

Curriculum Vitae

David Kiernan Skelly

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N.B. - Prior to 2020, the Yale School of the Environment was named the Yale School of Forestry & Environmental Studies

Education

1983 - 1987 A. B., Biology, Middlebury College, Vermont, *cum laude*
1987 - 1992 Ph.D., Department of Biology, University of Michigan, Ann Arbor

Professional Positions

1992 - 1993 Postdoctoral Research Fellow, University of Wollongong, Australia
1993 - 1995 NSF Postdoctoral Fellow, Dept. of Zoology, University of Washington
1996 -
 1996 – 2000 Assistant Professor of Ecology
 2000 – 2003 Associate Professor of Ecology
 2003 – 2015 Professor of Ecology
 2009 – 2014 Associate Dean for Research
 2015 – Frank R. Oastler Professor of Ecology
1998 - Adjunct Prof., Dept of Ecology & Evolutionary Biology, Yale University
2000 - Curator, Division of Vertebrate Zoology, Peabody Museum of Natural History, Yale University
2001 Visiting Associate Professor, Dept. of Biology, Penn State University
2003 – 2004 Visiting Scholar, School of Biological Sci, Univ. of Queensland, Australia
2004 – 2006 Director, Doctoral Program in Organismal and Integrative Biology, Yale University
2005 – 2009 Chair, Masters Admissions, School of the Environment, Yale University
2009 – 2014 Director of Doctoral Studies, School of the Environment, Yale University
2013 – Consulting Faculty, Yale National University of Singapore College
2014 – Director, Yale Peabody Museum of Natural History (Appt. renewed 2019)

Fellowships and Honors

1987 Honors, Undergraduate Thesis, Middlebury College
1990 - 1991 Rackham Predoctoral Fellowship, University of Michigan
1992 Rackham Dissertation Fellowship, University of Michigan
1997, 2001, Award for Teaching Excellence, Yale School of the Environment

- 2003, 2006
 2003 – 2004 Guggenheim Fellowship, John Simon Guggenheim Foundation
 2004 – Senior Research Fellowship, The MacMillan Center for International and Area Studies, Yale University
 2011 Fellow, American Association for the Advancement of Science
 2016 Fellow, Royal Canadian Geographical Society

Teaching Experience

- 1987 - 1991 Teaching Assistant, Department of Biology, University of Michigan
 Introductory Biology, General Ecology, Herpetology
 1995 Instructor, Biodiversity and Conservation Biology, Bureau of Land Management Training Course on Threatened and Endangered Species, Roseburg, Oregon

 1996 - Assistant/Associate/Full Professor, Yale University
 1996 – 2017 Aquatic Ecology, Conservation Biology, Landscape Ecology, Habitat Conservation Planning, Hydro-ecology, Graduate Seminar in Ecology, Doctoral Seminar: G. Evelyn Hutchinson, Ecology and the Earth System,
 2018 – First Year Seminar: Collections of the Peabody Museum
 2020 Regenerative Building: Research and Design Seminar

Other Professional Experience

- 1994 Consultant, Sierra Club Legal Defense Fund, Portland, Oregon.
 1994 – 1995 Consultant, Association of Forest Service Employees for Environmental Ethics, Portland, Oregon.
 1997 - 1998 Member, Working Group on Habitat Conservation Plans, National Center for Ecological Analysis and Synthesis, Santa Barbara, California.
 1997 - 2000 Member, Biodiversity Forum, Connecticut Chapter of The Nature Conservancy.
 1999 Consultant, National Park Service/Environmental Protection Agency, Mid Continent Ecology Lab, Duluth, Minnesota.
 2002, 2003 Panelist, Ecology Program, Doctoral Dissertation Improvement Grants, Division of Environmental Biology, National Science Foundation.
 2002 - Endangered Species Advisory Committee, Department of Environmental Protection, State of Connecticut.
 2002 – 2007 Director of Postdoctoral Studies, School of the Environment, Yale University
 2003 - 2009 Editorial Board, Ecology/Ecological Monographs, Ecological Society of America
 2003 Science Advisory Panelist, U.S. Environmental Protection Agency.
 Review of Atrazine effects on Amphibians
 2005 National Ecological Observatory Network (NEON) Design Consortium, Science and Human Dimensions Committee
 2005 Panelist, Ecological Biology, Division of Environmental Biology, National Science Foundation
 2005 - 2014 Board Member, Madison Land Conservation Trust, Madison, Connecticut

- 2007 Faculty Leader, Association of Yale Alumni Trip, New Zealand
- 2007 Panelist, Ecological Biology, Division of Environmental Biology, National Science Foundation
- 2007 Science Advisory Panelist, U.S. Environmental Protection Agency. Review of Atrazine effects on Amphibians
- 2009 Faculty Leader, Association of Yale Alumni Trip, Mexico
- 2009 - 2017 Board of Directors, Connecticut Trust for Public Land (Chair 2014-17)
- 2011 – Judge, Life Sciences Panel, Blavatnik Awards for Young Scientists, NY Academy of Sciences
- 2012 Panelist, Ecology Program, Division of Environmental Biology, National Science Foundation.
- 2012 – 2013 Chair, Env'tl. Studies Search Committee, Yale-NUS College, Singapore
- 2012 – 2017 Advisory Comm., NatureNet Program, The Nature Conservancy
- 2013 Chair, External Visiting Comm, Env'tl Studies Dept, UC Santa Cruz
- 2013 External Visiting Comm, EEB Program, Dartmouth College
- 2013 – 2017 Chair, Advisory Board, Connecticut Trust for Public Land
- 2013 – 2016 Mercer Award Subcommittee, Ecological Society of America
- 2014 External Visiting Comm., Env'tl Studies, Middlebury College
- 2015 – 2018 E. O. Wilson Award Committee, American Society of Naturalists
- 2015 External Review Panel, Common Curriculum, Yale-NUS College
- 2017 – Advisory Board, The Nature Conservancy Connecticut Chapter
- 2017 Reader, John Simon Guggenheim Foundation
- 2017 – 2018 University Science Strategy Committee, Yale University
- 2018 – 2020 University Research Council, Yale University
- 2019 Chair, External Review Committee, Dept of Biology, Middlebury College
- 2020 External Review Committee, Dept of Ecology & Evol Biol., Cornell Univ.
- 2021 External Review Committee, Natural Reserve System, UC Santa Barbara
- 2023 External Review Comm., Dept. of Bio., Georgetown Univ. (scheduled)

Selected Grants

- 1992 – 1993 Australian Flora and Fauna Research Program, University of Wollongong. \$AU 40,785
- 1993 – 1995 National Science Foundation Postdoctoral Fellowship in Environmental Biology. \$69,600
- 1997 – 2000 NSF/EPA Water and Watersheds Program: Connecting Ecological and Social Systems: watershed research relating ecosystem function to human values and socioeconomic behaviors. \$750,000. (with G. Benoit, S. Kellert, M. Ashton, P. Barten, and L. Bennett)
- 1997 – 2003 National Science Foundation LTREB: A long term survey of Michigan amphibian assemblages. \$300,000. (with E. Werner and R. Relyea)
- 2000 – 2003 NIH/NSF Ecology of Infectious Diseases Program: Wetland urbanization gradients and the ecology of vector borne diseases. \$1,500,000. (with D. Cavener and K. Shea)
- 2002 – 2007 CDC Fellowship Training Program: Vector Borne Disease. \$1,300,000. (with D. Fish and others)
- 2004 – 2006 Director's Award, Yale Center for International and Area Studies. \$10,000

- 2005 – 2010 National Science Foundation LTREB: A Long-Term Study of Metacommunity Dynamics of Amphibians and Their Predators. \$300,000. (with E. Werner, R. Relyea, & K. Yurewicz)
- 2005 – 2006 Connecticut Institute of Water Resources. Gonadal abnormalities in Connecticut Amphibians, \$18,040
- 2005 – 2010 Department of Defense (Army Research Office), Scalable Control of Networked Autonomous and Semi-Autonomous Vehicle Swarms Inspired by Nature, \$250,000 (with V. Kumar and others)
- 2006 – 2007 National Science Foundation, Evolutions: A Museum-Based After School Program, \$75,000 (PI: D. Skelly)
- 2007 – 2010 National Science Foundation, Urbanization and macroparasite infection of amphibians, \$250,000 (PI: D. Skelly)
- 2007 – 2008 Eppley Foundation, Rapid evolution in response to fire ants, \$25,200 (CoPIs: T. Langkilde and D. Skelly)
- 2010 – 2012 National Science Foundation, Doctoral Dissertation Improvement Grant, \$15,000 (PI: D. Skelly; Co PI: S. Brady)
- 2010 – 2011 Richard P. Garmany Fund, Hartford Foundation for Public Giving, \$30,000 (PI: D. Skelly)
- 2011 National Geographic Society/Waitt Foundation, \$14,900 (PI: D. Skelly)
- 2012 Quinnipiac River Fund, \$10,500 (PI: D. Skelly)
- 2017 – 2018 National Science Foundation Doctoral Dissertation Improvement Grant, \$21,763 (PI: D. Skelly; Co-PI: M. Lambert)

Fundraising Summary – Director, Peabody Museum

Total fundraising in excess of \$200M since 2014. Gifts of \$1M and above listed below.

- 2015 \$4M to create state of the art mineral gallery, David Friend Hall
- 2016 \$3M to endow informatics unit, add staff within Museum
- 2017 \$163M toward comprehensive Museum renovation and expansion
- 2018 \$15.5M to create gallery, add staff in renovated Museum
- 2019 \$1M naming gift for classroom
- 2020 \$15M naming gift for Peabody Fossil Hall
- 2020 \$2M naming gift for Peabody study gallery
- 2022 \$15M gift to support free admission
- 2022 \$30M gift to establish curatorial endowment (includes 5 faculty lines)
- 2022 \$1M gift for ancient pharmacology initiative

Invited Seminars & Symposia

- 1993 Department of Biological Sciences, University of New South Wales
Division of Wildlife & Ecology, CSIRO, Canberra
University of Technology, Sydney
Department of Biology, Middlebury College
- 1994 Department of Organismal & Evolutionary Biology, Harvard University
- 1995 School of the Environment, Yale University
Cary Conference VI, Institute of Ecosystem Studies

- Amphibian Symposium, Society of Northwestern Vertebrate Biologists
- 1996 College of Forest Resources, University of Washington
The Ecosystems Center, Woods Hole
- 1997 Department of Zoology, University of Oklahoma
Department of Biology & Medicine, Brown University
Department of Biology, University of Rhode Island
Department of Ecology & Evolutionary Biology, Univ. of Connecticut
Department of Biology, Columbia University
Vernal Pools Symposium, Conn. Dept. of Env'tl. Protection
- 1998 Division of Biological Sciences, University of Missouri
Mountain Lake Biological Station, University of Virginia
Wildlife Biology Program, University of Montana
- 1999 Department of Wildlife Ecology, University of Maine
Department of Biology, University of Maine
Department of Biology, Wheaton College
Department of Biology, City College of New York
Department of Zoology, University of British Columbia
Department of Forest Sciences, University of British Columbia
Department of Biology, University of Victoria
- 2000 Society of American Foresters, Connecticut
- 2001 Ecology Program, Pennsylvania State University
Department of Biology, University of Massachusetts
- 2002 Department of Ecology & Evolutionary Biology, Yale University
National Marine Fisheries Service, Seattle
City University of New York
Institution for Social and Policy Studies, Yale University
- 2003 Department of Biology, Boston University
Department of Biology, Arizona State University
Association of Massachusetts Wetland Scientists
Wetland Symposium, The Wildlife Society
Department of Biology, University of Maryland
Department of Biology, McGill University
- 2004 School of Tropical Biology, James Cook University, Queensland
Applied & Environmental Sciences, Griffith University, Queensland
School of Biological Sciences, University of Queensland
Department of Anatomy & Neurobiology, Dalhousie University
Institute for Ecosystem Studies, Millbrook, New York

Department of Natural Sciences, Bennington College

- 2005 Plenary Presentation, Australian Society of Herpetology
 Dept of Ecology and Evolutionary Biology, Cornell University
 Cornell Herpetological Society
 Department of Biology, University of New Orleans
 School of Engineering & Applied Sciences, Univ. of Pennsylvania
 Declining Amphibians Symposium, 5th World Herpetology Congress,
 South Africa
 Robotics Conference, Napa, California
 Science Saturdays Program for Children, Yale University
- 2006 John Ostrom Lecture, Peabody Museum, Yale University
 Sigma Xi Lecture, Program in Environmental Science, Pace Univ.
 Center for Integrative Geosciences, University of Connecticut
 Peabody Museum Teachers' Institute
 Mark W. Gould Lecture Series, Rhode Island Natural History Survey
 Dept of Natural Resource Conservation, Univ. Massachusetts, Amherst
- 2007 Mianus River Watershed Council, Stamford, Connecticut
 Lecturer, Association of Yale Alumni Educational Travel, New Zealand
 Swarming in Natural and Engineered Systems, Univ. of Pennsylvania
 Connecticut Forest Science Forum
- 2008 Natural Resources, University of Connecticut
 Ecology Program, Duke University
 Ecology Center, Utah State University
 Yale Institute of Biospheric Studies
 New England Assoc. of Resource Conservation & Development Councils
 Dept of Natural Resource Conservation, Univ. Massachusetts
- 2009 Ecology and Evolution, University of California Davis
 Lecturer, Assoc. of Yale Alumni Educational Travel, Sea of Cortez
 Keynote Speaker, Guilford Land Trust Annual Meeting
 Pomperaug River Watershed Coalition, Southbury, Connecticut
 Cornell Herpetological Society, Cornell University
- 2010 Hudson River Environmental Society
 Department of Biology, Reed College
 Keynote Speaker, Simsbury Land Trust Annual Meeting
 National Association of Science Writers Annual Meeting
 Westchester Conservation Café, Greenburgh, NY
- 2011 Transportation Research Board Annual Meeting, Wash. DC
 Department of Biology, Connecticut College
 2011 Water Science Forum, New England Interstate Water Pollution

- Control Commission, Portland, Maine
 Program in Ecology, University of Wyoming
 Department of Ecology & Evolutionary Bio., Brown University
 League of Women Voters, Greenwich, Connecticut
 Department of Biology, Georgia Tech
- 2012 Organizer, AAAS Symposium: “The future of ecological communities under climate change. No analog?,” Vancouver, BC
 Yale Institute of Biospheric Studies, Director’s Seminar
 Environment Initiative, Georgetown University
- 2013 Wildlife Ecology Program, University of Maine
 Leadership Council, Yale Peabody Museum
 Keynote Address, Graduate Student Symposium, Yale EEB
 Co-Organizer, EarlFest Symposium in honor of Prof. Earl Werner
 Plenary, Action2020, US Business Council for Sustainable Development
 Summer Program, Yale NUS College, New Haven
 Plenary, Student Conference on Conservation Science, NY
 Department of Biology, Rice University
 All Science Meeting, The Nature Conservancy, San Jose
- 2014 Center for Science and the Common Good, Ursinus College
 Family Weekend Lecture, Yale Peabody Museum of Natural History
 Yale Club of New Haven
 Dept. of Biology, Colorado State University
- 2015 Yale-Natl. Univ. of Singapore College
 College of the Environment, Wesleyan University
 Plenary speaker, PRIM&R (IACUC National Meeting), Boston
 Endocrinology Grand Rounds, Yale School of Medicine
 Connecticut Amphibian Monitoring Project
 Yale College Alumni Reunion
 CEO Symposium, American Alliance of Museums Meeting
 Keynote, University of Connecticut BioBlitz
- 2016 Yale Club, Santa Fe, New Mexico
 Keynote, Connecticut Association of Wetland Scientists
 Yale Club of Central New Jersey
 Keynote, Branford Land Trust, Branford, CT
 Yale College Alumni Reunion
 Keynote, Menunkatuck Audubon Society
 Yale Parents Reception, Seattle
 Distinguished Speaker Series, Dept. of Biology, Southern Illinois Univ.
 Bethany Garden Club
- 2017 Westward Look Symposium, Tucson Gem and Mineral Show

- Ray Semlitsch Memorial Symposium, Joint Meeting of
Ichthyologists and Herpetologists, Austin
School of the Environment, Yale University
New Canaan Land Trust
Keynote, Connecticut Association of Conservation & Inland Wetland
Commissions
Museum Trustee Association, Philadelphia
- 2018 Local Adaptation Symposium and Workshop, University of Haifa
Department of Biology, Trinity College
TEDx UConn
Yale NUS College Summer Session, New Haven
Chinese University Leaders Symposium, Yale University
Vernal Pool Symposium and Workshop, University of Maine
Yale Alumni Assoc. Assembly and Convocation, Yale University
- 2019 Department of Biology, Purdue University
Yale Alumni Association of SW Florida
Yale Science and Engineering Forum
Speaker, Annual Dinner, Yale Club of Washington, DC
Yale Alumni Fund
- 2020 World Congress of Herpetology, University of Otago, Dunedin, NZ
Yale Alumni Association Board
Yale Club of the Treasure Coast, Florida
Harvard Museums of Natural History (virtual)
Florida Museum, University of Florida (virtual)
Yale Planetary Solutions Symposium (virtual)
- 2021 Dept of Biology, University of Dayton (virtual)

Publications

Books

Skelly, D. K. and T. J. Near. 2016. Exploration and discovery: treasures of the Yale Peabody Museum of Natural History. Yale University Press, New Haven and London.

Skelly, D. K., D. M. Post, and M. D. Smith (editors). 2010. The art of ecology: writings of G. Evelyn Hutchinson. Yale University Press, New Haven and London.

Book Chapters

Skelly, D.K., A.Z.A. Arietta and M. Lambert. *In Press*. Green frogs thrive in the Suburbs. *In Feral Atlas: The More Than Human Anthropocene* (Eds A. Tsing, J. Deger, A. Keleman, and F. Zhou). Stanford University Press, Palo Alto.

Skelly, D.K. 2017. From Silent Spring to the Frog of War: the forgotten role of natural history in conservation science. Ch. 12 in *Effective Conservation Science: Data Not Dogma* (Eds. P. Kareiva, M. Marvier, and B. Silliman). Oxford University Press, London.

Smith, M.D. and **D.K. Skelly**. 2010. Theory: Reflection Thereon. *in The art of ecology: writings of G. Evelyn Hutchinson*, **D. K. Skelly**, D. M. Post, and M. D. Smith (Eds.). Yale University Press, New Haven and London.

Skelly, D. K., and J. L. Richardson. 2009. Larval sampling. Chapter 4 *in Amphibian Ecology and Conservation: A Handbook of Techniques*. (C. K. Dodd, Editor). Oxford University Press.

Semlitsch, R. D. and **D. K. Skelly**. 2007. Ecology and conservation of pool breeding amphibians. Pages 127-148 *in Vernal Pools: Ecology and Conservation of Seasonal Wetlands in Northeastern North America* (A. Calhoun and P. deMaynadier, Editors). CRC Press. ISBN 0849336759

Skelly, D. K., S. R. Bolden, M. P. Holland, L. K. Freidenburg, N. A. Freidenfelds, and T. R. Malcolm. 2006. Urbanization and disease in amphibians. Pages 153-167 *in S. Collinge and C. Ray (Eds.) Ecology of disease: community context and pathogen dynamics*. Oxford University Press.

Manuscripts in Review and Preparation

Arietta, A.Z.A., and **D.K. Skelly**. *in preparation*. Drought associated shifts in development and growth rates across two decades in an amphibian. For *Global Change Biology*.

Zarnetske, P.L., M.C. Urban, **D.K. Skelly**, P. Budy, C. Luecke. *in preparation*. Predicting Condition in Arctic Fish: Evaluating Climate and Species Interaction Drivers.

Peer-Reviewed Publications (h-index: ISI 42, Google Scholar 50)

Rowland, F. E., Schyling, E. S., Freidenburg, L. K., Urban, M. C., Richardson, J. L. Arietta, A. Z. A., Rodrigues, S. B., Rubinstein, A., Benard, M. F., and **D. K. Skelly**. 2022. Asynchrony, density dependence, and persistence in an amphibian. *Ecology* e3696.

- Arietta, A.Z.A., and **D.K. Skelly**. 2021. Rapid microgeographic evolution in response to climate change. *Evolution* 75:2930-2943.
- Gahm, K., A.Z.A. Arietta, and **D.K. Skelly**. 2021. Temperature-mediated tradeoff between development and performance in larval wood frogs (*Rana sylvatica*). *Journal of Experimental Zoology Part A: Ecological and Integrative Physiology*.
- Lowe, W. H., T. Martin, **D. K. Skelly**, and H. A. Woods. 2021. Metamorphosis in an era of increasing climate variability. *Trends in Ecology & Evolution* 36:360-375.
- Lambert, M.R., T. Ezaz, and D.K. Skelly. 2021. Sex-biased mortality and sex reversal shape wild frog sex ratios. *Frontiers in Ecology and Evolution*. 9:756476.
- Gotelli, N.J., D.B. Booher, M.C. Urban, W. Ulrich, A.V. Suarez, **D.K. Skelly**, D.J. Russell, R.J. Rowe, M. Rothendler, N. Rios, S.M. Rehan, G. Ni, C.S. Moreau, A.E. Magurran, F.A.M. Jones, G.R. Graves, C. Fiera, U. Burkhardt, and R.B. Primack 2021. Estimating Species Relative Abundances From Museum Records. *Methods in Ecology and Evolution* DOI: 10.1111/2041-210X.13705.
- Skelly, D.K.** 2020. Amphibians of Rhode Island (book review) by Christopher J. Raithel. 2019. Rhode Island Division of Fish and Wildlife. Kingston, Rhode Island. Herpetological Review.
- Arietta, A.Z.A., L. K. Freidenburg; M.C. Urban, S.B. Rodrigues, A. Rubinstein, **D.K. Skelly**. 2020. Phenological delay despite warming in wood frog (*Rana sylvatica*) reproductive timing: a 20-year study. *Ecography* 43:1791-1800.
- Van Acker, M., Lambert, M., Schmitz, O., and **D. K. Skelly**. 2019. Suburbanization increases echinostome infection in Green Frogs and Snails. *EcoHealth* 16:235-247.
- Lambert, M.R., T. Tran. A. Killian. T. Ezaz, and **D. K. Skelly**. 2019. Molecular evidence for sex reversal in wild populations of green frogs (*Rana clamitans*). *PeerJ* 7:e6449.
- Lambert, M. R., M. S. Smylie, A. J. Roman, L. K. Freidenburg, and **D. K. Skelly**. 2018. Sexual and somatic development of wood frog tadpoles along a thermal gradient. *Journal of Experimental Zoology Part A* 329:72-79.
- Amburgey, S.M., Miller, D.A.W., Grant, E.H.C., Rittenhouse, T.A.G., Benard, M.F., Richardson, J.L., Urban, M.C., Hughson, W., Brand, A.B., Davis, C.J., Hardin, C.R., Paton, P.W.C., Raithel, C.J., Relyea, R.A., Scott, A.F., **Skelly, D.K.**, Skidds, D.E., Smith, C.K., Werner, E.E. 2018. Range position and climate sensitivity: the structure of among-population demographic responses to climatic variation. *Global Change Biology* 24:439-454.

- Holgerson, M.A., M.R. Lambert, L.K. Freidenburg, and **D.K. Skelly**. 2017. Suburbanization alters small pond ecosystems: Shifts in nitrogen and food web dynamics. *Canadian Journal of Fisheries and Aquatic Sciences*. 999:1-12.
- Rogalski, M. A., P.R. Leavitt, and **D.K. Skelly**. 2017. Daphniid zooplankton assemblage shifts in response to eutrophication and metal contamination during the Anthropocene. *Proceedings of the Royal Society*. B 284 (1859), 20170865.
- Crump, P., K. Berven, T. E. Youker-Smith, **D. Skelly**, S. Thomas, and J. Houlihan. 2017. Predicting Anuran Abundance Using an Automated Acoustics Approach. *Journal of Herpetology* 51:582-589.
- Urban, M.C., P.L. Zarnetske, and **D.K. Skelly**. 2017. Searching for biotic multipliers of climate change. *Integrative and Comparative Biology* 57:134-147.
- Shepack, A., L. K. Freidenburg, and **D. K. Skelly**. 2017. Species absence in developed landscapes: an experimental evaluation. *Landscape Ecology* 32:609-615.
- Lambert, M. L., A. B. Stoler, M. S. Smylie, R. A. Relyea, and **D. K. Skelly**. 2016. Interactive effects of road salt and leaf litter on wood frog sex ratios and sexual size dimorphism. *Canadian Journal of Fisheries and Aquatic Sciences*. 10.1139/cjfas-2016-0324
- Lambert, M. R., **D. K. Skelly**, and T. Ezaz. 2016. Sex-linked markers in the North American green frog (*Rana clamitans*) developed using DArTseq provide early insight into sex chromosome evolution. *BMC Genomics* 17:844.
- Holgerson, M., D. M. Post, **D. K. Skelly**. 2016. Reconciling the role of terrestrial leaves in pond food webs: A whole-ecosystem experiment. *Ecology*. 97:1771–1782.
- Lambert, M. R. and **D. K. Skelly**. 2016. Diverse sources for endocrine disruption in the wild. *Endocrine Disruptors*. 4: e1148803. [commissioned commentary]
- Lambert, M.R., G.S.J. Giller, **D. K. Skelly** and R. G. Bribiescas. 2016. Septic systems, but not sanitary sewer lines, are associated with elevated estradiol in male frog metamorphs from suburban ponds. *General and Comparative Endocrinology* 232:109-114.
- Lambert, M. R., G. S. J. Giller, L. B. Barber, K. C. Fitzgerald, and **D. K. Skelly**. 2015. Suburbanization, estrogen contamination, and sex ratio in wild amphibian populations. *Proceedings of the National Academy of Sciences*. 112:11881–11886.
- Fenichel, E., **D. K. Skelly**. 2015. Why should data be free? Don't you get what you pay for? *Bioscience*. [doi:10.1093/biosci/biv052]

- Tallis, H., J. Lubchenco, ... , **D. K. Skelly**, et al. (ca. 240 authors). 2015. A call for inclusive conservation. *Nature* 515:27-28.
- Werner, E. E., C. J. Davis, **D. K. Skelly**, R. A. Relyea, and S. MacCauley. 2014. Cross-scale Interactions and the distribution-abundance relationship. *PLoS ONE* 9:e97387.
- Richardson, J.L., M.C. Urban, D. Bolnick, and **D.K. Skelly**. 2014. Microgeographic adaptation and the spatial scale of evolution. *Trends in Ecology and Evolution* 29:165-176. (<http://dx.doi.org/10.1016/j.tree.2014.01.002>)
- Skelly, D. K.**, L. K. Freidenburg, and S. R. Bolden. 2014. Experimental canopy removal enhances diversity of vernal pond amphibians. *Ecological Applications* 24:340-345. (<http://dx.doi.org/10.1890/13-1042.1>).
- Smits, A.P., **D. K. Skelly** and S. R. Bolden. 2014. Amphibian intersex in suburban landscapes. *Ecosphere*. 5:art11. (<http://dx.doi.org/10.1890/ES13-00353.1>)
- Urban, M.C., P.L. Zarnetske, and **D. K. Skelly**. 2013. Moving forward: Dispersal and species interactions determine biotic responses to climate change. *Annals of the New York Academy of Sciences* 1297:44-60.
- Skelly, D. K.** 2013. Learning from deformed frogs (book review). *BioScience* 63:140-141.
- Skelly, D. K.** 2013. G. Evelyn Hutchinson. *Oxford Biographies*. Oxford University Press, New York: Oxford University Press.
- Balmori, D. and **D. K. Skelly**. 2012. Crossing to sustainability: a role for design. *Ecological Restoration*. 30:363-367 (Images: 30:350-352).
- Rogalski, M. A., and **D. K. Skelly**. 2012. Positive effects of nonnative invasive *Phragmites australis* on Larval Bullfrogs. *PLoS ONE* 7:e44420.
- Zarnetske, P. L., **D. K. Skelly**, M. C. Urban. 2012. Biotic multipliers of climate change. *Science* 336:1516-1518.
- Hoverman, J. T., C. J. Davis, E. E. Werner, **D. K. Skelly**, R. A. Relyea, and K. L. Yurewicz. 2011. Environmental gradients and the structure of freshwater snail communities. *Ecography* 34:1049-1056.
- Skelly, D. K.** and L. K. Freidenburg. 2011. *Applied Ecology in Oxford Bibliographies Online: Ecology*. Ed. EIC Christopher Key Chapple. New York: Oxford University Press.

- Warren, R. J., II, **D. K. Skelly**, O. J. Schmitz, and M. Bradford. 2011. Universal ecological patterns in college basketball communities. PLoS ONE 6: e17342.
- Skelly, D. K.**, S. R. Bolden, and K. Dion. 2010. Intersex amphibians concentrated in suburban and urban landscapes. *EcoHealth*.7:374-379. [*Recommended by Faculty of 1000*]
- Skelly, D. K.** 2010. A climate for contemporary evolution. *BMC Biology* 8:136.
- Skelly, D. K.** and L. K. Freidenburg. 2010. Evolutionary responses to climate change. In: *Encyclopedia of Life Sciences (ELS)*. John Wiley & Sons. Chichester.
- Skelly, D. K.** and M. F. Benard. 2010. Mystery unsolved: missing limbs in deformed amphibians. *Journal of Experimental Zoology B: Molecular and Developmental Evolution*. 314B:179-181.
- Kerby, J., K. Richards-Hrdlicka, A. Storfer, and **D. K. Skelly**. 2009. An examination of amphibian sensitivity to environmental contaminants: Are amphibians poor canaries? *Ecology Letters* 12:1-8. [*Recommended by Faculty of 1000*]
- Ligon, N. F., and **D. K. Skelly**. 2009. Cryptic divergence: countergradient variation in the wood frog. *Evolutionary Ecology Research* 11:1099-1109.
- Werner, E. E., R. A. Relyea, K. L. Yurewicz, **D. K. Skelly**, and C. J. Davis. 2009. Comparative landscape dynamics of two anuran species: climate driven interaction of local and regional processes. *Ecological Monographs* 73:509-521. [*Recommended by Faculty of 1000*]
- McCauley, S. J., C. J. Davis, R. A. Relyea, K. L. Yurewicz, **D. K. Skelly**, and E. E. Werner. 2008. Metacommunity patterns in larval odonates. *Oecologia*. 158:329-342.
- Schwager, M., F. Bullo, **D. Skelly**, and D. Rus. 2008. A Ladybug Exploration Strategy for Distributed Adaptive Coverage Control. *Proceedings of International Conference on Robotics and Automation, Pasadena*.
- Urban, M. C., B. L. Phillips, **D. K. Skelly** and R. Shine. 2008. A toad more traveled: the heterogeneous invasion dynamics of cane toads in Australia. *American Naturalist*. 171:E134-E138.
- Skelly, D. K.** 2007. The Ailing Invader. *Proceedings of the National Academy of Sciences USA*. 104:17561-17562.

- Skelly, D. K.**, L. N. Joseph, H. P. Possingham, L. K. Freidenburg, T. J. Farrugia, M. T. Kinnison & A. P. Hendry. 2007. Evolutionary responses to climate change. *Conservation Biology*. 21:1353-1355.
- Werner, E. E., K. L. Yurewicz, **D. K. Skelly**, and R. A. Relyea. 2007. Turnover in an amphibian metacommunity: the role of local and regional factors. *Oikos* 116:1713–1725. [*Recommended by Faculty of 1000*]
- Werner, E. E., **D. K. Skelly**, R. A. Relyea and K. L. Yurewicz. 2007. Amphibian species richness across environmental gradients. *Oikos* 116:1697-1712.
- Skelly, D. K.**, S. R. Bolden, L. K. Freidenburg, N. A. Freidenfelds, and R. Levey. 2007. *Ribeiroia* infection is not responsible for Vermont Amphibian Deformities. *EcoHealth* 4:156-163.
- Urban, M. C., B. Philips, **D. K. Skelly**, and R. Shine. 2007. The cane toad's (*Bufo marinus*) increasing ability to invade Australia is revealed by a dynamically updated range model. *Proceedings of the Royal Society of London B* 274:1413-1419. [*Recommended by Faculty of 1000*]
- Holland, M. P., **D. K. Skelly**, M. Kashgarian, S. R. Bolden, L. M. Harrison, M. Cappello. 2007. Echinostome infection in green frogs is stage and age dependent. *Journal of Zoology* 271:455-462.
- Halverson, M. A., **D. K. Skelly** and A. Caccone. 2006. Inbreeding linked to amphibian survival in the wild but not in the laboratory. *Journal of Heredity* 97:499-507.
- Urban, M. C. and **D. K. Skelly**. 2006. Evolving metacommunities: Toward an evolutionary perspective on metacommunities (Concepts & Synthesis). *Ecology* 87:1616–1626.
- Skelly, D. K.** 2006. Declining amphibians (M. Lannoo, Editor) [book review] *Herpetological Review* 37:123-125.
- Halverson, M. A., **D. K. Skelly** and A. Caccone. 2006. Kin distribution among amphibian larvae in the wild. *Molecular Ecology* 15:1139-1145.
- Urban, M. C., **D. K. Skelly**, D. Burchsted, W. Price, and S. Lowry. 2006. Stream communities across a rural-urban landscape gradient. *Diversity & Distributions* 12:337-350. [*Recommended by Faculty of 1000*]
- Brownstein, J., **D. K. Skelly**, T. Holford, and D. Fish. 2005. Forest fragmentation predicts local scale heterogeneity of Lyme disease risk. *Oecologia* 146:469-475.

- Taylor, B., **Skelly, D. K.**, Demarchis, L. K., Slade, M. D., Rabinowitz, P. M. 2005. Proximity to pollution sources and risk of amphibian limb deformity. *Environmental Health Perspectives* 113:1497-1501.
- Skelly, D. K.**, M. A. Halverson, L. K. Freidenburg, and M. C. Urban. 2005. Canopy closure and amphibian diversity in forested wetlands. *Wetlands Ecology and Management* 13: 261–268.
- Skelly, D. K.** 2005. Experimental venue and estimation of interaction strength: reply. *Ecology* 86:1068-1071.
- Freidenburg, L. K., and **D. K. Skelly**. 2004. Microgeographical variation in thermal preference by an amphibian. *Ecology Letters* 7:369-373.
- Skelly, D. K.** 2004. Microgeographic countergradient variation in the wood frog, *Rana sylvatica*. *Evolution* 58: 160-165.
- Skelly, D. K.**, K. L. Yurewicz, E. E. Werner, and R. A. Relyea 2003. Estimating decline and distributional change in amphibians. *Conservation Biology* 17:744-751.
- Halverson, M. A., **D. K. Skelly**, J. M. Kiesecker, and L. K. Freidenburg 2003. Forest mediated light regime linked to amphibian distribution and performance. *Oecologia* 134:360-364.
- Skelly, D. K.** 2003. How to write a successful Doctoral Dissertation Improvement Grant proposal. *Bulletin of the Ecological Society of America* 84:137-138.
- Skelly, D. K.**, and J. Golon. 2003. Assimilation of natural benthic substrates by two species of tadpoles. *Herpetologica* .
- Skelly, D. K.**, L. K. Freidenburg, and J. M. Kiesecker. 2002. Forest canopy and the performance of larval amphibians. *Ecology* 83:983-992.
- Skelly, D. K.** 2002. Experimental venue and estimation of interaction strength. *Ecology* 83:2097-2101.
- Skelly, D. K.** 2002. Landscape Ecology. McGraw-Hill Encyclopedia of Science and Technology [www.AccessScience.com].
- Harding, E. K. and the NCEAS Habitat Conservation Plan Working Group. 2001. The scientific foundations of habitat conservation plans: a quantitative assessment. *Conservation Biology* 15:488-500.
- Skelly, D. K.** and J. M. Kiesecker. 2001. Design and outcome in ecological experiments: manipulations of larval anurans. *Oikos* 94:198-208.

- Skelly, D. K.** 2001. Distributions of pond-breeding anurans: an overview of mechanisms. *Israel Journal of Zoology* 47:313-332. [special issue on the ecology of temporary pools]
- Anholt, B. R., E. E. Werner, and **D. K. Skelly**. 2000. Effects of food and predators on the activity of four larval ranid frogs. *Ecology* 81:3509-3521.
- Skelly, D. K.**, K. H. Beard, and N. Hengartner. 2000. Animal-distribution modelling in gap analysis: an evolving science. *Conservation Biology* 14:1224-1225.
- Skelly, D. K.** and L. K. Freidenburg. 2000. Effects of beaver on the thermal biology of an amphibian. *Ecology Letters* 3:483-486.
- Skelly, D. K.** 2000. Patterns of distribution of amphibians: a global perspective (W. E. Duellman, Editor) [book review]. *Quarterly Review of Biology* 75:469.
- Beard, K. H., N. Hengartner, and **D. K. Skelly**. 1999. Effectiveness of predicting breeding bird distributions using probabilistic models. *Conservation Biology* 13:1108-1116.
- Skelly, D. K.**, E. E. Werner, and S. A. Cortwright. 1999. Long-term distributional dynamics of a Michigan amphibian assemblage. *Ecology* 80:2326-2337 .
- Skelly, D. K.** 1999. Experimental Ecology: issues and perspectives (W. J. Resetarits & J. Bernardo, Editors) [book review]. *Copeia* 1999:1137-1138.
- Kareiva, P., S. Andelman, D. Doak, B. Elderd, M. Groom, J. Hoekstra, L. Hood, F. James, J. Lamoreux, G. Lebuhn, C. McCulloch, J. Regetz, L. Savage, M. Ruckelshaus, **D. Skelly**, H. Wilbur and K. Zamudio. 1998. Using science in habitat conservation plans. American Institute of Biological Sciences.
- Kareiva, P., **D. Skelly**, and M. Ruckelshaus. 1997. Reevaluating the use of models to predict the consequences of habitat loss and fragmentation. Pages 156-166 in (S. T. A. Pickett, R. S. Ostfeld, M. Shachak, and G. E. Likens, Editors), *Enhancing the ecological basis of conservation: heterogeneity, ecosystem function, and biodiversity*, Chapman and Hall, New York.
- Skelly, D. K.** 1997. Tadpole communities. *American Scientist* 85:36-45.
- Skelly, D. K.** and E. Meir. 1997. Rule-based models for evaluating mechanisms of distributional change. *Conservation Biology* 11:531-538.
- Anholt, B. R., **D. K. Skelly**, and E. E. Werner. 1996. Factors modifying antipredator behavior in larval toads. *Herpetologica* 52: 301-313.

- Skelly, D. K.** 1996. Pond drying, predators, and the distribution of *Pseudacris* tadpoles. *Copeia* 1996:599-605.
- Wellborn, G. A., **D. K. Skelly**, and E. E. Werner. 1996. Mechanisms creating community structure across a freshwater habitat gradient. *Annual Review of Ecology and Systematics* 27:337-363.
- Skelly, D. K.** 1995. A behavioral trade-off and its consequences for the distribution of *Pseudacris* treefrog larvae. *Ecology* 76:150-164.
- Skelly, D. K.** 1995. Competition and the distribution of spring peeper larvae. *Oecologia* 103:203-207.
- Skelly, D. K.** 1994. Activity level and the susceptibility of anuran larvae to predation. *Animal Behaviour* 47:465-468.
- Jones, T. R., **D. K. Skelly**, and E. E. Werner. 1993. *Ambystoma tigrinum tigrinum* (Eastern Tiger Salamander). Developmental polymorphism. *Herpetological Review* 24:147-148.
- Skelly, D. K.** 1992. Field evidence for a cost of behavioral antipredator response in a larval amphibian. *Ecology* 73:704-708.
- Skelly, D. K.**, and E. E. Werner. 1990. Behavioral and life historical responses of larval American toads to an odonate predator. *Ecology* 71:2313-2322.
- Sheldon, S. P., and **D. K. Skelly**. 1990. Differential colonization and growth of algae and ferromanganese bacteria in a mountain stream. *Journal of Freshwater Ecology* 5:475-485.

Media Coverage

PBS Nature Documentary Series, National Public Radio – Talk of the Nation Science Friday, National Public Radio – All Thing Considered, NatGeo Wild, AP, BBC, CNN, Science Magazine, New York Times, Washington Post, Agence France Press, Environment: Yale Magazine, Harper’s Magazine, Environmental News Network, National Geographic.com, Nature Science Update, BBC Wildlife Magazine, Boston Globe, Connecticut Public Radio, Hartford Courant, Kansas City Star, Yale Alumni Magazine, Yale Medicine Magazine, Middlebury Magazine, Wildlife News, Australian Broadcasting Corporation, WTIC Radio, NBC30, WTNH.

Peer Reviewer

National Science Foundation, Australian Research Council, Department of Defense, Environmental Defense, Environmental Protection Agency, National Science and Engineering Research Council of Canada, Swiss National Science Foundation, National

Geographic Society, The Nature Conservancy, U.S. Fish & Wildlife Service, U. S. National Park Service.

American Naturalist, Animal Behaviour, Behavioral Ecology, Biological Conservation, Biological Invasions, Biological Journal of the Linnean Society, Canadian Journal of Fisheries and Aquatic Sciences, Canadian Journal of Forest Research, Canadian Journal of Zoology, Columbia University Press, Conservation Biology, Copeia, Ecological Applications, Ecology/Ecological Monographs, Ecology Letters, Environmental Science & Technology, Herpetologica, Hydrobiologia, Israel Journal of Zoology, Journal of Applied Ecology, Journal of Experimental Zoology, Journal of Herpetology, Journal of Wildlife Management, Nature Climate Change, Northeastern Naturalist, Oecologia, Oikos, PNAS, Princeton University Press, Proceedings of the Royal Society Series B, Quarterly Review of Biology, Sinauer Associates, Wetlands, Yale University Press.

Doctoral Students

1998 – 2003	Heinrich zu Dohna (Asst. Prof., American University of Beirut)
2000 – 2005	M. Anders Halverson (Author, Research Assoc., U of Colorado, National Outdoor Book Award Winner)
2001 – 2006	Mark C. Urban (Professor, UConn; ASN Young Investigator Award)
2003 – 2008	Manja P. Holland (Regional Educ. Mgr., Natl. Wildlife Federation)
2003 – 2008	Eric H. Lee (Freelance Data Scientist)
2006 – 2012	Jonathan L. Richardson (Assoc. Prof., Univ. of Richmond)
2007 – 2014	Steven P. Brady (Asst. Prof., Southern Connecticut State University)
2009 – 2015	Mary A. Rogalski (Asst. Prof., Bowdoin College)
2011 – 2016	Meredith Atwood Holgerson (Asst. Prof., Cornell University)
2013 – 2018	Max Lambert (Aquat. Sect. Res. Mgr, Wash. Dept of Fish & Wildlife)
2015 – 2022	Andis Arietta (Data Scientist, Teach for America)
2019 –	Yara Alshwairikh
2020 –	Logan Billet
2022 –	Samantha Tracy

Postdoctoral Associates

1997 – 1999	Joseph Kiesecker (Lead Scientist, The Nature Conservancy)
2002 – 2005	Linda Puth (Lecturer, Research Associate, Yale University)
2005 – 2007	Tracy Langkilde (Prof. and Dean of Science, Penn State University, ESA Mercer Award for Yale research)
2011 – 2013	Phoebe L. Zarnetske (Assoc. Prof., Michigan State)
2012 – 2016	Arthur Middleton (Assoc. Prof., UC Berkeley, winner Camp Monaco Prize, Natl Geographic Society Adventurer of the Year, 2016)
2015 – 2018	Lindsey Swierk (Asst. Research Prof., Binghamton University)
2019 – 2021	Freya Rowland (Research Ecologist, USGS, Columbia Envntl Res Ctr)
2020 – 2022	Nate Edelman (Genomic Scientist, Childrens Hospital Colorado)

Visiting Researchers and Students

2000 – 2001	Erica Crespi (Assoc. Prof., Washington State University)
2002 – 2003	Claire Doutrelant (CNRS, Montpellier, France)
2011 – 2012	Peter Smith (Dept. of Comparative Medicine, Yale School of Medicine)
2012 – 2013	Sara Zonneveld (Dept of Biosciences, University of Exeter)

Masters Students (partial)

1996	Karen H. Beard (Professor, Utah State University)
1998	Shelley Greene (Science, TNC Connecticut)
2004	Jennifer Molnar (Lead Scientist and Director, Center for Sustainability Science, TNC)
2006	Reilly Dibner (Postdoc, University of Wyoming)
2013	Alex Shepack (Doctoral Student, Southern Illinois University)
2015	Geoff Giller (Science and Environmental Writer)
2016	Amber Roman (Consultant, Resource Environmental Solutions, Houston)
2020	Ella Schmidt (PhD Student, Center for Limnology, Univ. of Wisc.)
2021	Dahn Young Dong (PhD Student, Univ. of Wisconsin)
2022	Ryan Dougherty
2022	Luca Guadagno
2023	Brandon Sanchez
2023	Sydney Nelson

Undergraduate Students (Partial)

2004	Livia DeMarchis (Partner, Gravel and Shea Attorneys, Burlington, VT)
2009	Nisha Ligon (CEO UBongo Edutainment, Tanzania)
2010	Adrienne Smits (Postdoc, UC Davis)
2014	Samantha Attwood (Sr Manager, Tech Business Development, Amazon, Seattle)
2014	Elizabeth Schyling (Seattle Public Schools)
2016	Emma Tipton (Policy Fellow, Amer Meteorological Society)
2017	Kimberly Guo (Associate, Better World Group)
2018	Cesar Garcia Lopez (Masters Student, urban planning, MIT))
2020	Kaija Gahm (PhD Student, Dept of Ecology & Evol Biology, UCLA)
2020	Kamau Walker (Teacher, John Burroughs School, St. Louis)
2022	John-Gabriel Bermudez