

National Shellfisheries Association

Issue #1

Report to Industry 2004 – 2006

This publication is offered to members of the US commercial shellfish harvesting and aquaculture industry to inform them of work which has been published or presented in the National Shellfisheries Association's Journal of Shellfish Research or at the Annual Meeting either as a formal talk or as a poster. These items have been selected because they may have the most application to fisheries' activities or important species. There are many other fine papers which are presented or published each year by the Association.

If the title of the work that is listed below is of interest to you, you can either contact the corresponding author directly through the information provided or your marine extension agent who could probably get you a copy of the article. For the presentations at the annual meeting, you will have to contact the author directly for the information.

At the end of this report is an application for membership in the National Shellfisheries Association. One of the benefits of membership is a subscription to the Journal in which you can find all the future papers that will be mentioned in upcoming reports, aside from having the opportunity to attend the annual meetings and meet with shellfish researchers. Your input is always welcome.

JOURNAL OF SHELLFISH RESEARCH

VOLUME 23, NUMBER 1

APRIL 2004

- --Site selection for oyster habitat rehabilitation in the Virginia Portion of the Chesapeake Bay: A commentary.

 Roger Mann* and David A. Evans. *Virginia Institute of Marine Science, College of William and Mary, Gloucester Point, VA 23062.

 E-mail: rmann@vims.edu
- --Long-term projections of eastern oyster populations under various management scenarios.

 Stephen J. Jordan* and Jessica M. Coakley. *U.S. Environmental Protection Agency, Gulf Ecology Division, Gulf Breeze, Florida
- --Perkinsus sp. Infection risk for Manila clams, Tapes philippinarum (A. Adams and Reeve, 1850), from three sediment types using sucrose density solution.

Ralph A. Elston*, Christopher F. Dugan, Theodore R. Meyers and Kimberly S. Reece. * AquaTechnics, PO Box 687, Carlsborg, Washington 98324.

VOLUME 23, NUMBER 2

32526.

AUGUST 2004

-- Quarantine of oyster shell cultch reduces the abundance of Perkinsus marinus.

David Bushek*, Donnia Richardson, M. Yvonne Bobo and Loren D. Coen. * USC-Baruch Marine Field Laboratory, Georgetown, South Carolina 29442. Email: bushek@hsrl.rutgers.edu

--A comparison of dredge and patent tongs for estimation of oyster populations.

Roger Mann*, Melissa Southworth, Juliana M. Harding and James Wesson. *Virginia Institute of Marine Science, College of William and Mary Gloucester Point, VA 23062. Email: rmann@vims.edu

- --Decadal scale changes in seasonal patterns of oyster recruitment in the Virginia sub estuaries of the Chesapeake Bay. Melissa Southworth* and Roger Mann. *Virginia Institute of Marine Science, College of William and Mary, P.O. Box 1346, Gloucester Point, Virginia 23062. Email: melsouth@vims.edu
- --Herpes-like virus associated with eroded gills of the Pacific oyster Crassostrea gigas in Mexico.

 Rebecca Vasquez-Yeomans*, Jorge Caceres-Martinez and Antonio Figueras Huerta. * Instituto de Sanidad Acuicola, A.C. Calle 9na y Gastelum No. 468 Local 14, Zona Centro. C.P. 22800, Ensenada, Baja California Mexico.
- --Surfclam histopathology survey along the Delmarva mortality line.

Yungkul Kim* and Eric N. Powell. *Haskin Shellfish Research Laboratory, Rutgers University, Port Norris, NJ 08349.

--Impact of green crab (Carcinus maenas L.) predation on a population of softshell clams (Mya arenaria L.) in the Southern Gulf of St. Lawrence.

Trevor Floyd and Jim Williams*. * Department of Biology, St. Francis Xavier University, Antigonish, Nova Scotia, B2G 2W5, Canada. Email: jwilliam@stfx.ca

VOLUME 23, NUMBER 3

DECEMBER 2004

- --Population biology of the Pacific geoduck clam, Panopea abrupta, in experimental plots, southern British Columbia, Canada.
- A. Campbell*, C.W. Yeung, G. Dovey and Z. Zhang. * Pacific Biological Station, Nanaimo, BC, Canada V9T 6N7.
- --Natural mortality and recruitment rates of the Pacific geoduck clam (Panopea abrupta) in experimental plots. Zane Zhang*and Alan Campbell. *Shellfish Stock Assessment Section, Pacific Biological Station, 3190 Hammond Bay Road, Nanaimo, British Columbia, V9T 6N7, Canada. Email: ZhangZ@pac.dfo-mpo.gc.ca
- --Reproduction and pathology of blue mussels, Mytilus edulis (L.) in an experimental longline in Long Island Sound, Connecticut.

Inke Sunila*, Lawrence Williams, Steve Russo and Tessa Getchis. *State of Connecticut, Department of Agriculture, Bureau of Aquaculture, P.O. Box 97, Milford, Connecticut 06460. Email: isunila@snet.net

- --First occurrence of the nonindigenous green mussel, Perna viridis (Linnaeus, 1758) in coastal Georgia, United States.

 Alan J. Power*, Randal L. Walker, Karen Payne and Dorset Hurley. *Shellfish Research Laboratory, University of Georgia Marine Extension Service, 20 Ocean Science Circle, Savannah, Georgia 31411. Email: alanpowr@uga.edu
- --The potential of aerial photography for estimating surface areas of intertidal Pacific oyster beds (Crassonstrea gigas).

 B. J. Kater* and J. M. D. D. Baars. *Netherlands Institute for Fisheries Research, Centre for Shellfish Research, P.O. Box 77, 4400 AB, Yerseke, The Netherlands. Email: b.j.kater@rikz.rws.minvenw.nl
- --Growth and survivorship of non-native (Crassostrea gigas and Crassistrea ariakensis) versus native eastern oysters (Crassostrea virginica).

Jonathan H. Grabowski*, Charles H. Peterson, Sean P. Powers, David Gaskill and Henry C. Summerson. *University of North Carolina at Chapel Hill, Institute of Marine Sciences, Morehead City, North Carolina 28557. Email: jgrabowski@gmri.org

--A comparison between a suction dredge and a traditional oyster dredge in the transplantation of oysters in Delaware Bay. Eric N. Powell and Kathryn A. Ashton-Alcox. *Haskin Shellfish Research Laboratory, Rutgers University, 6959 Miller Ave., Port Norris, New Jersey, 08349.

Selected Presentations from the National Shellfisheries Association 97th Annual Meeting in Philadelphia, PA, April 11-14, 2005.

COMPARATIVE FIELD TRIALS OF TRIPLOID CRASSOSTREA ARIAKENSIS WITH C. VIRGINICA AT EIGHT FIELD SITES IN THE CHESAPEAKE BAY: GROWTH, MORTALITY, CONDITION, REVERSION AND GAMETOGENESIS. Karen L. Hudson*, Ashlie Kozlowski, A.J. Erskine, and Standish K. Allen, *Virginia Institute of Marine Science, Gloucester Point, VA 23062.

INDUCED TRIPLOIDY IN THE BAY SCALLOP *ARGOPECTEN IRRADIANS* AND FIELD CULTURE PERFORMANCE. Amandine Surier*, Rick Karney, Kim Tetrault, and Robert Rheault. *PO Box 963, Oak Bluffs MA 02557.

EARLY PERFORMANCE OF TWO DISEASE-TOLERANT OYSTER STRAINS IN THE PATUXENT RIVER, MARYLAND. George R. Abbe*, Candace A. Morrell, Carol B. McCollough, Christopher F. Dungan and Mark L. Homer. *Morgan State University Estuarine Research Center, St. Leonard, MD 20685.

PATHOGENS OF THE NON-NATIVE OYSTER, CRASSOSTREA ARIAKENSIS, IN ITS NATIVE RANGE: CURRENT FINDINGS AND WORK IN PROGRESS. Jessica A. Moss* and Kimberly S. Reece. *Virginia Institute of Marine Science, College of William and Mary, Gloucester Point, VA 23062.

TOWARD GULF-WIDE MONITORING AND MANAGEMENT OF *PERKINSUS MARINUS*: RECENT ADVANCES IN THE DERMOWATCH PROGRAM. Thomas M. Soniat*, Sammy M. Ray, Enrique Kortright and Lance Robinson. *Department of Biology, Nicholls State University, Thibodaux, LA 70310.

SALINITY EFFECTS ON THE SUSCEPTIBILITY TO AND PERSISTENCE OF *BONAMIA OSTREAE* AND *BONAMIA* SP. IN *CRASSOSTREA ARIAKENSIS*. Corinne Audemard*, Ryan Carnegie, Nancy Stokes, Eugene Burreson ,and Melanie Bishop. *Virginia Institute of Marine Science, Gloucester Point, VA 23062.

TRANSMISSION OF QUAHOG PARASITE UNKNOWN IN HARD CLAMS: INTERACTIONS BETWEEN DIFFERENT HOST STRAINS AND PATHOGEN ISOLATES. Soren F. Dahl*, Deenie M. Buggé and Bassem Allam, *Marine Sciences Research Center, Stony Brook University, Stony Brook, NY 11794.

MONITORING QPX DISEASE IN RARITAN - SANDY HOOK BAYS: RESULTS OF A 3-YEAR SURVEY PROGRAM. B. Allam*, Bushek, S. Pawagi, D. L. Ragone-Calvo, A. Dove, J. Normant, J. Thiel, J. Joseph, D Barnes, and S. Ford. *Marine Sciences Research Center, Stony Brook University, Stony Brook, NY 11794.

OYSTER INVADER MORE ABUNDANT IN MARINE RESERVES. Dianna K. Padilla* and Terrie Klinger. *Department of Ecology and Evolution, Stony Brook University, Stony Brook, NY 11794.

ANOTHER INVASIVE BIVALVE SPECIES: THE GREEN MUSSEL, *PERNA VIRIDIS.* Shirley M. Baker*, Jon Fajans and Patrick Baker, *Department of Fisheries and Aquatic Sciences, University of Florida, Gainesville, FL 32653.

INVASIVE ASCIDIAN BIOFOULING IN AQUACULTURE: AN INCREASING PROBLEM AND CAN IT BE CONTROLLED? R.B. Whitlatch*, R.W. Osman and S.E. Shumway. *Department of Marine Sciences, University of Connecticut, Groton, CT 06340.

THE INFLUENCE OF SELECTED SINGLE SPECIES ALGAL DIETS ON THE GROWTH, MORTALITY, AND ELEMENTAL SHELL COMPOSITION OF *ARGOPECTEN IRRADIANS CONCENTRICUS*: RESULTS OF AN ONGOING STUDY. William N. Elsaesser*, Norman J. Blake, Sandra E. Shumway and Anthony Greco. *University of South Florida College of Marine Science, St. Petersburg, FL 33701.

SURVIVAL AND GROWTH OF BAY SCALLOPS, *ARGOPECTEN IRRADIANS IRRADIANS*, IN SEMI-STATIC CULTURES SYSTEMS UTILIZING AN AUTOMATED FEEDING SYSTEM. James C. Widman Jr.* and David J. Veilleux. *NOAA Fisheries, Milford CT 06460.

IMPACTS OF THE TOXIC DINOFLAGELLATE ALEXANDRIUM MONILATUM ON FOUR ECOLOGICALLY IMPORTANT SHELLFISH SPECIES. Susan E. Pate*, Sandra E. Shumway and JoAnn M. Burkholder. *Center for Applied Aquatic Ecology, North Carolina State University, Raleigh, NC 27606.

SEASONAL VARIATIONS IN SEDIMENT AND BOTTOM WATER CHEMISTRY: IMPLICATIONS FOR LOBSTER MORTALITY IN WESTERN LONG ISLAND SOUND. Carmela Cuomo* and Raymond M. Valente, *Dept. of Biology & Environmental Sciences, University of New Haven, West Haven, CT 06516.

TOXICITY OF PESTICIDES USED TO CONTROL MOSQUITOES ON ADULT AMERICAN LOBSTERS, HOMARUS AMERICANUS. Sylvain De Guise*, Jennifer Maratea, and Christopher Perkins. *Department of Pathobiology and Veterinary Science, University of Connecticut, Storrs, CT, 06269.

UPDATE ON SHELL DISEASE IN AMERICAN LOBSTERS IN SOUTHERN NEW ENGLAND WATERS. Kathleen Castro*, *University of Rhode Island Fisheries Center, Kingston, RI 02881.

JUVENILE BAY SCALLOP (*ARGOPECTEN IRRADIANS IRRADIANS*) HABITAT PREFERENCES. Marnita Chintala*, Elizabeth Hinchey, Timothy Gleason, and Walter Berry. *U.S. EPA, Atlantic Ecology Division, Narragansett, RI 02882.

SPAWNING ACTIVITY OF HARD CLAMS IN TWO NATURE CONSERVANCY SANCTUARIES IN LONG ISLAND, NEW YORK. Michael H. Doall*, Dianna K. Padilla, Carl Lobue, and Laurie Perino. *Stony Brook University, Department of Ecology & Evolution, Stony Brook, NY 11794.

DISTRIBUTION AND FREQUENCY OF OCCURRENCE OF GONADAL NEOPLASIA IN FLORIDA HARD CLAM (*MERCENARIA* SPP.) POPULATIONS. William S. Arnold*. *Fish and Wildlife Research Institute, St. Petersburg, FL 33701. **RE-EVALUATION OF OYSTER DREDGE EFFICIENCY IN SURVEY MODE: APPLICATION IN STOCK ASSESSMENT.** Eric N. Powell, Kathryn A. Ashton-Alcox*, and John N. Kraeuter. *Haskin Shellfish Research Laboratory, Rutgers University, Port Norris, NJ 08349.

NEW JERSEY'S DELAWARE BAY OYSTER BEDS: LONG TERM DATA AND TRENDS. John Kraeuter*, Eric Powell, Susan Ford, Kathryn Ashton-Alcox, and Stephen Fegley, *Haskin Shellfish Research Laboratory, Port Norris, NJ 08349.

COLLECTION AND RELAY OF OYSTER SPAT FROM HIGH RECRUITMENT - HIGH MORTALITY SITES TO ENHANCE SEEDBED PRODUCTION. R. Babb*, J. Hearon, and D. Bushek. *New Jersey Department of Environmental Protection, Bureau of Shellfisheries, Port Norris, NJ 08349.

A COMPARISON OF *PERKINSUS MARINUS* INFECTION PATTERNS IN NEW JERSEY AND SOUTH CAROLINA. David Bushek* and Susan Ford, *Haskin Shellfish Research Laboratory, Rutgers University, Port Norris, NJ 08349.

REAL-TIME PCR TO MEASURE EXPRESSION OF HSP70 AS A RESPONSE TO STRESS IN *CRASSOSTREA VIRGINICA*. Amanda Powell*, Olaf Heilmayer, and G. Roesijadi. *Florida Atlantic University, Biological Sciences, Boca Raton, FL 33431.

AN ASSESSMENT OF THE DELAWARE BAY KNOBBED WHELK DREDGE FISHERY. David G. Bruce*, *Delaware Division of Fish and Wildlife, Little Creek, DE 19961.

MARYLAND OYSTER STATUS: INDUSTRY AND RESOURCE PERSPECTIVES WITH A VIEWPOINT ON RESTORATION. Christopher C. Judy*, *Maryland Department of Natural Resources, Annapolis. MD 21401.

DISTRIBUTION AND FREQUENCY OF OCCURRENCE OF GONADAL NEOPLASIA IN FLORIDA HARD CLAM (*MERCENARIA SPP.*) **POPULATIONS.** William S. Arnold*. *Fish and Wildlife Research Institute, St. Petersburg, FL 33701.

A COMPARISON OF THE BEHAVIOR OF LARVAE OF TWO SPECIES OF OYSTERS, *CRASSOSTREA VIRGINICA* AND *CRASSOSTREA ARIAKENSIS*. Joan Manuel*, Victor S. Kennedy, and Roger I. E. Newell. *Horn Point Laboratory, University of Maryland Center for Environmental Science, Cambridge, MD 21613.

SO HOW FAR DO OYSTER LARVAE DISPERSE? A DYE STUDY SIMULATION. Alan J. Erskine*, Steve Snyder, Melissa Southworth, Karen Hudson, Jian Shen and Roger Mann, *VIMS, Gloucester Point, VA 23062.

A PRELIMINARY INVESTIGATION OF THE RAZOR CLAM (*ENSIS DIRECTUS*) AS A CANDIDATE FOR COMMERCIAL FARMING. Dale Leavitt*, Jeff Gardner, Tessa Getchis, David Grunden, Diane Murphy, Jim O'Connell, Michael Patricio, Amandine Surier, John Wadsworth and William Burt, *Marine & Natural Sciences, Roger Williams University, Bristol, RI 02809.

TIME AND TEMPERATURE EFFECTS FOR HIGH PRESSURE INACTIVATION OF A NOROVIRUS SURROGATE. David H. Kingsley* and Haiqiang Chen. *U.S. Department of Agriculture, Agricultural Research Service, Microbial Food Safety Research Unit, Delaware State University, Dover, DE 19901.

THE IMPACT OF A WARMER OCEAN ON ATLANTIC SURFCLAMS AT THE SOUTHERN LIMIT OF THEIR RANGE. James R. Weinberg* and Eric N. Powell. *NMFS/NEFSC, Woods Hole, MA 02543.

A SURVEY OF TRENDS IN MAINE SOFT-SHELL CLAM LANDINGS. William R. Congleton, Jr*, Tracy Vassiliev, Robert C. Bayer and Bryan R. Pearce. *Department of Animal and Veterinary Science, University of Maine, Orono, ME 04469.

POPULATION TRENDS OF HARD CLAMS (*MERCENARIA MERCENARIA***) IN THE MARYLAND COASTAL BAYS.** Mitchell L. Tarnowski* and Mark L. Homer. *Maryland Department of Natural Resources, Fisheries Service, Annapolis, MD 21401.

NEW JERSEY'S DELAWARE BAY OYSTER BEDS: LONG TERM DATA AND TRENDS. John Kraeuter*, Eric Powell, Susan Ford, Kathryn Ashton-Alcox, and Stephen Fegley, *Haskin Shellfish Research Laboratory, Port Norris, NJ 08349.

SO HOW FAR DO OYSTER LARVAE DISPERSE? THEORETICAL AND TIME FRAME CONSIDERATIONS. Roger Mann*, *VIMS, Gloucester Point, VA 23062.

HOW MARKET DEMAND FOR EASTERN OYSTERS HAS AFFECTED MANAGEMENT ACTIONS IN THE INDUSTRY. Clyde L. MacKenzie, Jr.*, *James J. Howard Marine Sciences Laboratory, Northeast Fisheries Science Center, National Marine Fisheries Service/NOAA, Highlands, NJ 07732.

Posters

BAY SCALLOP RESTORATION IN THE NORTHEAST: A WORKSHOP SUMMARY. William Walton*, Diane Murphy, Ronald Goldberg, Sheila Stiles, Steven Tettelbach, Marnita Chintala and Karin Tammi. *Cape Cod Cooperative Extension, Barnstable, MA 02630.

APPLICATION TO PRODUCE REMOTE SET OYSTERS FOR RESTORATION OF POPULATIONS IN NARRAGANSETT BAY, RHODE ISLAND. Carma Gilcrist*, Karin A. Tammi, Timothy M. Scott, and Dale F. Leavitt, *Roger Williams University, Center for Economic and Environmental Development (CEED), Bristol, RI 02809.

EVALUATION OF SPAWNING TIME AND SPAT COLLECTION IN THE NORTHERNMOST POPULATION OF EUROPEAN OYSTERS (*OSTREA EDULIS L.*) ALONG THE ATLANTIC EAST COAST. Kevin Burke*, Erick Bataller, Marc Ouellette, *Université de Moncton, Département de biologie, Moncton, NB Canada E1A 3E9.

COLLECTION AND RELAY OF OYSTER SPAT FROM HIGH RECRUITMENT - HIGH MORTALITY SITES TO ENHANCE SEEDBED PRODUCTION. R. Babb*, J. Hearon, and D. Bushek. *New Jersey Department of Environmental Protection, Bureau of Shellfisheries, Port Norris, NJ 08349.

TOWARD GULF-WIDE MONITORING AND MANAGEMENT OF *PERKINSUS MARINUS*: RECENT ADVANCES IN THE DERMOWATCH PROGRAM. Thomas M. Soniat*, Sammy M. Ray, Enrique Kortright and Lance Robinson. *Department of Biology, Nicholls State University, Thibodaux, LA 70310.

IMPACTS OF THE TOXIC DINOFLAGELLATE *ALEXANDRIUM MONILATUM* ON FOUR ECOLOGICALLY IMPORTANT SHELLFISH SPECIES. Susan E. Pate*, Sandra E. Shumway and JoAnn M. Burkholder. *Center for Applied Aquatic Ecology, North Carolina State University, Raleigh, NC 27606.

IMMUNE RESPONSE OF TWO POPULATIONS OF THE EASTER N OYSTER CRASSOSTREA VIRGINICA, TO NATURAL AND SIMULATED BLOOMS OF THE DINOFLAGELLATE, PROROCENTRUM MINIMUM. Hélène Hégaret* and Gary H. Wikfors. *Department of Marine Sciences, University of Connecticut, Groton, CT 06340.

SPAWNING ACTIVITY OF HARD CLAMS IN TWO NATURE CONSERVANCY SANCTUARIES IN LONG ISLAND, NEW YORK. Michael H. Doall*, Dianna K. Padilla, Carl Lobue, and Laurie Perino. *Stony Brook University, Department of Ecology & Evolution, Stony Brook, NY 11794.

- -- Acoustic deterrents do not reduce black drum predation on oysters. Kenneth M. Brown*, Gary W. Peterson, Gerald J. George and Michael McDonough. Department of Biological Sciences; Coastal Fisheries Institute; Department of Oceanography and Coastal Studies Louisiana State University, Baton Rouge, Louisiana 70803. Email: kmbrown@lsu.edu
- -- Genetic diversity of the European oyster (Ostrea edulis L.) in Nova Scotia: comparison with other parts of Canada, Maine and Europe and implications for brookstock management.

Benedikte Vercaemer*, Koren R. Spence, Christophe M. Herbinger, Sylvie Lapegue, and Ellen L. Kenchington. Fisheries and Oceans Canada, Ecosystem Research Division, Bedford Institute of Oceanography, 1 Challenger Drive, Dartmouth, Nova Scotia, B2Y 4A2, Canada.

Email: vercaemerb@mar.dfo-mpo.gc.ca

-- Tissue distribution and hemolymph activity of six enzymes in the American lobster (*Homarus americanus*): potential markers of tissue injury.

Andrea Battison. Atlantic Veterinary College Lobster Science Centre (AVCLSC), University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada. Email: abattison@upei.ca

- -- Comparison of early season versus late season trap schedules for harvest of red swamp crawfish *Procambarus clarkia* cultured in earthen ponds without planted forage. Cortney L. Ohs¹ and Louis R. D'Abramo². ¹University of Florida Institute of Food and Agricultural Sciences Indian River Research and Education Center, 2199 South Rock Road, Fort Pierce, FL 32945. ²Mississippi State University Department of Wildlife and Fisheries, Box 9690 Mississippi State, Mississippi 39762. Email: ldabramo@cfr.msstate.edu
- -- A perspective on ecological consideration in crawfish pond aquaculture.

Jay V. Huner. Crawfish Research Center, University of Louisiana at Lafayette, Lafayette, LA 70504. Email: piku@classicnet.net

 $\hbox{\bf -- Inferring shrimp } \textit{(Pandalus borealis)} \ \textbf{growth characteristics from life history stage structure analysis.}$

Peter A. Koeller. Department of Fisheries and Oceans, Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, Canada. Email: koellerp@mar.dfo-mpo.gc.ca

- -- Effects of tidal restrictions and potential benefits of tidal restoration on fecal coliform and shellfish-water quality. John W. Portnoy* and Jenny R. Allen. Cape Cod National Seashore, 99 Marconi Site Road, Wellfleet, Massachusetts 02667. Email: john_portnoy@nps.gov
- -- A new in situ method for measuring seston uptake by suspension-feeding bivalve molluscs.

Raymond E. Grizzle*, Jennifer K. Greene, Mark W. Luckenbach and Loren D. Coen. Jackson Estuarine Laboratory and Department of Zoology, University of New Hampshire, Durham, New Hampshire 03824. Email: ray.grizzle@unh.edu

- -- Out-crossing among commercial strains of the northern quahog, *Mercenaria mercenaria*: survival, growth and implications for selective breeding. Mark D. Camara, ^{1,2}* Standish K. Allen, Jr., ¹ Ryan B. Carnegie and Kimberly S. Reece ¹. ¹Virginia Institute of Marine Science, P.O. Box 1346, Gloucester Point, Virginia 23062; ²Current address: USDA Agricultural Research Service, Hatfield Marine Science Center, 2030 SE Marine Science Dr., Newport, Oregon 97365. Email: Mark.Camara@oregonstate.edu.
- -- A population dynamics model of the hard clam, *Mercenaria mercenaria*: development of the age- and length-frequency structure of the population.

Eileen E. Hofmann, ^{1*} John M. Klinck, ¹ John N. Kraeuter, ² Eric N. Powell, ² Ray E. Grizzle, ³ Stuart C. Buckner ⁴ and V. Monica Bricelj ⁵. ¹Center for Coastal Physical Oceanography, Crittenton Hall, Old Dominion University Norfolk, Virginia 23529. Email: hofmann@ccpo.odu.edu

- -- Recruitment patterns and precautionary exploitation rates for Geoduck (*Panopea abrupta*) populations in British Columbia. Zane Zhang and Claudia Hand. Shellfish Stock Assessment Section, Pacific Biological Station, 3190 Hammond Bay Road, Nanaimo, British Columbia, V9T 6N7, Canada. Email: zhangz@pac.dfo-mpo.gc.ca
- -- Biotic and abiotic factors influencing growth and survival of wild and cultured individuals of the softshell clam (*Mya arenaria* L.) in eastern Maine. Brian F. Beal*. University of Maine at Machias, 9 O'Brien Avenue, Machias, Maine 04654. Email: bbeal@maine.edu

- -- Trends in Maine softshell clam landings. William R. Congleton, Jr., ¹* Tracy Vassiliev¹, Robert C. Bayer¹, Bryan R. Pearce², Jennifer Jacques¹ and Carolyn Gillman¹. ¹Department of Animal and Veterinary Science, University of Maine, Orono, Maine 04469. Email: williamc@maine.edu
- -- Initial recruitment and growth of surfclams (*Spisula solidissima* Dillwyn) on the inner continental shelf of New Jersey. Hongguang Ma*, Judith P. Grassle and Jeanine M. Rosario. Institute of Marine and Coastal Sciences, Rutgers, The State University of New Jersey, 71 Dudley Road, New Brunswick, New Jersey 08901. Email: hgma@imcs.rutgers.edu
- -- Variations in growth and reproduction of bay scallops (*Argopecten irradians*, Lamark, 1819) from six subpopulations in the northeastern Gulf of Mexico. Stephen P. Geiger*, Janessa Cobb and William S. Arnold. Florida Fish & Wildlife Research Institute, 100 8th Ave., SE, St. Petersburg, Florida 33701. Email: steve.Geiger@myFWC.com
- -- Reproduction and spawning in calico scallops, *Argopectin gibbus*, from Bermuda.

 Samia Sarkis¹*, Cyr Couturier and Andrew Cogswell. Department of Conservation Services, P.O. Box FL 588, Flatts FLBX, Bermuda. Email: scsarkis@gov.bm
- -- Genotype-dependent survival, growth and production in cultured blue mussels, Mytilus spp.: results of reciprocal seed transfer experiment. R. W. Penney*, M. J. Hart and N. D. Templeman. Department of Fisheries and Oceans, Science Branch, P.O. Box 5667, St. John's, Newfoundland, Canada, A1C 5X1. Email: penneyra@dfo-mpo.gc.ca
- -- Abstracts of technical papers presented at the 26th Annual Milford Aquaculture Seminar, Milford, Connecticut, February 27 March 1, 2006.
- -- Abstracts of technical papers presented at the 98th Annual Meeting of the National Shellfisheries Association, Monterey, California, March 26-30, 2006.