

CURRICULUM VITAE

April 18, 2008

ROGER I. E. NEWELL

Horn Point Laboratory
University of Maryland Center for Environmental Science
P.O. Box 775, Cambridge, MD 21613

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I. Education

B.Sc. Queen Mary College, University of London, 1973, with Honours in Zoology and Comparative Physiology.

Ph.D. Student at the Plymouth Marine Laboratory, Devon, UK. (Thesis title: "The eco-physiology of the cockle *Cardium edule*.") Degree awarded from University of London, 1978, Marine Biology.

II. Professional Background

1977-1980 Postdoctoral Research Associate, Department of Ecology and Evolution, State University of New York at Stony Brook, NY.

1980-1986 Assistant Professor, Horn Point Laboratory, UMCES.

1986-1995 Associate Professor, Horn Point Laboratory, UMCES.

1995-Pres. Professor, Horn Point Laboratory, UMCES.

III. Awards and Special Recognition

Natural Environment Research Council Postgraduate Studentship, 1973-1976

North Atlantic Treaty Organization Postdoctoral Fellowship, 1977-1979.

IV. Research

A. Areas of Professional Expertise

Molluscan Biology: Feeding ecology, Nutrition, Reproduction, Recruitment, Larval Biology, Parasitology
Ecosystem ecology: Benthic-pelagic coupling, Nutrient cycling, Shellfish restoration, Saltmarsh ecology.

B. Peer Reviewed Publications (previous 5 years)

1. Published and Submitted (since 2002)

Kennedy, VS , KS Shaw and RIE Newell. 2008. Discriminatory predation by three invertebrate predators on eastern oysters (*Crassostrea virginica*) compared to non-native Suminoe oysters (*C. ariakensis*). Invertebrate Biology. In Press.

- * Newell RIE, W. M. Kemp, J. D. Hagy III, C. F. Cerco, J. M. Testa , W. R. Boynton. 2007. Top-down control of phytoplankton by oysters in Chesapeake Bay, USA: Comment on Pomeroy et al. (2006). *Mar. Ecol. Prog. Ser.* 341: 293–298. UMCES contribution # 4180.
- * Newell, R.I.E., V.S. Kennedy, and K. S. Shaw. 2007. Comparative vulnerability to predators, and induced defense responses, of eastern oysters *Crassostrea virginica* and non-native *Crassostrea ariakensis* oysters in Chesapeake Bay. *Marine Biology* 152:449-460.UMCES contribution # 4121.
- * Kimmel, D. G., and R. I. E. Newell. 2007. The influence of climate variation on eastern oyster (*Crassostrea virginica*) juvenile abundance in Chesapeake Bay. *Limnology and Oceanography* 52: 959-965. UMCES contribution # 4044. free download from http://www.aslo.org/lo/toc/vol_52/issue_3/index.html
- * Fulford, R.S., D. L. Breitburg, **R. I. E. Newell**, W.M. Kemp and M.W. Luckenbach. 2007. Effects of oyster population restoration strategies on phytoplankton biomass in Chesapeake Bay: a flexible modeling approach. *Marine Ecology Progress Series.* 336:43-61. UMCES contribution # 4046.
- * Newell, R.I.E. 2007. A framework for developing “ecological carrying capacity” mathematical models for bivalve mollusc aquaculture. *Bulletin of Fisheries Research Agency.* 18:41-51. UMCES contribution # 4045.

Newell, R.I.E. 2006. Oyster Reef Restoration and Oyster Aquaculture. Pages 52-60 in: “Best Management for Sediment Control and Water Clarity.” CBP/TRS-282-06. UMCES contribution # Download from http://www.chesapeakebay.net/pubs/Best_Management_Practices_Report.pdf

Langan, R., **R.I.E. Newell**, J.P. McVey, C. Newell, J.E. Soles, J.E.J. Rensel, and C. Yarish. 2006. The USA Management Scenario. Pages 109-139 in J.P. McVey, C-S. Lee, and P.J. O'Bryen, editors. *Aquaculture and Ecosystems: An Integrated Coastal and Ocean Management Approach.* The World Aquaculture Society, Baton Rouge, Louisiana, 70803. United States. UMCES contribution # 3934

Rensel, J.E.J., A.H. Buschmann, T. Chopin, I.-K. Chung, J. Grant, C.E. Helsley, D.A. Kiefer, R. Langan, **R.I.E. Newell**, M. Rawson, J.E. Soles, J.P. McVey, and C. Yarish. 2006. Ecosystem-based management: Models and mariculture. Pages 207-220 in J. McVey, C-S. Lee, and P.J. O'Bryen, editors. *The Role of Aquaculture in Integrated Coastal and Ocean Management: An Ecosystem Approach.* The World Aquaculture Society, Baton Rouge, Louisiana, 70803. United States. UMCES contribution #3935

Smith, G.F., D.G. Bruce, E.B. Roach, A. Hansen, **R.I.E. Newell** and A.M. McManus. 2005. Habitat conditions of mesohaline oyster bars in the Maryland Chesapeake Bay: An Assessment of 40 Years of Oyster Management. *North American Journal Fisheries Management.* 25:1569-1590. UMCES contribution #3932. <http://afs.allenpress.com/archive/1548-8675/25/4/pdf/i1548-8675-25-4-1569.pdf>

Kemp, W.M., W.R. Boynton, J.E. Adolf, D.F. Boesch, W.C. Boicourt, G. Brush, J.C. Cornwell, T.R. Fisher, P.M. Glibert, J.D. Hagy, L.W. Harding, E.D. Houde, D.G. Kimmel, W.D. Miller,

- R.I.E. Newell, M. R. Roman, E.M. Smith, J.C. Stevenson.** 2005. Eutrophication of Chesapeake Bay: Historical trends and ecological interactions. *Marine Ecology Progress Series*. 303:1-29. UMCES contribution #3899. <http://www.int-res.com/articles/feature/m303p001.pdf>.
- Newell, R.I.E., T.R. Fisher, R.R. Holyoke, and J.C. Cornwell. 2005. Influence of eastern oysters on Nitrogen and Phosphorus regeneration in Chesapeake Bay, USA. Pages 93-120 In: *The comparative Roles of Suspension Feeders in Ecosystems*. R Dame and S. Olenin (Eds.) Vol 47 NATO Science Series: IV - Earth and Environmental Sciences. Springer, Netherlands. Download from <<http://hpl.umces.edu/faculty/newellcv.html>> UMCES contribution #3796.
- Apple, JK, del Giorgio, P.A, and R.I.E. Newell. 2004 The effects of system-level nutrient enrichment on bacterioplankton production in a tidally-influenced estuary. *Journal of Coastal Research* 45: 110-133.UMCES contribution #3830
- Newell, R.I.E., and E.W. Koch. 2004. Modeling seagrass density and distribution in response to changes in turbidity stemming from bivalve filtration and seagrass sediment stabilization. *Estuaries*. 27:793-806. UMCES contribution # 3812. Download from <http://hpl.umces.edu/faculty/newell/NewelKochEstuaries2004.pdf>
- Newell, R.I.E. 2004. Ecosystem influences of natural and cultivated populations of suspension-feeding bivalve molluscs: a review. *Journal of Shellfish Research*. 23:51-61 UMCES contribution # 3723 Download from <http://hpl.umces.edu/faculty/newell/ecobivalve2.pdf>
- Milbury, C.A., D. W Meritt, R.I.E. Newell, and P.M. Gaffney. 2004. Mitochondrial DNA markers allow monitoring of oyster stock enhancement in the Chesapeake Bay. *Marine Biology*. 145:351-359.UMCES contribution #3797. Download from <http://hpl.umces.edu/faculty/newell/Millburyetal2004.pdf>
- Porter E.T., J.C Cornwell, L.P Sanford, R.I.E. Newell. 2004. Effect of oysters *Crassostrea virginica* and bottom shear velocity on benthic-pelagic coupling and estuarine water quality. *Marine Ecology Progress Series*. 271:61-75. UMCES contribution # 3701.
- Luckenbach, M., B. Dumbald, R. Mann, and R. I.E. Newell. 2003. Habitat Restoration, In: S.Shumway, J. Kraeuter, D. Leonard & K. McGraw (eds.), *Bivalve Shellfish - A National Assessment*, NOAA/NMFS Office of Habitat Conservation.
- Huang, S.-C, D.A. Kreeger and R.I.E. Newell. 2003. Seston as a food resource for the ribbed mussel (*Geukensia demissa*) in a North American, mid-Atlantic salt marsh. *Estuarine, Coastal, and Shelf Science*. 56:561-571.UMCES contribution #3568.
- Huang, S.-C, D.A. Kreeger and R.I.E. Newell. 2003. Tidal and seasonal variations in the quantity and composition of seston in a North American, mid-Atlantic salt marsh. *Estuarine, Coastal, and Shelf Science* 56:547-560. UMCES contribution #3567.
- Newell, R.I.E, J.C.Cornwell and M.S.Owens. 2002. Influence of simulated bivalve biodeposition and microphytobenthos on sediment nitrogen dynamics: a laboratory study. *Limnology and Oceanography* 47: 1367-1379. UMCES contribution #3595. Free download at http://aslo.org/lo/toc/vol_47/issue_5/1367.pdf

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). J. Exp. Mar. Biol. Ecol. 270:241-255. UMCES contribution # 3525.

C. Research Grants and Contracts (since 2002)

1. Active

- * Cornwell J.C. and **R.I.E. Newell**, Geochemical and ecological consequences of disturbances associated with geoduck aquaculture operations in Washington. (In collaboration with G. R. VanBlaricom D. A. Armstrong and T. E. Essington School of Aquatic and Fishery Sciences, University of Washington) Washington Sea Grant Program. Funds for HPL \$200,000. May 1, 2008 - April 30 2010. Effort 1 month per year
- * Scarpa J. (Harbor Branch Oceanographic Institution) **R.I.E. Newell**, C. Dungan (MD-DNR, Cooperative Oxford Laboratory), S. Laramore (Harbor Branch Oceanographic Institution). Growth and Reproduction of the Suminoe Oyster in a U.S. Sub-Tropical Environment: EIS Ramifications? NMFS-NOAA. Funds for HPL \$7,500. October 1, 2006 - September 30, 2008. Effort: 0.5 months per year.
- * Breitburg, D., **R.I.E. Newell**, M. Luckenbach and R.S. Fulford. Will predation mortality differ for larvae of native and non-native oysters? EPA, March 1, 2006- February 28, 2009. HPL budget. \$18,100. Effort 0.5 month.
- * **Newell, R.I.E.**, D. Breitburg, M. Luckenbach, and C. Dungan. "Long-term mesocosm studies of competitive interactions between diploid *Crassostrea virginica* and *C. ariakensis*." NMFS-NOAA. funds for HPL \$294,180 March 1, 2005 - February 28, 2009. Effort: 2 months per year.
- * **Newell, R.I.E.**, V.S. Kennedy, and J. L. Manuel. Quantifying the response of different strains of *C ariakensis* larvae to environmental change under spatially realistic conditions. NMFS-NOAA. March 1, 2005- August 28, 2008. \$170,133. Effort: 2 months per year.
- * V.S. Kennedy and **R.I.E. Newell**. Predation by polyhaline invertebrate predators on young non-native oysters, *Crassostrea ariakensis*, in Chesapeake Bay. NMFS-NOAA. 1 April 2005-31 March 2008. \$131,488. Effort: 2.0 month per year.

3. Completed

- Newell, R.I.E., and J. Scarpa (Harbor Branch Oceanographic Institution). Growth and Reproduction of *Crassostrea ariakensis* in a U.S. Sub-Tropical Environment: April 1, 2006 to December 31, 2006 . MD-DNR funds for HPL \$2,900. Effort: 0.5 months per year.
- Breitburg, D., R.I.E. Newell, M. Luckenbach, and W. M. Kemp Predicting effects of changing oyster abundance on managed finfish and their prey through retrospective analysis and ecosystem modeling. EPA, June 2004 - September 2006. HPL budget. \$35,201. Effort 1 month.

- Newell, R.I.E., V.S. Kennedy, D. Breitburg, M. Luckenbach, and C. Dungan. Competitive interactions between eastern and suminoe oyster from diploid larval settlement through to development of reefs and the assessment of the habitat value of such reefs. March 1, 2004 - March 31, 2005. MD-DNR funds for HPL \$130,479. Effort: 1 month per year.
- Newell, R.I.E., and V.S. Kennedy. Assessing the Potential for Natural Predators to Control the Spread of the Suminoe Oyster, *Crassostrea ariakensis*. Sea Grant Aquatic Nuisance Species Research Program. July 1, 2003 - October 30, 2006. \$188,021. Effort: 2.0 months per year.
- Newell, R.I.E. and V.S. Kennedy. Behavioral responses of *Crassostrea ariakensis* and *Crassostrea virginica* larvae to environmental change under spatially realistic conditions. March 1, 2004 - March 31, 2005. MD-DNR funds \$139,210. Effort: 1 month per year.
- Smith, G.F., R.I.E. Newell, R. Mann and C. Mackenzie. Sea Grant Fisheries Habitat Program: Validating Acoustic Sensing Techniques to Detect Habitat Changes in Oyster Reefs. National Sea Grant Proposal. Dec 1, 2003 - May 30, 2006. HPL budget. \$31,800. Effort: 4 months.
- Hood, R.R., E. W. Koch, R. I.E. Newell, E.W. North, and L.P. Sanford. Modeling the effects of bivalve mediated changes in turbidity on light available for submerged aquatic vegetation. Maryland Sea Grant College, February 2003 - July 2006. \$191,435. Effort: 3.8% time.
- Newell, R.I.E., and J.C. Cornwell. Quantifying the Magnitude of Nitrogen and Phosphorus Removal Associated with Restoration of Oysters in Chesapeake Bay. Maryland Sea Grant College, February 2002 - January 2005. \$138,676. Effort: 10% time.
- Newell, R. I.E., and P.A. del Giorgio. Refinement of Bacterial Growth Efficiency as an Index of Salt Marsh Ecological Function. Cooperative Institute for Coastal and Estuarine Environmental Technologies (NERR program administered through Univ. of New Hampshire), October 1, 2002 - February 30, 2004, \$87,123. Effort: 1.0 month per year
- Newell, R.I.E., S. Tettelbach and C. Gobbler. Relationships between the Timing of Reproduction, Fecundity, and Egg Composition to declines in Hard Clam Recruitment. New York Sea Grant Institute. Sept 2000 - December 2003, 10% time \$90,015.
- del Giorgio, P.A. R. Harvey, and R.I.E. Newell. Microbial Transfer of Detrital Carbon to Higher Trophic Levels in Marsh Food Webs. Marsh Ecology Research Program administered through New Jersey Sea Grant Program. July 1, 2000 - June 30, 2002, \$218,573. 15 % time
- Newell, R. I.E., R.R. Hood, E. W. Koch. Modeling the effects of bivalve mediated changes in turbidity on light available for submerged aquatic vegetation. Cooperative Institute for Coastal and Estuarine Environmental Technologies (NERR program administered through Univ. of New Hampshire), October 1, 1999 - September 30, 2002. \$169,524. 1.0 months time per year.

D. Invited Seminars and Presentations (previous five years)

- Newell, R I. E. Extending “production carrying capacity” models for bivalve mollusc aquaculture to include the concept of “ecosystem carrying capacity”. Workshop on the Role of Aquaculture in Integrated Coastal Management: An Ecosystem Approach. Hanoi, Vietnam April 2008.
- * Newell, R I. E. Scale and Location Influence the Role of Bivalves in Mediating Benthic-Pelagic Coupling in Coastal Waters. Regional Conference to Assess Ecosystem Effects of Bivalve Aquaculture hosted by Washington Sea Grant. Seattle October 2007.
- * Newell, R.I.E. Why we need more oysters in Chesapeake Bay. Presentation at Sailwinds Visitor Center as part of Cambridge Marine Days, Cambridge. June 2007.
- Newell, R I. E. Comparative studies of diploid *Crassostrea virginica* and *C. ariakensis*: Preliminary results on competition and growth, susceptibility to predation, and larval behavior. IAN seminar series, Annapolis, MD November 2006.
- Newell, R I. E. The influence of eastern oysters on ecological processes in Chesapeake Bay: Insights from recent modeling studies. National Shellfisheries Association Annual Meeting, Monterey. March 2006.
- Newell, R I. E., V S. Kennedy and K. Shaw. Changes in Shell Strength of *Crassostrea virginica* and *Crassostrea ariakensis* in Response to Crab Predators from Chesapeake Bay. National Shellfisheries Association Annual Meeting, Monterey. March 2006.
- Newell, R.I.E. Ecological role of oysters in Chesapeake Bay. Presentation to Chesapeake Bay Foundation Annual Education Content Conference. Tilghman Island, MD. February 2006.
- Newell, R.I.E., Fulford, R. S., Breitburg, D. L., Cerco, C.F. Koch, E.W. Fisher, T.R. The influence of eastern oysters on ecological processes in Chesapeake Bay: Insights from recent modeling studies. Invited presentation Estuarine Research Federation, Chesapeake Research Federation Biennial Meeting. Norfolk VA. November 2005.
- Newell, R.I.E. The US Management Scenario. Invited presentation at the symposium “Role of Aquaculture in Integrated Coastal and Ocean Management: An Ecosystem Approach.” Honolulu, Hawaii. April 2005.
- Newell, R.I.E. A framework for developing “ecological carrying capacity” mathematical models for bivalve mollusc aquaculture. Invited presentation at the 33rd UJNR Aquaculture panel symposium “Ecosystem and carrying capacity of aquaculture ground” Nagasaki, Japan, November 2004
- Newell, R.I.E., R. Holyoke and J.C. Cornwell. The influence of benthic suspension feeders on nutrient cycling in eutrophic coastal waters. Invited presentation at NATO Advanced Research Workshop on “The Comparative Roles of Suspension Feeders in Ecosystems” hosted by the Coastal Research and Planning Institute of Klaipeda University, Lithuania. October, 2003.

- Newell, R.I.E., The crucial ecological role of oysters in Chesapeake Bay. Plenary Session. National Sea Grant Program Oyster Disease Research Symposium, Annapolis, MD., Sept 2003
- Newell, R.I.E., The ecological role of oysters in maintaining water quality in Chesapeake Bay. Plenary Session. Choptank Tributary Team meeting , August 2003
- Newell, Roger I.E., J. Cornwell, R. R. Hood, and E. Koch Understanding the influence of bivalve aquaculture on nutrient cycling and seagrass beds in eutrophic coastal waters. Invited presentation in session on “ Integrated Aquaculture” at the Coastal Zone ‘03 Meeting Baltimore MD July 2003
- Newell, R.I.E. , C. Gobler and S. T. Tettelbach. Linking hard clam (*Mercentaria mercenaria*) reproduction to phytoplankton community structure: II. Phytoplankton community structure and food composition. National Shellfisheries Association annual meeting, New Orleans, LA, April 2003.
- Newell, R.I.E., Does shellfish mariculture provide benefits to marine ecosystems? Keynote Address to twelfth Annual Conference, Pacific Northwest Shellfish Growers, Olympia, Washington, March 2003.
- Newell, R.I.E. The possible role of oysters in improving water quality in Chesapeake Bay. Invited Presentation, Chesapeake Bay Foundation, Annapolis MD, Feb 2003.
- Newell, R.I.E. Potential for Oysters to serve as an adjunct to terrestrial best management practices . Invited presentation at meeting organized by EPA Chesapeake Bay program on “Nutrient/sediment removal by oysters.”Annapolis MD, Feb 2003.
- Newell, R.I.E., J.C. Cornwell, R.R. Hood and E. Koch. Understanding the influence of bivalve suspension feeders on water quality in eutrophied coastal waters. 31st United States-Japan Cooperative Program in Natural Resources. Yokohama October 16-25 2002.
- Newell, R.I.E., Effects of oysters on water quality. National Academy of Sciences Committee on Non-native Oysters in the Chesapeake Bay. Fredericksburg, VA October 2002
- Newell, R.I.E. Role of Benthic Suspension-feeders in Maintaining Estuarine Water Quality. Chesapeake Biological Laboratory, UMCES, weekly seminar series. September 2002.
- Newell, R.I.E., M. K. Wood, R. E. Grizzle, E. Koch and R.R. Hood. Modeling the Influence of Filtration by Bivalve Stocks on Turbidity and Seagrass Growth. National Shellfisheries Association annual meeting, Mystic CT, April 2002
- Newell, R.I.E., J.C. Cornwell, R.R. Hood and E. Koch. Beyond Water Clearance: Incorporating Other Aspects of Benthic Suspension-feeder Ecology into Estuarine Water Quality Models. Chesapeake Bay Program Scientific Technical and Advisory Committee Workshop: “Suspension feeders: A workshop to assess what we know, don't know, and need to know to determine their effects on water quality” Baltimore, March 2002
- Newell, R.I.E. Role of Benthic Suspension-feeders in Maintaining Estuarine Water Quality. Maryland Department of Natural Resources Seminar series. March 2002.

Newell, R.I.E. Pros and cons of introducing non-native oysters into Chesapeake Bay. Cambridge Rotarian Seminar. February 2002.

E. Symposia Organized/Chaired for Professional Meetings (previous 5 years)

- * Organized session at the ERF 2007 meetings in Providence RI, on the research associated with the non-native oyster *Crassostrea ariakensis*, in collaboration with Dr. Jamie King and Dr. Mark Luckenbach.

Co-lead with Dr. Rich Langan of the US delegation to the International Workshop on “The Role of Aquaculture in Integrated Coastal Management: An Ecosystem Approach” held in Honolulu, Hawaii, April 2005. Prior to this meeting I helped identify the team of scientists who participated in this meeting.

Organized, invited participants, and chaired one of the two scientific sessions at the 31st United States-Japan Cooperative Program in Natural Resources held in Yokohama Japan during October 16-25th 2002. This conference was arranged by Jim McVey, NOAA National Sea Grant office, as a means of exchanging information on aquaculture. The technical session that I arranged was on evaluating the ecological effects of bivalve aquaculture and I presented the following paper in this session.

Organized and Chaired day-long session on the “Functional Role of Bivalves in Marine Environments”. National Shellfisheries Association Annual Meeting, Seattle, March 2000

F. Society Memberships

National Shellfisheries Association
(Chair, Ad Hoc Software Development committee 2000-2004)
(Chair, Awards and Election Committee, 1998-99)
(President, 1997-98)
(President-Elect, 1996-97)
(Vice-President, 1995-96)
(Editorial Board, 1992-94)
(Publication Committee 1990-91)
(Chairman Membership Committee 1985-1987)
(Membership Committee 1984)
Estuarine Research Federation

IV. Graduate Teaching

1980- associate member, Graduate Faculty, University of Maryland College Park
1986- Full member, Graduate Faculty, University of Maryland College Park
1990- Full member, UMCES Graduate Faculty
1997- Full member, USM Inter-Institutional Graduate Faculty

A. University System of Maryland Courses Taught (since 1994)

Course No.	Title	Institution	Semester	Enrollment	Credit Hrs	Co-Instructors	Contact Hours
MEES 698	Wetlands Ecology	UMCP	Fall 2004	8	3	Stevenson, Koch, Cornwell	4 h
MEES 630	Benthic Ecology	UMCP	Spring 2004 Fall 2001	54	3	Marinelli	6 h
MEES 698/U	Coulter Multisizer; Analysis of particles suspended in seawater	UMCP	January 1998 January 1999 January 2000	67	0.5		14 h
MEES 698P/U	Methods of Particle Analyses	UMCP	Winter 1996 Winter 1997	84	1	Van Heukelem	14 h
MEES 630	Benthic Ecology	UMCP	Fall 1993 Fall 1995 Fall 1997 Fall 1999	11161211	3	Tenore	21 h 18 h 18 h 18 h

B. Other Courses Taught

* Summer 2005. Gave single lecture in class organized by Dr. Laura Murray for Chesapeake Bay Foundation Educators.

Summer 2004. Gave single lecture in class organized by Dr. Laura Murray for Chesapeake Bay Foundation Educators.

VI. Graduate Student Training

A. Supervisor and Chairman (Since 1980)

1. Degrees Completed

Shou-Chung Huang Ph.D. 2002 HPL, University of Maryland
 “Variation of food resources and nutritional demands of the ribbed mussel, *Geukensia demissa*.”

Gary Smith Ph.D.2001 HPL, University of Maryland
 “A Characterization of Oyster Habitat in Mesohaline Chesapeake Bay”

Tim Battista M.S. 1998 HPL, University of Maryland
 “Habitat suitability index model for the eastern oyster, *Crassostrea virginica* in the Chesapeake Bay: A geographic information system approach.”

Amy Freise M.S. 1996 HPL, University of Maryland
"Growth and mortality of the eastern oyster, *Crassostrea virginica*."

Brad S. Baldwin Ph.D. 1992 HPL, University of Maryland
"The natural diet and feeding behavior of planktotrophic larvae of the eastern oyster *Crassostrea virginica*."

Michael P. Crosby Ph.D. 1987 HPL, University of Maryland
"The role of detritus in the nutrition of the oyster *Crassostrea virginica*."

Joseph A. Berg MS 1984 HPL, University of Maryland
"Temporal and spatial variations in quantity and quality of near bottom seston over two adjacent oyster bars."

2. Students Currently supervised

* Chris Kelly M.S. 2008 MEES, HPL, University of Maryland

3. Committee member

Current

* Becky Holyoke Ph.D. 2007 MEES, HPL, University of Maryland
Emily Vlahovich M.S. 2008 MEES, HPL, University of Maryland
Benjamin Fertig M.S. 2008 MEES, HPL, University of Maryland

Graduated (Since 2000)

Steven Engstrom M.S. 2004 MEES, CBL
Coren Milbury M.S. 2002 CMS, University of Delaware
Edwin Niklitschek Ph.D. 2001 MEES, CBL
Jesse C. Meiller Ph.D. 2001 MEES, UMBC
Jennifer Shepard Ph.D. 2000 MEES, UMBC

C. Foreign Students

Paul Elsemere MS 1994 University of Aberdeen, UK
Performed research work at HPL during summer 1994 towards degree

Miren Urrutia Ph.D. Universidad del Pais Vasco, Bilbao, Spain
Performed research work at HPL during summer 1991 towards degree

D. External Examiner

Mr. F. Krassoi, Ph.D candidate "The ecology of the Sydney Rock Oyster and the Pacific Oyster in a NSW estuary" University of Technology, Sydney, Australia. December 1998

Ms Miren Urrutia. Ph.D. Candidate, Universidad del Pais Vasco, Bilbao, Spain June 1997.

Mr. Oscar R. Chaparro. Ph.D. candidate. "The brooding process in the Chilean oyster *Ostrea chilensis*" (Philipp 1845). Memorial University of Newfoundland, Canada. July 1995.

Ms. A. Scarratt, M.S. Candidate. "The effect of changes in quantity and quality of food on the feeding behaviour of the soft-shelled clam *Mya arenaria*, using a new technique to determine gut retention time. Memorial University of Newfoundland, Canada. March 1994.

Mr. J. Navarro, Ph.D. candidate. "Influence of the natural food supply on the physiological energetics and biochemical storage cycles of the Horse mussel, *Modiolus modiolus* (L.)." Memorial University of Newfoundland, Canada. December 1990.

E. Post-Doctoral Students

- * Dr. Joan Manuel, 2004 - 2006
- Dr. Danielle A. Kreeger, 1994-1996
- Dr. Francois Charles, 1994-1995
- Dr. William S. Fisher, HPL postdoctoral Research Associate, 1983-1985

F. Research Internships Supervised (previous 5 years)

- Mr Ben Schulman, High School Teacher 2004 (co-supervised with Dr. V.S. Kennedy)
- Ms Stephanie Hurder, REU Sea Grant/NSF summer intern 2003

VII. Staff supervised (Since 1980)

- * Ms Kristi Stevens, Research Assistant 2004 - 2007
- * Ms Meg Maddox, Part-time Research Assistant 2005 - 2006
- * Mr. Chris Kelly, Research Assistant 2004 -2005
- Ms. Angela Padeletti, Research Assistant 2003-2004
- Ms. Lee Bebout, Senior Research Assistant 1995-1996
- Mr. Dave Moreno, Research Assistant, 1991-1995
- Ms. Meg Maddox, Research Assistant, 1990-1991
- Ms. Laurie Van Heukelem, Research Assistant, 1986-1990
- Ms. L. Franklin, Research Assistant, 1984-1986.
- Ms. S. Sulkin, Research Assistant, 1983-1986.

VII. Public Service (Previous 5 years)

A. Outside University of Maryland

1. Service to government agencies

- * Member five person peer review panel for Canadian Department of Fisheries and Oceans to evaluate techniques developed for assessing habitat effects of marine shellfish aquaculture and on the sensitivity of selected fish habitats. Moncton, Nova Scotia. Feb 26 -March 3 2006
- Member, National Sea Grant Gulf Coast Research Grant review panel. Silver Spring March, 2003
- Member joint MD-VA scientific committee to develop recommendations for oyster restoration in Chesapeake Bay 1998-Present.
- Member, Chesapeake Bay Program Living Resources Committee. 1992-Present
- Alternate for Dr. Ed Houde as member on Scientific and Technical Advisory Committee, Chesapeake Bay Program. 1993-2002
- Peer reviewer for National Science Foundation, 1980-Present.
- Specialist Referee to University and Polytechnic Grants Committee, Government of Hong Kong 1993-Present.
- Peer reviewer at both the state and national level for NOAA Sea Grant Program, 1980-Present.
- Member National Sea Grant Molluscan Research Disease Initiative grant review panel. Silver Spring July 12, 2001.
- Member Chesapeake Bay Ecosystem Indicators Workgroup, 1996-2000.
- Member EPA STAR grant review panel. Bethesda Feb 14/15 2001

2. Volunteer Service to Professional Associations and Private Agencies (previous 5 years)

- Chair, Physiology, Genetics, and Reproductive Panel at STAC workshop to discuss implications of introducing triploid *Crassostrea ariakensis* to Chesapeake Bay. Annapolis December 2-5, 2003
- Chair, Scientific Experts Panel at workshop to discuss implications of using triploid *Crassostrea ariakensis* for aquaculture in Chesapeake Bay. Williamsburg November 2001
- Member Nature Conservancy Experts Panel at workshop to develop Ecoregional plan for Chesapeake Bay. Annapolis, March 2001

3. Peer review

- * Member, Editorial Advisory Board for P.S.Z.N.: Marine Ecology 1999 to 2004.
- Member, Editorial Advisory Board for the proceedings of the scientific conference Aquatic Ecosystems and Organisms, Moscow, April 19-20, 1999. Vol. 1 Ecological Studies, Hazards, and Solutions. Dialog-MGU. Press, Moscow. ISBN 5-89209-431-6
- Editorial Board, Journal Shellfish Research 1991-1994
- Reviewer for the following journals on a regular basis:
 - Aquaculture
 - Biological Bulletin Woods Hole
 - Bollettino di Zoologia
 - Canadian Journal Fisheries and Aquatic Science
 - Contributions in Marine Science
 - Estuaries
 - Estuarine Research Federation Proceedings
 - Estuarine, Coastal and Shelf Science
 - Journal of Experimental Marine Biology and Ecology
 - Journal World Mariculture Society

Journal of Shellfish Research
Limnology and Oceanography
Marine Biology
Marine Ecology Progress Series
Microbial Ecology
National Geographic
Physiological Zoology

C. Laboratory Committees (previous 5 years)

Classification review committee for FRA promotion, Chair 2002-2004
Facilities and Space Committee, Chair 1989-92, 2006, Member 1993, 1996, 2001, 2004, 2005
Land Use Committee Chair, 1998, Member 1999, 2000- 2002
Graduate Education Committee, Member 1980-1983; 2002-2004
Boat Operations Committee, Member 1984-86, 1991-93, 1995-96; Chair 1994-95. 2000-2002
Computer Committee, Member 1980, 1989-91, 1993, 2000
Library Committee, Chair 1996, Member 1997, 2000
HPL representative to UMCES HazMat committee 1996 - 98; Chair 1998-99
HPL Post-Doctoral Search Committee, Chair 1989, 1999
Laboratory Radiation Safety/Waste Committee/Board, Chair 1985-91, Member 1984-85, 1994-96.

CURRICULUM VITAE

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* denotes items pertinent to calendar year 2007

Signature _____ Date _____

Roger I.E. Newell, Professor

Certification

I have reviewed this *Curriculum Vitae* and here certify
that is a current and accurate partial
statement of my professional record.