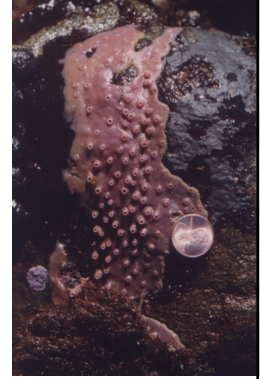


subtidal

Porifera

- *Haliclona ecbasis*
- Purplish intertidal sponge
- Worldwide distribution



porifera

- *Suberites* sp.
- Often on shells of hermit crabs, subtidal



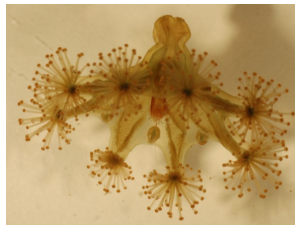
Porifera

- *Myxilla incrustans*
- Rough scallop sponge
- Can deter predators like starfish and octopus



Cnidaria

- *Haliclystus salpinx*
Stalked jellyfish
- 3 cm
- Found commonly on eelgrass, rock, and algae.
- Match the color of their substrate



- *Pleurobrachia bachei*
- Sea gooseberry
- Predator, 1.5 cm diameter, tentacles up to 15 cm long



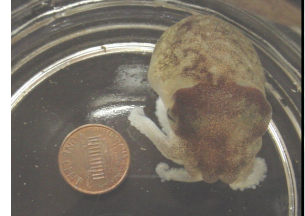
Platyhelminthes

- *Kaburakia excelsa*
- Giant leaf flatworm
- One of the largest marine flatworms
- Band of eyespots around entire margin, negatively phototactic.
- Mid-intertidal to subtidal
- Under rocks, among mussels



Mollusca

- *Rossia pacifica*
- Stubby squid
- subtidal (16-370 m)
- Sometimes swims in shallow water at night



Mollusca

- *Enteroctopus dofleini*
- Giant pacific octopus
- Largest on earth
- Upto 150 pounds, 23 feet long



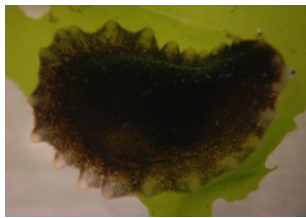
Mollusca

- *Octopus rubescens*
- Red octopus
- Intertidal to 120 m



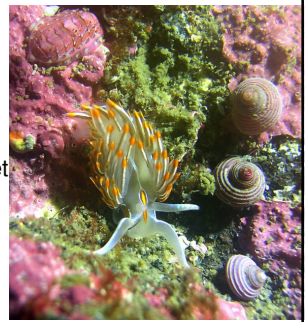
Mollusca

- *Onchidella borealis*
- Leather "limpet"
- Intertidal, has lungs instead of gills
- Spends a lot of time out of water especially in caves



Mollusca

- *Hermisenda crassicornis*
- Nudibranch
- Carnivore, and sometimes a cannibal
- Aggressive, if two meet "fights" occur with lunging and biting



Mollusca

- *Armina californica*
- nudibranch
- Mostly subtidal to 230 m



Mollusca

- *Dirona albolineata*
- White lined dorina
- Intertidal to 37m



Mollusca

- *Archidoris montereyensis*
- False sea lemon



Mollusca

- *Anisodoris nobilis*
- sea lemon
- Can be up to 26 cm
- penetrating, fruity odor, which may be used to fend off predators



Mollusca

- *Hopkinsia rosacea*
- Hopkin's rose
- Low intertidal to 6m
- Feeds on a rose colored bryozoan



Mollusca

- *Laila cockerelli*
- Cockerell's nudibranch
- Subtidal to intertidal



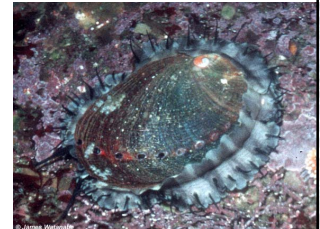
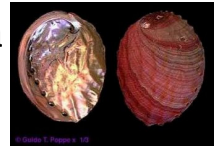
Mollusca

- ***Elysia hedgpethi***
- Hedgpeth's sea hare
- Related to the "leaves that crawl"



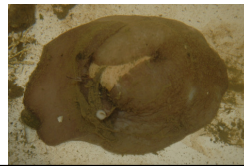
Mollusca

- *Haliotis rufescens*
- red abalone
- The swimming veliger larvae chew on coralline algae, which releases GABA (gamma-aminobutyric acid)
- This chemical induces the veligers to settle and metamorphose into juveniles. The abalone scrapes only the surface off the coralline algae, so it actually benefits the algae.
- The animal obtains a red dye (rufescin) from the algae, which it incorporates into its shell for the pink color. The color probably helps camouflage the abalone from predators such as octopus



Mollusca

- *Euspira lewisii*
- Moon snail
- one of the largest to be found intertidally in the Northwest
- It does not usually stay inside the shell long because it cannot breathe.
- It crawls across sandflats and mudflats with its huge foot partly extended in front of the shell like a snowplow, pushing through the sediments in search of clams.



Arthropoda

- Kelp crab
- ***Pugettia gracilis***



Echinodermata

- *Pycnopodia helianthoides*
- Sunflower star
- Voracious predator
- http://www.youtube.com/watch?v=i0_jCMYgwyo
- <http://www.youtube.com/watch?v=Iys0w3CgApQ>
- http://www.youtube.com/watch?v=ALaMoS_vvNE



Ochre starfish



Echinodermata

- *Strongylocentrotus franciscanus*
- Red sea urchin
- these urchins live over 100 years, and found some near Vancouver Island that may be 200 years old
- A prime food for sea otters.
- <http://www.youtube.com/watch?v=MXQF7dhVDSY&feature=related>
- http://www.youtube.com/watch?v=b44_-b4r07w



Echinodermata

- *Parastichopus californicus*
- Harvested for sale in Asia



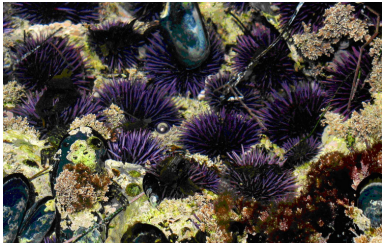
Lower intertidal

Cnidaria

- *Anthopleura elegantissima*
- Aggregating anemone
- Intertidal
- Algal symbionts



Purple sea urchin



Middle intertidal

Mytilus californianus



Gooseneck barnacles



Nucella dog whelk



Dogwinkle



Tegula snail



Balanus barnacle



Owl limpet



Upper intertidal

Limpets, periwinkles, brown barnacles



Arthropoda

- *Pachygrapsus crassipes*
- Lined shore crab
- intertidal

