

# Looking underneath an invasive macroalgae:

## Benthic assemblages associated to *Mastocarpus stellatus* in human-made structures

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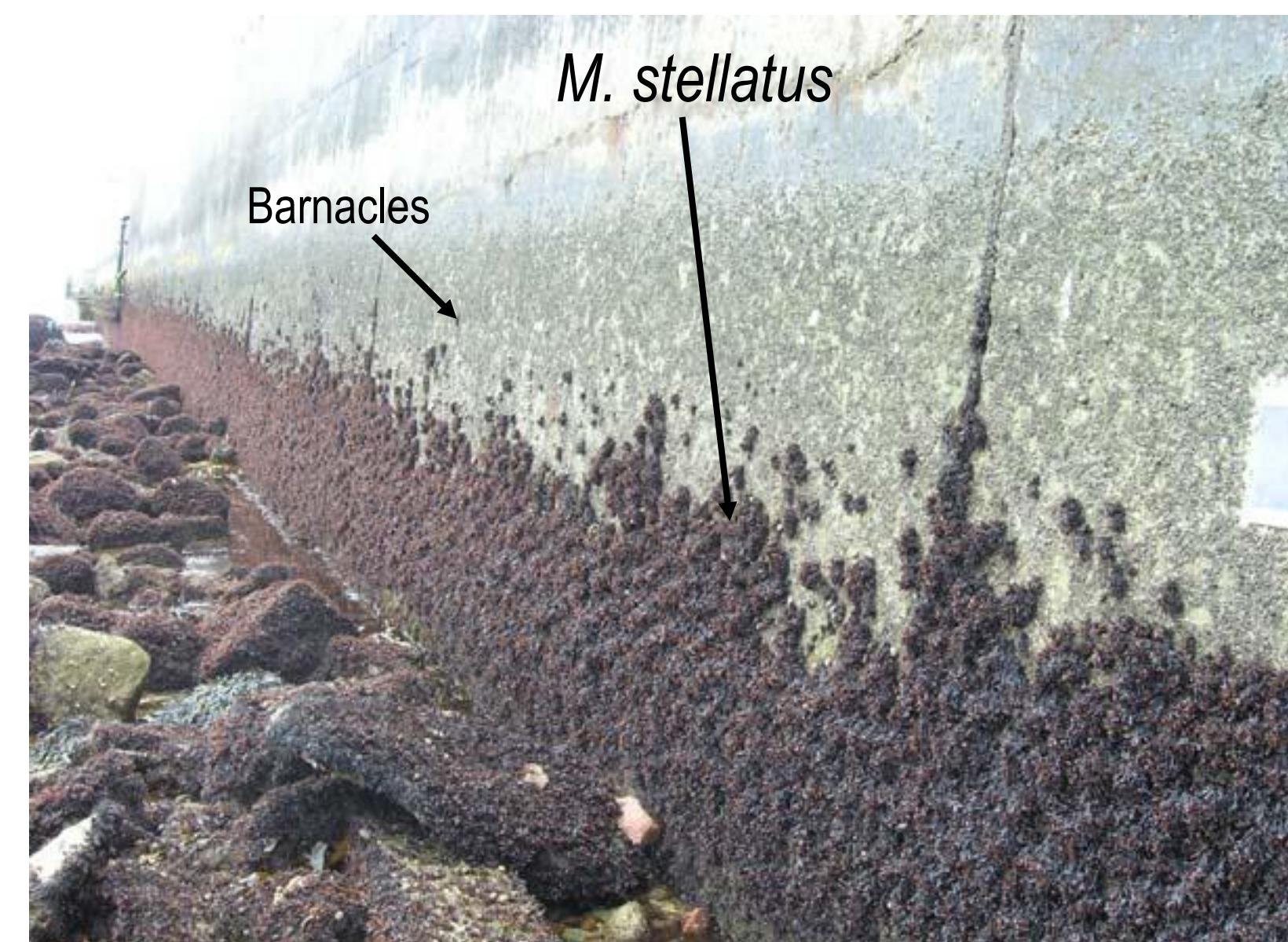
What are the potential roles of *M. stellatus* in the benthic community ?

### Methods

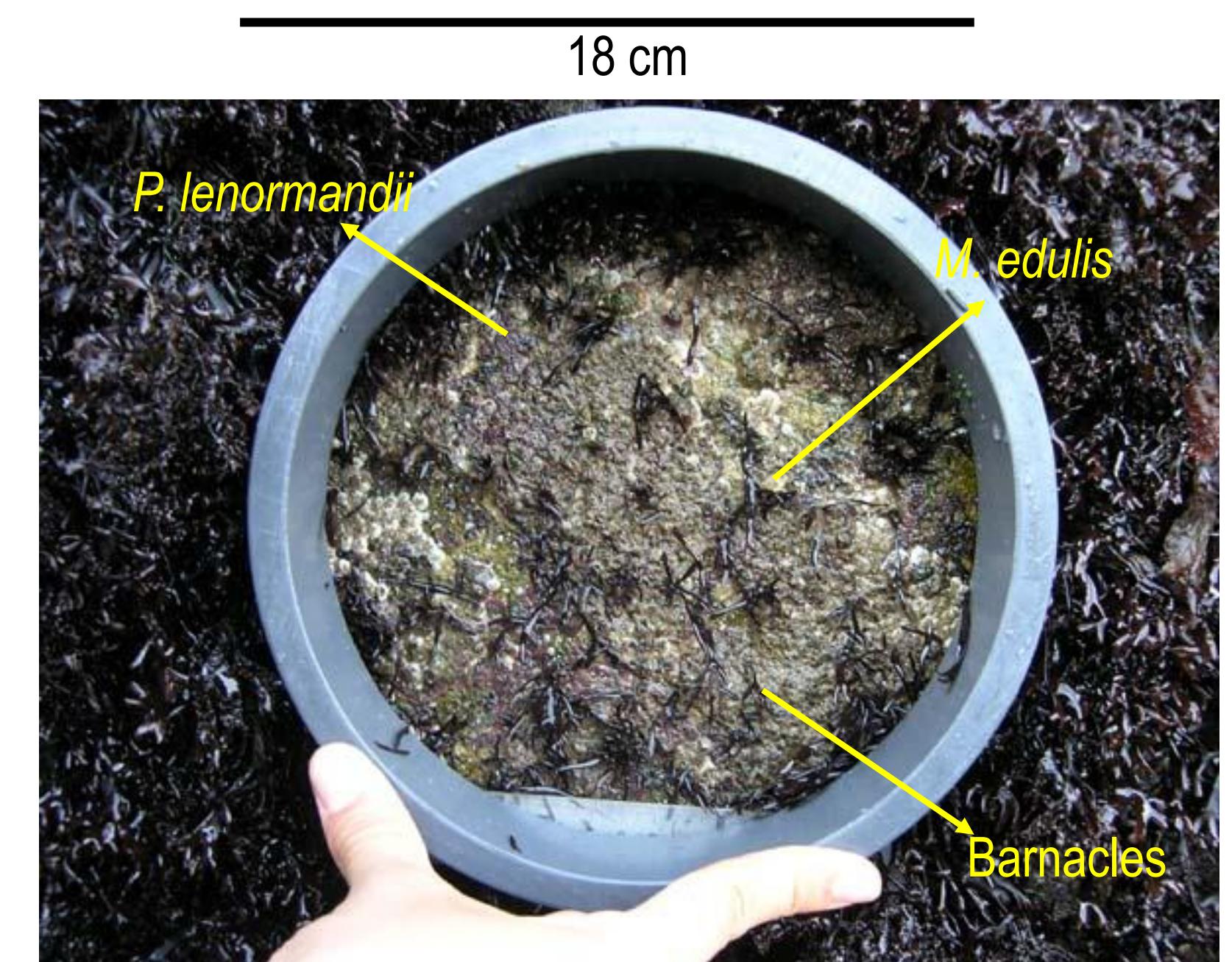
Study site:  
Helgoland, German Bight, (North Sea)



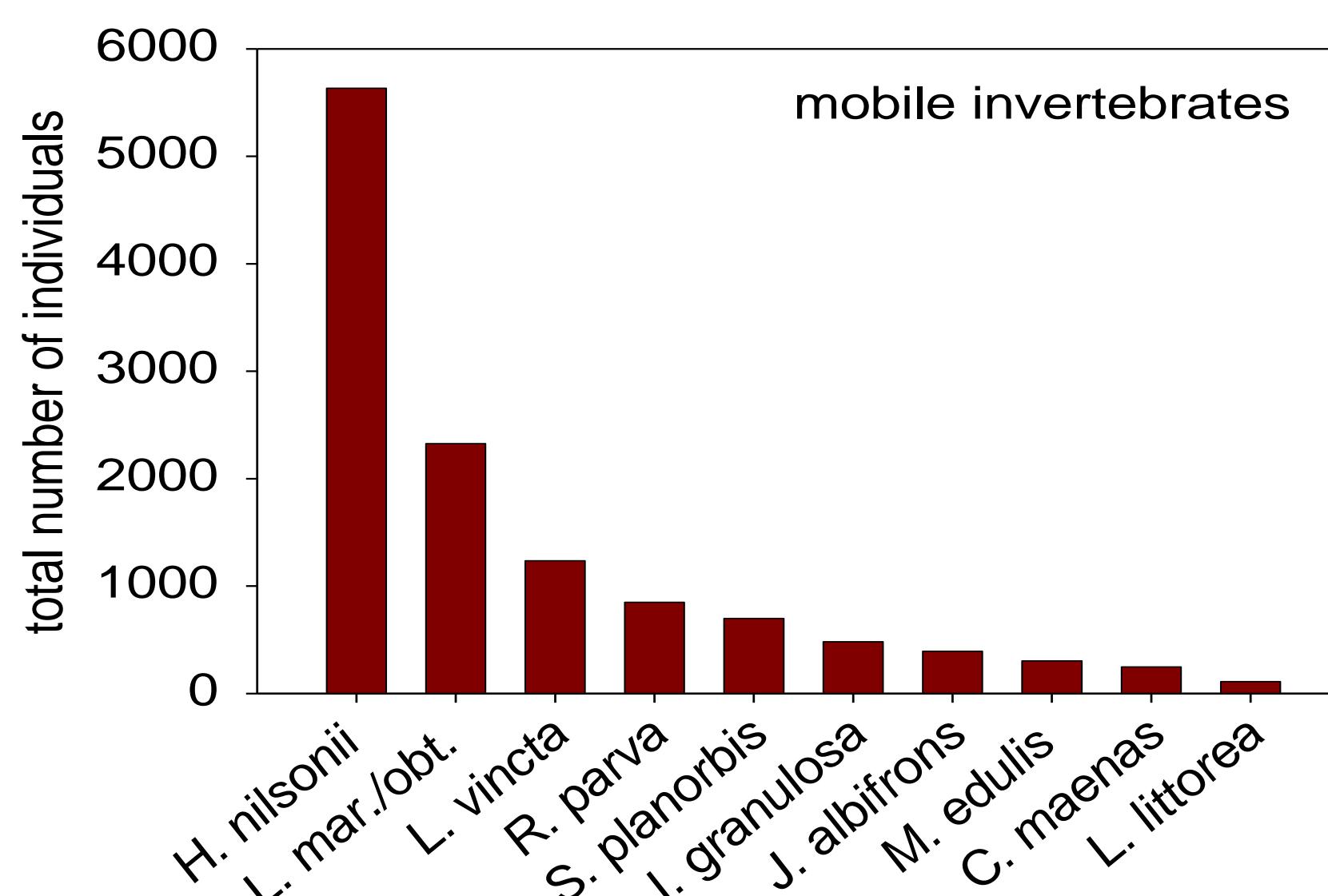
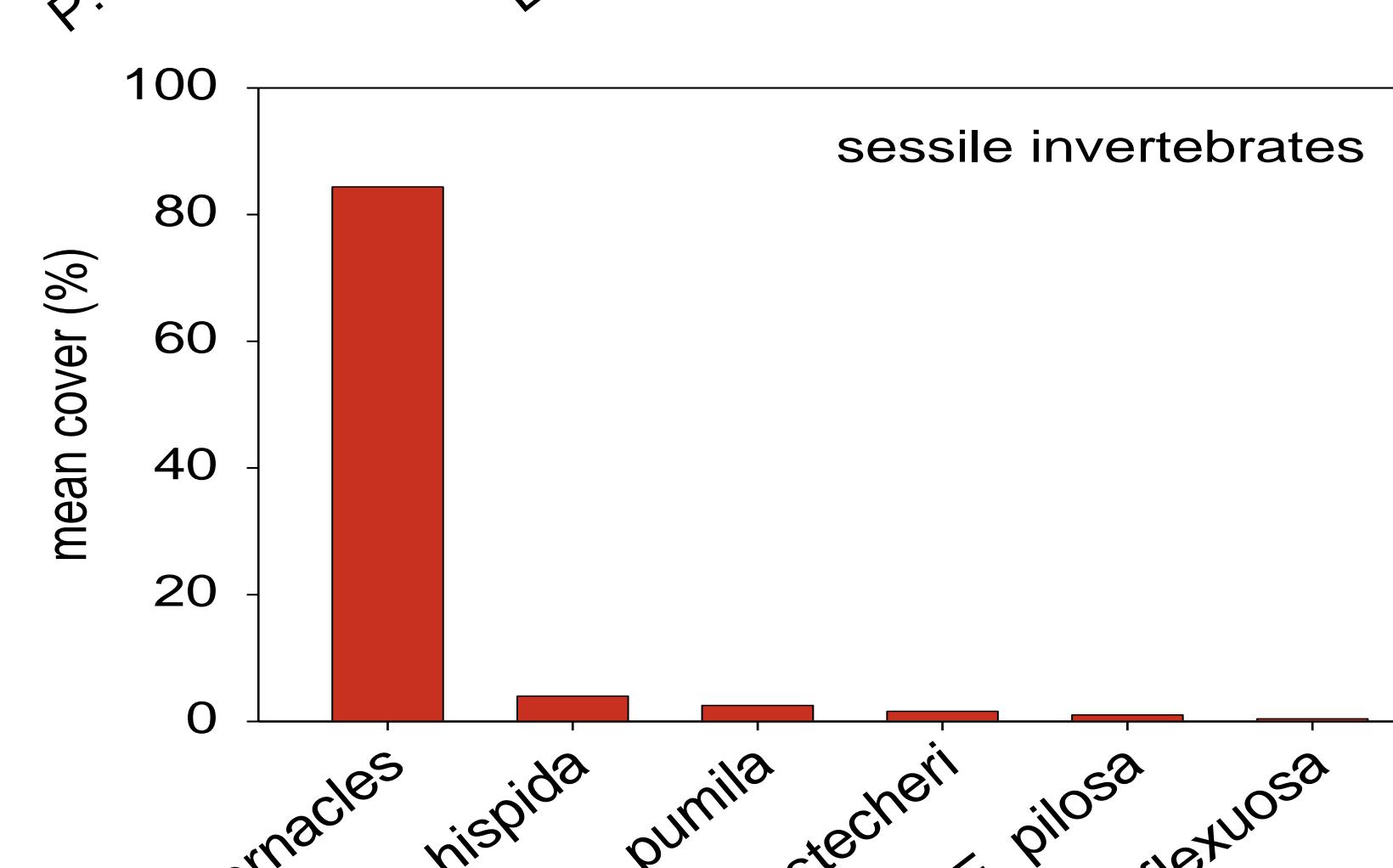
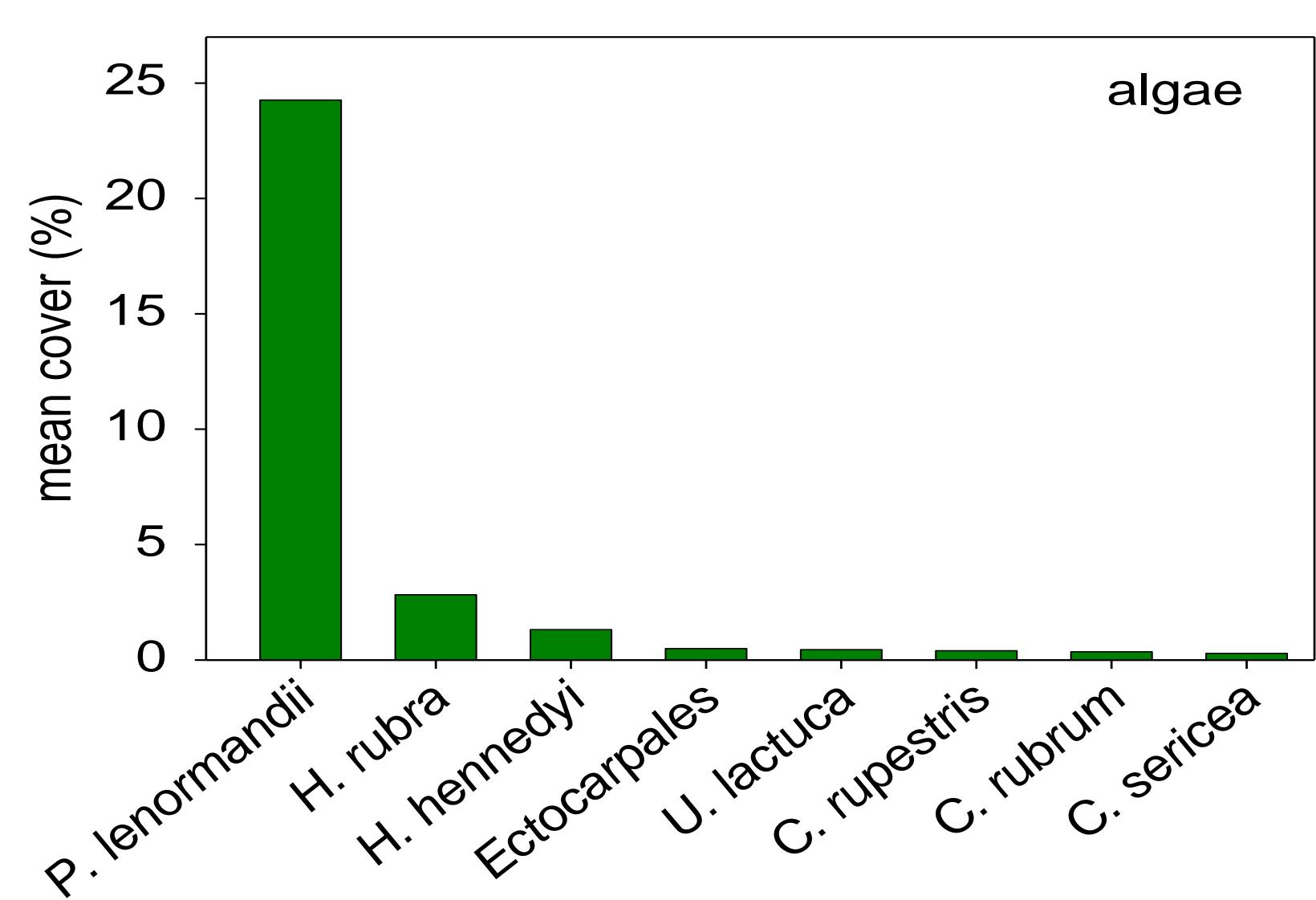
Sampling:  
Harbor wall: 3 samples at random in 10 occasions (June-August)



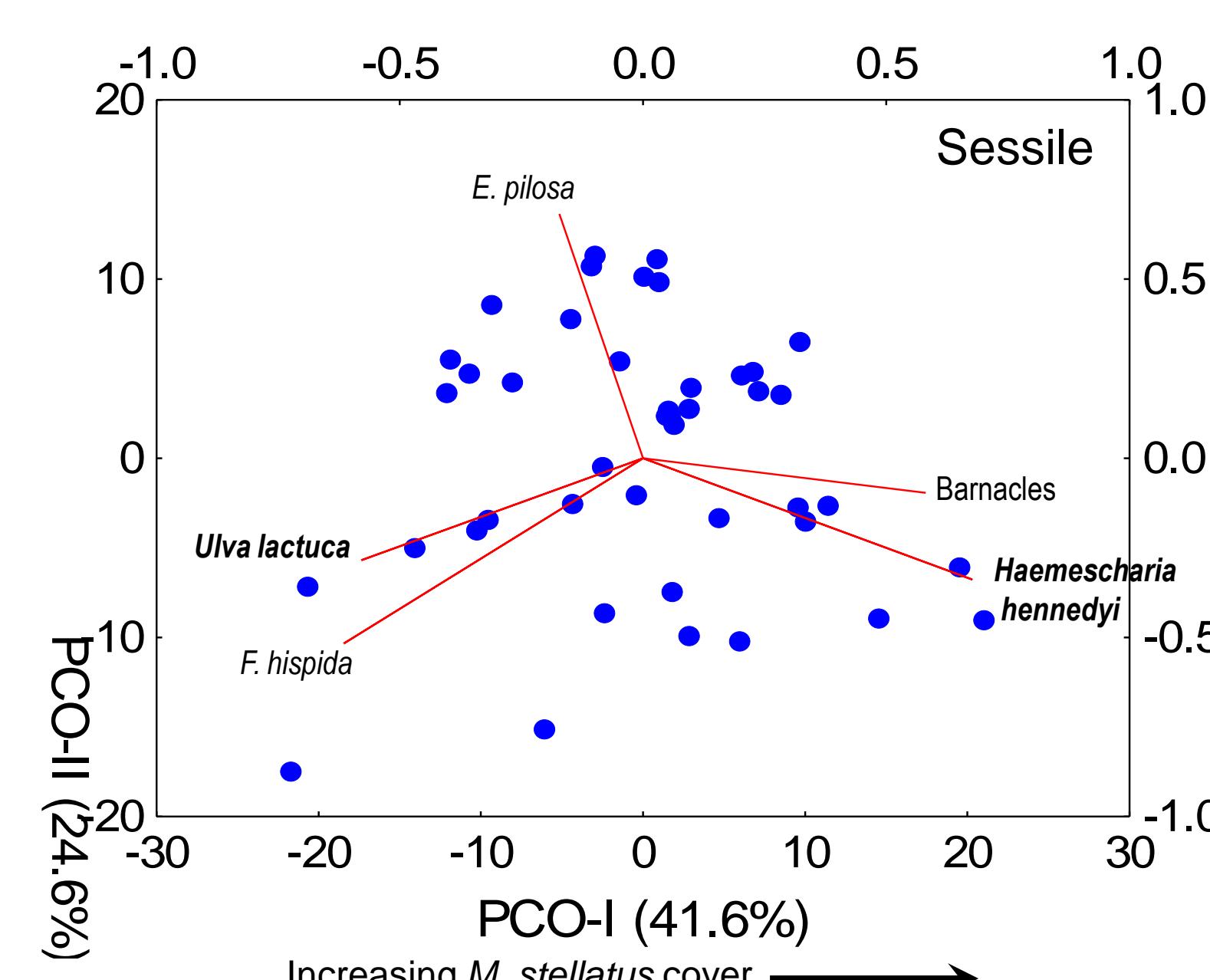
Cutting *M. stellatus* stands and looking underneath



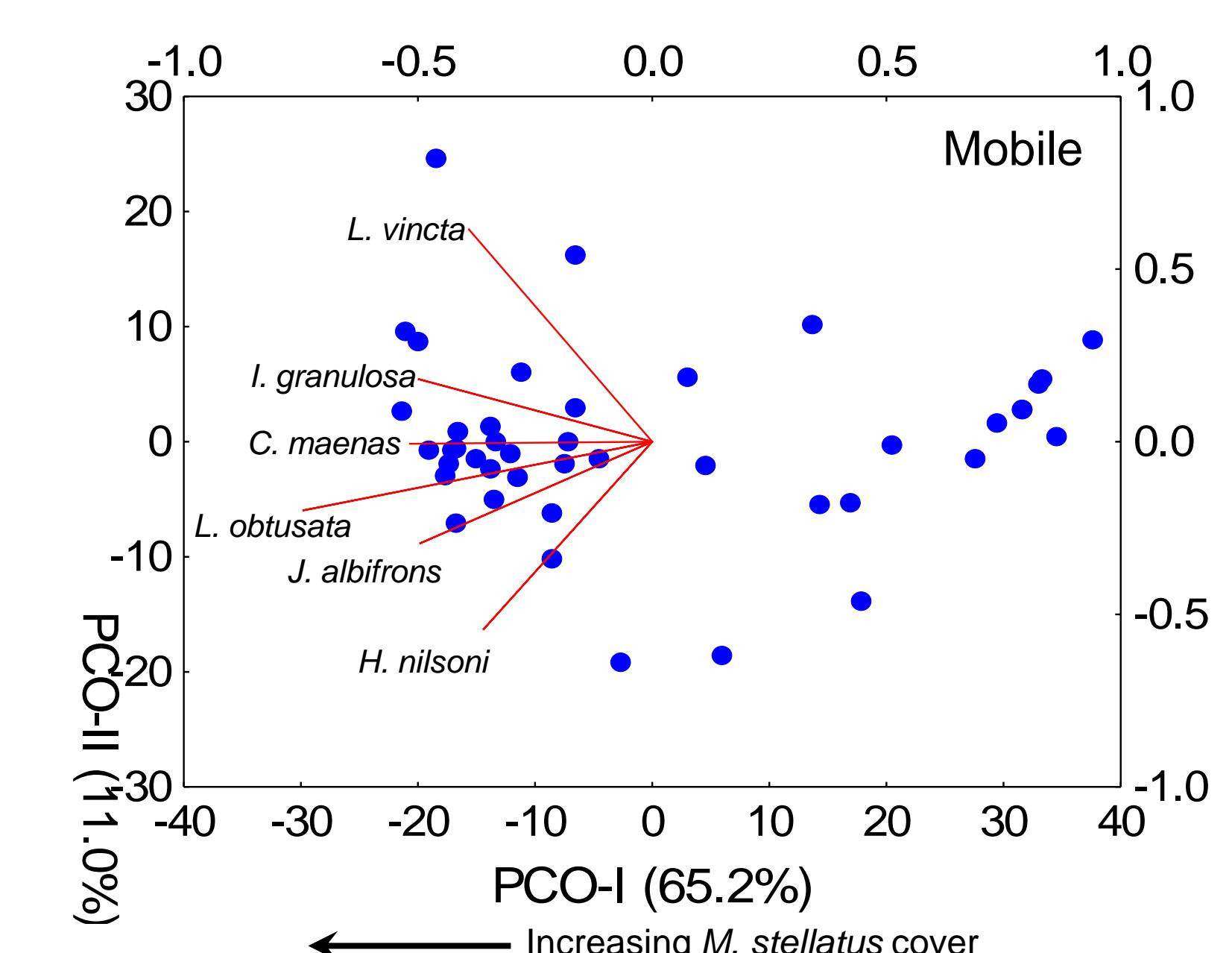
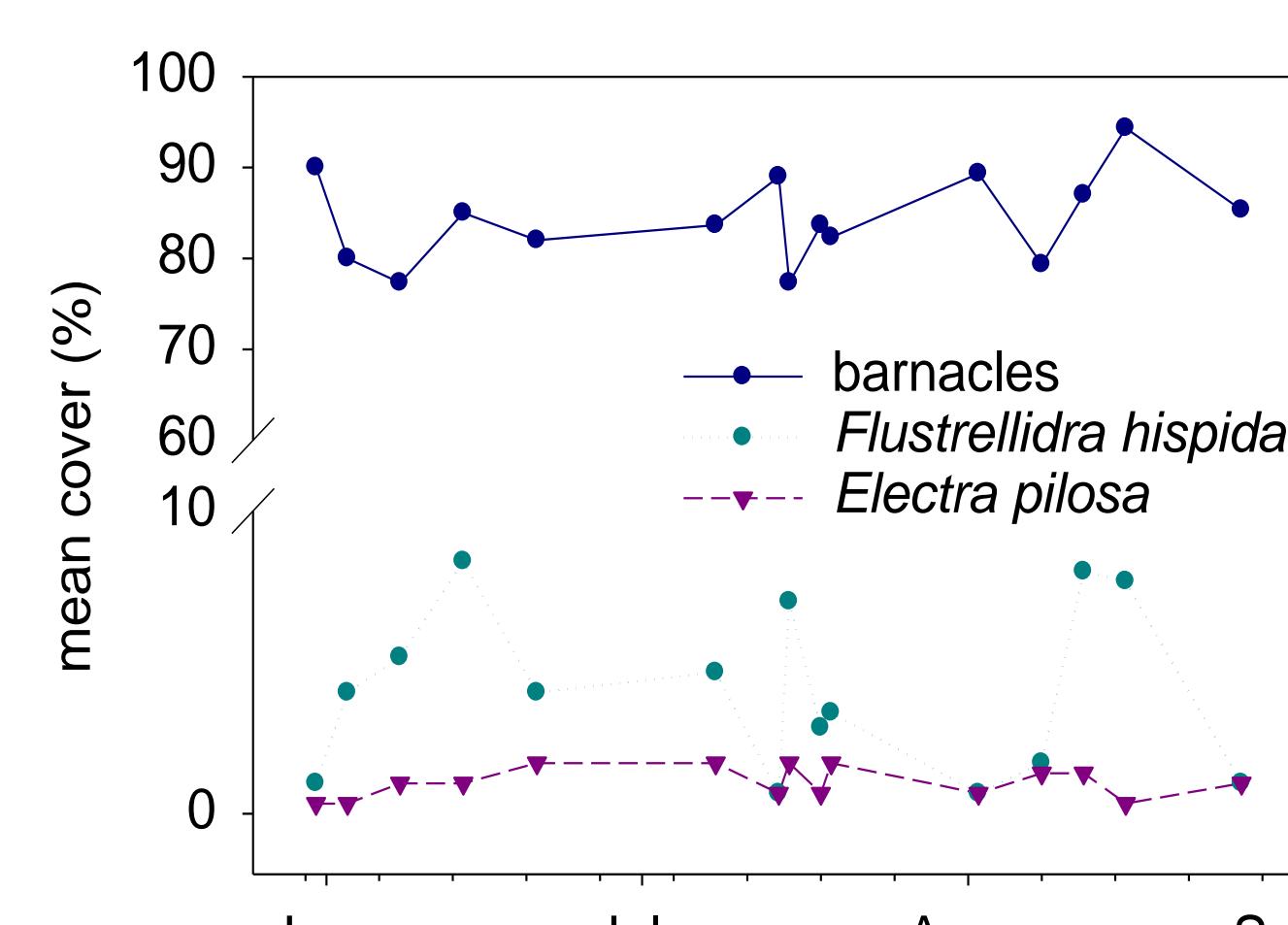
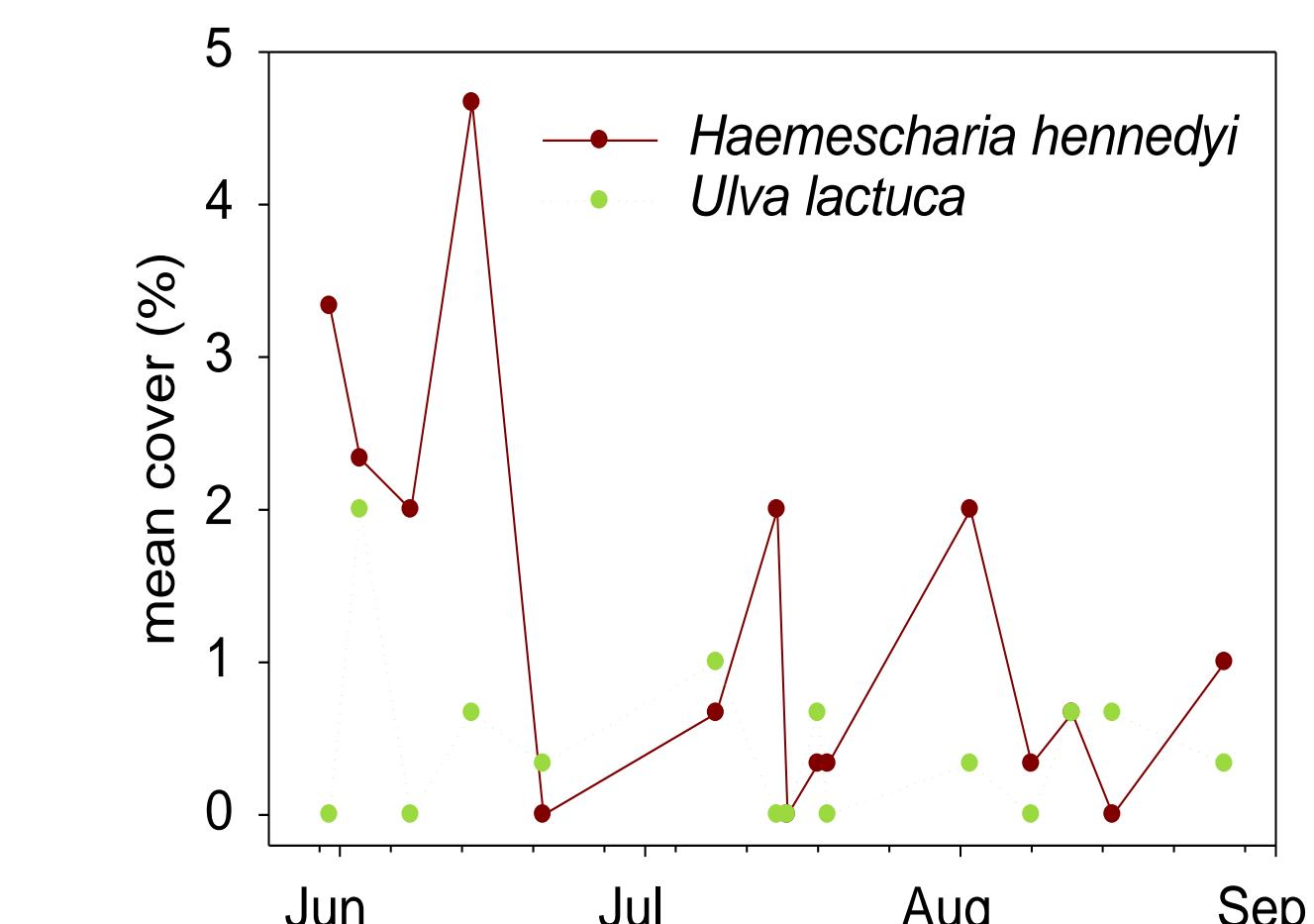
### Species abundance



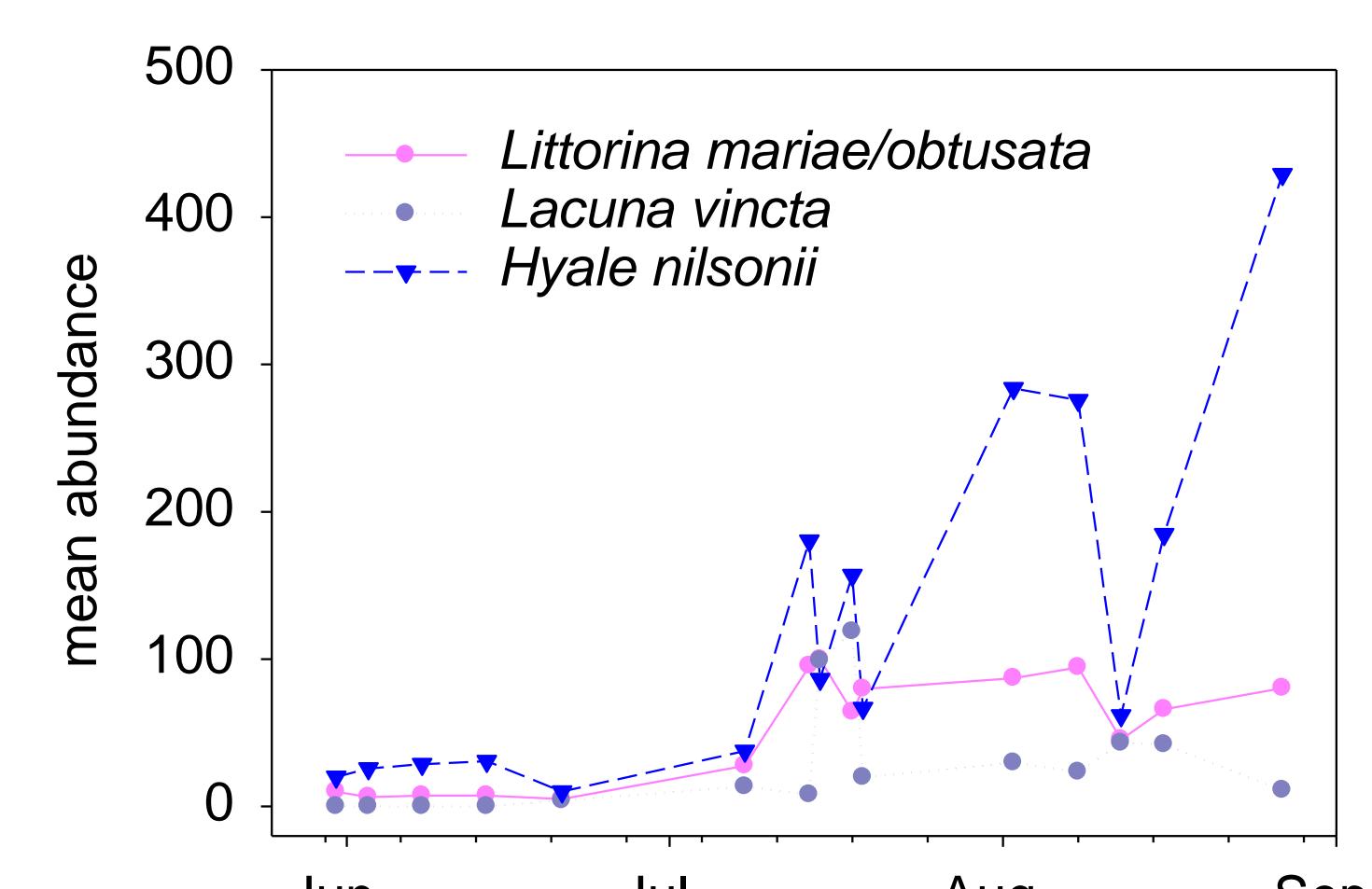
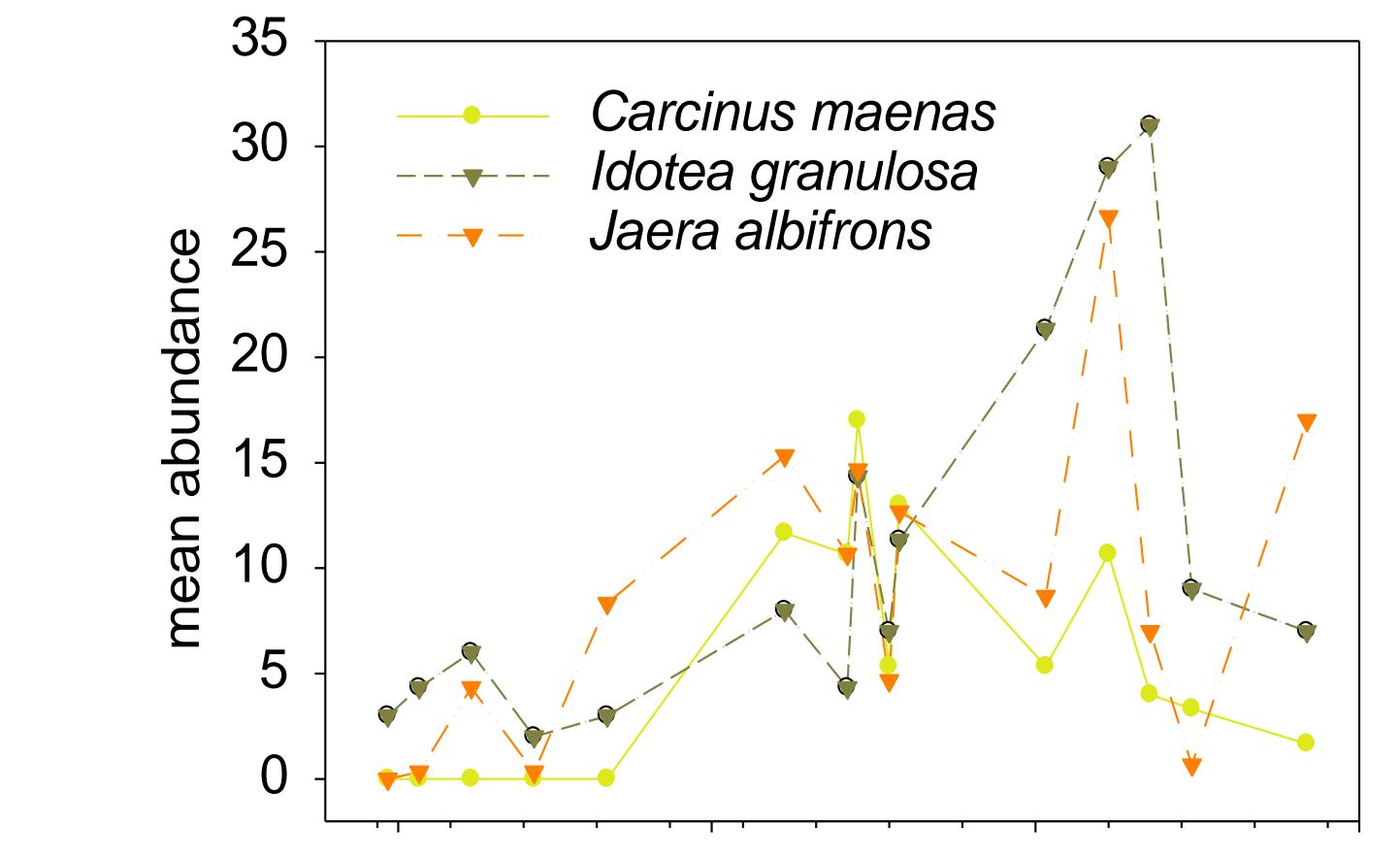
### Community structure



Sessile species: habitat partitioning



Mobile species: positive covariation



### Potential effects of *M. stellatus* after its incidental introduction to Helgoland in the 1980s

Lack of strong negative effect on barnacles: no competitive exclusion

Positive effect on settlement and recruitment of shore crab *C. maenas* and mussel *M. edulis*

Positive effects on guilds of peracard crustaceans and gastropods (shelter and food)

