

CURRICULUM VITAE
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Department of Marine Sciences
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DATE OF BIRTH: March 29, 1952

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EDUCATION:

UNDERGRADUATE - B.S. (*Summa Cum Laude*) 1974 (Marine Science/Biology)
Southampton College of Long Island University, Southampton, New York 11968

GRADUATE - Marshall Scholar; Awarded a fellowship from the Marshall Aid Commemoration Commission for graduate study in the United Kingdom; Ph.D. (1976), D.Sc. (1992), University College of North Wales, Bangor, Gwynedd, Wales. Advisor: D.J. Crisp, FRS (deceased)

POST-GRADUATE - Postdoctoral Fellow: Marine Science Laboratories, Menai Bridge, Gwynedd, North Wales (1977); University of Otago, Dunedin, New Zealand (1978-1979); Department of Ecology and Evolution, State University of New York, Stony Brook, New York (1979-1982)

RESEARCH EXPERIENCE:

Skidaway Institute of Oceanography, Savannah, Georgia (1973/1974)

Marine Science Laboratories, Menai Bridge, Wales (1974-1977)

Portobello Marine Laboratory, Portobello, New Zealand (1978-1979)

Universidade de Sao Paulo, Sao Paulo, Brazil (invited researcher, 1980)

Department of Ecology and Evolution, State University of New York, Stony Brook, New York
Research Assistant, 1979-1982)

Department of Marine Resources, West Boothbay Harbor, Maine and Graduate Faculty,
Department of Zoology, University of Maine, Orono, Maine (Research Scientist, 1983-1993)

Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine (Adjunct Principal Investigator, 1984-present)

Friday Harbor Laboratories, Friday Harbor, Washington (visiting investigator 1995- 2000)

North Carolina State University, Raleigh (visiting investigator 1995 - present)

Belle Baruch Marine Laboratory, University of South Carolina (visiting scientist 2003)

University of Connecticut, Avery Point (Research Professor) 2002- present

TEACHING EXPERIENCE:

Laboratory Instructor Southampton College (1973-74) **Course:** Field Biology

Teaching Assistant Southampton College (1974) **Course:** Field Biology for Elementary School Teachers (graduate)

Instructor Southampton College (1974) **Course:** Marine Field Biology, a non- credit course for laymen; **Course:** Marine Biology, for Children 6-12

Adjunct Assistant Professor Southampton College (Spring,1981) **Course:** Comparative Physiology

Adjunct Associate Professor Southampton College (Spring,1981/summer,1982)

Courses: Scientific Writing; Marine Invertebrate Zoology, Research Methods in Comparative Physiology (Summer 1982);

Professor of Marine Science and Biology (with tenure; 1994-2001), Southampton College, Long Island University, Southampton, New York

Courses: Comparative Physiology, Marine Ecology, Oceans, Scientific Writing, Current Topics in Marine Science

Research Professor (2002 - present), University of Connecticut, Avery Point, CT

Course: Career Development for Graduate Students

Thesis committee of M.S. students: University of Connecticut, University of Maine, Orono; College of William and Mary; University of Washington, Stony Brook University; Ph.D. thesis committees: University of South Florida, University of Maine, University of Connecticut, North Carolina State University, Rutgers; College of William and Mary; Florida Gulf Coast University, Stony Brook University

External Examiner (Ph.D.): University of Auckland (New Zealand); University of Cape Town (South Africa); Berhampur University (India); University of Guelph (Canada); Dalhousie University (Canada); Université de Laval (Quebec); University of Otago (New Zealand); University of Tasmania (M.Sc.; Ph.D.); Memorial University (Newfoundland); University of Technology (Sydney, Australia); University of Liverpool (England); University of New South Wales (Australia), University of New England (Australia), University of Newcastle (Australia); Australian National University; City University of Hong Kong;

ADMINISTRATIVE/SUPERVISORY EXPERIENCE

Maine Department of Marine Resources - supervised technical staff and scientists (10 years) and running of the public aquarium (including seals) (3 years)

Coordinator of Marine Science program (elected), Southampton College (1995-2001) - responsible for course scheduling, budgets, faculty searches, seminar program and other general duties

Coordinator Marine Station (appointed), Southampton College (1995-2001) - liaison between faculty, administration and marine station staff; budgeting, staff hiring, course scheduling, summer hires

GRANTS:

University of Otago Research Grant. A study of salt effects on haemocyanin oxygen binding in *Amphibola crenata*. (\$2000)

University of Otago Research Grant. A study of respiration in a terrebellid polychaete. (\$2000)

University of Otago Research Grant. Respiratory function of punctae in brachiopods and respiration in an intertidal crab. (\$2000)

Sigma Xi Grant-In-Aid-Of-Research (1981). Physiological adaptations in decapod crustaceans.

NOAA/Sea Grant - Superior shellfish stocks by polyploidization. (with H. Hidu, 1984-1987).

National Coastal Resources Research and Development Institute. Symposium: Toxic Algal Blooms - Hazards to Shellfish and Industry. (\$20,000)

International Pectinid Workshop 1989 - Total funding obtained through sixteen separate agencies. (\$18,000)

Maine Aquaculture Innovation Center - Effects of toxic algae on commercially important shellfish 1989.

Saltonstall-Kennedy (NOAA/NMFS) - Significance of domoic acid, DSP and PSP in the Gulf of Maine: an issue of economics and public safety (subcontract from New England Fisheries Development Association) 1990-1992.

Saltonstall-Kennedy (NOAA/NMFS) - Dinoflagellate bloom effects on oyster production (with K. Sellner, M. Luckenbach) 1991-1993.

Gulf of Maine Regional Marine Research Program - Preparation of a review of uptake and depuration kinetics of algal toxins by filter-feeding molluscan shellfish (with V.M. Bricelj) 1993-1995. (\$90,594)

Maine Aquaculture Innovation Center - Investigations in the biology and culture of the Arctic surfclam (*Mactromeris polynyma*) and the Atlantic surfclam (*Spisula solidissima*) (with C. Davis) 1992-1993.

Maine Aquaculture Innovation Center - Survey of *Bonamia* Disease in European oysters in Maine (with C. Davis) 1992-1993.

Maine Aquaculture Innovation Center and Northeast Regional Aquaculture Center - Possible cytotoxic effects of *Gyrodinium aureolum* on juvenile shellfish (with R. Smolowitz) 1993.

Saltonstall-Kennedy (NOAA/NMFS) - Polyculture of sea scallops suspended from salmon net pens (subcontract from New England Fisheries Development Association) 1994-1995.

National Science Foundation - (Levinton, Ward and Shumway) - Feeding strategies and limitations of marine bivalves (1994-1997; \$314,985)

Saltonstall-Kennedy (NOAA/NMFS) - A new harvest: Sea scallop enhancement and culture in New England. (subcontract from New England Fisheries Development Association) (1996-1997)

US Environmental Protection Agency-National Science Foundation (Burkholder, Shumway, and Rublee) - Toxic ambush-predator dinoflagellates: Potential biosensors of estuarine stress. (1997-1999 \$512,000)

National Science Foundation SBIR-Phase I - (Davis and Shumway) - Aquaculture development of Stimpson's surfclam, *Mactromeris polynyma*. (1996-1997) \$66,327)

Hudson River Foundation and NY Sea Grant (Levinton, Shumway and Ward) - Feeding responses of zebra mussels and effects on biodeposition and soft bottom communities, Hudson River Estuary. (\$159,853)

The Moore Foundation (Shumway and Sadove) New York marine turtle population monitoring program. (1996 - \$9,640; 1997 -\$9,640; 1998 - \$10,000)

ECOHAB (Wikfors, Shumway, Dam, McManus, Smolowitz) Trophic effects of two dinoflagellates. (1996-1997; \$125,000)

Connecticut Sea Grant (McManus, Wikfors, Shumway, Dam, Smolowitz, Martin) Trophic effects of two dinoflagellates upon representative pelagic and benthic consumers. (1998-2000; \$136,050)

NOAA/NMFS Cooperative Marine Education and Research Program (CMERS) - Factors governing the perceived decline in bluefish abundance along the Atlantic coast of the U.S.(1999-2001 \$200,000)

National Science Foundation (Levinton, Ward, Shumway) Feeding selectivity and strategies of marine bivalves (1998-2001; \$427,043)

ECOHAB Comparative biology, toxins, and bloom activity of *Pfiesteria*-like species; Impacts of *Pfiesteria piscicida* on filter-feeding shellfish and the role of shellfish as possible toxin vectors. (1999-2004; \$436,000)

NOAA/NMFS Cooperative Marine Education and Research Program (CMERS) (renewal 2001-2003 \$200,000)

National Science Foundation (Ward and Shumway) Functional mechanisms of control in the bivalve pump: an experimental approach to resolve current controversy (2004-2007; \$430,558)

ECOHAB-EPA (Shumway, Wikfors, Burkholder) Assessment of the potential for introduction of harmful algal bloom (HAB) species via shellfish transport (2004-2007; \$487,523)

Northeast Regional Aquaculture Center Effects of temperature on the infection of hard clams (*Mercenaria mercenaria*) by the protistan organism, quahog parasite unknown. (Smolowitz et al. 2005-2007; UCONN portion \$44,765)

NOAA/National Sea Grant (Whitlatch, Shumway, Osman, Adams, Getchis) The control of aquatic nuisance species in marine aquaculture operations (2005-2007; \$298,198)

National Science Foundation (Serb and Shumway) A multi-gene phylogeny of scallops (Mollusca: Bivalvia: Pectinidae) and an examination of morphological and behavioral trait evolution. (2006-2008; UCONN portion \$23,000)

NSF: Collaborative Research: Separating the grain from the chaff: a functional and comparable approach to elucidate particle selection mechanisms in suspension-feeding molluscs (Ward and Shumway; \$457,350; 2007-2009)

NOAA Marine Aquaculture Program: Molluscan shellfish aquaculture and the environment (Shumway; \$160,000; 2008-2010)

Saltonstall-Kennedy (NOAA/NMFS) Biofouling tunicates on aquaculture gear as potential vectors of harmful algal introductions (Shumway, Bullard, Getchis); \$248,690; 2009-2012)

NSF: Collaborative Research: Phenotypic plasticity in feeding: Ontogenetic solutions to scaling limitations (Padilla and Shumway; 2009-2013; SES \$313,000)

NSF: Collaborative Research: Elucidating the factors mediating particle-selection processes in suspension-feeding molluscs: A functional and comparative approach (Ward and Shumway; 2012 - 2015; \$447,007)

PROFESSIONAL SOCIETIES:

National Shellfisheries Association; Marine Biological Association, United Kingdom; World Aquaculture Society; Canadian Aquaculture Association; American Malacological Union; American Society of Zoologists; The Association for Women in Science; The Nature Conservancy; Council of Biology Editors; European Association of Science Editors; Sigma Xi; American Association for the Advancement of Science

HONORS AND AWARDS

Marshall Scholar, 1974-1977

William Evans Visiting Professor, University of Otago, Dunedin, New Zealand, 1992.

Taunton High School Hall of Fame, 1995

Long Island University Trustees Award for Lifetime Scholarly Achievement 1997

Education Service Award, Science Council of New York City 2000

David Newton Award for Excellence in Teaching, Long Island University 2000

Aldo Leopold Leadership Fellow 2001

Long Island University Trustees Award for Scholarly Achievement (2001)

National Shellfisheries Association Honored Life Member (2001)

Belle Baruch Marine Field Laboratory Visiting Scientist (2003)

Robert L. Carroll Lecturer, Fairmont University (2005)

Elise B. Newell Lecturer, Florida Sea Grant (2006)

Visitas de Profesores Distinguidos Academia Mexicana de Ciencias (2006)

Fellow, American Association for the Advancement of Science (2006)

Visiting Professor, Institute of Marine Research, Bergen, Norway (2007)

David H. Wallace Award for Contributions to Industry National Shellfisheries Association (2009)

Honorary Fellow, University of Wales (2009)

Erasmus Mundas Scholar (2010)

Fellow, Connecticut Academy of Science and Engineering (2011)

Fellow, The World Aquaculture Society (2011)

OTHER:

Editor in Chief: *Journal of Shellfish Research* (1986 - present)

Journal of Experimental Marine Biology and Ecology (1998 - present)

Harmful Algae Founder and Co-Editor-in-Chief (2001- present)

Reviews in Fisheries Science (2010 -)

Associate Editor: *Journal of the World Aquaculture Society*; *Frontiers in Aquatic Physiology*

Editorial Boards: Current - *Reviews in Fisheries Sciences*; *Advances in Marine Biology*; Prior - *Malacological Review*; *Journal of Aquaculture (Korea)*; *Shellfish World*; *Journal of Medical and Applied Malacology*

American Men and Women of Science

Who's Who in Science and Engineering; Who's Who of American Women; Who's Who in Medicine and Healthcare; International Who's Who of Professional and Business Women; Who's Who Among America's Teachers; Who's Who of Executives and Professionals

Conference Chair, International Pectinid Workshop (Portland, Maine) 1989

NATO Advanced Study Institute. Particle analysis in oceanography. Aquifreda, Italy. 1991.

President-elect, National Shellfisheries Association 1990-1991; President, National Shellfisheries Association 1991-1992; President-elect 2002-2003; President, 2003 - 2005

Northeast Regional Aquaculture Center, Technical/Industrial Advisory Committee 1991 - 1993

Invited participant at the Marine Phytoplankton Toxin Workshop, NMFS Southeast Fisheries Center, Charleston, South Carolina, to establish a national U.S. program on marine phycotoxins, 1992

Invited member National Sea Grant College Program (Washington, D.C.) 1991 Task Force on Harmful Algal Blooms

NATO Advanced Research Workshop. Bivalve filter feeders and marine ecosystem processes, Renesse, The Netherlands 1992

Site review panel member: NMFS, Milford Laboratory, Milford, CT, 1990 (chairman); EPA

Laboratory, Gulf Breeze, FL 1991; EPA Laboratory, Narragansett, RI, 1991

Invited Panel Member, National Panel on Assessment of Management and Mitigation of Harmful Algal Blooms; National Fish and Wildlife Foundation Harmful Algal Bloom Assessment Project 96-171 (1996).

Secretary, World Aquaculture Society 1993-1994; 1994-1995; Board of Directors 1995; Vice-President 1996-1997; Board of Directors 2012-2015

International Advisory Panel, 8th International Conference on Harmful Algal Blooms, Vigo, Spain, June 1997

Long Island Sound Study Technical Advisory Steering Committee 1996-2001

Coastal Research and Education Society of Long Island (CRESLI). Founding Member; Board of Directors 1996-1997; Vice-President 1997-2000; President 2000-2001

International Advisory Committee, 9th International Conference on Harmful Algal Blooms, Hobart, Tasmania, February 2000

Chair, National Shellfish Workshop sponsored by CRII (Cooperative Research and Information Institute), Charleston, South Carolina, 2000

Chair, Steering Committee Aquaculture 2001 (Triennial meeting of the National Shellfisheries Association, World Aquaculture Society and Fish Culture Section of the American Fisheries Society)

Conference Chair and Organizer, 3rd International Conference on Molluscan Shellfish Safety 2000

Program Chair and Steering Committee, Aquaculture 2004, the triennial meeting of the National Shellfisheries Association, World Aquaculture Society and Fish Culture Section of the American Fisheries Society. Honolulu, Hawaii

National Healthy Beaches Campaign Board of Advisors 2003 - present

New York Sea Grant Hard Clam Steering Committee (2003 - 2008)

Seafood Watch Board of Scientific Advisors (Monterey Bay Aquarium) 2003-2005

Steering Committee, National Plan for Marine Biotoxins and Harmful Algae Workshop 2005

Sea Grant Program Assessment Team (Virginia, 2004)

Program Committee Aquaculture 2006 - European Aquaculture Society/World Aquaculture Society meeting, Florence, Italy

Steering Committee and Program Chair, Aquaculture 2007, the triennial meeting of the National Shellfisheries Association, World Aquaculture Society and Fish Culture Section of the American Fisheries Society San Antonio, Texas.

Member, National HAB Committee 2006 - 2009; Chair, Education and Outreach Committee

Panel Manager, USDA-SBIR Aquaculture 2007

Conference Chair, Benthic Ecology Meeting 2008, Providence, Rhode Island

Conference Chair, National Shellfisheries Association Centennial Meeting, 2008 Providence, RI

Steering Committee Chair, Aquaculture 2010, the Triennial meeting of the National Shellfisheries Association, World Aquaculture Society and Fish Culture Section of the American Fisheries Society, San Diego, CA

Conference Chair, NOAA Shellfish and the Environment Meeting, Providence, RI, June 2008

Panel Manager, USDA-SBIR Aquaculture 2009

International Steering Committee, 14th International Conference on Harmful Algal Blooms, Crete, Greece 2010

Global Steering Committee (elected)

World Wildlife Foundation Molluscan Dialogues 2009

APEX Award for Publication Excellence - *Journal of Shellfish Research* (2008, 2009, 2010, 2011, 2012)

APEX Award for Publication Excellence - Executive Summary, Shellfish Aquaculture and the Environment (2012)

Association Trends - *Journal of Shellfish Research* - Bronze Award (2009); Silver Award (2010); Silver Award (2012)

Hermes Creative Awards Platinum Certificate - Executive Summary, Shellfish Aquaculture and the Environment (2012)

International Steering Committee, 15th International Conference on Harmful Algal Blooms, Korea, 2012

Steering Committee Member and Program Co-Chair, Aquaculture 2013, the Triennial meeting of the National Shellfisheries Association, World Aquaculture Society and Fish Culture Section of the American Fisheries Society, Nashville, TN

Aquaculture Stewardship Council Technical Advisory Group Vice-Chair (2010 - present)

Monterey Bay Aquarium Seafood Watch program Science Advisory Board (2012 - present; elected Chair)

PUBLICATIONS

1. Stickney, R.R. and S.E. Shumway - 1974. Occurrence of cellulase activity in the stomachs of fishes. *J. Fish Biol.* 6: 779-790.
2. Shumway, S.E. and R.R. Stickney - 1974. Notes on the biology and food habits of the cunner N.Y. Fish and Game J. 22: 71-79.
3. Harshbarger, J.C., S.E. Shumway and G.W. Bane. Variably differentiating oral neoplasms, ranging from epidermal papilloma to odontogenic ameloblastoma in cunners (*Tautoglabrus adspersus*) in: **Progress in Experimental Tumor Research**, Vol. 20, Neoplasms in Aquatic Animals as Indicators of Environmental Carcinogens. F. Homburger (ed.), pp.113-128 (Karger, Basel 1976).
4. Shumway, S.E. - 1977. The effects of salinity fluctuations on the osmotic pressure and Na^+ , Ca^{++} and Mg^{++} ion concentrations in the haemolymph of bivalve molluscs. *Marine Biology* 41: 153-178.
5. Shumway, S.E. - 1977. The effect of fluctuating salinity on the tissue water content of eight species of bivalve molluscs. *J. Comp. Physiol.* 116: 269-285.
6. Shumway, S.E., P.A. Gabbott and A. Youngson - 1977. The effect of fluctuating salinity on the concentrations of free amino acids and ninhydrin-positive substances in the adductor muscles of eight species of bivalve molluscs. *J. Exp. Mar. Biol. Ecol.* 29:131-150.
7. Shumway, S.E. - 1977. The effects of fluctuating salinities on four species of asteroid echinoderms. *Comp. Biochem. Physiol.* 58: 177-180.
8. Shumway, S.E. and J. Davenport - 1977. Some aspects of the physiology of *Arenicola marina* (Polychaeta) exposed to fluctuating salinities. *J. Mar. Biol. Assoc. U.K.* 57: 907-924.
9. Crisp, M., J. Davenport and S.E. Shumway - 1978. Effects of feeding and of chemical stimulation on the oxygen uptake of *Nassarius reticulatus* (Gastropoda: Prosobranchia). *J. Mar. Biol. Assoc. U.K.* 58: 869-876.
10. Shumway, S.E. - 1978. Respiration, pumping activity and heart rate in *Ciona intestinalis* L. exposed to fluctuating salinities. *Mar. Biol.* 48: 235-242.
11. Shumway, S.E. - 1978. Osmotic balance and respiration in the hermit crab *Pagurus bernhardus* exposed to fluctuating salinities. *J. Mar. Biol. Assoc. U.K.* 58: 869-876.
12. Shumway, S.E. - 1978. Activity and respiration in the anemone *Metridium senile* (L.) exposed to salinity fluctuations. *J. Exp. Mar. Biol. Ecol.* 33: 85-92.
13. Djangmah, J., S.E. Shumway and J. Davenport - 1979. The effects of fluctuating salinity on the behavior of the West African blood clam *Anadara senilis* and on the osmotic pressure and ionic concentrations of the haemolymph. *Mar. Biol.* 50: 209-213.

14. Djangmah, J., J. Davenport and S.E. Shumway - 1980. Oxygen consumption of the West African blood clam *Anadara senilis*. Mar. Biol. 56: 213-217.
15. Shumway, S.E. - 1979. The effects of changing salinities on respiration in gastropod molluscs. Comp. Biochem. Physiol. 63A: 279-283.
16. Shumway, S.E. - 1979. The effects of body size, oxygen tension and mode of life on the oxygen uptake rate of polychaetes. Comp. Biochem. Physiol. 64A: 273-278.
17. Shumway, S.E. and A. Youngson - 1979. The effect of fluctuating salinity on the physiology of *Modiolus demissus*. J. Exp. Mar. Biol. Ecol. 40: 167-181.
18. Murdoch, R. and S.E. Shumway - 1980. Oxygen consumption in six species of chitons in relation to their position on the shore. Ophelia 19: 127-144.
19. Wells, R.M.G. and S.E. Shumway - 1980. The effects of salts on haemocyanin-oxygen binding in the marine pulmonate snail *Amphibola crenata* (Martyn). J. Exp. Mar. Biol. Ecol. 43: 11-27.
20. Mackay, J. and S.E. Shumway - 1980. Factors affecting oxygen consumption in the scallop *Chlamys delicatula* (Hutton). Ophelia 19: 19-26.
21. Wells, R.M.G., P. Jarvis and S.E. Shumway - 1980. Oxygen uptake, the circulatory system and haemoglobin function in the intertidal polychaete *Terebella haplochaeta* (Ehlers). J. Exp. Mar. Biol. Ecol. 46: 255-277.
22. Shumway, S.E. - 1981. Factors affecting the oxygen consumption of the marine pulmonate *Amphibola crenata* (Martyn). Biol. Bull. 160: 332-347.
23. Haresign T.W. and S.E. Shumway - 1981. Permeability of the marsupium of the pipefish *Syngnathus fuscus* to C-14 alpha amino isobutyric acid. Comp. Biochem. Physiol. 69A: 603-604.
24. Shumway, S.E. - 1982. Oxygen consumption in brachiopods and the possible role of punctae J. Exp. Mar. Biol. Ecol. 58: 207-220.
25. Shumway, S.E. and M.B. Jones - 1981. The influence of salinity on respiration of an estuarine mud crab *Helice crassa* (Grapsidae). Comp. Biochem. Physiol. 70A: 551-553.
26. Koehn, R.K. and S.E. Shumway - 1982. A genetic/physiological explanation for differential growth rate among individuals of the American oyster, *Crassostrea virginica* (Gmelin). Mar. Biol. Lett. 3: 35-42.
27. Shumway, S.E. - 1982. Oxygen consumption in oysters: an overview. Mar. Biol. Lett. 3: 1-23.
28. Shumway, S.E. and I.D. Marsden - 1982. The combined effects of temperature, salinity and declining oxygen tension on oxygen consumption in the marine pulmonate *Amphibola crenata* (Gmelin, 1791). J. Exp. Mar. Biol. Ecol. 61: 133-146.

29. Shumway, S.E. and R.K. Koehn - 1982. Oxygen consumption in the American oyster *Crassostrea virginica*. Mar. Ecol. Prog. Ser. 9: 59-68.
30. Moreira, G.S., J.S. McNamara, S.E. Shumway, and P. Moreira - 1983. Osmoregulation and respiratory metabolism in Brazilian *Macrobrachium* (Decapoda, Palaemonidae). Comp. Biochem. Physiol. 74A: 57-62.
31. Shumway, S.E. - 1983. Oxygen consumption and salinity tolerance in four species of Brazilian crabs. Crustaceana. 44: 76-82.
32. Shumway, S.E., T.M. Scott and J.M. Shick - 1983. The effects of anoxia and hydrogen sulphide on survival, activity and metabolic rate in the coot clam, *Mulinia lateralis* (Say). J. Exp. Mar. Biol. Ecol. 71:135-146.
33. Shumway, S.E. - 1983. Factors affecting oxygen consumption in the coot clam, *Mulinia lateralis* (Say). Ophelia. 22: 143-171.
34. Shumway, S.E. and R.F.H. Freeman - 1984. Osmotic balance in a marine pulmonate *Amphibola crenata*. Mar. Behav. Physiol. 11: 157-183.
35. Shumway, S.E. and R.C. Newell - 1984. Energy resource allocation in *Mulinia lateralis* (Say), an opportunistic bivalve from shallow water sediments. Ophelia. 23: 101-118.
36. Cucci, T.L., S.E. Shumway, R.C. Newell, R. Selvin, R.R.L. Guillard and C.M. Yentsch - 1985. Flow cytometry: a new method for characterization of differential ingestion, digestion and egestion by suspension feeders. Mar. Ecol. Prog. Ser. 24: 201-204.
37. Shumway, S.E., T.L. Cucci, R.C. Newell and C.M. Yentsch - 1985. Particle selection, ingestion and adsorption in filter feeding bivalves. J. Exp. Mar. Biol. Ecol. 91: 77-92.
38. Shumway, S.E., T.L. Cucci, L. Gainey and C.M. Yentsch - 1985. A preliminary study of the behavioral and physiological effects of *Gonyaulax tamarensis* on bivalve molluscs. Pages 389-394 In: **Toxic Dinoflagellates** (Anderson, D.M., A.W. White and D.G. Baden, eds.) Elsevier, N.Y.
39. Cucci, T.L., S.E. Shumway, R.C. Newell and C.M. Yentsch - 1985. A preliminary study of the effects of *Gonyaulax tamarensis* on feeding in bivalve molluscs. Pages 395-400 In: **Toxic Dinoflagellates** (Anderson, D.M., A.W. White and D.G. Baden, eds.) Elsevier, N.Y.
40. Shumway, S.E., H.C. Perkins, D.F. Schick and A.P. Stickney - 1985. Synopsis of biological data on the pink shrimp, *Pandalus borealis* Krøyer, 1838. NOAA Technical Report. NMFS 30, 58pp.
41. Lucas, M.I., R.C. Newell, S.E. Shumway, L.J. Seiderer and R. Bally - 1987. Particle clearance and yield in relation to bacterioplankton and suspended particulate availability in estuarine and open coast populations of the mussel *Mytilus edulis*. Mar. Ecol. Prog. Ser. 36: 215-224.
42. Shumway, S.E. and T.L. Cucci - 1987. The effects of the toxic dinoflagellate *Protogonyaulax tamarensis* on the feeding and behavior of bivalve molluscs. Aquat. Toxic. 10: 9-27.
43. Shumway, S.E., D.F. Schick and R. Selvin - 1987. Food resources related to habitat in the scallop, *Placopecten magellanicus* (Gmelin, 1791): A qualitative study. J. Shellfish Res. 6: 89-95.

44. Shumway, S.E., F.C. Pierce and K. Knowlton - 1987. The effect of *Protogonyaulax tamarensis* on byssus production in *Mytilus edulis* L., *Modiolus modiolus* Linnaeus, 1758 and *Geukensia demissa* Dillwyn. Comp. Biochem. Physiol. 87: 1021-1023.
45. Shumway, S.E., J. Barter and J. Stahlnecker - 1988. Seasonal changes in oxygen consumption of the giant scallop *Placopecten magellanicus* (Gmelin). J. Shellfish Res. 7:77-82.
46. Schick, D.F., Shumway, S.E. and M.A. Hunter - 1988. A comparison of growth rate between shallow water and deep water populations of scallops *Placopecten magellanicus* (Gmelin, 1791), in the Gulf of Maine. Amer. Malacol. Bull. 6: 1-8.
47. Barber, B.J., R. Getchell, S.E. Shumway and D.F. Schick - 1988. Reduced fecundity in a deep-water population of the giant scallop, *Placopecten magellanicus* in the Gulf of Maine, USA. Mar. Ecol. Prog. Ser. 42: 207-212.
48. Shumway, S.E., D. Card, R. Getchell and C. Newell - 1988. Effects of calcium oxide (quicklime) on nontarget organisms in mussel beds. Bull. Environ. Contam. Toxicol. 40: 503-509.
49. Mason, K., S.E. Shumway and H. Hidu - 1988. Induced triploidy in the soft-shelled clam *Mya arenaria* L: Energetic implications. Mar. Biol. 98: 519-528.
50. Moreira, G.S., P.V. Ngan, P.S. Moreira and S.E. Shumway - 1988. The effect of salinity on the osmo-ionic regulation of *Macrobrachium carcinus* (Linnaeus). Comp. Biochem. Physiol. 91A: 105-108.
51. Gainey, L. and S.E. Shumway - 1988. Physiological effects of *Protogonyaulax tamarensis* on cardiac activity in bivalve molluscs. Comp. Biochem. Physiol. 91C:159-164.
52. S.E. Shumway, C. Bogdanowicz and D. Dean - 1988. Oxygen consumption and feeding rates of the sabellid polychaete, *Myxicola infundibulum* (Renier). Comp. Biochem. Physiol. 90A: 425-428.
53. Shumway, S.E., S. Sherman-Caswell and J.W. Hurst - 1988. Paralytic shellfish poisoning in Maine: Monitoring a monster. J. Shellfish Res. 7: 643-652.
54. Gainey, L.G. and S.E. Shumway - 1988. A compendium of the responses of bivalve molluscs to toxic dinoflagellates. J. Shellfish Res. 7: 623-628.
55. Beirbaum, R. and S.E. Shumway - 1988. Filtration and oxygen consumption in mussels, *Mytilus edulis*, with and without pea crabs, *Pinnotheres maculatus*. Estuaries. 11: 264-271.
56. Newell, C.R., S.E. Shumway, T.L. Cucci and R. Selvin - 1989. The effects of natural seston particle size and type on feeding rates, feeding selectivity and food resource availability for the mussel, *Mytilus edulis* Linnaeus, 1758 at bottom culture sites in Maine. J. Shellfish Res. 8:187-196.
57. Cucci, T.L., S.E. Shumway, W.S. Brown and C.R. Newell -1989. Using phytoplankton and flow cytometry to analyze grazing by marine organisms. Cytometry 10:659-669.
58. Shumway, S.E. 1990. A review of the effects of algal blooms on shellfish and aquaculture. J. World Aquaculture Society 21: 65-104.

59. Draper, C., L.E. Gainey, S.E. Shumway and L. Shapiro - 1990. Effects of *Aureococcus anophagefferens* ("Brown tide") on lateral cilia of 5 species of bivalve molluscs. Pages 128-131 In: **Toxic Marine Phytoplankton**. (Granéli, E., L. Edler and D.M. Anderson, eds.). Elsevier, New York.
60. Shumway, S.E., J. Barter and S. Sherman-Caswell - 1990. Auditing the impact of toxic algal blooms on oysters. *Environ. Auditor* 2:41-56.
61. Bass, A.E., R.E. Malouf and S.E. Shumway - 1990. Growth of northern quahogs (*Mercenaria mercenaria* (Linnaeus, 1758)) fed on picoplankton. *J. Shellfish Res.* 9:299-307.
62. Shumway, S.E., R.C. Newell, D.J. Crisp and T.L. Cucci - 1990. Particle selection in filter-feeding bivalve molluscs: A new technique on an old theme. pp. 151-165 In: **The Bivalvia**. Proceedings of a Memorial Symposium in Honour of Sir Charles Maurice Yonge, Edinburgh, 1986. (ed. B. Morton). Hong Kong University Press, Hong Kong.
63. Bricelj, M. and S.E. Shumway - 1991. Physiology: energy acquisition and utilization. Pages 305-346 In: **Scallops: Biology, Ecology and Aquaculture**. S.E. Shumway (ed). Elsevier Science Publishers. 1068pp.
64. Lesser, M.P., S.E. Shumway, T.L. Cucci, J. Barter and J. Edwards - 1991. Size-specific selection of phytoplankton by juvenile filter-feeding bivalves: comparison of the sea scallop (*Placopecten magellanicus* (Gmelin, 1791)) with *Mya arenaria* Linnaeus, 1758 and *Mytilus edulis* Linnaeus, 1758. Pages 341-346 In: Shumway, S.E. and P.A. Sandifer (eds.) **An International Compendium of Scallop Biology and Culture**. World Aquaculture Society.
65. Volckaert, F., S.E. Shumway and D.F. Schick - 1991. Biometry and population genetics of deep- and shallow-water populations of the sea scallop *Placopecten magellanicus* (Gmelin, 1791) from the Gulf of Maine. Pages 156-163 In: Shumway, S.E. (ed.) **An International Compendium of Scallop Biology and Culture**. World Aquaculture Society.
66. Gainey, L.F. and S.E. Shumway - 1991. The physiological effect of *Aureococcus anophagefferens* ("brown tide") on the lateral cilia of bivalve molluscs. *Biol. Bull.* 181:298-306.
67. Shumway, S.E. - 1992. Mussels and Public Health. Chapter 11 (pp. 511-542) In: **The Mussel, Mytilus** (Gosling, E.M. ed.). Elsevier Science Publishers B.V. Amsterdam.
68. Schick, D.F., S.E. Shumway and M. Hunter - 1992. Allometric relationships and growth in *Placopecten magellanicus*: the effects of season and depth. *Proc. Ninth Int. Malac. Congress*: 341-352.
69. Shumway, S.E. and L. Gainey - 1992. A review of the physiological effects of toxic dinoflagellates on bivalve molluscs. *Proc. Ninth Int. Malac. Congress*: 357-362.
70. Marsden, I.D. and S.E. Shumway - 1992. Effects of the toxic dinoflagellate *Alexandrium tamarense* on the greenshell mussel, *Perna canaliculus*. *N. Z. J. Mar. Fresh. Res.* 26:389-397.
71. Lesser, M.P., S.E. Shumway, T.L. Cucci and J. Smith - 1992. Impact of fouling organisms on mussel rope culture: interspecies competition for food among suspension-feeding invertebrates. *J. Exp. Mar. Biol. Ecol.* 165:91-102.

72. Foltz, D.W., S.E. Shumway and D.J. Crisp - 1993. Genetic structure and heterozygosity in the marine snail, *Littorina littorea*. Am. Malacol. Bull. 10:55-60.
73. White, A.W., S.E. Shumway and J. Nassif - 1993. Variation in levels of paralytic shellfish toxins among individual shellfish. in: Smayda, T.J. and Y. Shimizu (eds) **Toxic Phytoplankton Blooms in the Sea**. Proceedings of the Fifth International Conference on Toxic Marine Phytoplankton, Elsevier Science Publishers, Amsterdam. pp. 441-446.
74. White, A.W., J. Nassif and S.E. Shumway - 1993. Recent occurrence of paralytic shellfish toxins in offshore shellfish in the northeastern United States. in: Smayda, T.J. and Y. Shimizu (eds) **Toxic Phytoplankton Blooms in the Sea**. Proceedings of the Fifth International Conference on Toxic Marine Phytoplankton. Elsevier Science Publishers, Amsterdam. pp 435-440.
75. Grant, J., Craig W. Emerson and S.E. Shumway - 1993. Orientation, passive transport and sediment erosion features of the sea scallop (*Placopecten magellanicus*) in the benthic boundary layer. Can. J. Zool. 71: 953-959.
76. Shumway, S.E., M.J. Lesser and D.J. Crisp - 1993. Specific dynamic action demonstrated in herbivorous marine periwinkles, *Littorina littorea* L. and *Littorina obtusata* L. (Mollusca, Gastropoda). Comp. Biochem. Physiol. 106A: 391-395.
77. Shumway, S.E. and A.D. Cembella - 1993. The impact of toxic algae on scallop culture and fisheries. Reviews in Fisheries Science. 1:121-150.
78. Newell, C.R. and S.E. Shumway - 1993. Grazing of natural particulates by bivalve molluscs: a spatial and temporal perspective. pp:85-148 In: Dame, R. (ed) **Bivalve Filter Feeders in Coastal and Estuarine Ecosystem Processes**. NATO ASI Series G: Ecological Sciences, Vol. 33. Springer-Verlag. 584p.
79. Marsden, I.D. and S.E. Shumway - 1993. The effect of a toxic dinoflagellate *Alexandrium tamarense* on the oxygen uptake in bivalve molluscs. Comp. Biochem. Physiol. 106: 769-773.
80. Cembella, A.D., N.I. Lewis and S.E. Shumway - 1993. Anatomical distribution and spatio-temporal variation in paralytic shellfish toxin composition in two bivalve species from the Gulf of Maine. J. Shellfish Res. 12: 389-403.
81. Lesser, M.J. and S.E. Shumway - 1993. Effects of toxic dinoflagellates on clearance rates and survival in juvenile bivalve molluscs. J. Shellfish Res. 12:377-382.
82. Luckenbach, M.W., K.G. Sellner, S.E. Shumway, and K. Greene - 1993. Effects of two bloom-forming dinoflagellates, *Prorocentrum mariae-lebouriae* and *Gyrodinium unctenumon* on the growth and survival of the eastern oyster, *Crassostrea virginica* (Gmelin, 1791). J. Shellfish Res. 12:411-415.
83. Cembella, A.D., S.E. Shumway and R. Larocque - 1994. Sequestering and putative biotransformation of paralytic shellfish toxins by the sea scallop, *Placopecten magellanicus* (Gmelin, 1791): seasonal and spatial scales in natural populations. J. Exp. Mar. Biol. Ecol. 180: 1-22.

84. Shumway S.E., S.A. Sherman, A.D. Cembella and R. Selvin - 1994. Accumulation of paralytic shellfish toxins by Atlantic surfclams, *Spisula solidissima* (Dillwyn, 1817) from the Gulf of Maine: Seasonal changes, distribution between tissues and notes on feeding habits. *Natural Toxins* 2:236-251.
85. Cembella, A.D. and S.E. Shumway - 1994. Sequestering and biotransformation of paralytic shellfish toxins in scallops: food safety implications of harvesting wild stocks and aquaculture technology. *Proceedings of OECD Symposium on Aquatic Biotechnology and Food Safety*, Bergen, Norway, June 10-12, 1992. pp. 71-81.
86. Shumway, S.E. and M.J. Castagna - 1994. Scallop fisheries, culture and enhancement in the United States. *Proceedings of the Second Australasian Scallop Workshop. Memoirs of the Queensland Museum* 36: 283-298.
87. Shumway, S.E. and A.D. Cembella - 1994. Toxic algal blooms: potential hazards to scallop culture and fisheries. *Memoirs of the Queensland Museum* 36: 361-372.
88. Cembella, A.D. and S.E. Shumway - 1995 Anatomical and spatio-temporal variation in PSP toxin composition in natural populations of the surfclam *Spisula solidissima* in the Gulf of Maine. In: Lassus et al. (eds) **Harmful Marine Algal Blooms**. *Proceedings of the Sixth International Conference on Toxic Marine Phytoplankton*. Lavoisier Publishing, Paris. pp. 421-426.
89. Sellner, K.G., S.E. Shumway, M.W. Luckenbach and T.L. Cucci - 1995. The effects of dinoflagellate blooms on the oyster *Crassostrea virginica* in Chesapeake Bay. In: Lassus et al.(eds) **Harmful Marine Algal Blooms**. *Proceedings of the Sixth International Conference on Toxic Marine Phytoplankton*. Lavoisier Publishing, Paris. pp. 505-511.
90. Shumway, S.E. - 1995. Phycotoxin-related shellfish poisoning: bivalve molluscs are not the only vectors. *Reviews in Fisheries Science* 3:1-31.
91. Shumway, S.E., van Egmond, H., J.W. Hurst, and L.L. Bean - 1995. Management of shellfish resources. pp. 436-463 In: Hallegraeff, G.M., D.M. Anderson and A.D. Cembella (eds), *Manual on Harmful Marine Microalgae*. IOC Manuals and Guides no. 33. UNESCO.
92. Shumway S.E. - 1996. Natural Environmental Factors. Chapter 13 (pp. 467-513): In: Kennedy, V.S., R.I.E. Newell, and A.F. Eble, (eds). **The eastern oyster, *Crassostrea virginica***. Maryland Sea Grant Publication.
93. Bricelj, V.M., A.D. Cembella, D. Laby, S.E. Shumway and T.L. Cucci - 1996. Comparative physiological and behavioral responses to PSP toxins in two bivalve molluscs, the softshell clam, *Mya arenaria* and surfclam, *Spisula solidissima*. Pp. 405-408 in: *Harmful and Toxic Algal Blooms* (Yasumoto, T., Oshima, Y. and Fukuyo, Y., editors) OIC of UNESCO.
94. Shumway, S.E., T.L. Cucci, M.P. Lesser, N. Bourne and B. Bunting - 1997. Particle clearance and selection in three species of juvenile scallops. *Aquaculture International* 5: 89-99.
95. Smolowitz, R. and S.E. Shumway - 1997. Possible cytotoxic effects of the dinoflagellate, *Gyrodinium aureolum* on juvenile bivalve molluscs. *Aquaculture International* 5: 291-300.

96. Boesch, D.F., D.M. Anderson, R.A. Horner, S.E. Shumway, P.A. Tester, T.E. Whitledge - 1997. Harmful Algal Blooms in Coastal Waters: Options for Prevention, Control and Mitigation. NOAA Coastal Ocean Program Decision Analysis Series No.10. NOAA 46 pp. And appendix.
97. Davis, C., K.C. Scully and S.E. Shumway - 1997. Juvenile and yearling growth of Atlantic surfclams (*Spisula solidissima*, Dillwyn 1817) in Maine, USA. J. Shellfish Res 17:161- 168.
98. Shatkin, G., S.E. Shumway and R. Hawes - 1997. Considerations regarding the possible introduction of the Pacific oyster, *Crassostrea gigas*, to the Gulf of Maine: a review of global experience. J. Shellfish Res. 16:463-478.
99. Ward, J.E., J.S. Levinton, S.E. Shumway and T.L.Cucci - 1997. Site of particle selection in a bivalve mollusc. Nature 390: 131-132.
100. Ward, J.E., J.S. Levinton, S.E. Shumway and T.L. Cucci - 1998. Particle sorting in bivalves: In vivo determination of the pallial organs of selection. Marine Biology 131(2): 283-292.
101. Bricelj, V.M. and S.E. Shumway - 1998. A review of paralytic shellfish poisoning toxins in bivalve molluscs: occurrence and transfer kinetics. Reviews in Fisheries Science 6:315-383
102. Bricelj, V.M. and S.E. Shumway - 1998. An overview of the occurrence and transfer kinetics of paralytic shellfish toxins in bivalve molluscs. Proceedings VIII International Conference on Harmful Algae. Xunta de Galicia and Intergovernmental Oceanographic Commission of UNESCO pp 431-436.
103. Landsberg, J. H. and S.E. Shumway - 1998. Harmful algal blooms and their effects on marine and estuarine animals. Proceedings 3rd International Symposium on Aquatic Animal Health. Pp 58-63.
104. Baker, S., J.S. Levinton, J.P. Kurdziel and S.E. Shumway - 1998. Selective feeding and biodeposition by zebra mussels and their relation to changes in phytoplankton composition and seston load. Journal of Shellfish Research 17:1207-1214.
105. Algeiri, A., R. Pattison, and S.E. Shumway - 2000. A guide to the pronunciation of the scientific names of harmful algae. J. Applied Phycology 12:597-603
106. Curtis, K.M., V.L. Trainer and S.E. Shumway - 2001. Paralytic shellfish toxins in geoduck clams (*Panope abrupta*): variability, anatomical distribution, and comparison of two toxin detection methods. Journal of Shellfish Research 19:313-319
107. Grizzle, R., S.E. Shumway and V.M. Bricelj - 2001. Physiology and Bioenergetics of *Mercenaria mercenaria*. pp. 305-382 In: Kraeuter, J.N. and M. Castagna (eds) **The Hardclam, *Mercenaria mercenaria***, Elsevier Science Publishers. 751pp
108. Campbell, D.A., M.S. Kelly, M. Busman, C.J. Bolch and S.E. Shumway - 2001. Amnesic Shellfish poisoning in the king scallop, *Pecten maximus*, from the west coast of Scotland. Journal of Shellfish Research 20: 75-84

109. Matsuyama, Y., T. Uchida, T. Honjo, and S.E. Shumway - 2001. Impacts of the harmful dinoflagellate, *Heterocapsa circularisquama*, on shellfish aquaculture in Japan. *Journal of Shellfish Research* 20: 1269-1272.
110. Levinton, J.S., J.E Ward, S.E.Shumway and S.Baker - 2001. Feeding processes of bivalves: Connecting the gut to the ecosystem. P. 385-400. In: Aller, Josephine Y., Sarah A. Woodin, and Robert C. Aller (eds). *Organism-Sediment Interactions*. Belle W. Baruch Library in Marine Science no. 21. University of South Carolina Press, Columbia
111. Levinton, J.S., J.E Ward and S.E. Shumway - 2002. Feeding responses of the bivalves *Mytilus* and *Crassostrea* to fresh and aged kelp detritus. *Marine Biology* 141:367-376
112. Parsons, G. Jay, S.E. Shumway, S. Kuenstner and A. Gryska - 2002. Polyculture of sea scallops (*Placopecten magellanicus*) suspended from salmon cages. *Aquaculture International* 10: 65-77
113. Springer, J.T., S.E. Shumway J. Burkholder and H. Glasgow - 2002. Interactions between the toxic estuarine dinoflagellate *Pfiesteria piscicida* and two species of bivalve molluscs. *Marine Ecology Progress Series* 245:1-10
114. Shumway, S.E., S.M.Allen and P. Dee Boersma - 2003. Marine birds and harmful algal blooms: sporadic victims or under-reported events *Harmful Algae* 2:1-17.
115. Fernandes, M. and S.E. Shumway - 2003 Management of shellfish resources. pp. 436-463 In: Hallegraeff, G.M., D.M. Anderson and A.D. Cembella (eds), *Manual on Harmful Marine Microalgae* 2nd Edition. IOC Manuals and Guides no. 33. UNESCO.
116. Blake, N.S. and S.E. Shumway - 2006 The bay scallop and calico scallop fisheries, culture and enhancement in eastern North America. Chapter . In: Shumway, S.E. and G.J. Parsons (eds) *Scallops: Biology, Ecology and Aquaculture* 2nd Edition. Elsevier Science Publishers. pp. 945-964.
117. Ward, J.E., J.S. Levinton and S.E. Shumway - 2003. Influence of diet on pre-ingestive particle processing in bivalves. I: Transport rates on the ctenidium. *J. Exp. Mar. Biol. Ecol.* 293:129-149.
118. Shumway, S.E., D.M. Frank, L.M. Ewart and J.E. Ward 2003. Effect of yellow loess on clearance rate in seven species of benthic, filter-feeding invertebrates. *Aquaculture Research* 34: 1-12.
119. MacDonald, B., V.M. Bricelj and S.E. Shumway. 2006. Physiology. Chapter 7 in: Shumway, S.E. and G. J. Parsons, **Scallops: Biology, Ecology and Aquaculture**. 2nd Edition. Elsevier. pp 417 - 491.
120. Ward, J.E. and S.E. Shumway 2004. Separating the grain from the chaff: particle selection in suspension- and deposit-feeding bivalves. *J. Exp. Mar. Biol. Ecol.* 300: 83-130.
121. Shumway, S.E., J.M. Burkholder and J. Springer 2006. Effects of the estuarine dinoflagellate *Pfiesteria shumwayae* (Dinophyceae) on survival and grazing activity of several shellfish species. *Harmful Algae* 5:442-458

122. Leverone, J.R., N.J. Blake, R.H. Pierce and S.E. Shumway 2006. Effects of the dinoflagellate *Karenia brevis* on larval development in three species of bivalve mollusc from Florida. *Toxicon* 48: 75-84.
123. Hégaret, H., G.H. Wikfors, P. Soudant, C. Lambert, S.E. Shumway, J. Baptiste Berard and P. Lassus. 2007. Toxic dinoflagellates (*Alexandrium fundyense* and *A. catenella*) have minimal apparent effect on oyster hemocytes. *Marine Biology* 152:441- 447.
124. Hégaret, H., G. H. Wikfors and S. E. Shumway 2007. Diverse feeding responses of five species of bivalve mollusc when exposed to three species of harmful algae. *J. Shellfish Research* 26: 549-559.
125. Leverone, J.R., S.E. Shumway and N.J. Blake 2007. Comparative effect of the toxic dinoflagellate, *Karenia brevis* on clearance rates in juveniles of four bivalve molluscs from Florida, USA. *Toxicon* 49: 634-645.
126. Frank, D.M., J.E. Ward, S.E. Shumway, C. Gray and B. Holohan. 2007. Application of particle image velocimetry to the study of suspension-feeding in marine invertebrates. *Marine Behavior and Physiology* 41: 1-18.
127. Hégaret, H., S.E. Shumway, G.H. Wikfors, S. Pate and J.B. Burkholder. 2008. Potential transport of harmful algae through relocation of bivalve molluscs. *Marine Ecology Progress Series* 361:169-179.
128. Hégaret, H., G.H. Wikfors and S.E. Shumway 2008. *In vitro* interactions between several species of harmful algae and hemocytes of bivalve molluscs. Pp 356-359 In: Moestrup, Ø. Proceedings of the 12th International Conference on Harmful Algae. International society for the Study of Harmful Algae and Intergovernmental Oceanographic Commission of UNESCO, Copenhagen.
129. Hégaret, H., S.E. Shumway and G. H. Wikfors. 2008. Harmful algae can be transported via relocation of bivalve shellfish. Pp 253-255 In: Moestrup, Ø. Proceedings of the 12th International Conference on Harmful Algae. International society for the Study of Harmful Algae and Intergovernmental Oceanographic Commission of UNESCO, Copenhagen.
130. Sampson, J.C., S.E. Shumway and J.S. Weis 2008 Effects of the toxic dinoflagellate, *Alexandrium fundyense* on three species of larval fish: a food-chain approach. *J. Fish Biology* 72: 168-188
131. Frank, D.M., J.F. Hamilton, J.E. Ward and S.E. Shumway. 2007. A fiber optic sensor for high resolution measurement and continuous monitoring of valve gape in bivalve molluscs. *J. Shellfish Research* 26:575-580
132. Hégaret, H., P. Da Silva, G.H. Wikfors, C. Lambert, T. DeBettignies, S.E. Shumway and P. Soudant. 2007. Hemocyte responses of Manila clams, *Ruditapes philippinarum*, with varying parasite, *Perkinsus olseni*, severity to toxic-algal exposures. *Aquatic Toxicology* 84:469-479.
133. daSilva, P.M., H., Hégaret C. Lambert, G.H. Wikfors, S.E. Shumway and P. Soudant. 2008. Immunological responses of the Manila clam (*Ruditapes philippinarum*), with varying parasite (*Perkinsus olseni*) burden, to the harmful alga *Karenia selliformis* and possible interactions. *Toxicon* 51: 563-573.

134. May (Pate), S., J.M. Burkolder, S.E. Shumway, G.H. Wikfors and D.M. Frank 2010. Effects of the toxic dinoflagellate *Alexandrium monilatum* on survival, grazing and behavioral response of three ecologically important bivalve molluscs. *Harmful Algae* 9:281-293.
135. Hégaret, H., P.M. da Silva, I. Sunila, S.E. Shumway, M.S. Dixon, J.Alix, G.H. Wikfors and P. Soudant. 2009. Perkinsosis in the Manila clam *Ruditapes philippinarum* affects responses to the harmful-alga, *Prorocentrum minimum*. *J. Exp. Mar. Biol. Ecol.* 371: 112-120.
136. Watson, D., S.E. Shumway and R.B. Whitlatch (2009) Biofouling and the Shellfish Industry. Chapter 13, pp. 317-336 in: Shumway, S.E. and G.E. Rodrick eds. ***Shellfish Quality and Safety***. Woodhead Publishing, Cambridge, 591pp.
137. Hégaret, H, G.H. Wikfors and S.E. Shumway (2009) Biotxin contamination and shellfish safety. Chapter 2, pp. 43-80 in: Shumway, S.E. and G.E. Rodrick eds. ***Shellfish Quality and Safety***. Woodhead Publishing, Cambridge, 591pp.
138. Matsuyama, Y. and S.E. Shumway (2009) Impacts of harmful algal blooms and shellfisheries aquaculture. In: Allan and Burnell (Eds) ***Shellfish Aquaculture***. Woodhead Publishing. pp 560 - 609.
139. Espinosa, E.P., M. Perrigault, J.E. Ward, S.E. Shumway and B. Allam (2009) Lectins associated with feeding organs of the oyster *Crassostrea virginica* can mediate particle selection. *Biological Bulletin* 217:130-141.
140. Hégaret, H, R.M. Smolowitz, I. Sunila, S.E. Shumway, J. Alix, M. Dixon and G.H Wikfors. 2010. Combined effects of a parasite, QPX, and the harmful-alga, *Prorocentrum minimum* on northern quahogs, *Mercenaria mercenaria*. *Marine Environmental Research* 69:337-344.
141. Espinosa, E.P., M. Perrigault, J.E. Ward, S.E. Shumway and B. Allam. (2010) Microalgal cell surface carbohydrates as recognition sites for particle sorting in suspension-feeding bivalves. *Biol. Bull.* 218: 75-86.
142. Espinosa, E.P., D. Hassan, J. E. Ward, S. E. Shumway, and B. Allam (2010) The role of epicellular molecules in the selection of particles by the blue mussel, *Mytilus edulis*. *Biol. Bull.* 219:50-60.
143. Bullard, S.G., S.E. Shumway and C. Davis (2010) The use of aeration as a simple and environmentally sound means to prevent biofouling. *Biofouling* 26: 587-593.
144. Adams, C., S.E. Shumway, R.B. Whitlatch, T. Getchis (2011) Biofouling in marine molluscan shellfish aquaculture: a survey assessing the business and economic implications of mitigation. *J. World Aquaculture Society* 42: 242-252.
145. Marsden, I.D., S.E. Shumway and D.K. Padilla (2011) Does size matter? The effects of body size and declining oxygen tension on oxygen uptake in gastropods. *J. Marine Biological Association of the UK* 92: 1603-1618; doi:10.1017/s0025315411001512
146. Harke, M., C.J. Gobler and S.E. Shumway (2011) Suspension feeding by the Atlantic slipper limpet (*Crepidula fornicata*) and the northern quahog (*Mercenaria mercenaria*) in the presence of cultured and wild populations of the harmful brown tide alga, *Aureococcus anophagefferens*. *Harmful Algae* 10: 503-511.

147. Hégaret, H., P.M. da Silva, G.H. Wikfors, H. Haberkorn, S.E. Shumway and P. Soudant (2011). *In vitro* interactions between several species of harmful algae and haemocytes of bivalve molluscs. *Cell Biology and Toxicology* 27:249-266. Doi 10.1007/s10565-011-9186-6
148. Burkholder, J.M. and S.E. Shumway (2011) Chapter 8 in: Bivalve shellfish aquaculture and eutrophication. pp 155-216 In: Shumway, S.E. (Eds), ***Shellfish Aquaculture and the Environment***. Wiley Science Publishers, Ames City, Iowa. 508p.
149. Norkko, J. and S.E. Shumway (2011) Chapter 10 in: Bivalves as bioturbators and bioirrigators. pp. 29-318 In: Shumway, S.E. (Eds), ***Shellfish Aquaculture and the Environment***. Wiley Science Publishers, Wiley Science Publishers, Ames City, Iowa. 508p.
150. Cranford, P., J.E. Ward and S.E. Shumway (2011) Chapter 4 in: Bivalve filter feeding: variability and limits of the aquaculture biofilter. pp. 81-124 In: Shumway, S.E. (Ed), ***Shellfish Aquaculture and the Environment***. Wiley Science Publishers, Wiley Science Publishers, Ames City, Iowa. 508p.
151. Padilla, D.K. and S.E. Shumway (2011) Invasive species. pp. 395-424 In: Shumway, S.E. (Eds), ***Shellfish Aquaculture and the Environment***. Wiley Science Publishers, Wiley Science Publishers, Wiley Science Publishers, Ames City, Iowa. 508p.
152. Bouwman, A.F., M. Pawlowski, C. Liu, A.H.W. Beusen, S.E. Shumway, P. Glibert and C.C. Overbeek. (2011) Global nindcasts and future projections of coastal nitrogen and phosphorus loads due to shellfish and seaweed aquaculture. *Reviews in Fisheries Science* 19:1-27.
153. Rosa, M., B.A. Holohan, S.E. Shumway, S.G. Bullard, G.H. Wikfors, S. Morton and T. Getchis 2013. Biofouling ascidians on aquaculture gear as potential vectors of harmful algal introductions. *Harmful Algae* 23: 1-7.
154. Griffith, A., S.E. Shumway, and A.K. Volety 2013. Bioaccumulation and depuration of brevetoxins in the eastern oyster (*Crassostrea virginica*) and the northern quahog (=hard clam) *Mercenaria mercenaria*. *Toxicon* 66: 75-81.
155. Rosa, M., J.E. Ward, S.E. Shumway, G.H. Wikfors, E. Pales-Espinosa, and B. Allam 2013. Effects of particle surface properties on feeding selectivity in the eastern oyster *Crassostrea virginica* and the blue mussel, *Mytilus edulis*. In Press., *J. Exp. Mar. Biol. Ecol.*
156. Bullard, S.G, C.V. Davis and S.E. Shumway 2013. Seasonal patterns of ascidian settlement at an aquaculture facility in the Damariscotta River, Maine (USA). In Review
157. Senft-Batoh, C.D., H.G. Dam, S.E. Shumway, G.H. Wikfors, and C.D. Schlichting 2013. Effects of predator-prey evolutionary history, chemical cues and feeding selection on induction of toxin production in a marine dinoflagellate. In Review.

EDITED VOLUMES

Shumway, S.E. (editor) 1988. Toxic algal blooms: Hazards to shellfish and industry. J. Shellfish. Research. 7(4).

Shumway, S.E. (editor) 1988. A Tribute to John H. Welsh. Comp. Biochem. Physiol. 91C(I) 280 pp.

Shumway, S.E. and P.A. Sandifer (editor) 1991. **An International Compendium of Scallop Biology and Culture.** World Aquaculture Society. 357p p.

Shumway, S.E. (editor) 1991. **Scallops: Biology, Ecology and Aquaculture.** Elsevier Science Publishers. 1068pp.

Shumway, S.E. and J.N. Kraeuter (editors) 2004. **Molluscan Shellfish Research and Management: Charting a Course for the Future.** Final Proceedings from the Cooperative research and Information Institute (CRII) Workshop, Charleston, South Carolina, January 2000. 156pp.

“Taming of the Oyster” - A History of Evolving Shellfisheries and the National Shellfisheries Association. 2004. Melbourne R. Carriker. (Ed. S.E. Shumway) The Sheridan Press, Hanover, PA. 264pp.

Newell, R.C. and S.E. Shumway (editors) 2004. *Stepping Back to Look Forward.* Journal of Experimental Marine Biology and Ecology; special issue commemorating the 300th Volume

Godfrey, J. and S.E. Shumway (editors) 2005. Proceedings AAUS Diving for Science Symposium.

Shumway, S.E. and G.J. Parsons (editors) 2006. **Scallops: Biology, Ecology and Aquaculture.** Elsevier. 2nd Edition. Elsevier Science Publishers. 1500 pp

Shumway, S.E. and G. Rodrick (editors) 2009. **Shellfish Quality and Safety.** Woodhead Publishers., Cambridge. 591pp.

Shumway, S.E. (Editor) 2011 **Shellfish Aquaculture and the Environment.** Wiley-Blackwell Science Publishers, Ames, Iowa. 508p.

Wu, R., B.J. Richardson, D. Au, M. Martin, S. Fowler, D. Schlenk and S.E. Shumway 2011. Special Issue: **6th International Conference on Marine Pollution and Ecotoxicology.** Mar. Pollution Bulletin 63: 71- 582.

TECHNICAL REPORTS AND OTHER PUBLICATIONS

Shumway, S.E. and D.F. Schick - 1987. Variability of growth, meat count and reproductive capacity in *Placopecten magellanicus*: are current management policies sufficiently flexible? ICES C.M. 1987/K.2 15pp.

Shumway, S.E. - 1989. A review of the effects of algal blooms on shellfish and aquaculture. ICES C.M. 1989/E:25 50pp.

Shumway, S.E. - 1989. Toxic Algae: A serious threat to shellfish aquaculture. World Aquaculture 20:65-74

Ropes, J.W., S.E. Shumway, N. Andrade and J. Brownlow - 1990. A bibliography of the scallop, *Placopecten magellanicus*. Woods Hole Oceanographic Institute Technical Report 40pp.

Scheltema, R. and S.E. Shumway - 1990. In Memoriam - Dennis J. Crisp, C.B.E., F.R.S. J. Shellfish Res. 9:i-ix

Shumway, S.E. - 1991. Book review: Marine Invertebrate Fisheries: Their Assessment and Management. Edited by John F. Caddy. In: Fisheries 14(4):42.

Shumway, S.E. and A.D. Cembella - 1992. Toxic algal blooms: Potential hazards to scallop culture and fisheries. Bull. Aquaculture. Assoc. Canada 92:59-64.

Shumway, S.E. and D. Leonard - 1993. **Shellfish Artistry**. Walters Cookbooks, Inc., Waseca, MN. 276 pp. (Reprinted 1997, 2002)

Shumway, S.E. - 1997. Book Review: Ecology of Marine Bivalves: An ecosystem Approach by R. Dame. Transactions of the American Fisheries Society 126(4):722- 723.

Reynolds, D.P., S. Sadove and S.E. Shumway - 1998 Wild captures of sea turtles in New York: Species Composition shift examined.

Berry, K.A., M.E. Peixoto, S.S. Sadove, and S.E. Shumway - 1998. Occurrence, distribution, and abundance of green turtles, *Chelonia mydas*, in waters around Long Island, New York: 1986-1997. In: Abreu-Grobois, F.A. ed. Memoria de Resumenes 18th International Sea Turtle Symposium 3-7 March, 1999. p. 88.

Packer, D., L. Cargnelli, S. Griesbach, S.E. Shumway - 1999. Essential Fish habitat Source Document: Sea Scallop *Placopecten magellanicus* life history requirements. NOAA/NMFS Technical Memorandum NMFS NE 134. 21pp.

Leatherman, S.P., S.E. Shumway, and D.W. Christel - 1999. The Hamptons' South Shore: A history of beach changes and storm impacts. Eastern Long Island Coastal Conservation Alliance, Ltd. 26p.

Lewitus, A.J., P.A. Rublee, M.A. Mallin, and S.E. Shumway - 1999. Human Health and Environmental Impacts from *Pfiesteria*: A science-based rebuttal to Griffith (1999). Human Organization 58: 455-458.

Campbell, D.A., M.S. Kelly, C. Bolch, M. Busman, P. Moeller, S.E. Shumway (2000). ASP in the king scallop, *Pecten maximus*, from the West Coast of Scotland. Report for the Highlands Islands Enterprise, PESCA and the Highland Council, Scotland

Shumway, S.E., D.F. Schick, S.K. Naidu, J. Parsons, P. Beninger, J. Barter, J. Grant and J. Ropes - 2001. Synopsis of biological data on the giant scallop, *Placopecten magellanicus* Gmelin. NOAA Technical Report. NMFS.

Shumway, S.E., C. Davis, R. Downey, R. Karney, J. Kraeuter, J. Parsons, R. Rheault and G. Wikfors 2003. Shellfish aquaculture - In praise of sustainable economies and environments. World Aquaculture Magazine 34(4) 15-18.

Barbeque and Beverage Magazine contributor 2004 - 2006

Peer review: journal articles versus research proposals (contributor) 2004 Mar. Ecol.Prog. Ser. 277:301-309.

Bullard, S., R.B. Whitlatch, S.E. Shumway and R.W. Osman (2006) Scientists crying “foul”: sea squirts are invading Long Island Sound! *Wrack Lines* Winter 2005-2006 Vol 5 (1): 2-7.

Shumway, S.E. Scallop Farming 2nd Edition. Book Review (2007) *Aquaculture International* 15: 413- 414

Shumway, S.E. Oyster Stuffing. *Wracklines* Fall/Winter Issue 2008 Vol 8(2) p. 2

Mens Health Magazine contributor May 2010

Shumway, S.E. and E. Heupel 2010 Molluscan Diversity Playing Cards

Women’s Health Magazine December 2011

Getchis, T., M. Rosa and S.E. Shumway 2013 Sea squirts as potential vectors of harmful algal introductions. Connecticut Sea Grant Aquaculture Fact Sheet. Publication Number CTSG-12-07.

Glenn Lopez, Drew Carey, James T. Carlton, Robert Cerrato, Hans Dam, Rob DiGiovanni, Chris Elphick, Michael Frisk, Christopher Gobler, Lyndie Hice, Penny Howell, Adrian Jordaan, Senjie Lin, Sheng Liu, Darcy Lonsdale, Maryann McEnroe, Kim McKown, George McManus, Rick Orson, Bradley Peterson, Chris Pickerell, Ron Rozsa, Sandra E. Shumway, Amy Siuda, Kelly Streich, Stephanie Talmage, Gordon Taylor, Ellen Thomas, Margaret Van Patten, Jamie Vaudrey, Gary Wikfors, Charles Yarish, and Roman Zajac, 2013. Chapter 6: Biology and Ecology of Long Island Sound. In: James S. Latimer, Mark A. Tedesco, R. Lawrence Swanson, Charles Yarish, Paul E. Stacey, and Corey Garza (Editors), ***Long Island Sound: Prospects for the Urban Sea***. Springer Series on Environmental Management. In Press.

