

Curriculum Vitae**James S. Clark**

*Nicholas Professor in Global Environmental Change
Department of Statistical Science*

Duke University, Durham, NC 27708

<http://sites.nicholas.duke.edu/clarklab/people/>

Education

Ph.D., Ecology and Behavioral Biology, University of Minnesota (1988)

Fulbright - DAAD Fellow, Universitat Göttingen, West Germany (1984)

M.S., Forestry, University of Massachusetts (1983)

B.S., Entomology, North Carolina State University (1979)

Employment

Visiting Professor, INRAE Grenoble (2018-2022)

Professor, Department of Statistical Science, Duke Univ (2006)

Distinguished Professor, Nicholas School of the Environment, Duke Univ (2004)

Distinguished Professor, Dept Biology, Duke Univ (2001-)

Professor, Dept Biology, Duke Univ (1998-)

Associate Professor, Dept Botany, Duke Univ (1995-98)

Assistant Professor, Dept Botany, Duke Univ (1992-95)

Assistant Professor, Dept Botany, Univ Georgia (1990-92)

Senior Scientist, New York State Museum (1988-90)

Awards and Honors

National Academy of Sciences (2020)

Make Our Planet Great Again Lauréat (2018)

Humboldt Research Prize (2017)

Chief of the Forest Service Science Award, National Drought Assessment (2016)

Best poster award, Biennial World Congress of the International Soc Bayesian Analysis (2016)

Fellow of the Ecological Society of America (2012)

ISI Highly Cited Researcher (2010)

American Academy of Arts and Sciences (2005)

Distinguished Alumnus, Natural Resources Conservation, Univ Massachusetts (2004)

H.L. Blomquist Distinguished Professor, Duke University (2001)

Smith Fellowship, Duke University (2000)

Leopold Leadership Fellowship, Ecological Society of America (1999)

NSF Presidential Faculty Fellow (1994)

The George Mercer Award, Ecological Society of America (1991)

The William Skinner Cooper Award, Ecological Society of America (1988)

Fulbright-DAAD Scholarship to West Germany (1983-84)

Lectureships

Distinguished Lecture, *International Forum Adv Environm Sci & Technol* (2020)

Plenary Lecture, *Journée Scientifique du LESSEM, INRAE, Grenoble* (2020)

Plenary Lecture, *Advances in Complex Systems, Lake Como School Adv Stud, Como* (2019)

Opening Lecture, *47th Annual Alexander von Humboldt Symp, Bamberg* (2019)

Plenary Lecture, *Collaborations in Biodiversity Symposium, Univ Florida* (2019)

Plenary Lecture, *University Program in Ecology Annual Symposium, Duke Univ* (2018)

Symposium Lecture, Ecol Soc Amer, *Forecasting extremes: a research agenda*, New Orleans (2018)
 Plenary Lecture, Quadrennial 12th Int Congress of Ecology (INTECOL), Beijing (2017)
 Plenary Lecture, *Climate Ecology and Tree Growth*, Harvard (2016)
 Invited Special Session, *Internat Soc Bayesian Analysis Biennial Conf*, Sardinia (2016)
 Plenary Speaker, *US-China Biodiversity Workshop*, NSF, Raleigh (2015)
 Plenary Lecture, *G70 Celebration of Alan Gelfand's career*, Durham (2015)
 Keynote speaker, *Graybill Conference, Amer Stat Assoc, Section Stat & Environm*, Ft Collins (2014)
Sun Yat-sen Lecture, Guangzhou (2014)
 Plenary Speaker, *International Soc Biogeography Symposium*, Miami (2013)
 Plenary Speaker, *Next generation climate data products*, NSF/NCAR, Boulder (2013)
Symposium on hierarchical modeling, Ecol Soc Japan, Kanto (2012)
Young Investigators Workshop on Data Assimilation in Global Change Science, NSF Woods Hole (2012)
Inaugural lecture, Distinguished Lecturer Series, Centre Global Change Science, Univ Toronto (2012)
Distinguished Ecologist Lecture Series, Colorado State Univ (2012)
 Invited Speaker, *BayesComp2012, Internat Soc Bayesian Analysis Biennial Meeting*, Tokyo (2012)
Distinguished Ecologist Lecture, Univ Kansas (2011)
 Plenary Speaker, *North American Forest Ecology Workshop*, Roanoke, VA (2011)
 Plenary Lecture, *Ecology and Control of Invasive Species*, Mathematical Biosci Inst, Columbus (2011)
Distinguished Seminar Speaker Series, College of ACES, Univ Illinois (2010)
Ecology Program Annual Speaker, Utah State Univ (2009)
 Opening Plenary, *International Statistical Ecology Conf*, St Andrews (2008)
 Keynote speaker, *Annual Ecology Symposium*, Madison (2008)
 Invited speaker, *International Society for Bayesian Analysis*, Hamilton Island (2008)
 Keynote address, *Environmental Information Management*, Albuquerque (2008)
 Special Lecture, *Data Assimilation for the Carbon Cycle*, NCAR (2007)
 Plenary speaker, *Neural Information Processing Systems (NIPS) Conf*, Vancouver (2006)
 Keynote speaker, *1st Annual Ecosystem Informatics Symposium*, Oregon State (2006)
 Keynote address, *Uncertainty in Ecological Analysis*, Mathematical Biosciences Inst, Columbus (2006)
 Plenary Lecture, *Biogeographic responses to global change*, Internat Biogeogr Soc, Shephardstown (2005)
MacConnell Lecture, Univ Massachusetts (2004)
 Plenary Lecture, *Multi-dimensional Forest Structure*, NASA (2003)
 Plenary Lecture, *Interfaces in Environmental Biology*, Univ Kentucky (2003)
 Plenary Lecture, *Dynamics of genetic diversity in forest ecosystems*, European Union, Strasbourg (2002)
 Plenary Lecture, *45th Symp Intern Assoc Veg Sci*, Porto Alegre, Brazil (2002)
 Plenary Lecture, *Gordon Conference: Theoretical Biology & Biomathematics*, Tilton (2002)
University Lecture, Univ Wisconsin, Madison (2001)
 Keynote address, *Flammable Australia: the fire regimes of a continent*, Albury, New South Wales (1997)

Government service

Congressional testimony

2004 House Subcommittee on VA HUD and Independent Agencies

Government agencies

Interagency

2015-16 co-Director, *Effects of Drought on Forests and Rangelands in the United States: A Comprehensive Science Synthesis*. Vose, J.M., J. S. Clark C. H. Luce, T. Patel-Weynand (editors) 2016. [United States Department of Agriculture, Forest Service Gen. Tech. Report WO-93b.](#)

National Science Foundation

- 2022 NEON Operations Review Panel
 2020 Advisory Panel, *Population and Community Ecology*, Washington DC
 2015 Chair, annual meeting *Macrosystems Biology Workshop*, Washington DC
 2012 Advisory Panel, *Ecosystems*
 2010 Advisory Panel, *Ecology of Infectious Disease*
 2006 External Review Panel: UCLA's *Center for Embedded Network Sensing (CENS)*
 2005 Advisory Panel: High Performance Computing Workshop, Chicago
 2003 *Cedar Creek LTER* Review Panel
 1999 Advisory Panel, *LTER*
 1995-00 Science Advisory Board, *National Center for Ecological Analysis and Synthesis*
 1994 Advisory Panel, *Earth System History*
 1992-97 Advisory Panel, *Ecology*
 1992 External review panel: *Niwot Ridge, LTER*

National Academy of Science Engineering and Medicine

- 2018 Advisory to the Committee on Forest Health and Biotechnology

National Ecological Observatory Network

- 2022 NEON Operations Review Panel
 2017 Chair, *Terrestrial Sampling Technical Working Group*: advise NSF and the NSB on design to absorb 40% budget reduction.
 2014-20 *Vegetation Technical Working Group*
 2014-15 [*Science Capability Review Team: Abbot M, Dawson T, Clark J,S, Covich A, Goldberg D, Kinzig A. NEON Science Capability Assessment. Boulder \(CO\): NEON, Inc.; 2015 19p.*](#)
 2007 NEON Global Change Experiment, Design Team
 2007-08 NEON Project Execution Plan Review Panel
 2005 NEON Design working group
 2004 Climate Change working group, Tucson

U.S. Global Change Research Program

- 2018 Coauthor, *USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA. [doi: 10.7930/NCA4.2018](https://doi.org/10.7930/NCA4.2018).

NASA

- 2004 *Earth System Science Pathfinder Mission Concept* planning workshop, JPL, Pasadena
 2002 *Earth Science Vision Steering Group*, Washington DC.

DOE

- 2018 Workshop Co-director: *Disturbance and Vegetation Dynamics in Carbon Cycle Models*

International

- 2022 *The Future of Transatlantic Ties for Climate Research*, French Embassy, Washington, DC
 2022 *Facing Global Change: the Franco-German Research Program*, DAAD, Berlin
 2019 *Make Our Planet Great Again*, [advisory to President Macron on Biodiversity policy](#)
 2018 *Make Our Planet Great Again Lauréat*, France
 2016 *Review Panel Research Infrastructures*, German Council Science & Humanities, Berlin
 1990-92 Program Advisory Committee, *Dahlem Conference: Fire in Natural Ecosystems*

NATO

1994 Director, Advanced Scientific Workshop, *Biomass burning emissions and global change*, Algarve

Educational workshops

2020—the *Bayesics in Ecological models and beyond* (LECA, Univ Grenoble)
 2019—*Univ Ljubljana: Masting Inference and Forecasting: Methods and Analysis* (Ljubljana, Slovenia); *NASA Biodiversity and Ecological Forecasting Team Meeting* (Wash DC); *Advances in Complex Systems*, Lake Como School Adv Stud, Como
 2018 – Ecological Society of America Annual Meeting: *Generalized Joint Attribute Modeling*; University of Tennessee: *Generalized Joint Attribute Modeling*
 2017 – SUNY Stonybrook: *Generalized Joint Attribute Modeling*
 2016 – ILTER 1st Open Sci Meeting, Uncertainty Quantification for NEON, *Data synthesis* (Kruger Nat Park)
 2015 – Statistics and Applied Math Inst: *Multivariate models in ecology* (Research Triangle Park)
 2010 – Amer Statistical Assoc Annual Meeting: *Bayesian Ecology*, Vancouver; Northern Arizona State Univ IGERT: *Summer Inst on Hierarchical Modeling*
 2009 – 2nd Summer Course on Flux Measurements and Advanced Modeling: *Bayesian Analysis* (Niwot Ridge); Northern Arizona State Univ IGERT: *Summer Inst on Hierarchical Modeling*
 2008 – Northern Arizona State Univ IGERT: *Summer Inst on Hierarchical Modeling*
 2007 – Northern Arizona State Univ IGERT: *Summer Inst on Hierarchical Modeling*
 2006 – 2nd NSF Institute on Statistical Computation for Ecological Inference and Prediction (Duke); Northern Arizona State Univ IGERT: *Summer Inst on Hierarchical Modeling*
 2005 – Statistics and Applied Math Inst: *Bayesian analysis for complex models* (Research Triangle Park); Northern Arizona State Univ IGERT: *Summer Inst on Hierarchical Modeling*
 2004 – 1st NSF Institute on Statistical Computation for Ecological Inference and Prediction (Duke)

Other professional activities

Organizer, *Mast production, forest regeneration, and food webs*, Smithsonian Ecol Res Center, Annapolis (2023)
 Organizer, *Bottom-up control of food-web dynamics*, Grenoble (2022)
 Organizer, *Masting Inference and Forecasting (MASTIF) Synthesis Workshop*, Grenoble (2019)
 Co-organizer, *Joint Species Distribution Modeling Workshop, Grenoble*
 Creator and Admin: Citizen Science [Masting Inference and Forecasting \(MASTIF\)](#)
 Chair, *External Review Committee, Univ Kansas, Dept Ecology and Evolutionary Biology* (2017)
Drought Impacts on U.S. Forests & Rangelands: Science to Management, San Antonio (2017)
 Organizer/Convener: *Drought vulnerability of forests and rangelands*, AGU, San Francisco (2016)
 Organizing committee: *NIMBioS Graduate Workshop--Current Issues in Statistical Ecology* (2014-15)
 Organizer: *Multivariate models for biodiversity & climate change*, SAMSI Working Group (2014-2015)
 Coordinating committee, *SAMSI Program on Mathematical and Statistical Ecology* (2013-15)
 Organizer, *Emerging methods in global change science*, NSF, Duke University (2013)
Macrosystems Biology Workshop, NSF, Boulder (2012)
 Organizer, *New Perspectives on Data Assimilation in Global Change Science*, NSF Woods Hole (2012)
Research Coordination Network, "Data-model assimilation" NSF (2010-2012)
Coordinated Approaches to Address Long-Term Issues in Global Change Experiments, NSF-DOE (2009)
Improving Ecological Forecasts by Integrating Feedback Mechanisms, FEMMES, Potsdam (2009)
Ecology of Infectious Disease Advisory Panel, NSF (2009)
Drivers of population change under threat, Centre for Population Biology, London (2009)
 Prog Comm: "Data-model assimilation in ecology: Techniques and applications" NSF, Norman (2007)
 Prog Comm: "Development/Assessment of Complex Computer Models", *Stat & Appl Math Inst*, RTI (2005-2008).

Program Comm: “Control/assimilation wireless networks in global change” *Stat & Appl Math Inst*, RTI (2005-2008).

Director, 2nd NSF Institute on Statistical Computation for Ecological Inference and Prediction (2006)

Organizing Comm, “Uncertainty in Ecological Analysis, *Math Biosci Inst*, Ohio State Univ, (2005-06)

Director, NSF Institute on Statistical Computation for Ecological Inference and Prediction (2003-04)

Organizer and Editor: *Uncertainty in ecological forecasting*, *Ecology* Special Feature (2001)

Director, *Ecological Forecasting*, NCEAS workshop, Santa Barbara (2000)

Faculty Director, *Center for Global Change*, Duke University (2000-2005)

Co-chair, *Sustainable Biosphere Initiative*, Ecol Soc America (1998-2003)

Chair, *Research Committee*, Ecol Soc America (1998-2003)

Planning workshop, *International Program on Ecosystem Change* (IPEC) (1999)

Observer, *Millennium Assessment Steering Committee* (1998)

Vice President of Science & Governing Board, *Ecological Society of America* (1998-2003)

Organizer, *The role of dispersal in Holocene migrations of trees*, NCEAS wksp, Santa Barbara (1996)

Organizer, *Climate and CO₂ effects on biomes across glacial/interglacial boundaries*, ESA Symp. (1995)

Chair, *Mercer Award Committee*, Ecological Society of America (1993-97)

Editorial

Guest Editor: *PNAS* (2019-2023, 2017); *Trends in Ecology and Evolution* 20th Anniversary Issue (with A. Reid) (2006); *Ecology* (2006); *PNAS* (2006, 2018-2021); *Ecology* Special Feature: *Uncertainty in ecological forecasting*, (2003)

Editorial Boards: *Elementa* (2013 - 2020); *Trends in Ecology and Evolution* (2006 -); *Journal of Agricultural, Biological, and Environmental Statistics* (2010 - 2014); *Ecosystems* (2004 – 2007); *Annual Reviews of Ecology and Systematics* (1998-2003); *Ecology and Ecological Monographs* (1996-99); *Global Change Biology* (1994-2007)

Major Research Funding

NASA-22-ECON22-0008 (\$1,012,073) “Determining forest recruitment change through the integration of NASA Earth observation data and predictive modeling”. Other PI: Tong Qiu, 4yr (2023).

NSF-DEB-2211764 (\$2,011,601) “Collaborative research: Continent wide forest recruitment change: the interactions between climate, habitat, and consumers”. Other PIs: Ines Ibanez, Roland Kays, Miranda Redmond, Emily Moran, 4 yr (2022).

NSF-ICER- 2033934 (\$299,693) “Identifying microbes’ population-level environmental responses using Bayesian modeling.” Other PIs: Dana Hunt (lead) and Mark Borsuk, 2 yr (2020)

NASA-18-AIST18-0063 (\$574,926) “The bridge from canopy condition to continental scale biodiversity forecasts, including the rare species of greatest conservation concern”. other PIs Jennifer Swenson, 2 yr (2019)

NSF-DEB-1754443 (\$1,213,977): “Collaborative Research: Combining NEON and remotely sensed habitats to determine climate impacts on community dynamics”. other PIs Jennifer Swenson, Roland Kays, 4 yr (2018).

Ministère de l’Enseignement Supérieur de la Recherche et de l’Innovation, France, *Make Our Planet Great Again* (\$1,277,416): “Forecasting Biodiversity Change” other PIs: Benoit Courbaud, Wilfried Thuiller, Georges Kunstler, 4 yr (2018).

NSF ICER-1854976/Belmont Forum Biodiversa (\$179,997 Duke budget): “Scenarios of Biodiversity and Ecosystem Services”, other PIs W Thuiller et al., 4 yr (2018).

NASA-16-AIST16-0052 (\$483,367) “Generative Models to Forecast Community Reorganization with Climate Change”. other PIs Jennifer Swenson, 2 yr (2017).

NSF-EF-1550911 \$(266,279) “Collaborative Research EAGER-NEON: Probabilistic Forecasting of Biodiversity Response to Intensifying Drought by Combining NEON, National Climate, Species, and Trait Data Bases”. other PIs: Rob Dunn, Alan Gelfand, Roland Kays, Diana Nemergut, 2 yr (2015)

- NSF-EF-1137364 (\$4,273,484) "Macrosystems: Climate change impacts on forest biodiversity: individual risk to subcontinental impacts", other PIs: Alan Gelfand, Mike Dietze, Andrew Finley, Sean McMahon, Jackie Mohan, Maria Uriarte, coPIs, 5 yr (2011).
- ONR (\$413,136) "Population Consequences of Acoustic Disturbance for Marine Mammal Populations", 3 yr (2009).
- DEB-0955904 (\$593,331) "Pathogen mediated diversity and response to climate change", Rytas Vilgalys, Michelle Hersh, coPIs, 4 yr (2009).
- NSF-LTER (\$225,000) "Southern Appalachia on the Edge –Exurbanization & Climate Interaction in the Southeast" 6 yr (2009).
- NSF-CDI 0940671 (\$1,701,370) "Integrating algorithmic and stochastic modeling techniques for environmental prediction", Pankaj Agarwal, Alan Gelfand, coPIs (2009).
- USFS (\$165,000) "Remote Sensing Climate-Related Forest Stress: Development of a Real Time Decision Support System for the Southern U.S." (2009)
- DOE (\$654,845, Duke Budget, \$2,185,451 total) "Effects of warming on tree species' recruitment in deciduous forests of the eastern United States". Jerry Mellilo, Jackie Mohan, coPIs. (2008).
- NSF DDDAS 0540347 (\$1,247,845, Duke Budget, \$1,690,000 total) "Collaborative Research: DDDAS-TMRP: Dynamic Sensor Networks - Enabling the measurement, modeling, and prediction of biophysical change in a landscape". Pankaj Agarwal, Carla Ellis, Paul Flikemma, Alan Gelfand, Kamesh Mungala, Jun Yang, co PI's, 5 yr (2005).
- NSF DEB-0527070 (\$126,000). "The 2nd Summer Institute: Uncertainty in Ecological Inference, Forecasting, and Decision: Modern Statistical Computation," Alan Gelfand, Barbara Braatz, Carol Brewer, co-PIs (1 yr) 2005.
- NSF SEII 0430693 (\$317,291, Duke budget) "Collaborative Research: SEI\ (BIO)\--Automated Methods for Generating High-Resolution GIS Databases from Remotely Sensed Data for Biodiversity Predictions" Howard Shultz, Thomas Millette, co PIs, 4 yr (2004).
- NSF DEB 0425465 (\$499,907). "Integration of data and models to assess forest biodiversity". Pankaj Agarwal, co-PI, 3 yr (2004).
- NSF IDEA-0308498 (\$453,474 Duke budget). "Large-Scale Wireless Sensor Networks for In Situ Observation of Ecosystem Processes". Paul Flikkema, Bruce Hungate, George Koch, Steve Sillette, co-PIs, 5 yr (2003).
- NSF DEB- 0308724 (\$96,000). "Summer Institute on Statistical Computation for Ecological Inference and Prediction". 1 yr (2003).
- NSF ATM-0212962 (\$234,226, Duke budget) "Collaborative Research: Holocene Drought Cycles and Impacts on the Northern Great Plains". E. Grimm, J. Donovan, co-PIs , 3 yr (2002).
- NSF subcontract (RR551-080 2401964) (\$220,481, Duke Budget): "Long-term studies of disturbances as they affect ecological processes in landscapes of the southern Appalachians". 6 yr (2002).
- NSF BDEI: 0131905 (\$93,181) "Computation and uncertainty in ecological forecasting", P. Agarwal and M. Lavine, co-PIs. 1 yr. (2001)
- NSF DEB-0089769 (\$250,000): "Rates of range expansion in eastern trees based on fossil and molecular data". J. McLachlan, P Manos, co-PIs. 3 yr. (2001)
- DOE (\$3,211,960): "Duke Forest Experiment: Continuation". 10 PIs. 3 yr. (2001)
- NSF DEB-0074705 (\$25,000): "Ecological Forecasting: an emerging imperative". Workshop. (2000)
- NSF DEB-9981392 (\$480,000): "Experimental and model analysis of large disturbance consequences for forest diversity". 4 yr (1999)
- DOE (\$297,971): "Forest succession in a CO2 enriched environment". W.H. Schlesinger, co-PI. 3 yr
- NSF (number pending) (\$66,000): "The role of wildfire in Alaska: experimental and regional approaches to improved understanding of boreal feedbacks to climate". 3 yr (1997)
- NSF DEB-9632854 (\$214,981, Duke budget): "Long-term studies of disturbances as they affect ecological processes in landscapes of the southern Appalachians". 5 yr. (1996)
- NSF ATM (\$12,189): "Subdecadal reconstruction of drought patterns in North America's arid interior: 0 - 2 ka. 1 yr. (1996)
- Presidential Faculty Fellow Award DEB 9453498 (\$500,000). 5 yr. (1995)

US Fish and Wildlife (\$25,000): “Fire and insect outbreaks on Kenai Peninsula, Alaska”. 1 yr. (1995)
 NSF BSR-9444146 (\$156,000): “Long-term studies of ecosystem response to disturbance along environmental gradients at Coweeta Hydrologic Laboratory”. 2 years. (1994)
 NSF DEB-9419677(\$242,696): “Prehistoric biomass burning at local to regional scales in eastern North America”. E. Grimm, co-PI. 3 yr. (1994)
 NATO/NSF Advanced Workshop Series (\$51,000): “Biomass burning emissions and global change”, Algarve, Portugal, (1994)
 NSF BSR-9107272 (\$195,000): “The role of fire in prehistoric times of rapid climate change”. 3 yr. (1991)
 NSF/LTER (\$150,000): “Long-term studies of ecosystem response to disturbance along environmental gradients at Coweeta Hydrologic Laboratory”. 6 years (1991)
 NSF BSR-8818355 (\$205,000): “Long-term climate change and fire regimes in eastern North America”. H.E. Wright, co-PI. 2 yr. (1989)
 Fulbright-DAAD, “Holocene fire and vegetation dynamics in southwestern Germany”. (1983)

University service

2023 NSOE Search Committee Chair
 2022 NSOE Board of Visitors (Napflio, Greece) and Alumni (Duke Forest & Berlin)
 2022 Chair, Faculty Promotion Committee
 2020 Climate Change & Data Science Working Group
 2019 - Program II Committee
 2018 – 19 Chair, Faculty Council, Nicholas School of the Environment
 2018 Promotion Committee, Nicholas School of the Environment
 2018 - Arts & Sciences Committee on Program II, Natural Sciences Representative
 2018 Duke Alumni Travel Faculty Representative, Galapagos Islands
 2018 Promotion Committee, Nicholas School of the Environment
 2017 – 19 Faculty Council, Nicholas School of the Environment
 2017 Promotion Committee, Nicholas School of the Environment
 2017 Duke Alumni Travel Faculty Representative, Panama/Costa Rica
 2016 Promotion Committee, Nicholas School of the Environment
 2016 Structure Committee, Nicholas School of the Environment
 2016 - Education Committee, Nicholas School of the Environment
 2016 Duke Alumni Travel Faculty Representative, Amazon basin
 2015 Promotion Committee, Nicholas School of the Environment
 2014 Promotion Committee, Nicholas School of the Environment
 2014 - 19 *Oosting Lecture committee*, Chair
 2013 - 16 Academic Promotion and Tenure Committee
 2013 Promotion Committee, Biology
 2013 Promotion Committee, Nicholas School of the Environment
 2012 - 14 Strategic Priorities Committee, Nicholas School of the Environment
 2010 - 12 Chair, Life Sciences Faculty, Nicholas School of the Environment
 2011 - Executive Committee, University Program in Ecology
 2010 Chair, Ecohydrology cluster hire search committee, Nicholas School Environm
 2010 Promotion committee, Biology
 2009 Chair, Promotion committee, NSOE/Inst Genomic Science & Policy
 2008 - 09 Chair, Search committee, NSOE/Inst Genomic Science & Policy
 2008 - 09 Chair, Promotion committee, Biology
 2007 - 09 University Academic Council
 2007 - 10 Graduate Admission Committee, Nicholas School of the Environment
 2005 - 14 Chair, Distinguished Professors Committee, Nicholas School of the Environment
 2004 - 10 Promotion Review Committee, Biology
 2002 Provost’s Scientific Advisory Committee, Multidisciplinary Sciences Building
 2001- 03 Faculty Director, Center for Global Change

2001- 04	Advisory Committee on Distinguished Professorships (Chair, Natural Sciences)
2001	Search Committee, Biology Chair
2001	Chair of Search committee, Doris Duke Chair of Conservation Biology
2001	Promotion committee
2001	Promotion committee
2001- 04	Duke Forest committee
2000	Botany Academic Priorities committee
2000-	Biology Graduate committee
2000	Search committee, Aquatic Biology, Nicholas School of the Environment
2000 - 02	Computer Committee, Dept Biology
1999 - 04	Director of Graduate Studies, Univ Program in Ecology
1999	Provost's Task Force on Biological Sciences
1999	Promotion committee
1999	Promotion committee
1998	Chair of Search Committee, Evolutionary Biology
1998 - 00	Director of Graduate Studies, Botany
1995	Dean's task force on Biological Sciences
1993	Search Committee, Landscape ecology, Nicholas School of the Environment

Books

- Kueppers, L. and J.S. Clark (Co-directors and editors) U.S. DOE. 2018. *Disturbance and Vegetation Dynamics in Earth System Models*, [DOE/SC-0196](#). Office of Biological and Environmental Research, U.S. Department of Energy Office of Science.
- Vose, J.M., J. S. Clark C. H. Luce, T. Patel-Weynand (editors) 2016. *Effects of Drought on Forests and Rangelands in the United States: A Comprehensive Science Synthesis*. [United States Department of Agriculture, Forest Service Gen. Tech. Report WO-93b](#).
- Clark, J.S. 2007. *Models for Ecological Data*. Princeton University Press.
- Clark, J.S. 2007. *Ecological data models with R*. Princeton University Press.
- Clark, J.S. and A. E. Gelfand (eds). 2006. *Hierarchical Modelling for the Environmental Sciences*. Oxford University Press, Oxford, England.
- Clark, J. S., B. J. Stocks, H. Cachier, and J. G. Goldammer (eds). 1997. *Sediment Records of Biomass Burning and Global Change*. Springer Verlag, Berlin, Germany.

Software

- Clark, J.S. 2016. gjam: Generalized Joint Attribute Modeling in R, <https://cran.r-project.org/web/packages/gjam/index.html>
- Clark, J.S. 2019. mastif: Mast Inference and Forecasting in R, <https://cran.r-project.org/web/packages/mastif/index.html>, <http://rpubs.com/jimclark/281413>.

Publications

- 1) Palacio, R. and J.S. Clark. 2023. *Incorporating intraspecific variation into species responses reveals both their resilience and vulnerability to future climate change*. *Ecography*, in press.
- 2) Clark, J.S. 2023. *The most abundant mammals on earth*. *Trends in Ecology and Evolution*, in press.
- 3) Qiu, T. M.-C. Aravena Acuña, D. Ascoli, Y. Bergeron, M. Bogdziewicz, R. Bonal, T. Boivin, T. Caignard, M. Cailleret, R. Calama, J. J. Camarero, C.-H. Chang-Yang, J. Chave, F. Chianucci, B. Courbaud, A. Cutini, A. Das, N. Delpierre, S. Delzon, M. Dietze, S. Donoso Calderon, L. Dormont, J. M. Espelta, T. Fahey, W. Farfan-Rios, J. Franklin, C. Gehring, G. Gilbert, G. Gratzler, C. Greenberg, A. Guignabert, Q. Guo, A. Hackett-Pain, A. Hampe, Q. Han, J. Holík, K. Hoshizaki, I. Ibañez, J. Johnstone, V. Journé, T. Kitzberger, J. Knops, G. Kunstler, J. Lagueard, J. LaMontagne, F. Lefevre, T. Leininger, J.-M. Limousin, J. Lutz, D. Macias, A. Marell, E. McIntire, C. Moore, E. Moran, R. Motta, J. Myers, T. Nagel, M. Noguchi, R. Parmenter, P. Samonil, I. Pearse, I. Perez-

- Ramos, L. Piechnik, T. Podgorski, J. Poulsen, M. Redmond, C. Reid, K. Rodman, F. Roiguez-Sanchez, J. Sanguinetti, C. L. Scher, B. Seget, S. Sharma, M. Silman, M. Steele, N. Stephenson, J. Straub, S. Sutton, J. Swenson, M. Swift, P. Thomas, M. Uriarte, G. Vacchiano, A. Whipple, T. Whitham, A. Wion, S. Wright, K. Zhu, J. Zimmerman, M. Żywiec, and J. S. Clark (2023). *Mutualist dispersers and the global distribution of masting: mediation by climate and fertility*. **Nature Plants**, in press.
- 4) Bogdziewicz, M., Calama, R., Courbaud, B., Espelta, J., Hacket-Pain, A., Journé, V., Kunstler, G., Steele, M., Qiu, T., Zywiec, M., and J. S. Clark. 2023. *How to measure mast seeding*. **New Phytologist**, in press.
 - 5) Tang, B., R. Kamakura, D. Barnett, and J. S. Clark. 2023. *Learning from monitoring networks: Few-large versus many-small (FLvMS) plots and multi-scale analysis*. **Frontiers in Ecology and Evolution**, in press.
 - 6) Qiu, T., A. J. Bell, J. J. Swenson, and J. S. Clark. 2023. *Habitat-trait interactions that control response to climate change: North American ground beetles (Carabidae)*. **Global Ecology and Biogeography**, in press.
 - 7) Scher, C.L. and J.S. Clark. 2023. *Protocol differences and species traits drive biases in reporting rates across monitoring datasets*. **Ecological Applications**, in press.
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- 194) Clark, J.S. 1998. Why trees migrate so fast: Confronting theory with dispersal biology and the paleo record. *American Naturalist*, 152: 204-224.
- 195) Clark, J.S. 1997. Introduction to sediment records of biomass burning and global change. Pages 1-9. in J.S. Clark, H. Cachier, J.G. Goldammer, and B.J. Stocks, editor. *Sediment Records of Biomass Burning and Global Change*. Springer Verlag, Berlin, Germany.
- 196) Clark, J. S., and W. A. Patterson. 1997. Background and local charcoal in sediments: scales of fire evidence in the paleorecord. Pages 23-48. in J.S. Clark, H. Cachier, J.G. Goldammer, and B.J. Stocks, editor. *Sediment Records of Biomass Burning and Global Change*. Springer Verlag, Berlin, Germany.
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- 206) Clark, J.S. 1996. Testing disturbance theory with long-term data: alternative life history solutions to the distribution of events. *American Naturalist*, 148:976-996.
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- 208) FIRESCAN. 1996. Fire in ecosystems of boreal Eurasia: the Bor Forest Island Fire Experiment Fire Research Campaign Asia - North (FIRESCAN). Pages 848-873. in J.S. Levine, editor. *Biomass Burning and Global Change*. MIT Press, Cambridge, Massachusetts, USA.
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- 210) Clark, J. S., and Y. Ji. 1995. Fecundity and dispersal in plant populations: implications for structure and diversity. *The American Naturalist*, 146:72-111.

- 211) Clark, J. S., and P. D. Royall. 1995. Transformation of a northern hardwood forest by aboriginal (Iroquois) fire: charcoal evidence from Crawford Lake, Ontario, Canada. *The Holocene* 5:1-9.
- 212) Clark, J. S. 1995. Climate and Indian effects on southern Ontario forests: forum. *The Holocene*, 5:371-379.
- 213) Clark, J. S., and P. D. Royall. 1995. Particle-size evidence for source areas of charcoal accumulation in Late Holocene sediments of eastern North American lakes. *Quaternary Research* 43:80-89.
- 214) Wright, H. E., and J. S. Clark. 1995. Charcoal analysis of varved lake sediments. In S. Hicks, U. Miller, and M. Saarnito (eds). *Laminated Sediments and Archaeology, Journal of the European Study Group on Physical, Chemical, Mathematical and Biological Techniques Applied to Archaeology.*, Rixensart, Belgium 41, 125-130.
- 215) FIRESCAN 1994. Fire in boreal ecosystems of Eurasia: first results of the Bor Forest Island Fire Experiment, Fire Research Campaign Asia-North (FIRESCAN). *Journal of World Resources Review*, 6:499-519.
- 216) Clark, J. S., and P. D. Royall. 1994. Pre-industrial particulate emissions and carbon sequestration from biomass burning in North America. *Biogeochemistry* 23:1-17.
- 217) Clark, J.S. 1993. Sensitivity of forest communities to global climate change. Pages 315-332 in P. Kareiva, J.G. Kingsolver, and R.B. Huey (eds.) *Biotic Interactions and Global Change*, Sinauer, Sunderland, MA.
- 218) Clark, J.S. 1993. Functional groups and ecological consistencies: population perspectives on regional forest dynamics. Pages 255-286 in J. Ehleringer and C. Field (eds) *Scaling Processes between Leaf and Landscape Levels*, Academic Press. New York, NY.
- 219) Clark, J.S. and J. Robinson. 1993. Paleocology of Fire. Pages 193-214 in P. Crutzen and J. Goldammer (editors). *Fire in the Environment: its Ecological, Climatic, and Atmospheric Chemical Importance*. Dahlem Conference, Wiley.
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- 222) Binkley, D., P. Becker-Heidman, J.S. Clark, P.J. Crutzen, P. Frost, A.M. Gill, A. Granström, F. Mack, J.-C. Menaut, R.W. Wein, and B. van Wilgren. 1993. Impacts of fires on ecosystems. Pages 359-374 in P. Crutzen and J. Goldammer (editors). *Fire in the Environment: its Ecological, Climatic, and Atmospheric Chemical importance*. Dahlem Conference, Wiley.
- 223) Clark, J.S. 1993. Scale relationships in boreal forest. *Trends in Ecology and Evolution* 8: 220.
- 224) Clark, J. S. and Reid, C. D. 1993. Sensitivity of unmanaged ecosystems to global change. Pages 53-89 in Darmstadter, J.; Toman, M. A., editors. *Non-linear Responses to Global Change*, Resources for the Future, Washington, D.C.
- 225) Clark J.S. 1992. Disturbance, climate change, and forest rehabilitation. Pages 165-186 in M. Wali (ed.) *Ecosystem Rehabilitation: Preamble to Sustained Development*. SPB Academic Publishing, The Hague, Netherlands.
- 226) Clark, J.S. 1992. Implications of individual plant growth for landscape patterns of age structure, net primary production, and resource availabilities. Pages 421-454 in D. DeAngelis and L. Gross (eds) *Populations, Communities, and Ecosystems: an Individual Perspective*, Chapman and Hall, New York, NY.
- 227) Clark, J.S. 1992. Validating model predictions of climate and vegetation change. Pages 423-440 in D. Ojima (ed) *Earth System Modeling*, OIES Global Change Institute, Boulder, CO.
- 228) Clark, J.S. 1992. Density-independent mortality, density compensation, and gap formation in plant populations. *Theoretical Population Biology* 42:172-198.

- 229) Morris, L.A., P.B. Bush, and J.S. Clark. 1992. Ecological impacts and risks associated with forest management. Pages 153-214 in J. Cairns, B.R. Niederlehner, and D.R. Orvos (eds). *Predicting Ecosystem Risk*. Princeton Scientific Publishing Co, Princeton, NJ.
- 230) Clark, J.S. 1991. Ecosystem sensitivity to climate change and complex responses. Pages 65-98 in R. Wyman (ed.) *Global Change and Life on Earth*. Chapman and Hall, New York, New York.
- 231) Clark, J.S. 1991. Forest-tree growth rates and probability of gap origin—a comment. *Ecology* 72:1166-1169.
- 232) Clark, J.S. 1991. Disturbance and tree life history on the shifting mosaic landscape. *Ecology* 72:1102-1118.
- 233) Clark, J.S. 1991. Disturbance and population structure on the shifting mosaic landscape. *Ecology* 72:1119-1137.
- 234) Clark, J.S. 1990. Fire and climate change during the last 750 years in northwestern Minnesota. *Ecological Monographs* 60:135-159.
- 235) Clark, J.S. 1990. Integration of ecological levels: individual plant growth, population mortality, and ecosystem dynamics. *Journal of Ecology* 78:275-299.
- 236) Clark, J.S. 1990. Effects of 20th century climate change and fire suppression on forest production and decomposition in northwestern Minnesota. *Canadian Journal of Forest Research* 20:219-232.
- 237) Clark, J.S. 1990. Population and evolutionary consequences of being a coastal plant: long-term evidence from the North Atlantic coasts. *Aquatic Science Reviews* 2:509-533.
- 238) Clark, J.S. 1990. Landscape interactions among nitrogen mineralization, species composition, and long-term disturbance. *Biogeochemistry* 11:1-22.
- 239) Clark, J.S. 1989. Water balance and fire occurrence during the last 160 years in northwestern Minnesota. *Journal of Ecology* 77:989-1004.
- 240) Clark, J.S. 1989. Forests are for burning. *Natural History* 1:50-53.
- 241) Clark, J.S., Merkt, J., and Müller, H. 1989. Post Glacial fire, vegetation, and cultural history of the northern Alpine forelands, southwest Germany. *Journal of Ecology* 77:897-925.
- 242) Clark, J.S. 1989. Ecological disturbance as a renewal process: theory and application to fire history. *Oikos* 56:17-30.
- 243) Clark, J.S. 1988. Effects of climate change on fire regime in northwestern Minnesota. *Nature* 334:233-235.
- 244) Clark, J.S. 1988. Stratigraphic charcoal analysis on petrographic thin sections: recent fire history in northwestern Minnesota. *Quaternary Research* 30:81-91.
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- 246) Clark, J.S. and Patterson, W.A. 1987. Dating of the organic deposits. in S.P. Leatherman, (ed.) "Geomorphic Development of Long Island's South Shore Barriers", *National Park Service Technical Report*, Boston, Massachusetts.
- 247) Clark, J.S. 1986. Dynamism in the barrier-beach vegetation of Great South Beach, New York. *Ecological Monographs* 56:97-126.
- 248) Clark, J.S. 1986. Late Holocene vegetation and coastal processes at a Long Island tidal marsh. *Journal of Ecology* 74:561-578.
- 249) Clark, J.S. 1986. Coastal forest tree populations in a changing environment, southeastern Long Island, New York. *Ecological Monographs* 56:259-277.
- 250) Clark, J.S., Overpeck, J., Webb, T., and Patterson, W.A. 1986. Pollen stratigraphic correlation and dating of barrier-beach peat sections. *Review of Palaeobotany and Palynology* 47, 145-168.

- 251) Clark, J.S. 1986. Vegetation and land-use history of the William Floyd Estate, Fire Island National Seashore, New York. *National Park Service, Office of Scientific Studies Technical Report OSS 86-3*, Boston, Massachusetts.
- 252) Clark, J.S. and Patterson, W.A. 1985. The development of a tidal marsh: upland and oceanic influences. *Ecological Monographs* 55, 189-217.
- 253) Clark, J.S. 1984. Chronologies for recent sediments in coastal environments. *Proceedings of the 12th Nordic Symposium on Sediments*, Skallingen, Denmark 12:76-81.
- 254) Clark, J.S. and Patterson, W.A. 1984. Pollen, ²¹⁰Pb, and opaque spherules: an integrated approach to dating and sedimentation in the intertidal environment. *Journal of Sedimentary Petrology* 54:1249-1263.

Invited talks—seminars, symposia, and conferences

- 2023 Biology, Wake Forest University
Invited Symposium: *Forest Resilience and Climate Change*, Society of American Foresters.
- 2022 *The Future of Transatlantic Ties for Climate Research*, French Embassy, Washington, DC
Facing Global Change: the Franco-German Research Program, Berlin
- 2021 *Make Our Planet Great Again* Symposium, Strasbourg
Ecology, Michigan State University, East Lansing
Forestry and Wildlife, North Carolina State Univ, Raleigh
- 2020 Environmental Biology, UC Santa Cruz
Centre for the Synthesis and Analysis of Biodiversity, Montpellier
Biology, Rice University
- 2019 Invited Symposium, *Macrosystems Biology Annual Meeting*, Boulder
Doñana Biol Inst, Sevilla
German Centre for Integrative Biodiversity Research (iDiv), Halle-Jena-Leipzig
- 2018 *Southeastern Climate Science Center*, annual meeting
Invited symposium: *Forecasting effects of extreme climatic events: a research agenda*; Ecol Soc Amer, New Orleans
Ecology, Univ Tennessee
Disturbance and Vegetation Dynamics in Carbon Cycle Models, DOE (Washington DC)
- 2017 Plenary Lecture, *12th Int Congress of Ecology (INTECOL)*, Beijing
Drought Impacts on U.S. Forests and Rangelands: Translating Science into Management, USFS (San Antonio)
Ecology and Evolution, Stony Brook University
Forestry and Natural Resources, Purdue University
NIMBioS Investigative Workshop: *Species' Range Shifts in a Warming World* (Knoxville)
Invited Session, *Functional Traits and Ecological Communities across Climate Gradients*, Ecol Soc America (Portland)
- 2016 Invited symposium on *Global scale patterns of invasion*, Annual Meeting, Int Assoc Landscape Ecol, Asheville
Plenary Lecture, *Climate Ecology and Tree Growth*, Harvard
Invited session ILTER *First Open Science Meeting*, Kruger Nat Park, S Africa
Workshop: ILTER *First Open Science Meeting*, Uncertainty Quantification for LTER and NEON, Kruger Nat Park
Invited Special Session, *Internat Soc Bayesian Analysis* Biennial Conf, Sardinia
- 2015 Global Ecology, Stanford-Carnegie
Plenary Speaker, *US-China Biodiversity Workshop*, NSF, Raleigh
Invited session: *Dynamic species distribution models*, ESA annual meeting

- The Macrosystems Biology Program*, NSF, Washington DC
National Institute for Environmental Science and Research, Grenoble
 Multivariate models in ecology, *Statistics and Appl Math Sci Institute*, Res Tri Park
 Plenary lecture, *G70 Celebration of Alan Gelfand's Birthday*, Durham
- 2014 *Symp on Climate Change and Biodiversity in the SE*, East Carolina Univ
 Earth Sciences, Boston Univ
Graybill Conference, Amer Stat Assoc Section on Statistics & Environment, Ft Collins
Bayesian Analysis for ecological Data, Beijing
 Scripps Oceanographic Inst, La Jolla
- 2013 *Agric, Forest, & Environm Sci*, Clemson
Plenary International Soc Biogeography Symposium, Miami
Next Generation Climate Data Products, NCAR
 Biology, East Carolina Univ
Ecological Theory, ETH/Univ Zurich
 Biology, Marine Biological Lab, Woods Hole
- 2012 Ecology, Penn State University
NSF workshop on Data assimilation, Woods Hole
Symposium on hierarchical modeling, Ecol Soc Japan, Kanto
Inaugural lecture, Distinguished Lecturer Series, Centre for Global Change Science, Univ Toronto
 Invited Speaker, *BayesComp2012, Internat Soc Bayesian Analysis Biennial Meeting*, Tokyo
Distinguished Ecologist Lecture Series, Colorado State Univ
- 2011 *Challenges to Ecological Modelling and Theory in a Changing World*, Berlin
 Ecology/Forestry, Michigan State University
 Plenary Lecture, Ecology and Control of Invasive Species, Math Biosci Inst, Columbus
 Distinguished Ecologist Lecture, Univ Kansas
 Plenary Lecture, North Amer Forest Ecology Workshop
 Conservation Biology, Univ Michigan
- 2010 Ecology, Univ Georgia
 Ecology, McGill Univ
 Ecology Center, Utah State Univ
Population Consequences of Acoustic Disturbance to Marine Mammals, Office of Naval Research
 Ecology, Univ Connecticut
Distinguished Seminar Speaker Series, College of ACES, Univ Illinois
 Ecology, Univ Utah
- 2009 Plant Ecology & Nature Conservation, Univ Potsdam
Second Summer Course on Flux Measurements and Advanced Modeling, NSF, Niwot Ridge
 Paleoecology, Univ Minnesota
 IGERT Short Course, NAU, *Hierarchical modeling in ecology*
Coordinated Approaches to Address Long-Term Issues in Global Change Experiments, NSF-DOE
Population change under different threat scenarios, Univ London, Silwood Park
Improving Ecological Forecasts by Integrating Feedback Mechanisms, FEMMES, Potsdam
Population Consequences of Acoustic Disturbance to Marine Mammals, Office of Naval Research
 Ecology, Notre Dame
- 2008 Invited speaker, *International Society for Bayesian Analysis*, Hamilton Island
 Experimental Forest Research Conference, USFS, Shepardstown
 Keynote speaker, *Annual Spring Ecology Symposium*, Madison
 Keynote address, *Environmental Information Management*, Albuquerque
Ecological Forecasting: Applications of model-data fusion techniques, ESA Symposium, Milwaukee.

- Opening plenary, *International Statistical Ecology Conf*, St Andrews
 Biomathematics, NCSU
 CEMAGREF, Grenoble
Prediction of biome boundary shifts in regional and global dynamic vegetation models, Yokohama
 Inst Ecosystem Studies, Millbrook
- 2007 *Statistics in ecological and climate modeling*, Invited Session, Joint Stat Meetings, Salt Lake City
Mathematical Challenges / Opportunities in Sensor Networking, Inst Pure & Appl Math, UCLA
Uncertainty in age estimation, Max Plank Inst Demography, Rostock
 Transition workshop, *Complex computer models*, Res Tri Park.
 Center for Forest Ecosystem Assessment, Alabama A&M
Data-Model Assimilation in Ecology, NSF Workshop, Norman
 Ecology, UC Santa Barbara
 Special Seminar, *Data Assimilation for the Carbon Cycle*, NCAR
- 2006 Botany, North Carolina State University
2nd International Research Workshop of Evolutionary Demography. Max Plank Inst Demography,
 Rostock
 Tutorial, *Complex Computer Models*, Stat & Appl Math Inst, Research Triangle Park
 Ecology, Univ North Carolina Chapel Hill
 Keynote speaker, *1st Annual Ecosystem Informatics Symposium*, Oregon State
 Ecology, Wake Forest University
 Plenary speaker, *Neural Information Processing Systems (NIPS) Conf*, Vancouver
 Center for Integrating Statistical and Environmental Science, Univ Chicago
 Ecology, McGill University
 Population Research Institute Colloquium, Duke Univ
 Keynote Address, *Uncertainty in Ecological Analysis*, Math Biosci Inst, Columbus
- 2005 *Biogeographic responses to global change*, Internat Biogeogr Soc, Shepardstown, WV
Frontiers of Environ Change Research: Climate Change Drivers, Impacts, and Policy, Brown Univ
 Biology, Harvard
 Ecology, Univ Tennessee
 Ecology, Univ Montana
 TERRAC: *Modeling Ecosystem Responses to Global Change*, Sanibel, FL
How to succeed in Ecology, ESA panelist
Testing hypotheses with the Paleorecord, ESA speaker.
 Ecology, Penn State
 Botany, Univ Vermont
 TERRAC: *Global Environmental Change and Biodiversity*, Paris.
Stony Brook World Environmental Forum, SUNY Stony Brook, NY
- 2004 Ecology, Univ Georgia
Winemiller Symp: New Developments of Stat Anal in Ecol Res, Univ Missouri
 CIEMAS Dedication ceremony: *Sensor technology for environmental protection*. Duke Univ
Landscapes, Genomics and Transgenic Conifers, Nicholas Environm Leadership Forum, Durham
 Biological Sciences, Univ Illinois Chicago
Earth System Science Pathfinder Mission Concept planning meeting, JPL, Pasadena
 NEON *Climate Change* planning workshop, Tucson
 Ecology, Ohio Univ
Mathematical Models for Biological Invasions, Banff Int Res Station, Math Innovation
Computational Environmetrics Environ Sect, Am Stat Assoc/Int Stat Environm Sci, Univ Chicago
 Ecology/Math, Colorado State Univ

- Models for estimating population size*, Environm Sec, Joint Statistical Meetings, Toronto
 Ecology, Northern Arizona Univ
 Geography, Univ North Carolina
Interagency Climate Change Science Program (CCSP) Ecosystems Workshop, Washington DC
- 2003 Ecology, Cornell University
 Biology, Univ Miami
 Keynote lecture, *Interfaces in Environmental Biology*, Univ Kentucky
 Biology, Univ Illinois
Multi-dimensional Forest Structure, NASA Workshop
 Research Prospects of NSF BDEI Program
 Morrison Institute, Stanford University
 Biology, Rutgers Univ
- 2002 Gordon Conference: *Theoretical Biology & Biomathematics*, Tilton, NH
 NSF Digital Government Conference, Los Angeles
 IUFRO: *Dynamics of genetic diversity in forest ecosystems*, European Union, Strasbourg
 Millennium Assessment Wrkshp: *Conceptual Tools for Biodiversity Scenarios*, Trinidad
 Biology, Univ Nebraska
Climate Change Impacts and Integrated Assessment Wrkshp, Snowmass, CO
 Biology, Bowdoin College
 American Meteorological Society, RTP
 ESA Symposium: *Uncertainty in ecological estimation and forecasting*
 Biology, Rice University
 Statistics, NC State University
- 2001 NCEAS Workshop: *A new synthesis of demography and dispersal*, Santa Barbara
 Ecology, Michigan State Univ
 Inst Statistics & Decision Sci, Duke University
 ESA Symposium: *Extreme Event Analysis in Ecology*
 ESA Symposium: *Long distance dispersal*
 Workshop: *Seed dispersal and migration modeling*, Montpelier
 University lecture, Univ Wisconsin
 Univ Program Ecology, Duke University
- 2000 Planning workshop: *International Program on Ecosystem Change (IPEC)*. Paris
 Workshop: *Ecological Forecasting: an Emerging Imperative*, Santa Barbara
 Ecology and Evol Biology, Princeton University
 Ecology and Evol Biology, Univ of Arizona
- 1999 GTCE Workshop: *Evolutionary and ecological responses to environmental change*, Reno.
 Keynote address, *Flammable Australia: the fire regimes of a continent*, Albury, New South Wales
 Biology, Wake Forest Univ
 Biology, Louisiana State Univ
 Environmental Science, Frostburg Univ
 Steering committee observer, *The Millennium Assessment*, Washington DC
- 1998 Ecology, Univ Minnesota
 Limnological Res Cent, Univ Minnesota
 Ecology, Stony Brook
 Plant Biology, CSIRO, Canberra
 Geography, Univ Monash
 Biology, Univ North Carolina
- 1997 Bodega Marine Lab, UC

- Symposium: *Long-term Environmental Dynamics*, Wengen, Switzerland
 Workshop: *Global Change and Terrestrial Ecosystems - Landscape scale processes*, San Diego
- 1996 Botany, Univ Vermont
 Workshop: *The role of dispersal in the Holocene expansion of forest trees*, Santa Barbara
 Workshop: *Plant dispersal and migration in response to climate change*, Bateman's Bay, Australia
- 1995 NASA Conference: *Biomass burning and global change* (Williamsburg)
 Forestry, Penn State
- 1994 Amer Quaternary Assoc: *Models in Quaternary Paleorecords* (Mpls)
 Environm Sci, Univ VA
- 1993 Ecology, Univ Illinois
 Symposium: *Extending long-term ecological monitoring into the past* (ESA, Madison)
- 1992 Biology, McGill Univ
 Biology, Univ Quebec
 Botany, Duke Univ
Dablen Conference: Fires in natural ecosystems (Berlin)
 Stichting Mathematisch Centrum, Univ Amsterdam
 Biology, UNC-Chapel Hill
 Savanna River Ecol Lab
 Symposium: *Testable models of ecological dynamics?* (ESA, Honolulu)
 Workshop: *The role of ecological models in earth system modeling.* (UCAR, Boulder)
- 1991 Geology, Univ. Georgia
Special Year in Theoretical and Computational Biology (Cent Appl Math, Cornell)
 Institute of Ecology, Univ Georgia
 Symposium: *Patch Dynamics in Terrestrial, Marine, and Freshwater Ecosys* (Cornell)
 Symposium: *Consequences of global change for communities* (Univ Wash)
- 1990 Biology, Univ Wis-Milwaukee
 Public Lecture Series on Global Climate Change, Univ Maine
 Botany, Univ Georgia
 Symposium: *Populations, Communities, & Ecosystems: an Individual Perspective*, Knoxville
 Oak Ridge Nat Lab, Oak Ridge
 Symposium: *Biotic indicators of global change*, Friday Harbor
 Workshop: *Earth Syst Modeling* (Global Change Inst, Univ Corp Atm Res, Snowmass)
 Geography, Univ Georgia
 Dept Biology, Clemson
 Limnol Res Center, Univ Minnesota
 Symposium: *Scaling processes between Leaf and Landscape Levels* (Snowbird, UT)
- 1989 Ecosystem Res Center, Cary Arboretum
 Biology, SUNY Albany
 Sect Ecol & Syst, Cornell Univ
 Symposium: *Global Climate Change and Life on Earth*, New York State Ed Dept
 AIBS Symposium: *Environmental Impact of Global Climate Change*, Toronto
- 1988 Biol Survey, New York State Museum
 Div Biol Science, Kansas State Univ
 Botany, Univ Maine
 Quaternary Inst, Univ Maine
 Workshop: *Wildfire and Global Clim Change*, Nat Cen Atmosph Res & US For Serv
 Dept Bot, Univ Toronto

Teaching

Regular courses:

Biodiversity and climate change in the big data era	Annually, fall semester
Ecological Models and Data	Annually, spring semester

Current PhD advisees: Miao Hu, Lauren Jenkins, Renata Poulton-Kamakura, Lane Scher, Maggie Swift

Former PhDs

Tang, Becky	2022	Assist Prof, Middlebury College	Dynamic community models
Palacio, Ruben	2022	Duke Forest Associate	Climate vulnerability of Andean bird populations
Nunez, Chase	2019	postdoc, Max Planck	logging impacts on tree fecundity in Gabon
Tomasek, Bradley	2018	re-insurance industry	climate change impacts on biodiversity
Syednasrollah, Bijan	2017	postdoc Harvard	continent-wide impacts on of drought on trait distributions and phenology
Kwit, Matthew	2016	Private industry	experimental warming effects on tree recruitment
Berdanier, Aaron	2016	postdoc Duke University	water use and tree competition
Zhu, Kai	2014	Assoc Prof, UC Santa Cruz	climate impacts on biodiversity
Valle, Denis	2013	Assoc Prof, Univ Florida	Land cover, climate and malaria in the western Amazon
Bell, David	2011	USFS Research Scientist	Effects of climate change on recruitment dynamics
Salk, Carl	2010	postdoc, Univ Colorado	Experimental warming and phenology
Moran, Emily	2009	Assist Prof, UC Merced	Population genetics of oaks
Hersh, Michelle	2009	Assoc Prof, Sarah Lawrence Univ	Fungal pathogen effects on tree diversity
Colchero, Fernando	2007	Assoc Prof, Univ S Denmark	Demography and aging of Sooty terns
Ibanez, Ines	2006	Assoc Prof, Univ Michigan	Climate change and tree recruitment.
Wolosin, Mike	2006	Pew Center for Climate Change	Forest canopy dynamics
Dietze, Michael	2006	Assoc Prof, Boston Univ	Gap dynamics and forest response.
LaDeau, Shannon	2005	Assoc Prof, Cary Inst	Fecundity of trees under elevated CO2.
McLachlan, Jason	2003	Assoc Prof, Notre Dame	Late Quaternary molecular biogeography of forest trees.
Mohan, Jacqueline	2002	Assoc Prof, Univ Georgia	Elevated CO2 and forest succession.
HilleRisLambers, Janneke	2001	Professor, Univ Washington	Dispersal through space and time: dispersal and seed dormancy.
Lynch, Jason	2001	USEPA, Washington DC	Long-term fire dynamics and paleohydrology in Canada and Alaska
Beckage, Brian	2000	Professor, Univ Vermont	Seedling recruitment: Does spatial heterogeneity maintain diversity?
Camill, Phil	1999	Professor, Bowdoin College	Carbon dynamics of boreal permafrost peatlands during rapid warming
Wyckoff, Peter	1999	Professor, Univ Minnesota, Morris	Life history and demography of southern Appalachian trees
Macklin, Eric	1997	Statistician, Massachusetts General Hospital	Seed dispersal effects on population and community dynamics.

Current and former postdocs

Kendrick Brown, Danish Geological Survey
 Souparno Ghosh, Texas Tech University
 Christoph Hellmyer, private industry
 Valentin Journe, current postdoc
 John Lichter, Associate Professor, Bowdoin College
 Sean McMahon, Research Scientist, SERC
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