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### Education

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Duke University, B.S. Zoology, magna cum laude, 1979

University of California, Santa Barbara, Ph.D., Aquatic and Population Biology, 1990

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### Professional Positions (post-doctorate)

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Santa Barbara City College, Visiting Professor, 1990-1991

State University of New York, Stony Brook, Marine Science Research Center, Postdoctoral Fellow, 1991-1993; Research Assistant Professor, 1993-1995

University of Connecticut, Department of Ecology and Evolutionary Biology, Assistant Professor, 1995-2001; Associate Professor, 2001-2013; Professor, 2013-present

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### Grants and Awards (post-doctorate)

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National Science Foundation. Countergradient variation: adaptation to seasonality in fishes. (D. Conover, project director; ETS, co-PI; 3 yrs., \$355,000) 1993

Hudson River Foundation. Upriver transport of larval bay anchovy in the Hudson River. (ETS, project director; R.K. Cowen and K.M.M. Lwiza, co-PIs; 2 yrs., \$ 165,163) 1995

National Science Foundation. Coupling of biological and physical processes responsible for retention of coral reef fish larvae. (R.K. Cowen, project director; K.M.M. Lwiza, ETS, co-PIs; 3 yrs., \$750,016) 1996

Anonymous Foundation. Variation in phenology: energetic influences and selective consequences in the California golden trout. (2 yrs., \$52,000) 1999

Hudson River Foundation. Transport of larval bay anchovy in the Hudson River. (ETS, project director; K.M.M. Lwiza, co-PI; 2 yrs., \$ 205,088) 1998

Hudson River Foundation. Structure and dynamics of catfish populations in the freshwaters of the Hudson River estuary. (R.M. Neumann, project director; ETS, co-PI; 2 yrs., \$ 120,806) 1998

Anonymous Foundation. Fall fattening in the fathead minnow. (2 yrs., \$ 90,704) 1999

Connecticut Sea Grant College Program. Estimating the seasonal reproductive output of female tautog (*Tautoga onitis*) in Long Island Sound. (1 yr., \$ 2506) 2000

Northeast Utilities. Estimating the seasonal reproductive output of female tautog (*Tautoga onitis*) in Long Island Sound. (2 yrs., \$ 25,000) 2000

Connecticut Department of Environmental Protection, State Wildlife Grant. Anadromous rainbow smelt in Connecticut: Assessment of populations, conservation status, and need for restoration plan. (2 yrs., \$ 128,218) 2003

Connecticut Department of Environmental Protection, State Wildlife Grant. Tomcod in Connecticut: Assessment of populations, conservation status, and need for restoration plan. (2 yrs., \$ 128,782) 2003

Connecticut Department of Environmental Protection, State Wildlife Grant. Assessment of Alewife and Blueback Herring Populations in Connecticut Coastal Streams and Connecticut River Tributaries. (2 yrs., \$ 150,835) 2003

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## External Grants and Awards (cont'd)

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- Connecticut Department of Environmental Protection, Long Island Sound Fund. Determining winter flounder spawning sites in two Connecticut estuaries. (1 yr., \$ 23,403) 2004
- Connecticut Department of Environmental Protection. Predator-prey interactions of striped bass and river herring in the Connecticut River. (3 yr., \$ 230,233) 2005
- U.S. Environmental Protection Agency. Improved valuation of ecological benefits associated with aquatic living resources: development and testing of indicator-based stated preference valuation and transfer. (R.J. Johnston, Project Director; ETS and two other co-PIs; 3 yrs., \$ 405,154) 2005
- Connecticut Department of Environmental Protection. Estimating predation on declining river herring: Tag-recapture study of striped bass in the Connecticut River. (1 yr., \$ 25,000) 2007
- Connecticut Department of Environmental Protection. Integrating fluvial geomorphology and stream ecology: Processes shaping the distribution of freshwater mussels in Connecticut. (1 yr., \$ 16,185) 2008
- Connecticut Sea Grant College Program. Estimating anadromous river herring natal stream homing rates and timing of juvenile emigration using otolith microchemistry. (J. Vokoun, Project Director; ETS and G. Whitley; 2 yr., \$ 63,962) 2008
- National Science Foundation. Planning Visit to East Africa for environmental research on Lake Victoria. (K.M.M. Lwiza, J. Aller, ETS in linked proposal; 1 yr., \$ 20,477) 2010
- Anonymous Foundation. How ion-exchange physiology adapts upon landlocking in anadromous fishes. (1 yr., \$53,080) 2011
- Fulbright Program, U.S. Department of State. The physiology, ecology, and conservation of landlocked fishes in Greece. Four-month research and teaching fellowship at Aristotle University, Greece. 2012
- Connecticut Department of Environmental Protection, Tax Checkoff Fund. Bridle Shiner Conservation Genetics: Local (Meta)Population Structure and Statewide Genetic Diversity. (J. Vokoun, Project Director; 1 yr., \$ 6,688) 2013
- Hudson River Foundation, Hudson River Fund. Zebra mussel effects on diet of early-stage fishes in the Hudson River. (ETS, project director; D. Strayer, co-PI; 2 yrs., \$ 170,170) 2013
- NOAA National Sea Grant College. Modelling alternative management for sustainable stocks of tautog. (ETS, project director; J. Vokoun, co-PI; 2 yr., \$ 129,460) 2014
- NOAA National Sea Grant College. How Public Support for Adaptation to Sea Level Rise Responds to Context of Eco-Services, Public Trust Resources, and Land Use. (Steve Swallow, PI; ETS and 3 other co-PIs; 2 yr., \$150,000) 2016
- Anonymous Foundation. Are they born ready? Migratory readiness of juvenile Alewives and predictors of adult success. (2 yr., \$144,920) 2017
- Anonymous Foundation. Evaluating Alternative Management Strategies for Mixed Recreational and Commercial Fisheries. (2 yr., \$92,604) 2017
- NOAA National Sea Grant College. Bio-economic Outcomes under Alternative Management Strategies with Human Choice and Behavior: Modeling Tautog and Anglers' Preferences. (Pengfei Liu, PI; ETS and one other co-PI; 2 yr., \$150,000) 2018
- Fondo Chileno de Investigacion Pesquera y Acuicultura. Conducta Trófica De Jurel. (Hugo Arancibia, PI; 4 co-PIs; ETS, International Advisor)
- UConn-AAUP Service Excellence Award 2018
- UConn Provost's Outstanding Service Award 2019
- Southern New England Chapter American Fisheries Society Irwin Halperin Membership Service Award 2019
- Southern New England Chapter American Fisheries Society Award of Excellence 2020

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## Professional Activities

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### **State and Federal service (selected)**

Connecticut Endangered Species Technical Advisory Committee (1996-present)

Fishery Advisory Council of Connecticut (2004-present)

Member and Subgroup Chair, NOAA Technical Expert Working Group on River Herring (2014-present)

### **Editorial service**

Associate Editor, *Copeia* (2005-2009). Handled 64 manuscripts, not counting revisions

Editorial Board, *Copeia* (2010-2013; 2018-)

### **Society service (selected)**

Chair, Endowment and Finance Committee, American Society of Ichthyologists and Herpetologists (2004, 2010). Revised investment policy, managed changes in investment managers

Board of Governors, American Society of Ichthyologists and Herpetologists (2004-2012)

Treasurer and Vice President, American Fisheries Society Southern New England Chapter (2015-2017). Prepared investment policy, managed accounts and investments, prepared membership reports

Conference Co-Organizer, Annual Meeting of American Society of Ichthyologists and Herpetologists 2010, 1000 registrants

Conference Organizer or Co-Organizer, Annual Meeting of American Fisheries Society Southern New England Chapter 2015 (65 registrants), 2017 (140 registrants, inauguration of two-day meeting format), 2019 (72 registrants), 2020 (150 registrants)

### **Society memberships (past and/or present)**

American Fisheries Society, American Institute of Fisheries Research Biologists (Fellow), American Society of Ichthyologists and Herpetologists, Ecological Society of America, Estuarine Research Foundation, Sigma Xi, Society for Integrative and Comparative Biology, Society for the Study of Evolution

### **Manuscript reviewer**

American Fisheries Society Monographs, American Naturalist, Animal Behavior, Aquaculture Nutrition, Behavioral Ecology and Sociobiology, Biological Conservation, Bioscience, Bulletin of the Southern California Academy of Sciences, Bulletin of Marine Science, CAB Reviews, Canadian Journal of Fisheries and Aquatic Sciences, Comparative Physiology and Biochemistry, *Copeia*, Coral Reefs, Ecology, Ecology of Freshwater Fish, Environmental Biology of Fishes, Estuaries and Coasts, Ethology, Evolution, Evolutionary Biology, Evolutionary Ecology Research, Fisheries Oceanography, Fishery Bulletin, Frontiers in Ecology and the Environment, Functional Ecology, Global Change Biology, Heredity, Hopkins University Press, Journal of Avian Biology, Journal of Comparative Physiology, Journal of Ecological Restoration, Journal of Evolutionary Biology, Journal of Experimental Ecology, Journal of Experimental Marine Biology and Ecology, Journal of Experimental Biology, Journal of Experimental Zoology, Journal of Fish Biology, Journal of Marine Science, Journal of Marine Systems, Journal of Morphology, Journal of North American Fisheries Management, Journal of Sea Research, Marine Biology, Marine and Coastal Fisheries, Marine Ecology Progress Series, New Zealand Journal of Marine and Freshwater Research, Northeastern Naturalist, *Oecologia*, Plos-One, Proceedings of the Royal Society London, Transactions of the American Fisheries Society

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## Professional Activities (cont'd)

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### **Grant or awards panel member**

Fulbright Greece Foundation (2017, 2018); Hudson River Foundation (2000, 2015); Maine/New Hampshire Sea Grant 1998; National Science Foundation 2011; New Jersey Sea Grant 2007; North Carolina Sea Grant 1997; Rhode Island Sea Grant 2005; University of Connecticut Fulbright Scholars (2018); University of Connecticut Research Advisory Council (2012, 2013); University of Connecticut Teaching Innovation Awards (2017, 2018)

### **Grant panel organizer**

Peer review panel for NSF proposals or preproposals in Biology, 2014-2016

Implemented process of internal ad-hoc review and panel discussion of proposals from EEB, MCB and PNB faculty

### **Grant proposal or awards reviewer**

Alberta Conservation Association Grant in Biodiversity program, Bluefish Along the Atlantic Coast Research Program, Fulbright Poland Foundation; Hudson River Foundation, Lizard Island Station, Massachusetts-Rhode Island Sea Grant, Mississippi-Alabama Sea Grant, National Estuarine Research Reserve System, National Oceanic and Atmospheric Administration, National Science Foundation, National Underwater Research Program (NOAA), Connecticut Nature Conservancy, Smithsonian Institution, University of Connecticut Research Foundation

### **Prospectus reviewer, thesis reviewer**

University of Connecticut, University of Windsor Canada, University of Sydney

### **Tenure and Promotion file reviewer**

University of Hawaii, University of Massachusetts, University of New Haven

### **University service (selected)**

Board of Directors of the Connecticut State Museum of Natural History, Member and Secretary 1995-2005

Graduate Faculty Council, Department representative 1996-2013

Environmental Sciences Degree Program, Co-director 2001-2007

Directed and implemented curriculum reform, reformed reporting process to University, expanded professional staff

Environmental Policy Advisory Council, Member 2004-2010

University Senate, Department or At-Large representative 2005-present

University and Interdepartmental Curriculum Committee, Member 2006-2016

University Senate Curricula and Courses Committee, Member 2005-present; Chair 2009-2015

As chair, managed an estimated 400 course action requests and multiple policy proposals; revised course proposal and committee procedures manual. Organized and directed the creation, testing and implementation of online course action request workflow.

STRONG-CT Steering Committee, Member 2005-2011

Program funded by NSF (Hedley Freake, project director) to support first-generation college students in STEM fields at UConn. Created name for program; mentored students

College of Liberal Arts and Sciences Courses and Curricula Committee, Department representative 2006-2009

Senate Ad Hoc Committee on Charging Graduate Tuition to Grants Chair 2008-2009

Asked by Provost to Co-Chair, then by Senate to Chair, group to consider administration proposal to charge graduate tuition to grants. Ad-hoc group recommended rejection of proposal, which was implemented and then reversed almost 10 years later

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## Professional Activities (cont'd)

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General Education Oversight Committee, Member 2009-2016, Chair 2016-present

Co-organized a task force to consider revision of General Education program; managed an estimated 100 course action requests to date, review of fifteen and funding of seven proposals to Provost Competition in Innovation of General Education, successfully applied to and participated in American Association of Colleges and Universities 2017 Summer Institute on General Education and Assessment as leader of a team of seven faculty and staff; directed review of course alignment reports from 21 academic programs; proposed revision of Senate By-Laws, Rules and Regulations on General Education, including expansion of membership on committee; directed assessment of Quantitative courses; expanded outreach to University committee by videotaping interviews and classroom sessions with recipients of General Education grants

John and Valerie Rowe Health Professions Scholars Program Steering Committee, Member 2012-2015

ΔGE Task Force on General Education, Chair 2017-present.

Reconceiving the University's General Education curriculum

### Department service (selected)

Fish Biodiversity Research Collection, Curator 1995-present

Faculty Search Committees, Member of Tenure-Track Search Committee 1996-1997, 1998-1999; Chair of Visiting Assistant Professor Search Committee 1998-1999; Chair of Tenure-Track Search Committee 2013-2014

Outstanding Student Teaching Award Committee, Chair, 1999

Promotion, Tenure and/or Merit Review Committees, Member 2004, 2007, 2008, 2013

Space allocation, Coordinator 2005-present

Department Head Advisory, Member 2005-present

BS/MS Degree in Biodiversity and Conservation Biology Program, Steering Committee 2003-2013; Coordinator 2013-present

Program has graduated almost 60 students since inception. Shepherded program proposal through process of approval at Graduate School, Board of Trustees, and Connecticut Department of Higher Education; prepared and delivered progress report for Connecticut Department of Higher Education; maintain communication with graduates; recruit students, handle applications, organize interviews

Vertebrate Biodiversity Research Collections, Director 2013-present

Coordinating activities of curators and collections manager, presently acting as collections manager pro tem; implemented databasing and online publishing of collections data; organized celebration of career of Ralph Wetzel, faculty mammalogist

Undergraduate Curriculum and Assessment Planning Committee, Member 2013-present

Committee modified EEB degree assessment plan prepared by me in 2005, then conducted curriculum mapping to identify areas needing enhancement; enhanced recruitment and retention of students in EEB major; enhanced student support through programs on careers and applying to graduate school; created a listserv on job and internship opportunities for EEB and Biology students

Ad-hoc Committee on W Courses 2016-2017

Committee prepared course proposal providing test case for new approach in writing instruction to department

### Other professional positions

Member, Millstone Ecological Advisory Council (2009-present)

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## Recent Invited and Contributed Presentations (last 8 years)

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### Invited presentations at symposia and conferences

- 2012 Respect your elders: a few more reasons why demography is important in fisheries. 10th Panhellenic Symposium of Oceanography and Fisheries, Athens, Greece (1 sole-authored contribution)  
Euryhaline fishes and the evolutionary potential of generalist strategies. Annual Meeting, Hellenic Society of Biological Sciences, Trikala Greece (1 first-authored contribution)
- 2014 River herring: towards a holistic understanding. American Fisheries Society Annual Meeting, Quebec City (3 co-authored contributions)  
38<sup>th</sup> Annual Larval Fish Conference, American Fisheries Society Annual Meeting, Quebec City (1 co-authored contribution)
- 2015 Reproductive Biology and Population Models in Fisheries: Are We Assuming Too Much?. American Fisheries Society Annual Meeting, Portland OR (1 co-authored contribution)  
Invited presentation, 38<sup>th</sup> Annual Larval Fish Conference, American Fisheries Society Annual Meeting, Quebec City (1 co-authored contribution)

### Colloquia

- 2011 Ecology and Evolutionary Biology, University of Connecticut  
2011 Biology Department, Central Connecticut State University  
2012 School of Biology, Aristotle University, Thessaloniki Greece  
2014 Hatfield Marine Science Center  
2015 Ecology and Evolution, University at Stony Brook  
2017 University of New Hampshire  
2018 Wesleyan University

### Other Presentations at Regional, National or International Conferences

- 2011-present Presenter (5), co-author (28)

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## Teaching and Advising (UConn, since 1995)

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### Undergraduate courses and mentoring

Introductory Biology (11 semesters, 50% responsibility of team-taught lab course for majors, >200 students), Fish Biology (11 semesters, advanced lab course, average >20 students), Physiological Ecology of Animals (9 semesters, advanced lecture course, >20 students); Supervised 11 Honor's Program student projects, 1 University Scholar, >200 student-semesters of independent study

### Graduate courses

54 semesters of graduate seminar (co-taught or solo-taught); 1 semester of special study in ecological statistics; 2 semesters of course in writing proposals

### Graduate advising

Major advisor to 14 M.S. and 6 Ph.D. students; associate advisor to 27 M.S. and 25 Ph.D. students

**Graduate theses and dissertations**

- Gospodarek, A. M. 1998. Temporal and spatial effects on the growth rate and distribution of larval bay anchovy (*Anchoa mitchilli*) in the Hudson River Estuary. M.S. Thesis. University of Connecticut. 77 pp.
- Martin, J. M. 2001. Larval transport in the Hudson River Estuary: broad-scale, fine-scale, and individual-based approaches. M.S. Thesis. University of Connecticut. 91 pp.
- Schaefer, J. T. 2001. Allometry of energy allocation in *Pimephales promelas* (Rafinesque) from three temperate lakes. M.S. Thesis. University of Connecticut. 154 pp.
- LaPlante, L. H. 2005. The reproductive ecology of two wrasses: a focus on reproductive variation in females. Ph.D. Dissertation. University of Connecticut. 120 pp.
- Obeysekara, P. T. 2009. Integrating Fluvial Geomorphology and Stream Ecology: Processes Shaping the Distribution of Freshwater Mussels in Connecticut. M.S. Thesis. University of Connecticut. 88 pp.
- Pereira, J.J. 2011. Habitat Use in Marine Fish: A Test of Three Current Theories. Ph.D. Dissertation. University of Connecticut. 128 pp.
- Velotta, J. P. 2014. Freshwater Transitions and the Evolution of Osmoregulation in the Alewife. Ph.D. Dissertation. University of Connecticut. 191 pp.
- Davis, J. P. 2016. Population and Trophic Dynamics of Striped Bass and Blueback Herring in the Connecticut River. Ph.D. Dissertation. University of Connecticut. 116 pp.
- Divino, J. N. 2016. Osmoregulatory Physiology and its Evolution in the Threespine Stickleback. Ph.D. Dissertation. University of Connecticut. 107 pp.

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**Publications**

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**Dissertation**

- Schultz, E.T. 1990. Why do small dwarf perch breed late? The causes and consequences of size-based differences in breeding schedule in female *Micrometrus minimus*.

**Book Chapters**

- Conover, D.O., and E.T. Schultz. 1997. Natural selection and the evolution of growth rate in the early life history: what are the trade-offs? Chap. 11, pp 305-332 *In* R.C. Chambers and E.A. Trippel [eds.], *Early Life History and Recruitment in Fish Populations*. Chapman and Hall, London
- Schultz, E.T., and M. Ludwig. 2005. The Essentials on Estuarine Fish Habitat, its Evaluation and Protection by Federal Fisheries Law. Pp 148-167 *in* G. Visgilio and D. M. Whitelaw [eds.], *Our Changing Coast: Private Rights and Public Trust*. Edward Elgar Publishing, Inc. (preprint version in [DigitalCommons@UConn](#))
- Schultz, E.T., K.M.M. Lwiza, J. Young, K.J. Hartman, R.C. Tipton. 2006. The dynamics of bay anchovy in the Hudson River estuary: process-oriented studies and long-term changes. Pp 197-213 *In* J. Waldman, K. Limburg, D. Strayer [eds.] *Hudson River fishes and their environment*. American Fisheries Society Symposium 51. (preprint version in [DigitalCommons@UConn](#))
- Johnston, R.J., E.T. Schultz, K. Segerson and E.Y. Besedin. 2011. Bioindicator-based stated preference valuation for aquatic habitat and ecosystem service restoration. Chap. 9, pp 159-186 *In* J. Bennett [ed.] *International Handbook on Non-Marketed Environmental Valuation*. Edward Elgar Publishing, Inc. Cheltenham, UK

Schultz, E.T., and S.D. McCormick. 2013. Euryhalinity in an Evolutionary Context. Chapter 10, pp 477-533. In: McCormick, S.D., A.P. Farrell, C.J. Brauner, (eds.), Euryhaline Fishes. Fish Physiology 32. Elsevier, New York. (preprint version in [DigitalCommons@UConn](#))

**Peer-reviewed Journal Articles**

Meyer, J.L., E.T. Schultz and G.S. Helfman. 1983. Fish schools: an asset to corals. Science 220: 1047-1049. ([JSTOR stable URL](#))

Helfman, G.S., and E.T. Schultz. 1984. Cultural transmission of social traditions in a coral reef fish. Animal Behaviour 32: 379-384. ([doi: 10.1016/S0003-3472\(84\)80272-9](#); also at [DigitalCommons@UConn](#))

Meyer, J.L., and E.T. Schultz. 1985a. Migrating haemulid fishes as a source of nutrients and organic matter on coral reefs. Limnology and Oceanography 30: 146-156. ([JSTOR stable URL](#))

Meyer, J.L., and E.T. Schultz. 1985b. Tissue condition and growth rate of corals associated with schooling fish. Limnology and Oceanography 30: 157-166. ([JSTOR stable URL](#))

Schultz, E.T. 1986. *Pterois volitans* and *Pterois miles*: two valid species. Copeia 1986: 686-690. ([JSTOR stable URL](#))

Schultz, E.T., and R.R. Warner. 1989. Phenotypic plasticity in life-history traits of female *Thalassoma bifasciatum* (Pisces: Labridae). 1. Manipulations of social structure in tests for adaptive shifts of life-history allocations. Evolution 43: 1497-1506. ([JSTOR stable URL](#))

Schultz, E.T. 1990. Daily otolith increments and the early life history of a viviparous fish, *Micrometrus minimus*. Copeia 1990: 59-67. ([JSTOR stable URL](#))

Schultz, E.T. 1991. The effect of energy reserves on breeding schedule: Is there a saturation point? Functional Ecology 5: 819-824. ([JSTOR stable URL](#))

Schultz, E.T., L.M. Clifton and R.R. Warner. 1991. Energetic constraints and size-based tactics: The adaptive significance of breeding-schedule variation in a marine fish (Embiotocidae: *Micrometrus minimus*). American Naturalist 138: 1408-1430. ([JSTOR stable URL](#))

Schultz, E.T., and R.R. Warner. 1991. Phenotypic plasticity in life-history traits of female *Thalassoma bifasciatum* (Pisces: Labridae). 2. Correlation of fecundity and growth rate in comparative studies. Environmental Biology of Fishes 30: 333-344. ([doi: 10.1007/BF02028849](#))

Warner, R.R. and E.T. Schultz. 1992. Sexual selection and male characteristics in the bluehead wrasse, *Thalassoma bifasciatum*: mating site acquisition, mating site defense, and female choice. Evolution 46: 1421-1442. ([JSTOR stable URL](#))

Schultz, E.T. 1993. Sexual size dimorphism at birth in *Micrometrus minimus* (Embiotocidae): a prenatal cost of reproduction. Copeia 1993: 456-463. ([JSTOR stable URL](#))

Schultz, E.T. 1993. The effect of birth date on fitness of female dwarf perch, *Micrometrus minimus* (Perciformes: Embiotocidae). Evolution 47: 520-539. ([JSTOR stable URL](#))

Schultz, E.T. and R.K. Cowen. 1994. Recruitment of coral reef fishes to Bermuda: Local retention or long-distance transport? Mar. Ecol. Prog. Ser. 109: 15-28. ([DigitalCommons@UConn](#))

Conover, D.O., and E.T. Schultz. 1995. Phenotypic similarity and the evolutionary significance of countergradient variation. Trends Ecol. Evol. 10:248-252. ([Science Direct](#))

Schultz, E.T., K.E. Reynolds, and D.O. Conover. 1996. Countergradient variation in growth rate among newly-hatched *Fundulus heteroclitus*: geographic differences revealed by common-environment experiments. Functional Ecology 10: 366-374. ([JSTOR stable URL](#))

Schultz, E.T., and D.O. Conover. 1997. Latitudinal differences in somatic energy storage: adaptive responses to seasonality in an estuarine fish (Atherinidae: *Menidia menidia*). Oecologia 109: 516-529. ([JSTOR stable URL](#))

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## Publications (cont'd)

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- Schultz, E.T., and D.O. Conover. 1997. Latitudinal differences in somatic energy storage: adaptive responses to seasonality in an estuarine fish (Atherinidae: *Menidia menidia*). *Oecologia* 109: 516-529. ([JSTOR stable URL](#))
- Schultz, E.T., D.O. Conover, and A. Ehtisham. 1998. The dead of winter: size-dependent variation and genetic differences in seasonal mortality among Atlantic silversides (Atherinidae: *Menidia menidia*) from different latitudes. *Canadian Journal of Fisheries and Aquatic Sciences* 55: 1149-1157. ([doi: 10.1139/f97-320](#)).
- Schultz E.T., D.O. Conover. 1999. The allometry of energy reserve depletion: test of a mechanism for size dependent winter mortality. *Oecologia* 119: 474-483. ([JSTOR stable URL](#))
- Billerbeck, J., E. Schultz, and D. Conover. 2000. Adaptive variation in energy acquisition and allocation among latitudinal populations of the Atlantic silverside. *Oecologia* 122:210-219. ([JSTOR stable URL](#))
- Hurst, T., E.T. Schultz, and D.O. Conover. 2000. Seasonal energy dynamics of young-of-the year striped bass (*Morone saxatilis*) and the role of starvation in winter mortality. *Transactions of the American Fisheries Society* 129: 145-157. ([doi: 10.1577/1548-8659\(2000\)129<0145:SEDOYO>2.0.CO;2](#)).
- Jordan, R.C., A.M. Gospodarek, E.T. Schultz, R.K. Cowen, and K. Lwiza. 2000. Spatial and temporal growth rate variation of bay anchovy (*Anchoa mitchilli*) larvae in the mid Hudson River estuary. *Estuaries* 23:683-689. ([JSTOR stable URL](#))
- Leamon, J.H., J.F. Crivello, and E.T. Schultz. 2000. Variation among four health indices in natural populations of the estuarine fish, *Fundulus heteroclitus*, from five geographically proximate estuaries. *Environmental Biology of Fishes* 57:451-458 ([doi: 10.1023/A:1007622822837](#)).
- Schultz, E.T., R.K. Cowen, K.M.M. Lwiza, and A.M. Gospodarek. 2000. Explaining advection: do larval bay anchovy (*Anchoa mitchilli*) show selective tidal stream transport? *ICES Journal of Marine Science* 57: 360-371 (available from publisher <http://icesjms.oxfordjournals.org/cgi/reprint/57/2/360>).
- Schultz, E.T., and P.C. Rountos. 2001. Analysis of daily growth patterns in young-of-year male dwarf surfperch (Embiotocidae: *Micrometrus minimus*) reveals alternative strategies: breed after birth or grow. *Copeia* 2001: 14-24. ([JSTOR stable URL](#))
- Schultz, E.T., T.E. Lankford, and D.O. Conover. 2002. The covariance of routine and compensatory juvenile growth rates over a seasonality gradient in a coastal fish. *Oecologia* 133: 501-509. ([JSTOR stable URL](#))
- Schultz, E.T., K.M.M. Lwiza, M.C. Fencil, and J.M. Martin. 2003. Mechanisms promoting upriver transport of larvae of two fishes in the Hudson River Estuary (USA). *Marine Ecology Progress Series* 251:263-277. ([doi: 10.3354/meps251263](#); also at [DigitalCommons@UConn](#))
- Jordan S.M., R.M. Neumann, and E.T. Schultz. 2004. Distribution, habitat use, growth, and condition of a native and introduced catfish species in the Hudson River Estuary. *Journal of Freshwater Ecology* 19: 59-67.
- Schultz, E.T., J. Young, J.M. Martin and K.M.M. Lwiza. 2005. Tracking cohorts: analysis of migration in the early life stages of an estuarine fish. *Estuaries* 28: 394-405. ([JSTOR stable URL](#))
- Reznick, D.N., Schultz E.T., Morey, S., Roff, D. 2006. On the virtue of being the first born: the influence of date of birth on fitness in the mosquitofish, *Gambusia affinis*. *Oikos* 114: 135-147. ([doi: 10.1111/j.2006.0030-1299.14446.x](#))
- Schultz, E.T., M. Topper, D.C. Heins. 2006. Decreased reproductive investment of female threespine stickleback *Gasterosteus aculeatus* infected with the cestode *Schistocephalus solidus*: parasite adaptation, host adaptation, or side effect? *Oikos* 114: 303-310. ([DigitalCommons@UConn](#))

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## Publications (cont'd)

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- LaPlante, L. H. and E. T. Schultz. 2007. Annual fecundity of tautog in Long Island Sound: Size effects and long-term changes in a harvested population. *Transactions of the American Fisheries Society* 136: 1520–1533. ([DigitalCommons@UConn](#))
- Schultz, E.T. 2008. A sex difference in seasonal timing of birth in a livebearing fish. *Copeia* 2008: 674–680. ([DigitalCommons@UConn](#))
- Davis, J.P. and E.T. Schultz. 2009. Temporal shifts in demography and life history of an anadromous alewife population in Connecticut. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 1: 90–106. ([DigitalCommons@UConn](#))
- Gahagan, B.I., K.E. Gherard and E.T. Schultz. 2010. Environmental and endogenous factors influencing emigration in juvenile anadromous alewives. *Transactions of the American Fisheries Society* 139: 1069–1082. ([DigitalCommons@UConn](#))
- Johnston, R.J., K. Segerson, E.T. Schultz, E.Y. Besedin and M. Ramachandran. 2011. Indices of biotic integrity in stated preference valuation of aquatic ecosystem services. *Ecological Economics* 70: 1946–1956. ([doi: 10.1016/j.ecolecon.2011.06.018](#))
- McManus, H.A., L.A. Lewis and E.T. Schultz. 2011. Distinguishing multiple lineages of *Pediastrum duplex* Meyen 1829 with morphometrics and a proposal for *Lacunastrum* gen. nov. *Journal of Phycology* 47: 123–130. ([doi: 10.1111/j.1529-8817.2010.00941.x](#))
- Christensen A.K., J. Hiroi, E.T. Schultz, and S.D. McCormick. 2012. Branchial ionocyte organization and ion transport protein expression in juvenile alewives acclimated to freshwater or seawater. *Journal of Experimental Biology* 215: 642–652. ([doi: 10.1242/jeb.063057](#))
- Davis, J.P., E.T. Schultz and J.C. Vokoun. 2012. Striped bass consumption of blueback herring during vernal riverine migrations: does relaxing harvest restrictions on a predator help conserve a prey species of concern? *Marine and Coastal Fisheries* 4:239–251. ([doi: 10.1080/19425120.2012.675972](#))
- Gahagan, B.I., J.C. Vokoun, G. Whitley, and E.T. Schultz. 2012. Evaluation of Otolith Microchemistry for Estimating Natal Origin of Anadromous River Herring in Connecticut. *Marine and Coastal Fisheries* 4:358–372. ([doi: 10.1080/19425120.2012.675967](#))
- Johnston, R.J., E.T. Schultz, K. Segerson, E.Y. Besedin and M. Ramachandran. 2012. Enhancing the content validity of stated preference valuation: the structure and function of ecological indicators. *Land Economics* 88: 102–120. ([journal website link](#))
- Pereira, J. J., E. T. Schultz, and P.J. Auster. 2012. Geospatial analysis of habitat use in yellowtail flounder *Limanda ferrugina* on Georges Bank. *Marine Ecology Progress Series* 468: 279–290. ([doi: 10.3354/meps10035](#))
- Schultz, E.T., Johnston, R.J., K. Segerson, E.Y. Besedin. 2012. Integrating Ecology and Economics for Restoration: Using Ecological Indicators in Valuation of Ecosystem Services. *Restoration Ecology* 20: 304–310, 1 supplementary table. ([doi: 10.1111/j.1526-100X.2011.00854.x](#); pre-publication version [DigitalCommons@UConn](#))
- Johnston, R.J., E.T. Schultz, K. Segerson, E.Y. Besedin and M. Ramachandran. 2013. Stated preferences for intermediate versus final ecosystem services: disentangling willingness to pay for omitted outcomes. *Agricultural and Resource Economics Review* 42 (special issue on ecosystem services): 98–118. ([purl.umn.edu/148403](#)) *2013 ARER Article of the Year*
- Zhao, M., R.J. Johnston, and E.T. Schultz. 2013. What to Value and How? Ecological Indicator Choices in Stated Preference Valuation. *Environmental and Resource Economics* 56: 3–25. ([doi: 10.1007/s10640-013-9636-0](#))

---

## Publications (cont'd)

---

- Michalak, K., S. Czesny, J. Epifanio, R. J. Snyder, E. T. Schultz, J. P. Velotta, S. D. McCormick, B. L. Brown, G. Santopietro, and P. Michalak. 2014. Beta-thymosin gene polymorphism associated with freshwater invasiveness of alewife (*Alosa pseudoharengus*). *Journal of Experimental Zoology Part A: Ecological Genetics and Physiology* 321 (4): 233–240. (doi: 10.1002/jez.1854)
- Pereira, J. J., E. T. Schultz, and P. J. Auster. 2014. Geospatial Analysis of Habitat Use by Silver Hake (*Merluccius bilinearis*) in the Gulf of Maine. *Endangered Species Research* 23:219–227. (doi: 10.3354/esr00576)
- Velotta, J., E. T. Schultz, S. D. McCormick, and R. J. O'Neill. 2014. Relaxed selection causes microevolution of seawater osmoregulation and gene expression in landlocked Alewives. *Oecologia* 175(4): 1081–1092. (doi: 10.1007/s00442-014-2961-3)
- Ganias, K., J.N. Divino, K.E. Gherard, J.P. Davis, F. Mouchlianitis and E.T. Schultz. 2015. A reappraisal of reproduction in anadromous Alewives: Determinate versus indeterminate fecundity, batch size and batch number. *Transactions of the American Fisheries Society* 144:1143–1158. (doi: 10.1080/00028487.2015.1073620)
- Velotta, J. P., S. D. McCormick, and E. T. Schultz. 2015. Trade-offs in osmoregulation and parallel shifts in molecular function follow ecological transitions to freshwater in the Alewife. *Evolution* 69:2676–2688. (doi: 10.1111/evo.12774)
- Divino, J. N., M. Y. Monette, S. D. McCormick, P. H. Yancey, K. G. Flannery, M. A. Bell, J. L. Rollins, F. A. von Hippel, and E. T. Schultz. 2016. Osmoregulatory physiology and rapid evolution of salinity tolerance in recently lake-introduced Threespine Stickleback. *Evolutionary Ecology Research* 17: 179–201. (<http://evolutionary-ecology.com/abstracts/v17/2982.html>)
- Howell, P. T., J. J. Pereira, E. T. Schultz, and P. J. Auster. 2016. Habitat use in a depleted population of Winter Flounder *Pseudopleuronectes americanus*: Insights into impediments to population recovery. *Transactions of the American Fisheries Society* 145(6): 1208–1222. (doi: 10.1080/00028487.2016.1218366)
- Johnston, R. J., E. T. Schultz, K. Segerson, E. Y. Besedin and M. Ramachandran. 2016. Biophysical causality and environmental preference elicitation: Evaluating the validity of welfare analysis over intermediate outcomes. *American Journal of Agricultural Economics* 99(1): 163–185 (doi: 10.1093/ajae/aaw073)
- Smircich, M. G., D. L. Strayer, and E. T. Schultz. 2017. Zebra mussel (*Dreissena polymorpha*) affects the feeding ecology of early stage striped bass (*Morone saxatilis*) in the Hudson River estuary. *Environmental Biology of Fishes* 100(4): 395–406. (doi: 10.1007/s10641-016-0555-0, also available in [DigitalCommons@UConn](#))
- Velotta, J., J. Wegrzyn, S. Ginzburg, L. Kang, S. Czesny, R. J. O'Neill, S. D. McCormick, P. Michalak, and E.T. Schultz. 2017. Genomic imprints of adaptation to freshwater: parallel evolution of osmoregulatory gene expression in the Alewife. *Molecular Ecology* 26: 831–848. (doi: 10.1111/mec.13983)
- Velotta, J. P., S. D. McCormick, A. W. Jones, and E. T. Schultz. 2018. Reduced swimming performance repeatedly evolves upon loss of migration in landlocked populations of Alewife. *Physiological and Biochemical Zoology* 91: 814–825. (<http://www.journals.uchicago.edu/doi/full/10.1086/696877>)
- Herrick, S. Z., Wells, K. D., Farkas, T. E., Schultz, E. T. 2018. Noisy neighbors: acoustic interference and vocal interactions between two syntopic species of ranid frogs, *Rana clamitans* and *R. catesbeiana*. *Journal of Herpetology* 52: 176–184. (doi: 10.1670/17-049)  
*Recipient of Kennedy Student Award from Society for the Study of Amphibians and Reptiles*

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## Publications (cont'd)

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- Klarian, S. A., B. E. Molina, A. Saavedra, P. Galvez, R. Melendez, and E. T. Schultz. 2018. New insights on feeding habits of the southern blue whiting *Micromesistius australis* in eastern south Pacific waters *Journal of Applied Ichthyology*. 34:694–697. ([doi: 10.1111/jai.13598](https://doi.org/10.1111/jai.13598))
- Pregler, K. C., N. Hagstrom, E. T. Schultz, and J. Vokoun. 2019. Landscape factors predict local extirpation in an imperilled minnow species, the bridle shiner (*Notropis bifrenatus*). *Aquatic Conservation: Marine and Freshwater Ecosystems*. 29:1227–1237 ([doi: 10.1670/17-049](https://doi.org/10.1670/17-049))
- Schultz, E. T., M. G. Smircich, and D. L. Strayer. 2019. Changes over three decades in feeding success of young American Shad *Alosa sapidissima* are influenced by invading zebra mussels *Dreissena polymorpha*. *Marine Ecology Progress Series* 628: 141–153. ([doi: meps13114](https://doi.org/10.1007/s12237-019-0114-4))
- Kasper JM, Brust J, Caskenette A, McNamee J, Vokoun JC, Schultz ET. Accepted. Using harvest slot limits to promote stock recovery and broaden age structure in marine recreational fisheries: A case study. *North American Journal of Fisheries Management*. 29 text pp, 8 tables, 7 figures. ([http://digitalcommons.uconn.edu/eeb\\_articles/48](http://digitalcommons.uconn.edu/eeb_articles/48))

### Technical Reports

- LaPlante, L.H. and E.T. Schultz. 2002. Estimating the annual fecundity of tautog (*Tautoga onitis*) in Long Island Sound. Final report submitted to Northeast Utilities Dominion Power Station.
- Fried, H. and E.T. Schultz. 2006a. Tomcod in Connecticut: Assessment of populations, conservation status, and need for restoration plan. Final report submitted to Connecticut Department of Environmental Protection. 5 pp summary + 289 pp. ([http://digitalcommons.uconn.edu/eeb\\_articles/18](http://digitalcommons.uconn.edu/eeb_articles/18))
- Fried, H. and E.T. Schultz. 2006b. Anadromous rainbow smelt in Connecticut: Assessment of populations, conservation status, and need for restoration plan. Final report submitted to Connecticut Department of Environmental Protection 5 pp summary + 289 pp. (body of report combined with Fried and Schultz 2006a; [http://digitalcommons.uconn.edu/eeb\\_articles/18](http://digitalcommons.uconn.edu/eeb_articles/18)).
- Davis, J.P. and E.T. Schultz. 2006. Assessment of Anadromous Alewife and Blueback Herring Populations in Connecticut Coastal Streams and Connecticut River Tributaries. Final report submitted to Connecticut Department of Environmental Protection. 111 pp. ([http://digitalcommons.uconn.edu/eeb\\_articles/20](http://digitalcommons.uconn.edu/eeb_articles/20))
- Schultz, E.T., J.J. Pereira, and P.J. Auster. 2007. Determining Winter flounder Spawning Sites in Two Connecticut Estuaries. Final Report submitted to Connecticut Department of Environmental Protection. 29 text pp, 5 tables, 22 figures. ([http://digitalcommons.uconn.edu/eeb\\_articles/19](http://digitalcommons.uconn.edu/eeb_articles/19))
- Davis, Justin, Eric Schultz, and Jason Vokoun. 2009. Assessment of River Herring and Striped Bass in the Connecticut River: Abundance, Population Structure, and Predator/Prey Interactions. Final Report submitted to Connecticut Department of Environmental Protection. 29 text pp., 46 tables, 52 figures. ([http://digitalcommons.uconn.edu/eeb\\_articles/26](http://digitalcommons.uconn.edu/eeb_articles/26))
- Davis, Justin, Eric Schultz, and Jason Vokoun. 2009. Estimating predation on declining river herring: Tag-recapture study of striped bass in the Connecticut River. Final Report submitted to Connecticut Department of Environmental Protection. 17 text pp., 6 tables, 3 figures, 2 appendices. ([http://digitalcommons.uconn.edu/eeb\\_articles/21](http://digitalcommons.uconn.edu/eeb_articles/21))
- Johnston, R.J., E.T. Schultz, K. Segerson and E.Y. Besedin. 2009. Improving the Ecological Validity of Non-Market Valuation: Development and Application of Bioindicator-Based Stated Preference Valuation for Aquatic Restoration. [GPMI Working Paper No. 2009-06](#), July. George Perkins Marsh Institute, Clark University.

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## Publications (cont'd)

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- Obeyssekara, Piyumi T., Eric Schultz, Melinda Daniels, and Jason Vokoun. 2009. Integrating Fluvial Geomorphology and Stream Ecology: Processes Shaping the Distribution of Freshwater Mussels in Connecticut. Final Report submitted to Connecticut Department of Environmental Protection. 31 text pp., 14 tables, 6 figures.  
([http://digitalcommons.uconn.edu/eeb\\_articles/36](http://digitalcommons.uconn.edu/eeb_articles/36))
- Divino, J. N., and E. T. Schultz. 2014. Juvenile Threespine Stickleback Husbandry: Standard Operating Procedures of the Schultz Lab. University of Connecticut, Storrs CT. 47 pp.  
[http://www.fishlab.eeb.uconn.edu/wp-content/uploads/sites/116/2014/07/CompleteSTBKhandbook\\_31jul.pdf](http://www.fishlab.eeb.uconn.edu/wp-content/uploads/sites/116/2014/07/CompleteSTBKhandbook_31jul.pdf)
- Atlantic States Marine Fisheries Commission. 2016. 2016 Tautog Stock Assessment Update. Prepared by the Tautog Technical Committee and Stock Assessment Subcommittee and the Tautog Regional Stock Assessment Working Group (Kasper, J., E. Schultz and others). Arlington VA. 9+134 pp.  
[http://www.asmfc.org/uploads/file/589e1d3f2016TautogAssessmentUpdate\\_Oct2016.pdf](http://www.asmfc.org/uploads/file/589e1d3f2016TautogAssessmentUpdate_Oct2016.pdf)
- Atlantic States Marine Fisheries Commission. 2016. Tautog regional stock assessment: Long Island Sound and New Jersey-New York Bight. Prepared by the Tautog Regional Stock Assessment Working Group (Kasper, J., E. Schultz and others). 5+135 pp. In: Tautog Regional Stock Assessment and Desk Review Report. Arlington VA.  
[http://www.asmfc.org/uploads/file/58caf4502016TautogLIS\\_NJNYB\\_Assessment\\_DeskReviewReport\\_Final.pdf](http://www.asmfc.org/uploads/file/58caf4502016TautogLIS_NJNYB_Assessment_DeskReviewReport_Final.pdf)
- Schultz ET, Chen Z, Liu P, Swallow SK, Kasper JM (2020) Bio-economic outcomes under alternative management strategies with human choice and behavior: Modeling Tautog and anglers' preferences. Report of survey and preliminary analysis of results, April 2020. University of Connecticut, Storrs CT. [https://opencommons.uconn.edu/eeb\\_articles/47/](https://opencommons.uconn.edu/eeb_articles/47/)

### Magazine Articles

- Schultz, Eric, Jason Vokoun, Jason McNamee, and Jacob Kasper. 2016. Throw the big ones back! Wrack Lines, The official magazine of the Connecticut Sea Grant College Program, Fall/Winter 2016: 5-7.

### Book Reviews

- Schultz, E.T. 2001. Review of Smith-Vaniz, W.F., B.B. Collette, and B.E. Luckhurst. 1999. Fishes of Bermuda: History, Zoogeography, Annotated Checklist, and Identification Keys. American Society of Ichthyologists and Herpetologists Special Publication 14. *Quarterly Review of Biology* 76: 90.
- Schultz, E.T. 2002. Review of McNab, B. K. 2002. *The Physiological Ecology of Vertebrates*. Cornell U. Press. 576 pp. *Copeia* 2002: 1170–1171.
- Schultz, E.T. 2010. Review of Finn, R. N., and B. G. Kapoor, editors. 2008. *Fish Larval Physiology*. Science Publishers, Enfield, NH. *Quarterly Review of Biology* 85: 118-119.
- Schultz, E. T. 2015. Review of Riesch, R., M. Tobler, and M. Plath, editors. 2015. *Extremophile Fishes: Ecology, Evolution, and Physiology of Teleosts in Extreme Environments*. Cham (Switzerland) and Springer (New York). *Quarterly Review of Biology* 90: 450-451.