## *Gorgonocephalus* sp.



### *Gorgonocephalus arcticus*

Sparse, non-uniform but large tubercles on radial ridges



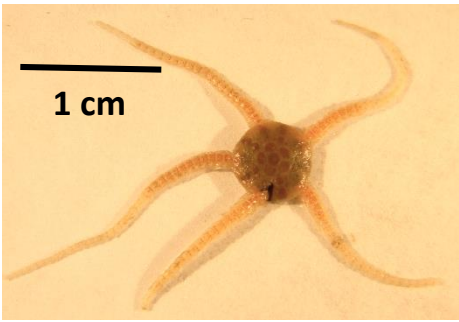
### *Gorgonocephalus eucnemis*

Numerous uniform, small tubercles on and between radial ridges



# Echinodermata: Ophiuroidea

## *Ophiocten sericeum*



Disc with distinct honey-comb pattern, arms break off easily

## *Ophiopholis aculeata*



Disc can have various colorations, arms with distinct spines

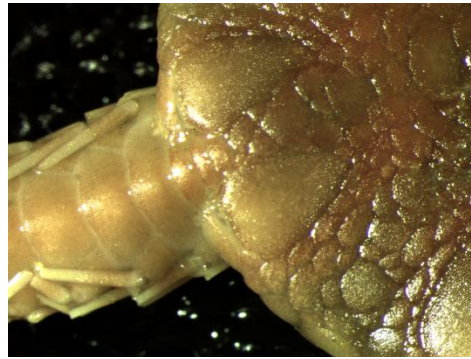
## *Ophiopleura borealis*



Very hard body  
Stiff legs  
Deep-water species

# Echinodermata: Ophiuroidea

## *Ophiura sarsii*



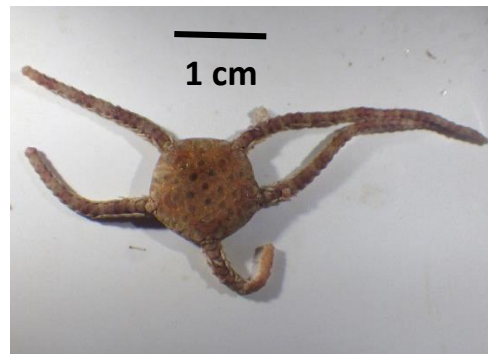
Most abundant species in Chukchi



## *Ophiura robusta*

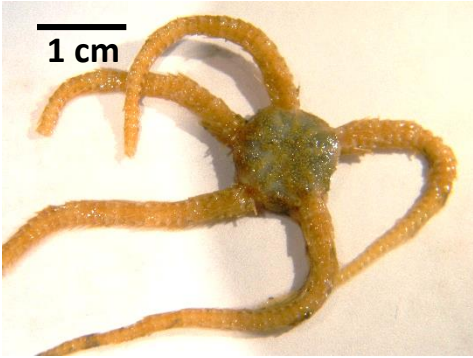


Arm pattern can appear 'striped'



# Echinodermata: Ophiuroidea

## *Ophiacantha bidentata*



soft 'skin' on disc  
hairy legs

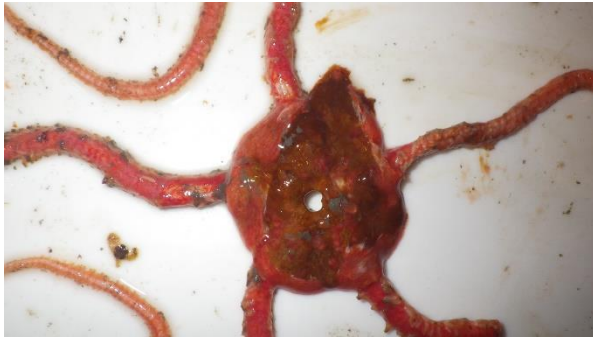
## *Amphiodia craterodmeta*



Distinctly visible "twin plates" at base of each arm

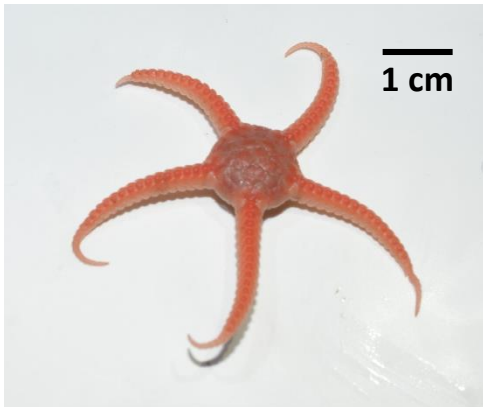
# Echinodermata: Ophiuroidea

## *Ophioscolex glacialis*



Slimy disc  
Disintegrates easily  
Mostly in deep water

## *Stegophiura nodosa*



Small, pink species  
Hard short legs

## *Amphiura sundevalli*

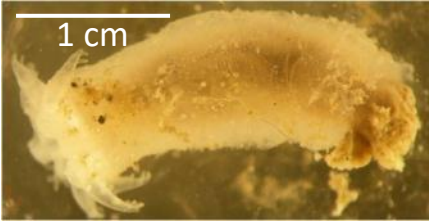


Smooth, small disc  
Long slender arms



# Echinodermata: Holothuroidea

## *Chiridota discolor*



Tentacles highly branched at end

## *Myriotrochus rinkii*



Gelatinous, often destroyed in net tows  
Ossicle ring visible around mouth  
Sclerites visible as little dots



Often abundant where present



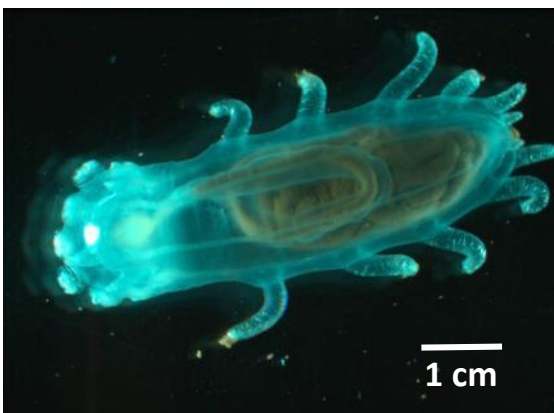
## *Elpidia heckeri*



"Papery" feel of skin



## *Kolga hyalina*



Gelatinous feel of skin

# Echinodermata: Holothuroidea

## *Ocnus glacialis*

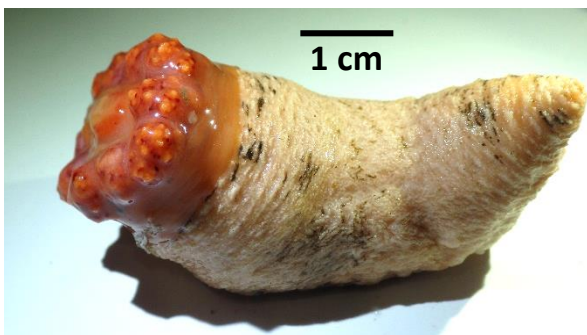


## *Psolus peronii*



Additional species occurring: *P. fabricii*  
(occurs in Bering, unknown if also in Chukchi)

## *Psolus phantapus*



Body with very distinct sole



# Echinodermata: Holothuroidea

*Molpadia borealis*

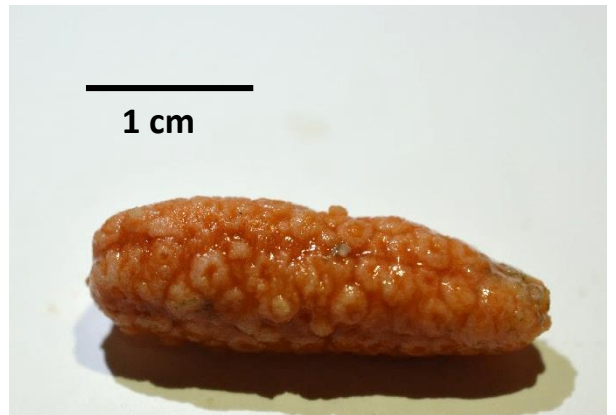


*Eupyrgus scaber*



Sand-covered body

Unknown species

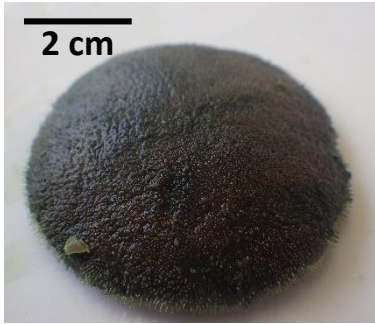


Unknown species



# Echinodermata: Echinoidea

*Echinarachnius parma*



*Strongylocentrotus pallidus*

