

CURRICULUM VITAE

Jan A. Pechenik

Professor, Biology Department
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Education: Duke University, 1968-1971; B.A. Zoology

Massachusetts Institute of Technology/Woods Hole Oceanographic Institution, 1971-1975; M.S. Biology

Graduate School of Oceanography, University of Rhode Island, 1976-1978; Ph.D. Biological Oceanography

Positions Held: Tufts University, Biology Department, Fall 1978 - present. Promoted to Associate Professor with tenure, May, 1984. Promoted to Full Professor, October 1994.

Environmental Research Laboratory, USEPA, Narragansett, R.I., Winter 1976 - Fall 1978. Marine Biologist: Effects of No. 2 fuel oil on gastropod and crustacean survival, locomotion, and reproduction.

Primary Research Interests

I have worked on a variety of problems, using a variety of marine organisms. Much of my research is collaborative: with undergraduate students, graduate students, post-docs, and faculty at Tufts and elsewhere. At Tufts I have collaborated with colleagues in Biology, Mechanical Engineering, and Biomedical Engineering. Elsewhere within the U.S., I have had research collaborations with faculty at Duke University, Central Connecticut State, Wilkes University, Dickinson College, University of Hawaii, University of California at Santa Cruz, William and Mary College, Boston University, Harvard University, and the Woods Hole Oceanographic Institution. I have also had productive international research collaborations with colleagues in Hong Kong, France, England, Wales, Norway, Australia, New Zealand, and Chile. My major research interests to date have been as follows:

1. Environmental and developmental factors influencing length of larval life and capacity for delayed metamorphosis by larvae of marine invertebrates.
2. Latent effects: To what extent do sublethal stresses experienced during embryological or larval development influence fitness after metamorphosis?
3. Role of reproductive pattern in determining the ability of populations to adapt to local stresses, including pollution stress, and in determining the likelihood and consequences of inbreeding.
4. Reproductive and physiological adaptations to intertidal development.
5. Determining the major predators on the larvae and juveniles of invasive species.
6. Yearly changes in hermit crab shell quality as an indicator of climate change.
7. Impact of short-term winter and spring warming stress on the survival and physiology of the marine intertidal gastropods *Crepidula fornicata* and *Crepidatella peruviana*.

8. Impact of red-tide algal blooms on *Crepidula* development and hermit crab shell selection behavior.

My research publications are listed at the end of this CV

Books

Pechenik, J.A. 2016. *A Short Guide to Writing About Biology*, 9th edition. Pearson, Longman, NY.

Pechenik, J.A. 2014. *Biology of the Invertebrates*, 7th edition. McGraw-Hill Publishers, NY

Pechenik, J.A. 2015. *The Readable Darwin--Charles Darwin's Origin of Species, edited for modern readers, Vol. 1*. Oxford University Press. (The complete book will be coming out in January 2023)

Courses Taught

Invertebrate Zoology

Marine Biology

Evolution in Our World (for non-majors)

Seminar in Marine Biology

Larval Ecology

Experiments in Ecology

Scientific Writing

Graduate Seminar in Ecology

Administration:

President, Phi Beta Kappa (Delta Chapter of Massachusetts), 2011- present

Vice-President, Phi Beta Kappa (Delta Chapter of Massachusetts), 1988-2011

Member, Faculty Research Awards Committee, Fall 2015-2021

Chair, Faculty Research Awards Committee, Fall 2017-2021

Co-Chair, University Committee on Budget and Priorities, 1987-1990

Director, Writing Across the Curriculum Program at Tufts University, 1998-2001, 2005-2008.

Member, Committee on Undergraduate Scholarships and Fellowships, 2003-2011

Elected to the Tufts University Grievance Committee, 2011 – 2016

Program Officer, Division of Invertebrate Zoology, American Society of Zoologists, 1981-1984

Chairperson, Division of Invertebrate Zoology, American Society of Zoologists, 1995-1997

Consulting:

Reviewer of grant proposals for National Science Foundation (Biological Oceanography and Physiological Ecology sections), Sea Grant Program, and government agencies in Hong Kong, Canada, and Australia.

Reviewer of manuscripts for *Journal of Experimental Marine Biology and Ecology*, *Aquaculture*, *Aquatic Living Resources*, *Biological Bulletin*, *Invertebrate Biology*, *Journal of the Marine Biological Association of the U.K.*, *Limnology and Oceanography*, *Ecology*, *Frontiers in Biology*, *Marine Ecology Progress Series*, *Marine Biology*, *Marine and Freshwater Research*, *Comparative Parasitology*, *PLoS ONE*, and *Acta Zoologica Sinica*.

Member of the Massachusetts Board of Directors, Conservation Law Foundation, Boston, MA 2010-present

Science Writing Workshops Presented:

Eastern Connecticut State University

Simon's Rock of Bard College

Harvard University
Lafayette College
Long Island University
University of Rhode Island
Northern Arizona University
College of Wooster
University of Canterbury (New Zealand)
Hong Kong University of Science and Technology
Wilkes University
University of Prince Edward Island (Canada)
World Fisheries Conference (Edinburgh, Scotland)
Norwegian Institute of Marine Research
University of Puget Sound
Horn Point Marine Lab, University of Maryland
International Writing Workshop, Copenhagen Denmark

Swarthmore College
University of South Carolina
Wellesley College
Plymouth State College
Gordon College
Flinders University (Australia)
Franklin and Marshall College
Smith College
Westfield State College
Swire Institute of Marine Science (Hong Kong)
Cape Breton University (Nova Scotia)
University of Washington, Friday Harbor Labs
Pacific Lutheran University\
Conservation Law Foundation, Boston MA

Activities with K-12 students

A number of times over the past several years I have had 3rd and 4th grade students in Cambridge and Winchester public schools conduct studies on the shell selection behavior of marine hermit crabs. One student left the session in my most recent visit fall saying, “This was the best day of my life!”

Three times over the past 6 years, I have participated in a program with the Cambridge Rindge and Latin High School, which places exceptional high school juniors in university research labs.

I have also developed 4 teaching kits for K-12 education over the past 30 years, for Nasco Scientific, VWR, and Wards.

Publications

- 1975 Pechenik, J.A. The escape of veligers from the egg capsules of *Nassarius obsoletus* and *Nassarius trivittatus* (Gastropoda, Prosobranchia). *Biol. Bull.* 149: 580-589.
- 1977 Sastry, A.N., and J.A. Pechenik. A review of the ecology, physiology and behavior of lobster larvae (*Homarus americanus* and *H. gammarus*). *Div. Fish. Oceanogr. Circ. 7*, Commonwealth Scientific and Industrial Research Org., Australia, pp. 159-173.
- 1978 Pechenik, J.A. Adaptations to intertidal development: Studies on *Nassarius obsoletus*. *Biol. Bull.* 154: 282-291.
- Pechenik, J.A. Winter reproduction in the gastropod *Nassarius trivittatus*. *Veliger* 21: 297-298.
- 1979 Pechenik, J.A. Leakage of ingested carbon by gastropod larvae, and its effect on the calculation of assimilation efficiency. *Estuaries* 2: 45-49.
- 1979 Pechenik, J.A. The role of encapsulation in the life histories of marine invertebrates. *Amer. Naturalist* 114: 859-870.
- Pechenik, J.A., F. Perron, and R.D. Turner. The role of phytoplankton in the diets of adult and larval shipworms, *Lyrodus pedicellatus* (Bivalvia, Teredinidae). *Estuaries* 2: 58-60.
- Pechenik, J.A., and N.S. Fisher. Ingestion and assimilation of three phytoplankton species related to larval growth rates of the mud snail, *Nassarius obsoletus*. *J. Exp. Mar. Biol. Ecol.* 38: 57-80.

- Pechenik, J.A., D.M. Johns, and D.C. Miller. Effects of exposure to No. 2 fuel oil on the survival and reproductive biology of some marine invertebrates. Proc. Symposium on the State of Marine Environmental Research, June 15-16, 1977. Environmental Research Laboratory, USEPA, Narragansett, R.I., pp. 135-156.
- 1980 Pechenik, J.A. Growth and energy balance during the larval life of three prosobranch gastropods. J. Exp. Mar. Biol. Ecol. 44: 1-28.
- Johns, D.M., and J.A. Pechenik. Effect of exposure to No. 2 fuel oil on growth and energetics of rock crab larvae, *Cancer irroratus*. Marine Biol. 55: 247-254.
- 1982 Pechenik, J.A. Ability of some gastropod egg capsules to protect against low-salinity stress. J. Exp. Marine Biol. Ecol. 63: 195-208.
- 1983 Pechenik, J.A. Egg capsules of *Nucella lapillus* protect against low-salinity stress. J. Exp. Marine Biol. Ecol. 71: 165-179.
- Pechenik, J.A., and D.M. Miller. Increased susceptibility to No. 2 fuel oil coincident with the initiation of particle feeding in developing mud snails, *Ilyanassa obsoleta*. Estuaries 6: 237-242.
- 1984 Pechenik, J.A. Relationship between rate of development and duration of larval life in larvae of the marine prosobranch gastropod *Crepidula fornicata*. J. Exp. Mar. Biol. Ecol. 74: 241-257.
- Pechenik, J.A., S.C. Chang, and A. Lord. Studies on the encapsulated development of the marine gastropod, *Nucella lapillus*. Marine Biol. 78: 223-229.
- Pechenik, J.A. Influence of temperature and temperature shifts on the development of the chiton, *Mopalia muscosa*. Int. J. Invert. Reprod. Devel. 7: 3-12.
- Pechenik, J.A., and G. Lima. Relationship between growth, differentiation, and duration of larval life in individually-reared larvae of the marine gastropod *Crepidula fornicata*. Biol. Bull. 166: 537-549.
- Pechenik, J.A., R.S. Scheltema, and L.S. Eyster. Growth-stasis and reduced shell calcification in larvae of the gastropod *Cymatium parthenopeum* during trans-Atlantic transport. Science, 224: 1097-1099.
- Pechenik, J.A. Predicting the consequences of water-soluble pollutant input into the marine environment. Hazardous Waste, 1: 273-282.
- 1985 Pechenik, J.A. Delayed metamorphosis of marine molluscan larvae: current status and directions for future research. Amer. Malac. Bull. Special Ed. No. 1: 85-91
- Lima, G.M., and Pechenik, J.A. The influence of temperature on growth rate and length of larval life of the gastropod *Crepidula plana* Say. J. Exp. Mar. Biol. Ecol. 90: 55-71.
- 1986 Pechenik, J.A. Field evidence for delayed metamorphosis of larval gastropods: *Crepidula plana* Say, *C. fornicata* (L.), and *Bittium alternatum* Say. J. Exp. Mar. Biol. Ecol. 97: 313-319.
- Greenberger, J.S., Pechenik, J.A., Lord, L., Gould, L., Naparstek, E., Kase, K., and T.J. FitzGerald. X-irradiation effects on growth and metamorphosis of gastropod larvae (*Crepidula fornicata*): a model for environmental radiation teratogenesis. Archives of Environ. Contam. Toxicol. 15: 227-234.

- Turner, R.D., Pechenik, J.A., and C.B. Calloway. The language of marine invertebrate developmental patterns--problems and needs. In: M.-F. Thompson, R. Sarojini, and R. Nagabhushanam, eds. *Biology of Benthic Marine Invertebrates*, pp. 227-235. Oxford and IBH Publ. Co., New Delhi.
- Pechenik, J.A. The encapsulation of eggs and embryos by molluscs: an overview. *Amer. Malac. Bull.* 4: 165-172.
- 1987 Dobbertein, R.A., and Pechenik, J.A. Comparison of larval bioenergetics for two marine gastropods with widely differing lengths of planktonic life (*Thais haemastoma canaliculata* (Gray) and *Crepidula fornicata* (L.)). *J. Exp. Mar. Biol. Ecol.* 109: 173-191.
- Pechenik, J.A. Environmental influences on larval survival and growth. IN, A.C. Giese and J.S. Pearse (eds.). Reproduction of Marine Invertebrates, Vol. 9, Blackwell Scientific, NY., pp. 551-608.
- Pechenik, J.A., and W.D. Heyman. Using KCl to determine size at competence for larvae of the marine gastropod *Crepidula fornicata* (L.). *J. Exp. Mar. Biol. Ecol.* 112: 27-38.
- Eyster, L.S., and J.A. Pechenik. Attachment of *Mytilus edulis* L. larvae on algal and byssal filaments is enhanced by water agitation. *J. Exp. Mar. Biol. Ecol.* 114: 99-110.
- 1988 Eyster, L.S., and J.A. Pechenik. Comparison of growth, respiration, and feeding of juvenile *Crepidula fornicata* (L.) following natural or KCl-triggered metamorphosis. *J. Exp. Marine Biol. Ecol.* 118: 269-279.
- 1989 Woollacott, R.M., J.A. Pechenik, and K.M. McSorley. Influence of swimming time on early colony development in *Bugula stolonifera* (Bryozoa: Cheilostomata). *Marine Biol.* 102: 57-63.
- Pechenik, J.A., and L.S. Eyster. Influence of delayed metamorphosis on the growth and metabolism of young *Crepidula fornicata* (Gastropoda) juveniles. *Biological Bulletin* 176: 14-24.
- 1990 Pechenik, J.A., L.S. Eyster, J. Widdows, and B.L. Bayne. The influence of food concentration and temperature on growth and morphological differentiation of blue mussel larvae, *Mytilus edulis* L. *J. Exp. Marine Biol. Ecol.* 136: 47-64.
- Pechenik, J.A. Delayed metamorphosis by larvae of benthic marine invertebrates: Does it occur? Is there a price to pay? *Ophelia* 32: 63-94.
- 1991 Pechenik, J.A. and J. Shiro Tashiro. Instant animals and conceptual loops: Teaching experimental design, data analysis, and scientific writing. *Amer. Biol. Teacher* 53(4): 220-228.
- Zimmerman, K.M., and J.A. Pechenik. How do temperature and salinity affect relative rates of growth, morphological differentiation, and time to metamorphic competence in larvae of the marine gastropod *Crepidula plana*? *Biol. Bull.* 180: 372-386.
- Pechenik, J., and T. Cerulli. Influence of delayed metamorphosis on survival, growth, and reproduction of the marine polychaete *Capitella* sp. I. *J. Exp. Marine Biol. Ecol.* 151: 17-27.
- 1992 Pechenik, J.A., and J.S. Tashiro. The Graphing Detective: An exercise in critical reading, experimental design & data analysis. *Amer. Biol. Teacher.* 54: 432-435.

- Rice, M.A., and J.A. Pechenik. A review of the factors influencing the growth of the northern quahog, *Mercenaria mercenaria* (Linnaeus, 1758). *J. Shellf. Res.* 11: 279-287.
- 1993 Pechenik, J.A., D. Rittschof, and A.R. Schmidt. Influence of delayed metamorphosis on survival and growth of juvenile barnacles *Balanus amphitrite*. *Marine Biol.* 115: 287-294.
- Pechenik, J.A., and C.C. Gee. 1993. Onset of metamorphic competence in larvae of the gastropod *Crepidula fornicata* (L.), judged by a natural and an artificial cue. *J. Exp. Marine Biol. Ecol* 167: 59-72.
- 1995 **Pechenik**, J.A., Hadfield, M.G., and L.S. Eyster. Assessing whether larvae of the opisthobranch gastropod *Phestilla sibogae* become responsive to three chemical cues at the same age. *J. Exp. Mar. Biol. Ecol.* 191:1-17.
- Pechenik**, J.A., and B. Fried. Effect of temperature on survival and infectivity of *Echinostoma trivolvis* cercariae: a test of the energy limitation hypothesis. *Parasitology* 111:373-378.
- 1996 **Pechenik**, J.A., K. Hammer, and C. Weise. The effect of starvation on acquisition of competence and post-metamorphic performance in the marine prosobranch gastropod *Crepidula fornicata* (L.). *J. Exp. Mar. Biol. Ecol.* 199:137-152.
- Pechenik**, J.A., S. Estrella, and K. Hammer. Food limitation stimulates metamorphosis and alters post-metamorphic growth rate in the marine prosobranch gastropod *Crepidula fornicata*. *Marine Biol.* 127:267-275.
- Pechenik**, J.A., T.J. Hilbish, L.S. Eyster, and D. Marshall. Relationship between larval and juvenile growth rates in two marine gastropods, *Crepidula plana* and *C. fornicata*. *Marine Biol.* 125:119-127.
- 1997 Jarrett, J.N., and J.A. **Pechenik**. Temporal variation in cyprid quality and juvenile growth capacity for the barnacle *Semibalanus balanoides*. *Ecology* 78:1262-1265.
- Pechenik**, J.A. Getting the most out of student laboratory reports. *Strategies* 23:4-5.
- 1998 **Pechenik**, J.A., D. Wendt, and J. Jarrett. Metamorphosis is not a new beginning: Larval experience reduces rates of postlarval growth, development, and survival in marine invertebrates. *BioScience.* 48:901-910.
- Pechenik**, J.A., and P.-Y. Qian. Onset and maintenance of metamorphic competence in the marine polychaete *Hydroides elegans* in response to three chemical cues. *J. Exp. Marine. Biol. Ecol.* 226:51-74.
- Qian, P.-Y., and J.A. **Pechenik**. Effects of starvation and delayed metamorphosis on juvenile survival and growth of the tube-dwelling polychaete *Hydroides elegans*. *J. Exp. Marine. Biol. Ecol.* 227:169-185.
- Pechenik**, J.A. On the benefits of being a larva... or not. In *Aquatic Life Cycle Strategies*, M. Whitfield, J. Matthews, C. Reynolds (eds.), pp. 97-104. Marine Biological Association of the United Kingdom, Plymouth.

- Pechenik, J.A.** Reproductive Modes of Marine Invertebrates. In, *Encyclopedia of Reproduction*, Academic Press, NY. Volume 3: 98-103.
- Fried, B., L.S. Eyster, and J.A. **Pechenik**. Histochemical glycogen and neutral lipid in *Echinostoma trivolvis* cercariae and effects of exogenous glucose on cercarial longevity. *J. Helminthol.* 72: 83-85.
- 1999 **Pechenik, J.A.** On the advantages and disadvantages of larval stages in benthic marine invertebrate life cycles. *Marine Ecol. Progr. Series.* 177: 269-297.
- Cohen, R., and J.A. **Pechenik**. Relationship between sediment organic content, metamorphosis, and postlarval performance in the deposit-feeding polychaete *Capitella* sp. I. *J. Exp. Marine Biol. Ecol.* 240:1-18.
- Hilbish, T.J., Sasada, K., Eyster, L.S., and J.A. **Pechenik**. Relationship between rates of swimming and growth in veliger larvae: genetic variance and covariance. *J. Exp. Marine Biol. Ecol.* 239:183-193.
- Pechenik, J.A.** Metamorphosis. *Encyclopedia of Science and Technology*, McGraw Hill, NY.
- 2000 **Pechenik, J.A.**, Berard, R., and L. Kerr. Effects of reduced salinity on survival, growth, reproductive success, and energetics of the euryhaline polychaete *Capitella* sp. I. *J. Exp. Mar. Biol. Ecol.* 254: 19-35.
- Klinzing, M.S., and J.A. **Pechenik**. Evaluating whether velar-lobe size indicates food limitation among larvae of the marine gastropod *Crepidula fornicata*. *J. Exp. Mar. Biol. Ecol.* 252: 255-279.
- Pechenik, J.A.**, Lewis, S. Avoidance of drilled gastropod shells by the hermit crab *Pagurus longicarpus* at Nahant, Massachusetts. *J. Exp. Mar. Biol. Ecol.* 253:17-32.
- 2001 **Pechenik, J.A.**, and M.E. Rice. Influence of delayed metamorphosis on postsettlement survival and growth of the sipunculan *Apionsoma misakiana*. *Invert. Biol.* 120: 50-57.
- Pechenik, J.A.**, Berard, R., Daniels, D., Gleason, T.R., and D. Champlin. Influence of lowered salinity and elevated cadmium on the survival and metamorphosis of *Capitella* sp. I trochophores. *Invert. Biol.* 120: 142-148.
- Pechenik, J.A.**, J.M. Reed, and M. Russ. Should auld acquaintance be forgot: Possible influence of computer databases on citation patterns in the biological literature. *BioScience* 51: 583-588.
- Pechenik, J.A.** Life Cycles. In: C.W. Fox, D. Roff, and F. Fairbairn, eds., *Evolutionary Ecology: Perspectives and Case Studies*, Oxford University Press, NY.
- Pechenik, J.A.**, B. Fried, and H.L. Simpkins. *Crepidula fornicata* is not a first intermediate host for trematodes: Who is? *J. Exp. Mar. Biol. Ecol.* 261: 211-224.
- Pechenik, J.A.**, J. Hsieh, S. Owara, S. Untersee, D. Marshall, and W. Li. Factors selecting for avoidance of drilled shells by the hermit crab *Pagurus longicarpus*. *J. Exp. Mar. Biol. Ecol.* 262: 75-89.

Pechenik, J.A., T. Gleason, D. Daniels, and D. Champlin. Influence of larval exposure to salinity and cadmium stress on juvenile performance of two marine invertebrates (*Capitella sp. I* and *Crepidula fornicata*). *J. Exp. Mar. Biol. Ecol.* 264: 101-114.

Gaudette, M.F., J. Lowther, and J. A. **Pechenik**. Heat shock induces metamorphosis in larvae of the prosobranch gastropod *Crepidula fornicata*. *J. Exp. Mar. Biol. Ecol.* 266: 151-164.

2002

Pechenik, J.A., Wei Li, and David E. Cochrane. Timing is everything: The effects of putative dopamine antagonists on metamorphosis vary with larval age and experimental duration in the prosobranch gastropod *Crepidula fornicata*. *Biological Bulletin* 202: 137-147.

Pechenik, J.A., J. Jarrett, and J. Rooney. Relationship between larval nutritional experience, larval growth rates, and juvenile growth rates in the prosobranch gastropod *Crepidula fornicata*. *J. Exp. Mar. Biol. Ecol.* 280: 63-78.

2003

Marshall, D.J., **Pechenik, J.A.**, and M.J. Keough. Larval activity levels and delayed metamorphosis affect post-larval performance in the colonial ascidian *Diplosoma listerianum*. *Mar. Ecol. Progr. Ser.* 246: 153-162.

Pechenik, J.A., Marsden, I.D., and O. Pechenik. Effects of temperature, salinity, and air exposure on development of the estuarine pulmonate gastropod *Amphibola crenata*. *J. Exp. Mar. Biol. Ecol.* 292: 159-176.

2004

Li, W., and J. A. **Pechenik**. 2004. A forced association between the slippersnail *Crepidula convexa* and the hermit crab *Pagurus longicarpus*? Possible control by a third party. *J. Exp. Mar. Biol. Ecol.* 311: 339-354.

Gravel, B.E., Wong, P.E., Starks, P.T., and J.A. **Pechenik**. 2004. The use of artificial shells for exploring shell preference in the marine hermit crab *Pagurus longicarpus* (Say). *Acta Zool. Fennica* 41: 477-485.

Pechenik, J.A., M. Blanchard, and R. Rotjan. 2004. Susceptibility of larval *Crepidula fornicata* to predation by suspension-feeding adults. *J. Exp. Mar. Biol. Ecol.* 306: 75-94.

2006

Pechenik, J.A. Larval experience and latent effects--metamorphosis is not a new beginning. *Integr. Comp. Biol.* 46: 323-333.

2007

Pechenik, J. A. 2007. Avoiding plagiarism: learning to summarize. Strategies for Success. Benjamin Cummings.

Pechenik, J., J.S. Pearse, and P.-Y. Qian. Effects of salinity on spawning and early development of the tube-building polychaete *Hydroides elegans* in Hong Kong: not just the sperm's fault. *Biological Bulletin* 212: 151-160.

Chiu, J.M, Thiyagarajan, V., **Pechenik**, J.A., and P.-Y. Qian. 2007. The influence of temperature and salinity on microbial film development and metamorphosis of the prosobranch gastropod *Crepidula onyx*. *Marine Biology* 151: 1417-1431.

Thiyagarajan, V., J.A. **Pechenik**, L.A. Gosselin, and P.Y. Qian. 2007. Juvenile growth in barnacles: combined effect of delayed metamorphosis and sublethal exposure of cyprids to low salinity stress. *Marine Ecology Progress Series* 344: 173-184.

Pechenik, J.A., and S. H. Levine. 2007. A new approach to estimating the magnitude of planktonic larval mortality using the marine gastropods *Crepidula fornicata* and *C. plana*. *Marine Ecology Progress Series* 344: 107-118.

Pechenik, J.A., D.E. Cochrane, W. Li, E. T. West, A. Pires, and M. Leppo. NO inhibits metamorphosis in larvae of *Crepidula fornicata*, the slippershell snail. *Biological Bulletin* 213: 160-171.

Li, W. and J. A. **Pechenik**. 2007. The impact of inbreeding on reproduction and juvenile performance in two marine gastropods with contrasting reproductive patterns. *Marine Ecology Progress Series* 346: 219–234.

Untersee, S. and J. A. **Pechenik**. 2007. Local adaptation and maternal effects in two species of marine gastropod (genus *Crepidula*) that differ in dispersal potential. *Mar. Ecol. Progr. Ser.* 347: 79-85.

2008

Blanchard, M., J.A. **Pechenik**, E. Giudicelli, J.-P. Connan, and R. Robert. 2008. Competition for food in the larvae of two marine molluscs, *Crepidula fornicata* and *Crassostrea gigas*. *Aquatic Living Resources*. 21: 1-9.

Chaparro, O.R., V.M. Cubillos, Y.A. Montiel, K.A. Paschke, and J.A. **Pechenik**. Embryonic encapsulation and maternal incubation: requirements for survival of the early stages of the estuarine gastropod *Crepipatella dilatata*. *J. Exp. Mar. Biol. Ecol.* 365: 38-45.

Ambrogio, O. and J. A. **Pechenik**. 2008. When is a male not a male? Sex recognition and choice in two sex-changing species. *Behavioral Ecol. Sociobiol.* 62: 1779-1786.

2009

Montory, J.A., O.R. Chaparro, V.M. Cubillos, and J.A. **Pechenik**. 2009. Isolation of the incubatory cavity: alteration of pH and its impact on the protoconch of brooded veligers in the estuarine gastropod *Crepipatella dilatata* Lamarck (Gastropoda: Calyptraeidae). *Mar. Ecol. Progr. Ser.* 374: 157-166.

Chaparro, O.R., C.J. Segura, J.A. Montory, J. M. Navarro, and J.A. **Pechenik**. 2009. Brood chamber isolation during salinity stress in two estuarine mollusk species: from a protective nursery to a dangerous prison. *Mar. Ecol Progr. Ser.* 374: 145-155.

Le Cam, Sabrina, **Jan A. Pechenik**, Mathilde Cagnon, and Frédérique Viard. 2009. The influence of multiple paternity on larval growth rate variation in an invasive marine mollusk. *J. Heredity* 100: 455-464.

Chaparro, O., J.A. Montory, C.J. Segura, and **J. A. Pechenik**. 2009. Effect of reduced pH on shells of brooded veligers in the estuarine bivalve *Ostrea chilensis* Philippi 1845. *J. Exp. Mar. Biol. Ecol.* 377: 107-112.

Ambrogio, O.V. and **J.A. Pechenik**. 2009. Do sex-changing male snails use mate choice to get a jump on their “size advantage”? *Mar. Biol.* 156:2173–2180.

2010

Pechenik, J.A., O.V. Ambrogio, and S. Untersee. 2010. Predation on juveniles of *Crepidula fornicata* by two crustaceans and two gastropods. *J. Exp. Mar. Biol. Ecol.* 384: 91-98.

Segura, C.J., O.R. Chaparro, K.A. Paschke, and **J.A. Pechenik**. 2010. Capsule walls as barriers to oxygen availability: Implications for the development of brooded embryos by the estuarine gastropod *Crepidatella dilatata* (Calyptraeidae). *J. Exp. Mar. Biol. Ecol.* 390: 49–57.

Allen, J.D. and J.A. **Pechenik**. 2010. Understanding the effects of low salinity on fertilization success and early development in the sand dollar *Echinarachnius parma*. *Biol. Bull.* 218: 189–199.

Taris, N., T. Comtet, R. Stolba, R. Lasbleiz, **J. A. Pechenik**, and F. Viard. 2010. Experimental induction of larval metamorphosis by a naturally-produced halogenated compound (dibromomethane) in the invasive mollusc *Crepidula fornicata*. *J. Exp. Mar. Biol. Ecol.* 393: 71-77.

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