

### Floating Docks

"I don't feel so good."

*-everyone who spends more than an hour on a floating dock*

MAJOR TAXA  
(lots-see species list on reverse side)

MAJOR THEMES  
habitat description  
diversity  
differences in shear  
community structure

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### TOP TEN LIST

Top "ten" ideas to investigate and understand about this habitat:

6. Why are these communities so diverse?
5. Most physical parameters are relatively constant
4. Importance of competition
3. Variations within the habitat
2. Lifestyles of the Benthic and Floating
1. Ideas about 'communities': static/dynamic, real/imaginary

### QUESTIONS

Some topics to pursue or ponder while you're stuck on the dock:

- In the winter most of the algae growing on the tires dies or is reduced to holdfasts. How would the loss of this group or other species affect the distribution and relative abundance of other members of the float community?
- How much of community structure is determined by substrate? Do wooden portions of the floating docks harbor different organisms?
- How do differences in the hydrodynamic conditions affect the distribution of diversity? Do some organisms 'prefer' certain hydrodynamic conditions, or rather is their distribution determined by competition?
- How do various organisms deal with the limited space resource?
- How do the qualities of this habitat relate to the four themes each group examined? For example, how do the processes of sexual and asexual reproduction contribute to the observed diversity? What proportion of the organisms on the floats are sedentary vs. mobile, and why? What methods of defense are employed by these organisms, and how do these methods differ from those used by the organisms in your studied habitat? Do most organisms on the tires derive their nutrition from the plankton, or from their tire-mates?
- Do Zoology 432 T.A.s float?

**Ph. Porifera**

*Halichondria bowerbanki*  
*Scypha*

**Ph. Cnidaria**

*Garveia annulata*  
*Plumularia setacea*  
Other Hydroids  
*Metridium senile*  
*Urticina spp.*

**Cl. Polychaeta**

*Serpulidae*  
*Sabellidae*  
*Spirorbidae*

**Ph. Mollusca**

*Tonicella lineata* (chiton)  
*Collisella pelta* (limpet)  
*Mytilus edulis* (mussel)

**Ph. Bryozoa**

*Bugula californica*  
*Bugula pacifica*  
*Dendrobeatia lichenoides*  
*Membranipora membranacea*  
*Scrupucellaria*  
Encrusting bryozoans

**Cl. Cirripedia**

*Balanus nubilus* (big guys)  
*B. glandula* + *B. crenatus* (little guys)

**Cl. Ascidiacea**

*Chelyosoma productum*  
*Boltenia villosa*  
*Distaplia occidentalis*  
*Aplidium spp.*  
*Corella inflata*

**Algae**

*Mastocarpus papillatus*  
*Ulva fenestrata*  
*Laminaria saccharina*  
*Callophyllis edentata*  
*Desmarestia viridis*  
*Membranoptera platyphylla*  
*Alaria marginata*  
*Porphyra sp.*  
*Iridaea cordata*