

## MSL 612: Early Life Histories of Marine Invertebrates

Instructor: Dr. Sarah M. Hardy

Class meeting times: T/Th 2:00 – 3:30

---

Prerequisites:

*Recommended:*

Course Description

group discussions

midterms

final exam

Homework assignments

Group Discussions

*maximum*



*[A collection of review papers that summarize many of the topics we will cover in this course. Although these papers are*

*[A developmental biology text with more detailed information on early embryology, including gene expression, cell communication, and other topics of potential interest.]*

*[A beautiful illustrated atlas of larval forms organized by phyla, with good general information about the life-cycle of each group.]*

Student Presentations:

*assign a relevant paper*

Support and Disabil



## Recommended Reading List

*Larval Forms*

*Marine Invertebrate Larvae*

*Bulletin* 184

*Zoology* 79

156

*Science* 305

*Bull* 214

*Biological Journal of the Linnean Society* 54

*Osedax*

*Osedax*

*Osedax roseus*

*The Origin and Evolution of*

*Ecology of*

*Biological*

*Pteraster tesselatus*

*Canadian Journal of*

*Marine Biology* 10

*Marine Biology*

*Biol*

*Evolution* 46



205 *Biological Bulletin*

*Geology* 33

50 *Evolution*

*Trends in Ecology and Evolution* 17

*Transactions of the Royal Society B: Biological Sciences* 363 *Philosophical*

*Science* 67 *Bulletin of Marine*

*Evolution* 32

*Annual Review of Ecology and Systematics* 16

*American Zoologist* 30

*Systematics* 24 *Annual Review of Ecology and*

*Science* 81 *Bulletin of Marine*

*Evolution* 51

*Echinoderm Studies*

*Oceanologica Acta* 19

*Journal*

*of Experimental Marine Biology and Ecology* 237

*Ecology of Marine Invertebrate*

*Larvae*

*Marine Ecology* 27

*American Naturalist* 148

*American Naturalist*

156

*Ecology* 84

*Ecology* 89

*Oceanography and Marine Biology. An Annual Review* 46

*Strongylocentrotus Journal of Experimental Marine Biology and Ecology* 352

*American Naturalist* 150

*Biological Journal of the Linnean Society* 60

*Biol Bull* 200

*Biol Bull* 216

*Trends in Ecology &*

*Evolution* 13

*Macrophiothrix  
Biological Bulletin* 209

*Marine Biology* 153

*Evolutionary Ecology Research* 9

*Evolution* 42

*American Naturalist* 108

*edulis* Mechanisms of Ageing and Development 130

107

*Mytilus*  
*American Naturalist*

Body size and the cost of brooding

*Cancer setosus*  
*Marine Ecology Progress Series* 251

*Biological Bulletin* 190

*Ecology Letters* 3

*Marine Ecology-Progress Series* 309

*The American Naturalist* 141

*Journal of Experimental Biology* 210

*American Naturalist* 119

*Asterina phylactica*

*American Naturalist* 123

*Journal of the Marine Biological Association of the UK* 75

Gametogenesis, spawning and fertilization

*Heredity*, 2

*Integrative and Comparative Biology* 46

*Proceedings of the National Academy of Sciences* 105

*Bulletin of Marine Science* 39

*Proceedings of the Biological Society of Washington* 107

*Invertebrate Biology* 114

*Rhithropanopeus harrisi*  
*Experimental Marine Biology and Ecology* 357

*Journal of*  
*Ecology of Marine*

*Invertebrate Larvae*

\*\*

*Sperm competition and sexual selection*

*American Naturalist* 165

*The*

*Integrative & Comparative Biology* 46



*Ecology of Marine Invertebrate Larvae*



*Ecology* 79

*Limnology and Oceanography* 50

*Science*

*Proceedings of the Royal Society B-Biological Sciences* 275

*Marine Ecology Progress Series* 313

*Marine Biology* 153

*Evolution* 49

*Ecological Applications* 13

*Bulletin of Marine Science* 70

*Marine Ecology Progress Series* 25

*Global Ecology and Biogeography* 16

*Deep Sea Research Part A. Oceanographic*

*Research Papers* 32

*Ecology* 84

*Integrative and Comparative Biology* 46

*Proceedings of the National Academy of Science* 104

*Integrative and Comparative Biology* 46

*Limnology and*

*Oceanography* 52

*American Naturalist* 165

*Marine Biology* 149

*Ecological Applications* 13

*Ecological Monographs* 75

*Biol Bull* 216









*Biogeosciences*

*Discussion* 6

*Littorina obtusata* *Aquatic Biology*

5

*ICES Journal of Marine Science* 65

*Science* 305

*Limnology and Oceanography* 49

*Limnology and*

*Oceanography* 54

*Marine Ecology Progress Series* 373

*Mytilus galloprovincialis* *Aquatic Biology* 4