Focus on Molluscan Shellfish Biology/Ecology/Restoration, Especially for Oysters (*Crassostrea virginica*), Ecosystem Engineering and Related Services, Living Shorelines, Related Climate Change/Acidification, Remote Sensing, and Other Related Topics

(Revision date 4/20/19)

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**General Restoration Papers, Recent Shellfish Reviews and Related Subjects (relevant Taxonomy, focus Biogenic Molluscan Species, Oysters, Scale, Ecosystem Services, Climate Change, Stessors, Coral Reefs, etc.)**


Gray, M.W., and C. Langdon, 2019. Particle processing by Olympia oysters (Ostrea lurida) and Pacific oysters (Crassostrea gigas). Estuaries and Coasts


Gray, M.W., P.E. zu Ermgassen, J. Gair, E. Lemagie, J. Lerczak, and C. J. Langdon, 2019. Predicted filtration services of historic and restored populations of native Olympia oysters (Ostrea lurida) and non-native Pacific (Crassostrea gigas) oysters. Estuaries and Coasts


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Haskins Shellfish Research Lab, Rutgers University publications by year, see http://hsrl.rutgers.edu/publications.htm


**Fisheries and Aquaculture Information, especially Reviews for Molluscs**


General Climate, Physiology, and Ocean Acidification, Sedimentation, Stress Tolerance, Related Papers, Reviews, Websites

http://ss2.climatecentral.org/#16/32.7858/-79.9613?show=income&projections=0-RCP85-SLR&level=0&unit=feet&pois=hide


**General Restoration Literature, Approaches, etc.**


**Impacts and Site Selection for Aquaculture, Alternative Energy (wind turbines), etc.**


Løkkeborg, S., 2005. Impacts of Trawling and Scallop Dredging on Benthic Habitats and Communities. FAO Fisheries and Aquaculture Technical Papers, Issue 472, 58pp. ISSN 0429-9345


**Disturbance From Harvesting, Aquaculture Positive and Negative Effects, Non-Consumptive Human Impacts (Includes abandoned gear)**


Some Classic Works (and Reviews)


U. S. Coast Survey 1872 and 1874. Boat Sheets Nos. 1179a and 1179b approved for registry in 1872 and 1874, respectively. Incorporating Results of Surveys of the James River made in 1871, 1872 and 1873. U. S. Coast Survey. Washington, D.C.


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Winslow, L.F., 1886. Report on the waters of North Carolina with reference to their possibilities for oyster culture. P.M. Hale, state printer and Binder, Raleigh, N.C.


**General Marine Ecological Contributions, Metapopulations, Sampling, Predator-Prey, Habitat Complexity, Incl. Reproduction, Habitats, Attraction-Production Issue, Reserves, etc.**


General Bivalve/Gastropod Feeding, Reproduction, Growth, Populations, and Ecology Papers (scallops, limpets, mussels, clams, Mya included)


**Living Shorelines, Habitat Protection, Erosion, Sea Level Rise, Beach Nourishment, Related Topics by Location, etc.**

**General**


Boyd, C.A., and N.L. Pace, 2013. Coastal Alabama living shorelines policies, rules, and model ordinance manual. This project was supported by the Mobile Bay National Estuary Program with a grant from AL Department of Conservation and Natural Resources, State Lands Division, Coastal Section, through funding from the NOAA, Office of Ocean and Coastal Resource Management, Award # 11NOS4190104, 50pp. see http://www.oyster-restoration.org/wp-content/uploads/2012/06/Boyd-and-Pace-LS-2013.pdf


See https://www.estuaries.org/living-shorelines


LinkedIn Living Shoreline Erosion Control forum. See http://www.linkedin.com/groups/Living-Shoreline-Erosion-Control-Forum-4157277/about

Living Shorelines Academy, see https://livingshorelinesacademy.org/, https://livingshorelinesacademy.org/index.php/projects-databases site has current info on LS, national and state databases related to restoration, LS, etc.


Mid-Atlantic Living Shorelines Summit (December 2013), presentations are now available at [http://www.estuaries.org/mid-atlantic-living-shorelines-summit-presentations.html](http://www.estuaries.org/mid-atlantic-living-shorelines-summit-presentations.html).


Mississippi-Alabama Sea Grant Legal Program, National Sea Grant Law Center, Troy University, 2014. Inventory of shellfish restoration permitting & programs in the coastal states. Prepared for The Nature Conservancy, under TNC Cost Center Number 1981203049 with additional funding from the NOAA, U.S. Department of Commerce, 189pp.


NOAA Habitat Restoration Projects database, see


North Carolina Living Shorelines Atlas, see
https://www.google.com/maps/d/viewer?mid=1SJ_kUKAvaHItQge_XuOsd1LFzfE&ll=34.9969225998088%2C-76.88771550000001&z=8.


TNC website for Restoration Projects, see http://www.projects.tnc.org/coastal/


http://www.habitat.noaa.gov/restoration/techniques/livingshorelines.html
http://www.habitat.noaa.gov/restoration/techniques/lsimplementation.html


Southern Environmental Law Center’s LS site, http://www.southernenvironment.org/cases/living_shorelines/


New England

New York/New Jersey


Mitigating shoreline erosion along New Jersey’s sheltered coast: overcoming regulatory obstacles to allow for living shorelines. see http://www.state.nj.us/dep/cmp/docs/living-shorelines2011.pdf

Maryland

Burke, D.G., E.W. Koch, and J.C. Stevenson, 2005. Assessment of hybrid type shore erosion control projects in Maryland’s Chesapeake Bay-Phases I and II: Annapolis, Md., Chesapeake Bay Trust.


Mid-Atlantic Living Shorelines Summit 2014, presentation are now available at http://www.estuaries.org/mid-atlantic-living-shorelines-summit-presentations.html.


Tidal Wetland Regulations for Living Shorelines (26.24.01), MD Department of the Environment, see http://www.nnde.state.md.us/programs/Water/WetlandsandWaterways/Pages/TidalRegsLivingShoreline.aspx.


Living Shoreline Stabilization at Riviera Beach, MD. See http://www.jmt.com/project-portfolio/living-shoreline-stabilization-at-riviera-beach/

Maryland Department of Natural Resources has debuted a new living shorelines website, See link http://dnr.maryland.gov/ccs/Pages/livingshores.aspx.


Evaluation of Living Shoreline Techniques, Dr. Bhaskar Subramanian et al., http://www.vims.edu/cbnerr/_docs/ctp_docs/ls_docs/06_LS_Eval.pdf

CoastSmart Communities, https://dnr.maryland.gov/ccs/coastsmart/Pages/default.aspx

Shoreline erosion maps by county, what are my options?, http://www.mgs.md.gov/coastal_geology/schangepdf.html

Restoring the Chesapeake Bay through Innovation, https://dnr.maryland.gov/ccs/Pages/livingshoreslines.aspx


Virginia
https://thevlm.org/american-oyster-castle-project-by-aquarist-carol-paulson/

North Carolina


NC Estuarine Shoreline Stabilization, NCDENR, http://dcm2.enr.state.nc.us/estuarineshoreline/estuarine.html


**South Carolina**

https://www.scdhec.gov/environment/your-water-coast/ocean-coastal-management/living-shorelines-working-group

Evaluating Living Shorelines to Inform Regulatory Decision-Making in South Carolina, see http://graham.umich.edu/activity/32622


**Georgia**

Georgia Department of Natural Resources. 2013. Living Shorelines along the Georgia Coast: A Summary Report of the First Living Shoreline projects in Georgia. Coastal Resources Division, Brunswick, GA, 43pp., plus appendix, see http://sagecoast.org/docs/sci_eng/LivingShorelinesAlongtheGeorgiaCoastweb.pdf

Living Shorelines, https://gacoast.uga.edu/research-major-projects/living-shoreline/


**Florida**

FL DEP, About shoreline erosion, http://publicfiles.dep.state.fl.us/dwrm/slerp/erphelp/mergedProjects/erphelp/Subject_Disc ussions/Living_Sharolines.htm

http://www.dep.state.fl.us/coastal/news/articles/2008/0812_Shorelines.htm

http://www.dep.state.fl.us/northwest/ecosys/section/living_shorelines.htm

Florida Living Shorelines (UF/IFAS) website, see http://floridalivingshoreslines.com/

FL Permitting, see http://floridalivingshoreslines.com/information-help-and-documents/permitting/

Restoring Florida’s Coast with Living Shorelines (UF/IFAS), see https://www.flseagrant.org/florida-living-shorelines/
**GOM**


**Alabama**


**Mississippi**


Mississippi-Alabama Sea Grant Consortium, Home for Living Shorelines, see [http://masgc.org/living-shorelines](http://masgc.org/living-shorelines)


**Louisiana**


Texas


PACIFIC, WESTERN U.S.

California

http://www.thewatershedproject.org/WhatWeDo/LivingShoreLine.html
http://www.californiawildlifefoundation.org/pdf/Attachment%201_SF%20Bay%20Shorelines%20JARPA%202012.pdf


Oregon

Washington

The Puget Sound Restoration Fund (PSRF) is a Washington-based nonprofit founded in 1997, dedicated to restoring marine habitat, water quality and native species in Puget Sound. They are: (1) adding shell substrate to increase settlement success; (2) spreading shell and seed on shell (SOS, hatchery or natural set); or (3) producing hatchery-propagated native oyster seed using appropriate genetic protocols co-developed with the state’s WDFW. NMFS/NOAA is building a restoration hatchery to produce Olympia oyster (Ostrea conchaphia) seed on a larger scale. For more information about their Olympia oyster project see their website: www.restorationfund.org.


Green Shores website, http://www.stewardshipcentrebc.ca/greenshores/

INTERNATIONAL


Recent Bivalve Contributions (w/ focus on Oyster Restoration includes recruitment, ecosystem services, diseases, feeding, reserves, reproduction, larvae, etc.) primarily:


Bolton-Warberg, M., L.D. Coen and J. Weinstein, 2007. Acute toxicity and acetylcholinesterase inhibition in grass shrimp (Palaemonetes pugio) and oysters (Crassostrea virginica) exposed to the organophosphate dichlorvos: laboratory and field studies. Archives of Environmental Contamination and Toxicology 52:207-216.


Powell, E.N., 2017. What is going on with *Perkinsus marinus* in the Gulf of Mexico? Estuaries and Coasts 40:105-120.


Quan, W., R. Fan, Y. Wang, and A.T. Humphries, 2017. Long-term oyster recruitment and growth are not influenced by substrate type in China: implications for sustainable oyster reef restoration. J. Shellfish Res. 36:79–86.


**Olympia oyster (O. lurida), Ostrea edulis, Crassostrea gigas, Non-Crassostrea Work, U.S., Canada and Elsewhere**


McAfee, D., and M.J. Bishop, 2019. The mechanisms by which oysters facilitate invertebrates vary across environmental gradients. Oecologia


Quan, W., R. Fan, Y. Wang, and A.T. Humphries, 2017. Long-term oyster recruitment and growth are not influenced by substrate type in China: implications for sustainable oyster reef restoration. J. Shellfish Res. 36:79–86.


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Silliman, K., 2019. Population structure, genetic connectivity, and adaptation in the Olympia oyster (Ostrea lurida) along the west coast of North America. Evolutionary Applications

Troost, K., 2009. Pacific oysters in Dutch estuaries: causes of success and consequences for native bivalves. This project was funded by the Netherlands Organization for Scientific Research – Earth and Life Sciences (NOW-ALW; Project number 812.03.003). Part of a Ph.D. Dissertation, Wageningen IMARES – Yersek. University of Groningen, Department of Marine Biology Centre for Ecological and Evolutionary Studies, 255pp. see http://www.waddenacademie.nl/fileadmin/inhoud/pdf/06-wadweten/Proefschriften/Proefschrift_Karin_Troost.pdf


**Tridacna and other Epibenthic Bivalves**


**Mollusc Shells, Shape, Flow, Food, Behavior, Temperature, Salinity, DO, etc. (see also Paleobiology, Anthropology, Taphonomy, Geomorphology of Oysters and Reefs below):**


Hopkins, S.H., 1950. The inter-relationship of weight, volume, and linear measurements of oysters and the number of oysters per Louisiana sack measure. Texas A&M University, College Station, TX. 15pp.


Reef Development, Habitat Landscapes, Organisms Associations, Shape, Flow, Edge Effects, Halos, Geomorphology, Paleontology, Taphonomy (includes molluscs, corals, etc.):


and *C. ariakensis* in Chesapeake Bay: does oyster species affect habitat function? J. Shellfish Res. 29:253–269.


editors, Oyster reef habitat restoration: a synopsis of approaches. VIMS Press, Williamsburg, VA.


**Cultch Quarantine for Restoration**


Some Pertinent “Grey” Literature (Oysters, Clams, etc.), Anthropology, and websites


Introduced species of Hawaii
[http://www2.bishopmuseum.org/HBS/invertguide/species/crassostrea_virginica.htm](http://www2.bishopmuseum.org/HBS/invertguide/species/crassostrea_virginica.htm)


Burrell, V.G., Jr., 1975a. Faunal studies of North and South Santee River prior to and after hard clam harvesting by hydraulic dredges. SCWMRD, MRD January report, 4 pp.


Cerco, C. F., and M. R. Noel. 2005. Assessing a ten-fold increase in the Chesapeake Bay native oyster population. A report to the EPA Chesapeake Bay Program.


Hicks, R. 2004. Recreational fishing and the benefits of oyster reef restoration in the Chesapeake Bay. Working Paper #1, College of William and Mary.


Lipton, D. Final draft economic analysis for oyster restoration alternatives. www.nao.usace.army.mil/OysterEIS


Philpots, John R., 1890. Oysters, and all about them. being a complete history of the titular subject, exhaustive on all points of necessary and curious information from the earliest writers to those of the present time, with numerous additions, facts and notes. John Richardson & Co. Medical Publishers, London, U.K.


SJWMD, Oyster mats — Homes for my friends, see http://www.sjrwmd.com/snook/oystermats.html


Walne, P.R., 1979. Culture of bivalve molluscs. 50 Years of Experience at Conwy Fishing New Books Ltd., Farnham 189.


**Papers on Policy Related to Restoration, Consumption, Industry, etc.**


Papers/Reports/Books/Handbooks Related to Restoration and Sampling Habitats, Reviews (focus on Oysters, Marsh, Mudflats, etc.)


Minello, TJ. 1999. Nekton densities in shallow estuarine habitats of Texas and Louisiana and the identification of Essential Fish Habitat. AFS Symposium 22:43-75.


Seitz, R.D., R.N. Lipcius, N.H. Olmstead, M.S. Seeboand, and D.M. Lambert, 2006. Influence of shallow-water habitats and shoreline development on abundance, biomass, and


**Relevant Genetics or Population (Fisheries, etc.) Models for Natural and Restored Reefs, Molecular, Carrying Capacity, DEBs, Aquaculture as An Alternative to Restoration, B-P Coupling**


Thompson, P., B. Rosenthal, and M.P. Hare, 2014. Hybridization between previously isolated ancestors may explain the persistence of exactly two ancient lineages in the genome of the oyster parasite Perkinsus marinus. Infection, Genetics and Evolution 24C:167-176.


Modeling Restoration, Oyster Reef Habitat, Carrying Capacity, Aquaculture, ShellGis

Practical models are required to help manage aquaculture production, including the effects of aquaculture on wider ecosystem services, towards internalisation of wastes within multitrophic systems. However, models to date in general lack detailed representation of critical hydrodynamic effects in and around aquaculture, whether suspended or on the bottom, thus without sufficient spatial resolution to be useful on an individual farm scale, ShellGIS has been developed as a custom application of STEMgis, a geographic information system (GIS) that handles additional dimensions of time and depth, within which we have embedded state-of-the-art models that account for interactive effects of culture type, see http://shellgis.com/Default.aspx


Ocean Acidification, pH, El Niño, N& C trading, Alteration of Interactions, Stressors, Climate-Disease Impacts, Sea-Level Rise, and Related Topics (See also Paleo and Shell Budgets), Marine and Freshwater, etc.

http://www.ecy.wa.gov/climatechange/ipa_resources.htm#OceanAcid web resource

http://pcsga.net/pcsga-tidings/ web resource


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doi:10.1371/journal.pone.0068198


*Mercenaria mercenaria* development in response to multiple stressors: temperature and 

Effect of marine acidification on calcification and respiration of *Chlamys farreri*. J.
Shellfish Res. 30:267-271.


Montalto, V., G. Sarà, P.M. Ruti, A. Dell’Aquila, and B. Helmuth, 2014. Testing the effects of 
temporal data resolution on predictions of the effects of climate change on bivalves. 
Ecological Modelling 278:1–8.

Najar, R., H. Walker, P. Anderson, E. Barron, R. Bord, J. Gibson, V. Kennedy, C. Knight, J.
Megenigal, R. O’Connor, C. Polsky, N. Psuty, B. Richards, L. Sorenson, E. Steele and R.
Swanson, 2000. The potential impacts of climate change on the mid-Atlantic coastal 

National Research Council (NRC), 2010. Ocean Acidification: A National Strategy to Meet the 


acidification on a marine invertebrate: elevated CO2 alters response to thermal stress in 


Parker, L.M., P.M. Ross, W.A. O’Connor, 2009. The effect of ocean acidification and 
temperature on the fertilization and embryonic development of the Sydney rock oyster 

Parker, L.M., P.M. Ross, W.A. O’Connor, 2010. Comparing the effects of pCO2 and 
temperature on the fertilization and early development of two species of oysters. Mar.

Parker, L.M., P.M. Ross, W.A. O’Connor, 2011. Comparing the effect of elevated pCO2 and 
temperature on the fertilization and early development of two species of oysters. Mar 

Parker, L.M., P.M. Ross, W.A. O’Connor, 2011. Populations of the Sydney rock oyster, 

Predicting the response of molluscs to the impact of ocean acidification. Biology 2:651– 
692.


Scanes, E., L.M. Parker, W.A. O’Connor, M.C. Gibbs, and P.M. Ross, 2018. Copper and ocean acidification interact to lower maternal investment, but have little effect on adult physiology of the Sydney rock oyster *Saccostrea glomerata*. Aquat. Toxicol. 203:51-60.


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**Carbonate and Shell Budgets and Restoration, etc. (see also Paleo section for more)**


http://www.sustainablefish.org/news/articles/2012/03/28/state-of-washington-establishes-ocean-acidification-panel

http://www.oceanacidification.noaa.gov/

http://www.oceanacidification.noaa.gov/AreasofFocus/OceanAcidificationMonitoring/coralmonitoringnetwork.aspx


http://www.ecy.wa.gov/water/marine/oa/panel.html


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Paleobiology, Anthropology, Taphonomy, Geomorphology of Oysters and Reefs (see also Shells, Shape, Flow, Food, DO, etc. Section above and Boonea):

http://www.georgiaencyclopedia.org/articles/history-archaeology/coastal-shell-rings


Keogh, C.L., M.E. Sanderson, and J.E. Byers, 2016. Local adaptation to parasite selective pressure: comparing three congeneric co-occurring hosts. Oecologia 180:137-147. 3 Littorines and parasites


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Vermeij, G.J., 2010a. The Evolutionary world: how Adaptation explains everything from seashells to civilization. thomas Dunne Books, St. Martin’s Press, N.Y.


See http://archaeology.about.com/od/boneandivory/a/shellmidden.htm

**Shellfish-SAV, HAB Bloom Interactions, Shellfish Aquaculture Interactions with Natural Systems (assoc. organisms), Sediments, (see also Relevant Genetics, etc.)**


ASMFC (Atlantic States Marine Fisheries Commission), Updated Submerged Aquatic Vegetation Policy see http://www.asmfc.org/files/Meetings/76AnnualMeeting/HabitatCommitteeSupplemental.pdf


Carriker, M.R., 1959. The role of physical and biological factors in the culture of *Crassostrea* and *Mercenaria* in a salt-water pond. Ecol. Monogr. 29:219-266.


Rheault, R.B., 2001. Eelgrass is Great, but Shellfish aquaculture is better. http://www.ecsga.org/Pages/Sustainability/eelgrass.htm


**Alternative Substrates for Restoration**


LDC, FAU Pg 188


**Predation/Competition/Refugia (other Bivalves also, See Paleobiol. For Vermeij et al.)**


Kulp, R.E., V. Politano, H.A. Lane, S.A. Lombardi and K.T. Paynter, 2011. Predation of juvenile Crassostrea virginica by two species of mud crabs found in the Chesapeake Bay. Shellfish Res. 30:261–266.


Milke, L.M. and V. S. Kennedy, 2001. Mud crabs (Xanthididae) in Chesapeake Bay: claw characteristics and predation on epifaunal bivalves. Invertebr. Biol. 120:67–77.


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_Predation, Competition, Pests on Oyster Reefs, Sublethal, Induction, NCEs, Other Molluscs, Decapod Crabs on Reefs_


Canton, L.L., 2011. Factors affecting the selection and consumption of oyster reef prey (Crassostrea virginica, Geukensia demissa) by mud crabs (Panopeus herbstii). MS in Coastal Marine and Wetland Studies, Coastal Carolina University, 35pp.


Munroe, D., J. Kraeuter, B. Beal, K. Chew, M. Luckenbach, and C.P. Peterson, 2015. Clam predator protection is effective and necessary for food production. Marine Pollution Bulletin DOI: 10.1016/j.marpolbul.2015.09.042 Review of more than 35 peer-reviewed articles, as well as our own research that demonstrates the efficacy of predator protection


**Volunteerism in Restoration, Community Restoration Work, etc.**


Boat Wakes/Anthropogenic Impacts/Freshwater, Turbidity, and Diversions/Hurricanes, Erosion, Sedimentation, Specific Marine-Related Statistical Treatments


Bhowmik, N. G., A.C. Miller, and B.S. Payne, 1990. Techniques for studying the physical effects of commercial navigation traffic on aquatic plants. Technical Report EL-90-10, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS., NTIS No. AD A229 834.


Department of Fisheries and Oceans Canada, Canadian Heritage, Ontario Ministry of Natural Resources and Conservation Ontario. 1999. Working around water: What you should know about fish habitat and docks, boathouses and boat launches. Fact Sheet #5, Issue Date September 1999. Published by the Fish Habitat Management Program, Fisheries and Oceans Canada. Burlington, ON.


Maryland Coastal Program, 2005. Shorelines Online. Department of Natural Resources, Tawes State Building E-2, Annapolis, MD, 21401.


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Analysis System (DSAS) V3.0: An ArcGIS extension for calculating shoreline change:


Aquatic Living Resources. 19: 371-387.


simulated storm events. Marine Biology 111:55-64.

Turner, R.E., 2006. Will lowering estuarine salinity increase Gulf of Mexico oyster landings?
Estuaries and Coasts 29:345-352.


Wright, D., 1989. Benthic boundary layers of estuarine and coastal environments. Reviews in Aquatic Sciences 1:75-95


http://boatwakes.homestead.com/files/wakesb.htm

**General Statistics Texts, Modeling, Ecological Analyses and Relevant Critiques**


Effect Size, see


Transformations: an introduction, see http://fmwww.bc.edu/repec/bocode/t/transint.html and http://udel.edu/~mcdonald/stattransform.html


**Remote Sensing, Potential Approaches, Status and Trends and Mapping Related to Habitats, Especially Shellfish Habitats (Subtidal and Intertidal), Misc. Methods, Sed Traps, etc.**


Harris, D.C., 1980. Survey of the intertidal and subtidal oyster resources of the Georgia coast. Georgia Department of Natural Resources Coastal Resources Division (Project no. 2-234-R). Brunswick, Georgia, 44pp.


Linton, T.L., 1969. Inventory of the intertidal oyster resources of Georgia. Pages 2-6, In: Linton, T.F. (Ed.) Feasibility study of methods for improving oyster production in Georgia. Final Report, Marine Fisheries Division, Georgia Game and Fish Commission and the University of Georgia.


Oyster Sentinel, clearinghouse for environmental info and related health of estuaries in the Gulf of Mexico. Includes modeling tools to assess the impact of salinity alterations on oysters site selection for reef restoration, estimate timing and related info for sustainable harvests, see http://www.oystersentinel.org/.

Ozbay, G., Yang Fan, and C. Zhiming, 2017. Relationship between land use and water quality and its assessment using hyperspectral remote sensing in mid-Atlantic Estuaries. Ch. 9 Open access peer-reviewed chapter, see http://dx.doi.org/10.5772/66620


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http://www.ifremer.fr/icsr05/communications/meridienne/Mon%20am/icsr05-coen-et-al.pdf


**Pollution, Plastics, and Impacts on Bivalves and Other Faunal Associates (Focus on Reefs)**


[http://cmbc.ucsd.edu/content/1/docs/jackson1989.pdf](http://cmbc.ucsd.edu/content/1/docs/jackson1989.pdf)

Gulf Oil Spill Information Center, [http://guides.lib.usf.edu/content.php?pid=121415&sid=1059513](http://guides.lib.usf.edu/content.php?pid=121415&sid=1059513)


Catarino, A.I., V. Macchia, W.G. Sanderson, R.C. Thompson, and T.B. Henry, 2018. Low levels of microplastics (MP) in wild mussels indicate that MP ingestion by humans is minimal compared to exposure via household fibres fallout during a meal. Environmental Pollution 237:675-684.


Soniat, T.M. S.M. King, M.A. Tarr and M.A. Thorne, 2011. Chemical and physiological measures on oysters (Crassostrea virginica) from oil-exposed sites in Louisiana. J. Shellfish Res. 30:713-717.


**General Intertidal and Subtidal Reef Assessments (Fish, Inverts, etc.)**


**Pinnotherids and Related Lit.**


**Intertidal Oyster Reefs, Disease, Exposure, etc.**


http://scholarcommons.usf.edu/etd/4152
http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=5348&context=etd


**Diseases (Dermo, MSX, QPX, Vibrio, etc.)**


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**Parasites of Molluscs and Crabs**


**Birds associated with Shellfish Habitats, Beaches, Mudflats (Methods also)**


Jodice, P.G.R., see home page, [http://people.clemson.edu/~pjodice/publications.html](http://people.clemson.edu/~pjodice/publications.html)


**Eutrophication, Denitrification, Nitrogen and C Sequestration (Reviews, Methods also for LS, Oyster Reefs, etc.)**

TNC oyster filtration calculator, see [http://oceanwealth.org/tools/oyster-calculator/](http://oceanwealth.org/tools/oyster-calculator/)


Non-Native Impacts, Dispersal of Oysters, Corbicula, Mya, etc. (does not include most mussel work)


See http://www.nobanis.org/ MarineIdkey/Bivalvia/LitCrassostrea.htm

Crassostrea gigas (Pacific oyster), CABI home Invasive Species Compendium, see http://www.cabi.org/isc/datasheet/87296, downloaded 6/28/15

Introduced species of Hawaii
http://www2.bishopmuseum.org/HBS/invertguide/species/crassostrea_virginica.htm


Joint Nature Conservation Committee (JNCC), UK, C. gigas, http://jncc.defra.gov.uk/page-1714

Mya arenaria introduction, http://www.exoticsguide.org/mya_ arenaria, AK, BC Canada, WA, OR, CA, first obs. Pacific Coast in San Francisco Bay in 1874 from C. v. transfers. By the 1880s it was the most common clam sold in SF Bay area markets (Stearns 1881).

Crassostrea gigas, Pacific Oyster,


Harwell, H.D., 2010. Habitat complexity and habitat function of native (Crassostrea virginica) and non-native (C. ariakensis) oysters in the Chesapeake Bay region, Ph.D., VIMS, 192pp. see http://web.vims.edu/library/theses/Harwell10.pdf?svr=www


Holm, M.W., J.K. Davids, P. Dolmer, E. Holmes, T.T. Nielsen, B. Vismann, and B.W. Hansen, 2016. Coexistence of Pacific oyster *Crassostrea gigas* (Thunberg, 1793) and blue mussels *Mytilus edulis* (Linnaeus, 1758) on a sheltered intertidal bivalve bed? *Aquatic Invasions* 1:155-165. See [https://pdfs.semanticscholar.org/0adc/2f8d8809e126ebec4d0b806fb655a7f0f.pdf](https://pdfs.semanticscholar.org/0adc/2f8d8809e126ebec4d0b806fb655a7f0f.pdf)


Huvet, A., A. Gérad, C. Ledu, P. Phélipot, S. Heurtebise, and P. Boudry, 2002. Is fertility of hybrids enough to conclude that the two oysters *Crassostrea gigas* and *Crassostrea angulata* are the same species? *Aquatic Living Resources* 15:45-52.


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Stearns, R.E.C., 1881. *Mya arenaria* in San Francisco Bay. American Naturalist 15:142-146. *By the 1880s it was the most common clam sold in SF Bay area markets*


**Perna viridis and Interactions with Oysters**


**Feeding by Gastropods, Intertidally and Subtidally**

General Faunal Summaries by Region, State, Area (see Heck and Spitzer also below)

See http://www.dep.state.fl.us/labs/cgi-bin/sbio/keys.asp
http://www.biodiversitylibrary.org/
http://decapoda.nhm.org/pdfs/ Source for a lot of invert pdfs
http://www.fiddlercrab.info/ Uca website worldwide

Marine invertebrates and seaweeds, flora and fauna of Hawaii and beyond (wonderful images),
http://www.marinelifephotography.com/marine/marine.htm
http://www.dnr.sc.gov/marine/sertc/
http://www.dnr.sc.gov/marine/sertc/Blue%20Crab%20SOM.pdf
http://www.dnr.sc.gov/marine/sertc/links.htm

Marine Invertebrates of Coastal South Carolina, https://sites.google.com/site/gricecove/home

Historical ecology of Charleston waters – https://sites.google.com/site/gricecove/historical-data-project


http://decapoda.nhm.org/pdfs/12365/12365-001.pdf

Indian River Lagoon (SW Atl. FL) Species Inventory http://www.sms.si.edu/irlspec/, see also
http://www.sms.si.edu/irlspec/Phyl_Mollus1.htm

Indian River Lagoon (SW Atl. FL) C. virginica.
http://www.sms.si.edu/irlspec/Crassostrea_virginica.htm

West coast field guides/books,
https://sites.google.com/site/seaquariainschools/extresources/fieldguidesbooks

Polychaetes of Chesapeake Bay and Coastal VA,
http://www.vims.edu/bio/benthic/polychaete.html

Shell boring polychaetes, AK,

FL keys online for all sorts of organisms, http://www.dep.state.fl.us/labs/cgi-bin/sbio/keys.asp


Related Websites for Malacology, etc., http://shellmuseum.org/links.cfm


Jax Shells, shell collecting, wonderful images and info on molluscs. Molluscs checklists for larger geographic scope but focus on east coast of FL, Perna viridis non-native also,
http://www.jaxshells.org/
Integrated Taxonomic Information System, authoritative taxonomic information on plants, animals, fungi, and microbes of North America and the world, http://www.itis.gov/


World Register of Marine Species (WoRMS) provides an authoritative and comprehensive list of names of marine organisms, including information on synonymy, http://www.marinespecies.org/


http://www.okeefes.org/index.htm general marine organisms for NC
http://www.okeefes.org/Crabs/crab_photos.htm images crabs, NC coast

**Alphabetical List**


DAMSL, Digital Atlas of Marine Species and Locations, damsl.org, a digital website, for viewing underwater world of over 3,500 marine species from the most prolific coral reefs in every prominent equatorial system of our ocean world.


Heard, R., T. Hansknecht, and K. Larsen. 2003. An illustrated identification guide to Florida Tanaidacea (Crustacea: Peracarida) occurring in depths of less than 200 m. see http://publicfiles.dep.state.fl.us/dear/labs/biology/biokeys/tanaidacea.pdf also http://www.dep.state.fl.us/labs/cgi-bin/sbio/keys.asp


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Simone, L.R.L., P.M. Mikkelsen, and R. Bieler, in press. Comparative anatomy of selected marine bivalves from the Florida Keys, with notes on Brazilian congeners (Mollusca: Bivalvia). Malacologia.


**General Macroalgal Summaries by Region**


Littler, D.S. and M.M. Littler’s works. [http://www.littlersworks.net/pubs.html](http://www.littlersworks.net/pubs.html)


Species- or Taxa- Specific Information

**Boonea impressa** (related archaeology) and Other Molluscan Parasites (Eulimids)

http://www.pac.dfo-mpo.gc.ca/sci/shelldis/pages/pyrasnoy_e.htm

http://erato.acnatsci.org/wasp/search.php/9129


Fradkin, A., 2005. Applying a seasonality measure of oyster harvesting: A Case Study from the Precolumbian Florida Coast. From M. Russo


Gale, L.D., 1990. Energetic costs to the American oyster, **Crassostrea virginica** (Gmelin) due to parasitism by the ectoparasitic gastropod, **Boonea impressa** (Say). M.S. Thesis, College of Charleston, SC, 49pp.


See http://en.wikipedia.org/wiki/Eulimidae


**Geukensia and Other Mussels on Reefs and in Marine and Estuaries (also Dreissenids)**


For a discussion on *G. demissa* vs. *G. granosissima* see:


The Animal Diversity Web,

http://animaldiversity.ummz.umich.edu/accounts/Geukensia_demissa/

http://txmarspecies.tamug.edu/invertdetails.cfm?scinameID=Geukensia%20granosissima


Hilbish, T.J. 1987. Response of aquatic and aerial metabolic rates in the ribbed mussel 
*Geukensia demissa* (Dillwyn) to acute and prolonged changes in temperature. Journal 


The School of Renewable Natural Resources, L.S.U., 47pp.


mussel (*Geukensia demissa*) in a North American, mid-Atlantic salt marsh. Estuarine, 
Coastal, and Shelf Sci. 56:561-571.

quantity and composition of seston in a North American, mid-Atlantic salt marsh. 
Estuarine, Coastal, and Shelf Sci. 56:547-560.

Huang, S.-C, and R.I.E. Newell, 2002. Seasonal variations in the rates of aquatic and aerial 
respiration and ammonium excretion of the ribbed mussel, *Geukensia demissa* (Dillwyn). 

and its significance in nitrogen flow in a New England salt marsh. Limnology and 
Oceanography 27: 75-90.

of *Geukensia demissa*, the Atlantic ribbed mussel, and their effects on mussel mortality. 

eastern oyster *Crassostrea virginica* (Gmelin) infested with the parasite *Perkinsus marinus*. Dis. Aquat. Org. 23:135-144.

Kennedy, V.S., 2011. The invasive dark falsemussel *Mytilopsis leucophaeata* (Bivalvia: 

Kemp, P.F., S.Y Newall, and C. Krambeck, 1990. Effects of filter-feeding by the ribbed mussel 
*Geukensia demissa* on the water-column microbiota of *Spartina alterniflora* saltmarsh. 
Marine Ecology Progress Series 50:119-131.

Kraus, M. L., and J. H. Crow, 1985. Substrate characteristics associated with the distribution of 
the ribbed mussel, *Geukensia demissa* (*Modiolus demissus*), on a tidal creek bank in 

dietary lignocellulose by the ribbed mussel, *Geukensia demissa* (Dillwyn) (Mollusca: 


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**Palaemonetes- (Grass shrimp) Related and Brachyuran (especially xanthid), Porcellanid Papers**


distribution of grass shrimps, *Palaemonetes pugio* and *P. vulgaris*. Invertebrate Biology


Kneib, R.T., 1985. Predation and disturbance by grass shrimp, *Palaemonetes pugio* Holthuis, in


*Palaemonetes pugio* Holthuis, in relation to other *Palaemonetes* spp. Comparative

Factors determining distribution and abundance of Delmarva grass shrimp (*Palaemonetes*


shrimp, *Palaemonetes* spp., population metrics at sites with agricultural runoff influences.
Integrative and Comparative Biology

restoration: relationships between oyster abundance and community development based
on two studies in Virginia and South Carolina. J. of Coastal Research Special Issue
40:64-78.

of Charleston.

198.

Morgan, M.D., 1980. Grazing and predation of the grass shrimp *Palaemonetes pugio*. Limnology
and Oceanography 25:896-902.

sapidus Rathbun by sand shrimp *Cragon septemspinosa* Say and grass shrimp

Williams, R. J., K. L. J. Heck, and J. Van Montfrans. 1984. Faunal communities in seagrass beds:
a review of the influence of plant structure and prey characteristics on predator-prey


