



If opening in
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Invertebrate Zoology

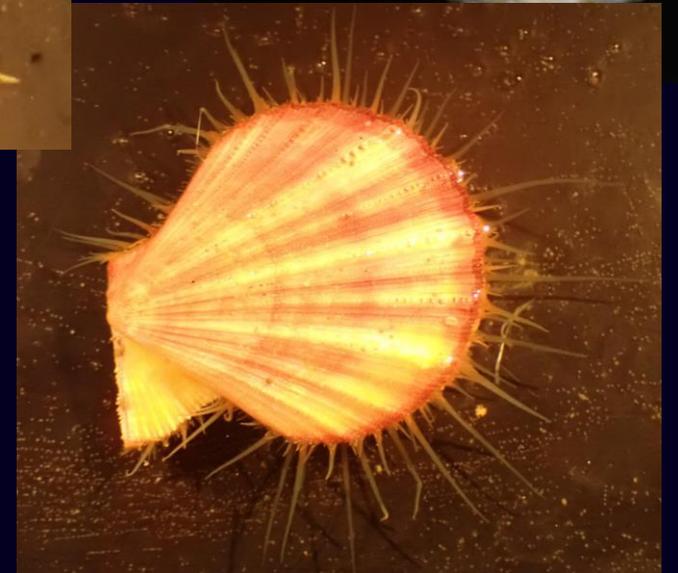
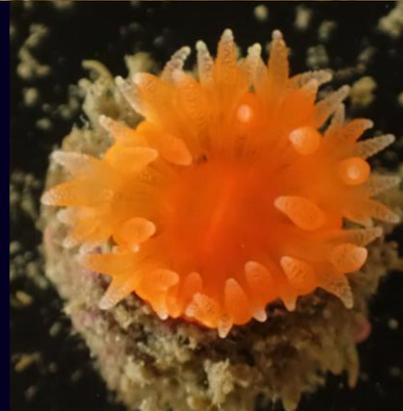
BI 451/551

Summer Term

Oregon Institute of Marine Biology

University of Oregon

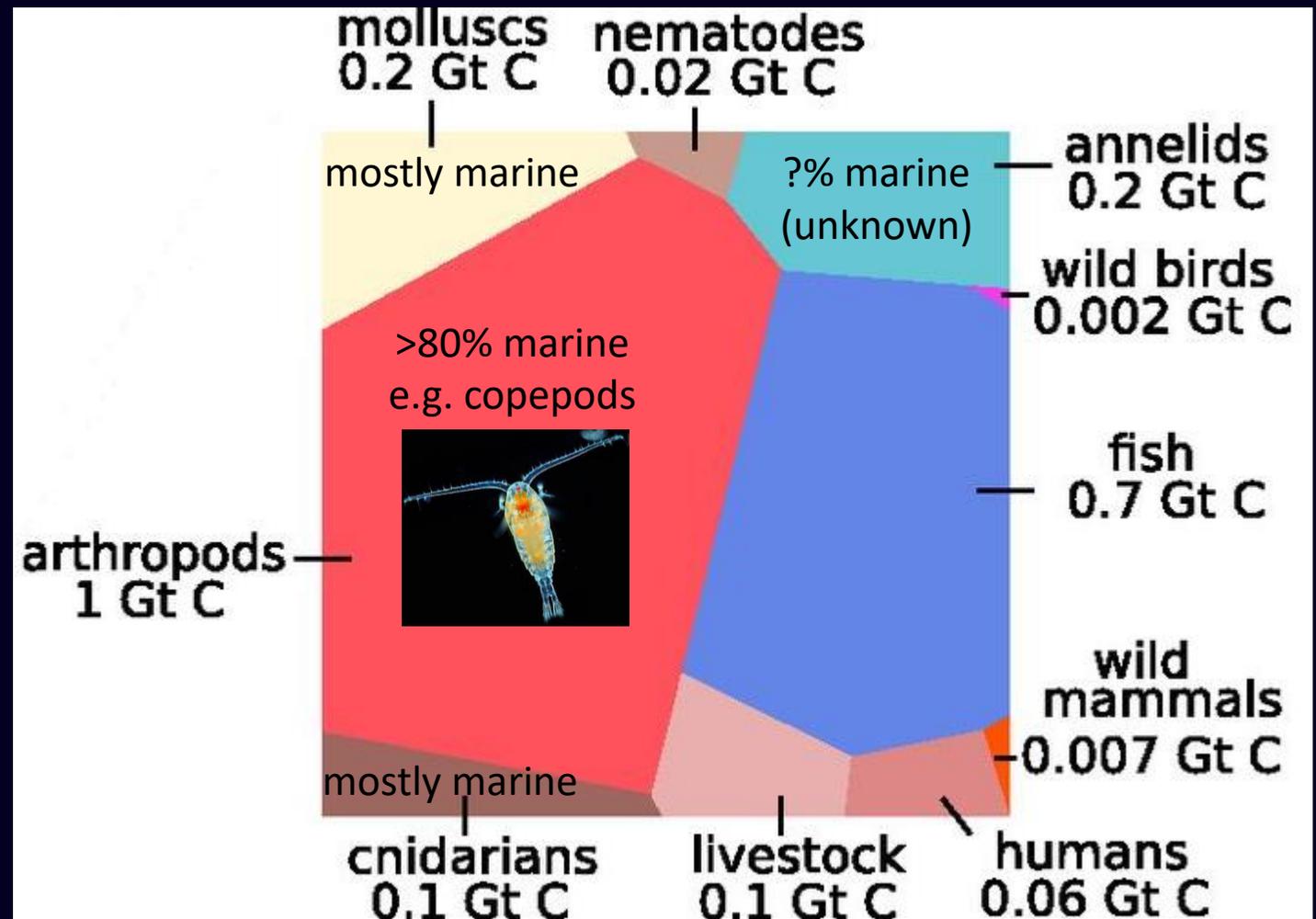
Do we care about spineless animals?





Invertebrates outnumber us.

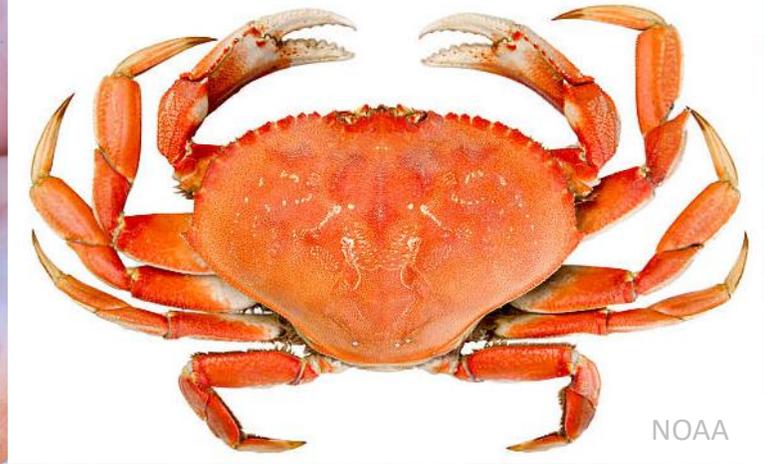
- At least 97% of all animal species are invertebrates.
- Nearly two thirds of animal biomass is in invertebrates.
- Most invertebrates remain poorly studied.



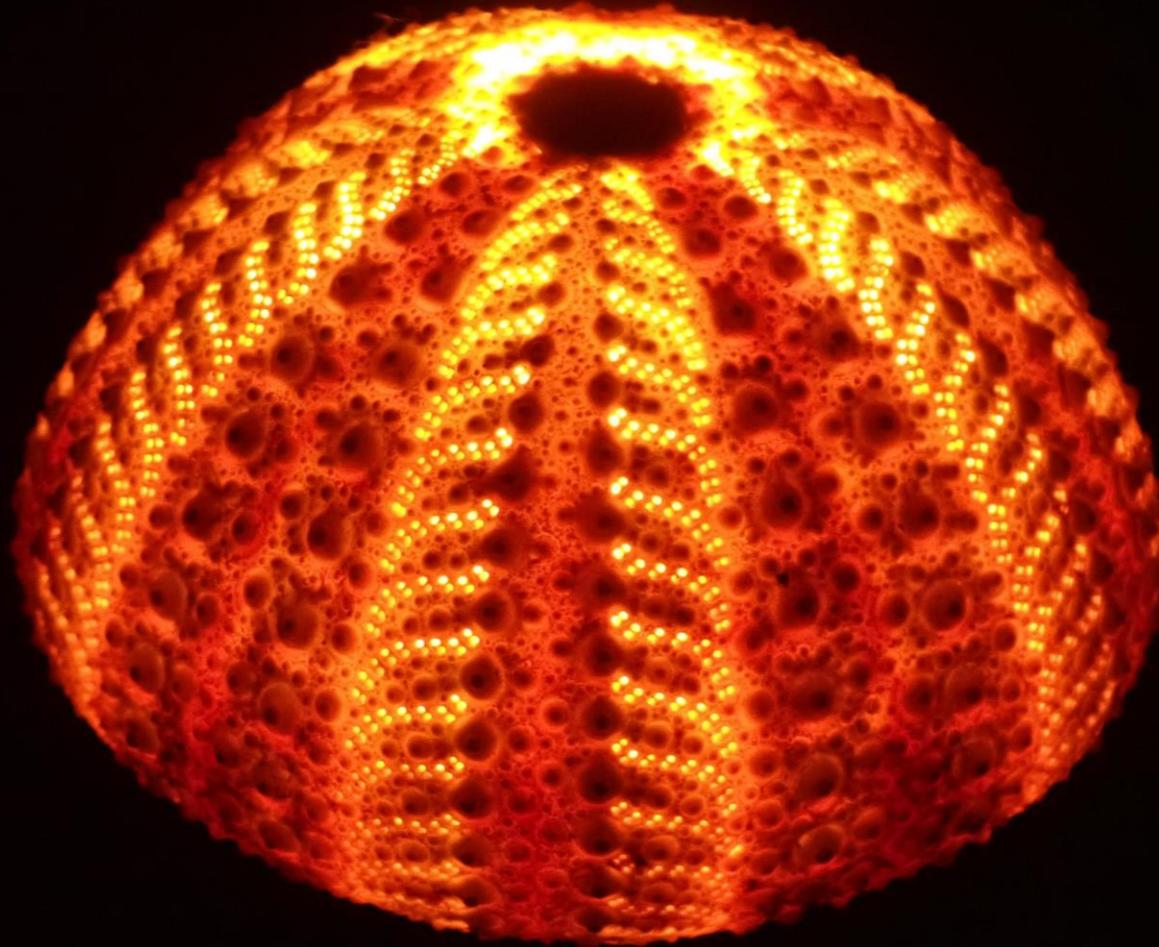
Invertebrates are of value to ecosystems and people.



- reef building and habitat
- water filtration
- nutrient recycling
- human food
- medical resources
- other commodities



Invertebrates don't need our permission
to be cool.



The test of a sea urchin,
photographed using
an internal light source.

Invertebrate Zoology Course Topics

- material will be organized by what we will see in the field with interesting, easy-to-understand animals first
 - segmented worms first, sponges last
- topics for each group include:
 - higher taxonomy and evolution
 - anatomy
 - physiology
 - reproduction and life cycles
 - important ecological and human interactions



Course Activities

- 8-hour days, three days a week
- lecture, labs, and field work every day



- quizzes once a week, midterm after Week 4, final exam at the end
- part of the grade will be based on a lab notebook
- no term papers (except for BI 551)



Will I have to touch invertebrates?



- Oh, yes.



Photo by Alex Baker



Field Trips in Invertebrate Zoology



- Marine animals are in the marine environment, which is wet.
 - Also, cold, slippery, salty, and rocky or muddy. And wet.
- We will go into the field every day.
- Low tide is usually early in the morning.
 - Early in the morning.
- Good foot gear is essential.
 - Rubber boots are best, neoprene shoes are okay.
 - No open-toe footwear.



It isn't necessary to cover your whole body with rubber, but you can if you are into that.

Three reasons not to go barefoot in the intertidal.



barnacles turn every rock into a cluster of spikes



crabs lurk in the seaweed



sea urchins are designed to poke things

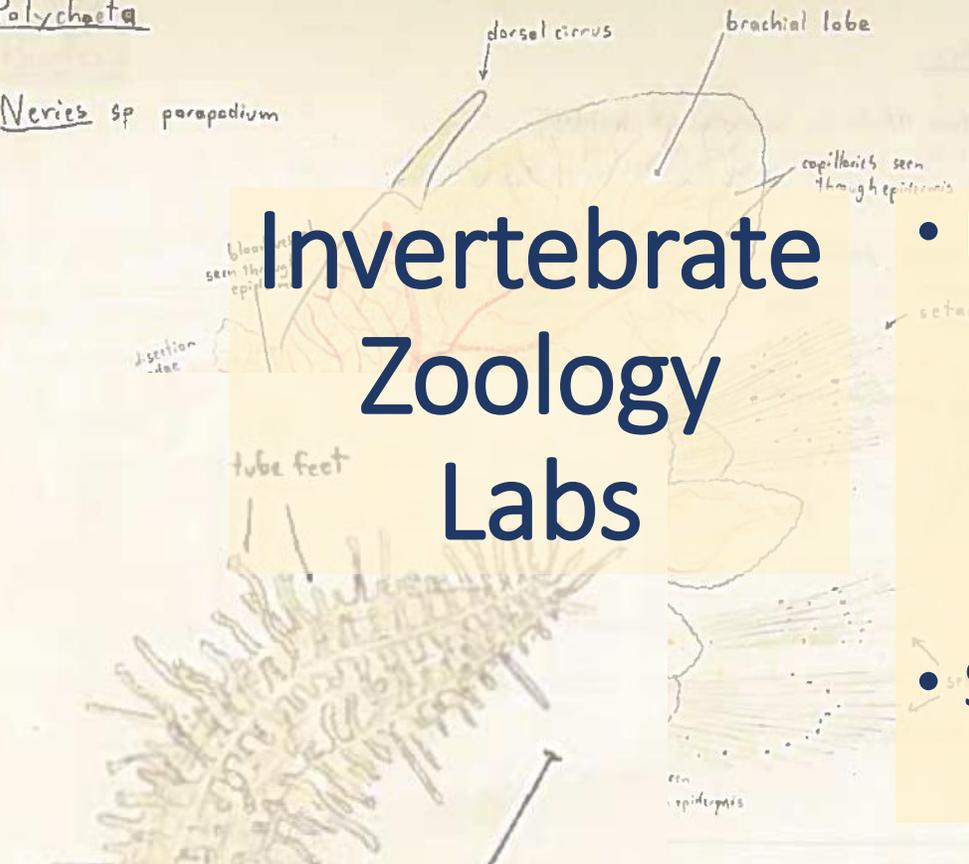
But they are still very cool animals!

Polychaeta

Nereis sp parapodium

Invertebrate Zoology Labs

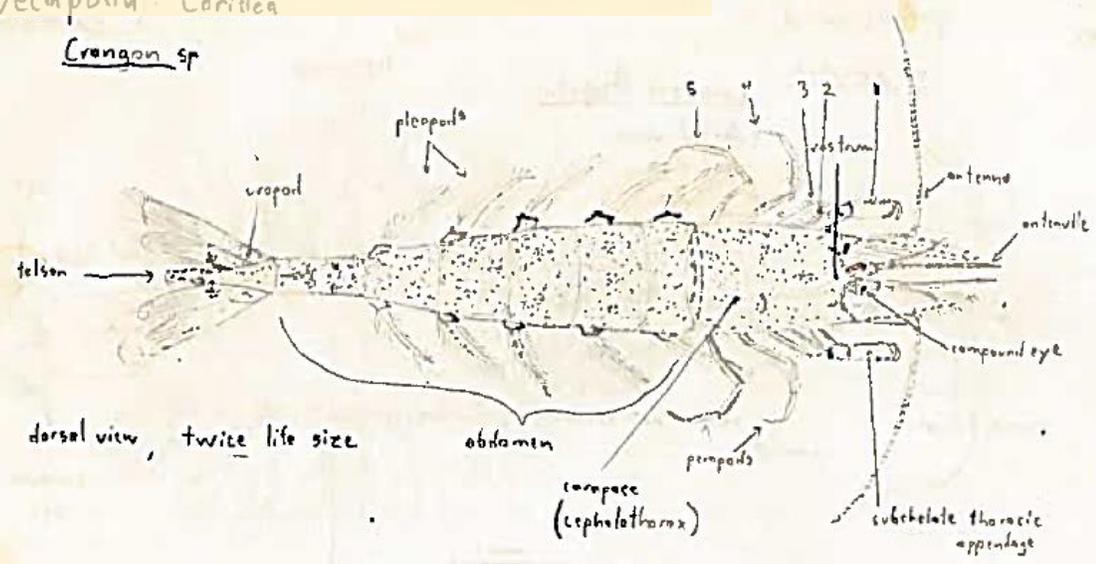
- Drawing is a proven way to sharpen your observation skills, so you will be drawing every day.
- No artistic talent is necessary, and assistance is available.
- Some labs will involve specific exercises or dissections.



Ventral view of Hemigrapsus nudus ♂



Decapoda: Caridea
Crangon sp





Oregon Institute of Marine Biology

- You will live and study at a marine biology station.
- [Charleston, Oregon](#) is a working coastal community.
 - Some shops are in town, others are a 20-minute drive.
 - Medical services are available locally.
- Summers at OIMB are windy, often foggy, but rarely rainy.
 - No matter how warm it gets elsewhere, it stays cool at OIMB.
- If friends or family comes to visit, there are many tourist opportunities.



I hope to see you here!

