

# JESSICA GUREVITCH

## CURRICULUM VITAE

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Department of Forestry and Natural Resources

Purdue University

phone: (765) 494-3590

website: <https://ag.purdue.edu/department/fnr/faculty-sites/gurevitch/index.html>

e-mail: [jggurevi@purdue.edu](mailto:jggurevi@purdue.edu)

orcid id: 0000-0003-0157-4332

### PROFESSIONAL EXPERIENCE

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2023 - current Distinguished Professor, Purdue University  
2023 - 2024 Professor and Head, Department of Forestry and Natural Resources, Purdue University  
2021 – 2022 Department Co-Chair, Ecology and Evolution, Stony Brook University  
2018 – 2022 Distinguished Professor, State University of New York  
2000 – 2018 Professor, State University of New York at Stony Brook  
2012 Visiting Professor, New York University (Sabbatical leave)  
2006 – 2012 Chair, Department of Ecology and Evolution, Stony Brook University  
2002 Visiting Professor, Macquarie University, Sydney, NSW, Australia (Sabbatical)  
1992 - 2000 Associate Professor, State University of New York at Stony Brook  
1992 - 1993 Program Director, Population Biology, National Science Foundation  
1985 - 1992 Assistant Professor, State University of New York at Stony Brook  
1983 - 1985 Postdoctoral Fellow, The University of Chicago

### Education

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1982 Ph.D., Ecology and Evolutionary Biology, University of Arizona  
1973 B.S., Biological Sciences /Ecology, Evolution & Systematics, Cornell University

### Professional Service – elected positions (*Selected, 2005 – present*)

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2024 – 2025 Ex-Officio, U.S. National Committee for the International Union of Biological Sciences, (USNC/IUBS), National Academy of Sciences appointment  
2016 – 2022 Secretary/Member of the Governing Board, Ecological Society of America (elected)  
2014 – 2016 President-elect, President, Past-President, Society for Research Synthesis Methodology  
2023 – 2025 Chair, Biological Sciences Section Steering Committee, AAAS  
2013 – 2016 Biological Sciences Council Delegate, AAAS  
2012 – 2020 Council Member, International Association for Vegetation Science  
2008 Member (elected), Society for Research Synthesis Methodology  
2005 – 2007 Executive Vice President, Society for the Study of Evolution

## Professional Service, Honors and Memberships

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2024 – 2025	Ad-Hoc Member representing AAAS on the National Academy of Sciences, US National Committee to the International Union of Biological Sciences
2015 – 2020	Member, Subcommittee on Fellows, AAAS
2014	Fellow, Stellenbosch Institute for Advanced Studies, Stellenbosch, South Africa
2013	Fellow of the Ecological Society of America
2012 – 2016	Chair, Ecological Society of America Fellowships & Awards Committee
2012 – 2019	Faculty of 1000, Contributing Member
2012 – 2018	Scientific Advisory Board, Alan Alda Center for Communicating Science
2010	Fellow, the American Association for the Advancement of Science
2011 – Present	Editorial Board, Ecology and Evolution
2011 – 2020	Editorial Board, Israel Journal of Ecology and Evolution
2009	University of Massachusetts accreditation review panel member, NEASC
2009	SUNY Strategic Plan, Group of 200 Delegate (invited by SUNY Chancellor)
2008 - 2013	Editorial Board, Biology Letters
2006	Dean's Award for Excellence in Graduate Teaching
2004 - Present	Editorial Board, Journal of Vegetation Science
2004 - Present	Associate Editor, Ecology Letters
current	<p><u>Reviewer of manuscripts</u> for: Nature, Science, Ecology, Evolution, The American Naturalist, BioScience, Journal of Ecology, Plant Ecology, Canadian Journal of Forest Research, Canadian Journal of Botany, Botanical Gazette, Journal of Vegetation Science, American Journal of Botany, and others</p> <p><u>External reviewer of grant proposals</u> for NSF, the Department of Energy, the Department of Agriculture, national counterparts in Israel, Germany, and others</p> <p><u>Tenure and promotion reviews</u> (confidential; various universities worldwide)</p> <p><u>Memberships</u>: American Association for the Advancement of Science, Ecological Society of America, Society for Research Synthesis Methodology, IAVS, Sigma Xi</p>

## Students and Postdoctoral Researchers

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### **MAJOR ADVISOR, PH.D. STUDENTS:**

Ananda Adhikari (began at Purdue Spring 2024)

Janet Morrison (Ph.D. 1994; Barbara Meyers Pelson '59 Professor, The College of New Jersey)

Proserpina Gomez Roxas (Ph.D. 1996; Professor and Chancellor, Mindanao State Univ.

Naawan, Philippines)

Paul Teese (Ph.D. 1997, Curator (retired), Bowman's Hill Preserve, PA)

Daniel Taub (Ph.D. 1997; Professor, Southwestern University, Texas)

Wei Fang (Ph.D. 2003, independent researcher)

Kerry Brown (Ph.D. 2004, Senior Lecturer, Kingston University, London, UK)

Eliza Woo (Ph.D., 2008, Faculty member, City College of San Francisco, CA)

Rebecca Grella (Ph.D. 2012, Research Director and Teacher, Brentwood High School, NY)

Emily Rollinson (Ph.D. 2015, Assistant Professor, East Stroudsburg University, PA)

Morodoluwa Aikin-Fajiyi (Ph.D. 2019, Postdoctoral Fellow, Thompson Rivers University, B.C., Canada)

Nicole Kinlock (Ph.D. 2020, Postdoctoral Fellow, University of Konstanz, Germany)

Urmi Poddar (entered Fall 2018)

Ashley Morris (entered Fall 2018)

### **DOCTORAL COMMITTEES (SINCE 2001):**

Christopher Jensen

Norah Warchola

Jonathan Hickman

Sarah Gray

Joshua Banta

Matthew Aiello-Lammens

Andre Tiu

Niamh O'Hara

Heather Throop

Michael McCann

Jennifer Funk

Mary Alldred

Isabel Ashton

Nicolette Sipperly

Catherine McGlynn

### **OUTSIDE PH.D. COMMITTEE MEMBER, VISITING PH.D. STUDENTS AND INTERNATIONAL SCHOLARS:**

Myla Aronson, Ph.D. 2006, Rutgers University

Krista Thyberg, Ph.D. 2015, Dept. Tech. & Soc., Stony Brook University

Professor Frank Yu (2015-2016), Yunnan University, visiting scholar

Shijia Peng, (2017-2018) Ph.D. 2018, Sun Yat Sen University, Guangzhou, China (visiting)

Vanessa Mariano da Silva (2018-2019), Ph.D. student, Federal University of São Carlos, São Carlos, Brazil

**MASTERS' ADVISOR:**

Laura L. Morrow (1990), Dana Woltering (1996), Kerry Brown (1998), Rebecca Grella (2000), Richa Misra (2001), Cate Stabile (2003), Angela Joseph (2007), David Ruggiero (2008), James Mickley (2010), Tracy Scott (2011), Adam Laybourn (2011), Leanne Merrill (2011), Brittany Hernon (2012), Kyle Kesel (2012), Jason O'Rawe (2012), Lisa Dittmar (2015), Hansol Lee (2015), Khum Thappa Magar (2016), Jie Ren (2016), Charlee Weidman (2016), Huijie Zhang (2017), Shanxing Gong (2017), Idamarie Pennolino (2020), Qinnan Zhu (2021), Megan Jefferis (Purdue, entered 2023)

**POSTDOCTORAL SUPERVISOR:**

M. Genoveva Rodriguez-Casteneda (2012-2013, Ph.D. Tulane; Consultant, Esperantza LLC)  
D. Edward Lowry (2009-2012, Ph.D. UC Santa Barbara, now Assoc. Prof. Hampden-Sydney College, VA)  
Elizabeth Leger (2004-5, Ph.D., UC Davis, now Assoc. Professor at Univ. Nevada, Reno)  
Katherine Howe (2003- 2004; Ph.D., Univ. Washington; Coordinator, Midwest Invasive Plant Network, The Nature Conservancy, Indianapolis IN)  
Laura Hyatt (1998-2002; Ph.D., Univ. Pennsylvania, now Dean Science/Math, West Valley College, Univ Pennsylvania)  
R. Matthew Landis (1999-2001; Ph.D., Dartmouth; now Assoc. Sci. Instr., Middlebury College)  
Maria N. Miriti (1999-2002; Ph.D., Univ. Ill./Chicago; now Assoc. Prof., Ohio State University)  
Timothy Howard (1998-2000; Ph.D., U. Mich.; now Ecologist, NYS Natural Heritage Program)

## Grants and Fellowships

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2021 – 2024	MCA: A Meta-analytic approach to resolving mechanisms of plant-soil-herbivore interactions. NSF DEB 08010000, Jennifer Krumins PI, J. Gurevitch co-PI, \$241,421 total (\$39,774 to JG).
2018-2023	Incorporating EDDMaps and range trend data into a systems approach to identify and manage invasive plant hotspots in Utah. Utah State through Utah State University, subcontract.
2019-2023	Collaborative Proposal: Workshop on Ecological Impacts of Solar Radiation Management Geoengineering, NSF DEB 1937619 (PI; \$26,709 to JG).
2019-2021	OPUS: CRS. Experiments, meta-analysis and big data in advancing ecological research. \$146,057. NSF DEB 1909233.
2014-2016	S. Handel, Rutgers University and J. Gurevitch: Restoration of Jamaica Bay Fringing Habitats: post-Sandy status and new approaches for a resilient future. National Parks Service, \$20,000 to JG.
2013-2016	J. Gurevitch, lead PI, Collaborative research: ABI Development: Making Advanced Statistical Tools Accessible for Quantitative Research Synthesis and Discovery in Ecology and Evolutionary Biology. (With Marc Lajeunesse, Univ. South Florida, and Byron Wallace, Thomas Trikalinos and Christopher Schmid, Brown University.) NSF 1262402, \$901,243 total funded

- 2011-2015 J. Gurevitch, lead PI, Catherine Graham, Co-PI: Collaborative research: Demographic heterogeneity at landscape scales in an emergent invasive species, *Centaurea stoebe*, in New York State (with Norma Fowler, Univ. Texas), NSF 1119891, \$803,956 total funded
- 2012 J. Gurevitch: Early detection and monitoring of an emerging invasion: population growth and expansion of spotted knapweed (*Centaurea stoebe*) in Suffolk County, Long Island. NYS Natural Heritage Program (\$25,000)
- 2002-2005 J. Gurevitch, PI: Factors promoting invasion of exotic plant species in forests of the Upton Preserve. U.S. Fish and Wildlife Service. \$77,291
- 2001-2004 J. Gurevitch, PI, M. Lerdau, co-PI: An experimental study of biological invasions in forests of the eastern United States, EPA R828900010, \$453,174
- 2001-2002 J. Gurevitch, PI, collaborative grant, with G.A. Fox: SGER: Dispersal and local population dynamics following large-scale wildfire NSF, \$27,650
- 2000-2002 J. Gurevitch, PI: Linking populations and ecosystem ecology: support for Ph.D. student Kerry Brown, USDA Forest Service, \$15,000
- 1998 - 2003 J. Gurevitch, PI, G.A. Fox, co-PI: Demography and population dynamics of a fire-adapted tree species, *Pinus rigida*, NSF, DEB 9806923, \$250,000; REU supplements, 1999, \$5000; 2003, \$6000
- 1998 - 2001 J. Gurevitch, PI, M. Lerdau & M. Carreiro, co-PIs: An experimental study of forest invasibility by exotic species, The Nature Conservancy, \$231,450 (incl. \$33,500 cash cost-share from SUNY-SB)
- 1998 – 2000 J. Gurevitch, PI: Demographic model of a plant invasion, USDA, 9800724, \$90,000 (Postdoctoral fellowship for Laura Hyatt)
- 1997 J. Gurevitch, PI: Pitch pine regeneration following severe fire in normal stature and dwarf pines in the Long Island pine barrens, Nature Conservancy, \$3,800
- 1996 - 1997 J. Gurevitch, PI: Patterns and mechanisms of community recovery following severe fire in the Long Island pine barrens, NSF, DEB 9634664, \$25,000
- 1996 J. Gurevitch, PI: Responses of pitch pine following severe fire in the Long Island pine barrens, The Nature Conservancy, \$7,000
- 1991 - 1992 J. Gurevitch, PI: Ecological meta-analysis: synthesizing the results of field experiments on competition and predation. NSF, Ecology and Mathematics, \$26,500.
- 1991 J. Gurevitch, PI: NSF, Dissertation Improvement Award (for Janet A. Morrison), \$10,954.
- 1990 J. Gurevitch, PI: NSF, Research Experiences for Undergraduates Award, \$4,600
- 1989 - 1994 J. Gurevitch, PI: Competitive dominance at two soil resource levels. NSF \$134,634.
- 1989 J. Gurevitch: Katherine Putnam Fellowship, Arnold Arboretum of Harvard University.

## Publications

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**Citations:** (to 05/2024): 34,554 *Google Scholar*/H index 63,i-10 index 108; 20,270 *Clarivate Web of Science* /H index 48

### **BOOKS PUBLISHED:**

Gurevitch, J., S.M. Scheiner and G.L. Fox. 2020. *The Ecology of Plants, 3<sup>rd</sup> Ed.* Sinauer Assoc./Oxford University Press, Oxford, UK and New York, NY, USA (undergraduate text)

Gurevitch, J., S.M. Scheiner and G.L. Fox. 2006. *The Ecology of Plants, 2<sup>nd</sup> Ed.* Sinauer Associates, Sunderland, MA. (major undergraduate text)

Gurevitch, J., S.M.Scheiner and G.L. Fox. 2002. *The Ecology of Plants.* Sinauer Assoc., Sunderland, MA.

Koricheva, J., J. Gurevitch and K. Mengersen, eds. 2013. *Handbook of Meta-analysis in Ecology and Evolution.* (Princeton Univ. Press; graduate/ professional level)

Scheiner, S.M and J. Gurevitch, Eds. 2001. *Design and Analysis of Ecological Experiments, 2<sup>nd</sup> Ed.* Oxford Univ. Press. (graduate and professional level textbook)

S. M. Scheiner and J. Gurevitch, Eds. 1993. *The Design and Analysis of Ecological Experiments.* Chapman & Hall, NY and London.

### **ARTICLES, CHAPTERS AND LETTERS PUBLISHED IN PEER-REVIEWED JOURNALS**

#### **2024**

Poddar, U., Gurevitch, J., Meiners, S. J., & D'Andrea, R. (2024). Similar trait-based successional assembly in native and introduced plants despite species pool differences. *JOURNAL OF ECOLOGY*. <https://doi.org/10.1111/1365-2745.14304>

Poddar, U., Lam, K. and J. Gurevitch. (2024) Trends in research approaches and gender in plant ecology dissertations over four decades (in press, *Ecology and Evolution*).

Futerman, Gideon, Mira Adhikari, Alistair Duffey, Yuanchao Fan, Peter Irvine, Jessica Gurevitch, and Claudia Wieners. The interaction of Solar Radiation Modification with Earth System Tipping Elements. (Submitted)

Roman de Miguel, Fiona J., Daniel Pfluger, Claudia E. Wieners, Jessica P. Gurevitch, and Cheryl Harrison. Sudden SRM initialization shock to ecological systems after delayed implementation (in preparation).

#### **2023**

Halpern, B.S. et al. 2023. Priorities for synthesis research in ecology and environmental science. *Ecosphere* 14:e4342 DOI10.1002/ecs2.4342

#### **2022**

Gurevitch, Jessica. 2022. Managing forests for competing goals. *SCIENCE* vol 376 Issue 6595 pp. 792-793 DOI: 10.1126/science.abp8463

#### **2021**

O'Dea, R.E., Lagisz, M., Jennions, M.D., Koricheva, J., Noble, D.W.A., Parker, T.H., Gurevitch, J., Page, M.J., Stewart, G., Moher, D., Nakagawa, S., n.d. Preferred reporting items for systematic reviews and meta-analyses in ecology and evolutionary biology: a PRISMA extension. *Biol. Rev.* 2021. <https://doi.org/10.1111/brv.12721>

**2021**

P. L. Zarnetske\*, J. Gurevitch\* [lead authors], J. Franklin, P. Groffman, C. Harrison, J. Hellmann, F.M. Hoffman, S. Kothari, A. Robock, S. Tilmes, D. Visoni, J. Wu, L. Xia, C.-E. Yang. 2021. Potential ecological impacts of climate intervention by reflecting sunlight to cool Earth. PNAS 2021 Vol. 118 No. 15 e1921854118; <https://doi.org/10.1073/pnas.1921854118>

Gurevitch, J., Jadotte, Y. and A. Moyer. 2021. Meta-analysis in the Social Sciences. (Chapter) The Cambridge Handbook of Research Methods and Statistics for the Social and Behavioral Sciences, Volume 1 edited by Austin Lee Nichols; John Edlund. Cambridge University Press, Cambridge, UK

**2020**

Stephan Kambach, Helge Bruelheide, Katharina Gerstner, Jessica Gurevitch, Michael Beckmann and Ralf Seppelt. 2020. Consequences of multiple imputation of missing standard deviations and sample sizes in meta-analysis. Ecology and Evolution: DOI.org/10.1002/ece3.6806

Ebbets, AL, Lane, DR, Dixon, P, Hollweg, TA, Huisenga, MT, and Gurevitch, J. 2020. Using meta-analysis to develop evidence-based recovery trajectories of vegetation and soils in restored wetlands in the northern Gulf of Mexico. Estuaries and Coasts 43: 1692-1710 (special issue)

Wurbel, H, Voelkl, B, Altman, NS, Forsman, A, Forstmeier, W, Gurevitch, J, Jaric, I, Karp, NA, Kas, MJ, Schielzeth, H, and Van De Castele, T. 2020. Reply to 'It is time for an empirically informed paradigm shift in animal research' (letter). Nature reviews neuroscience: DOI: 10.1038/s41583-020-0370-7

Voelkl, B, Altman, NS, Forsman, A, Forstmeier, W, Gurevitch, J, Jaric, I, Karp, NA, Kas, MJ, Schielzeth, H, Van De Castele, T, and Wurble, H. 2020. Reproducibility of animal research in light of biological variation. Nature Reviews Neuroscience 21: 384-393. Doi: 10.1038/s41583-020-0313-3

Schulz, AN, Mech, AM, Allen, CR, Ayres, MP, Gandhi, KJK, Gurevitch, J, Havill, NP, Herms, DA, Hufbauer, RA, Liebhold, AM, Raffa, KF, Raupp, MJ, Thomas, KA, Tobin, PC, and Marsico, TD. 2020. The impact is in the details: evaluating a standardized protocol and scale for determining non-native insect impact. Neobiota 55: 61-83. DOI: 10.3897/neobiota.55.38981

Akin-Fajiye, Morodoluwa; Gurevitch, Jessica. 2020. Increased reproduction under disturbance is responsible for high population growth rate of invasive *Centaurea stoebe*. Biological Invasions 22: 1947-1956

**2019**

Mech, AM, Thomas, KA, Marsico, TD, Herms, DA, Allen, CR, Ayres, MP, Gandhi, KJK, Gurevitch, J, Havill, NP, Hufbauer, RA, Liebhold, AM, Raffa, KF, Schulz, AN, Uden, DR, and Tobin, PC. 2019.

Evolutionary history predicts high-impact invasions by herbivorous insects. Ecology and Evolution 9: 12216-12230. DOI: 10.1002/ece3.5709

Kinlock, NL, Prowant, L, Herstoff, EM, Foley, CM, Akin-Fajiye, M, Bender, N, Umarani, M, Ryu, HY, Sen, B, and Gurevitch, J. 2019. Open science and meta-analysis allow for rapid advances in ecology: A response to Menegotto et al. (2019). Global Ecology and Biogeography 28: 1533-1534. DOI: 10.1111/geb.12964 (Letter)

Peng, Shijia, Nicole L. Kinlock, Jessica Gurevitch, and Shaolin Peng. 2018. Correlation of native and exotic species richness: a global meta-analysis finds no invasion paradox across scales, Ecology (open access) <https://doi.org/10.1002/ecy.2552> . Data: [edi.548.1](https://doi.org/10.1002/ecy.2552)

Beckmann, M., K. Gerstner, M. Akin-Fajiye, S. Ceaușu, S.n Kambach, N.L. Kinlock, H.R.P. Phillips, W. Verhagen, J. Gurevitch, S. Klotz, T. Newbold, P.H. Verburg, M. Winter and R. Seppelt. 2019. Conventional land-use intensification reduces species richness and increases production: A global meta-analysis. Global Change Biology. doi.org/10.1111/gcb.14606 Data: [edi.529.1](https://doi.org/10.1111/gcb.14606)

**2018**

- Gurevitch, Jessica, Julia Koricheva, Shinichi Nakagawa and Gavin Stewart. 2018. Meta-analysis and the science of research synthesis. *Nature* 555, pages 175–182, doi:10.1038/nature25753.  
*This paper was ranked by Altmetric In the top 5% of all research outputs and in the 99<sup>th</sup>% for High Attention Score compared to outputs of the same age.*
- Trisos, Christopher H., Giuseppe Amatulli, Jessica Gurevitch, Alan Robock, Lili Xia, & Brian Zambri. 2018. Potentially dangerous consequences for biodiversity of solar geoengineering implementation and termination. *Nature Ecology and Evolution* 2:475–482. <https://doi.org/10.1038/s41559-017-0431-0>  
*This paper was ranked by Altmetric in the 99.97th percentile of 152,000 articles of similar age for outreach in news outlets/publications and social media*
- Kinlock, Nicole L., Prowant, Lisa; Herstoff, Emily M., Foley, Catherine M., Akin-Fajiye, Morodoluwa, Bender, Nicole, Umarani, Mihir, Ryu, Hae Yeong, Sen, Bilgecan and Gurevitch, Jessica. 2018. Explaining global variation in the latitudinal diversity gradient: Meta-analysis confirms known patterns and uncovers new ones. *Global Ecology & Biogeography* 27: 125-141. Data: [edi.547.1](https://doi.org/10.1111/2041-210X.12747)
- Parker, Timothy H., Simon C. Griffith, Judith L. Bronstein, Fiona Fidler, Susan Foster, Hannah Fraser, Wolfgang Forstmeier, Jessica Gurevitch, Julia Koricheva, Ralf Seppelt, Morgan W. Tingley and Shinichi Nakagawa. 2018. Empowering peer reviewers with a checklist to improve transparency. *Nature Ecology & Evolution* 2:929–935.
- Akin-Fajiye, Morodoluwa and J. Gurevitch. 2018. The influence of environmental factors on the distribution and density of invasive *Centaurea stoebe* across NE USA. *Biol. Inv.*20: 3009-23.  
 Data: [edi.584.1](https://doi.org/10.1111/2041-210X.12758)

**2017**

- Hui, C., G.A. Fox, and J. Gurevitch. 2017. Scale-dependent portfolio effects explain growth inflation and volatility reduction in landscape demography. *PNAS* 114: 12507-12511
- Gerstner, K., Moreno-Mateos, D., Gurevitch, J., Beckmann, M., Kambach, S., Jones, H. P. and Seppelt, R. 2017. Will your paper be used in a meta-analysis? Make the reach of your research broader and longer lasting. *Methods in Ecology and Evolution*. doi:10.1111/2041-210X.12758

**2016**

- Wallace, B.C., M. J. Lajeunesse, G. Dietz, I.J. Dahabreh, T.A. Trikalinos, C.H. Schmid, and J. Gurevitch. 2016. OpenMEE: Intuitive, open-source software for meta-analysis in ecology and evolutionary biology. *Methods in Ecology and Evolution*. doi: 10.1111/2041-210X.12708
- Gurevitch, J., G.A. Fox, N.L. Fowler and C.H. Graham. 2016. Landscape demography: Population change and its drivers across spatial scales. *The Quarterly Review of Biology* 91: 459-484.
- Yu, F.K., Akin-Fajiye, Morodoluwa, Magar, Khum Thapa, Ren, Jie, and Jessica Gurevitch. 2016. A global systematic review of ecological field studies on two major invasive plant species, *Ageratina adenophora* and *Chromolaena odorata*. *Diversity and Distributions* 22: 1174-1185.
- Parker, T.H., S. Nakagawa, J. Gurevitch and IIEE Improving Inference group. 2016. Promoting transparency in evolutionary biology and ecology. *Ecology Letters* 19: 726-728. (editorial)
- Hillebrand H. and J. Gurevitch. 2016. Meta-analysis and Systematic Reviews in Ecology. *Encyclopedia of Life Sciences*, Wiley, London and NY <http://www.els.net/WileyCDA/ElsArticle/refId-a0003272.html>
- Rest, Joshua S., Olivia Wilkins, Wei Yuan, Michael D. Purugganan and Jessica Gurevitch. 2016. Meta-analysis and meta-regression of transcriptomic responses to water stress in *Arabidopsis*. *The Plant Journal* 85: 548-560



Seppelt, Ralf, Michael Beckmann, Silvia Ceausu, Anna F. Cord, Katharina Gerstner, Jessica Gurevitch, Stephan Kambach, Stefan Klotz, Chase Mendenhall, Helen R. P. Phillips, Kristin Powell, Peter H. Verburg, Willem Verhagen, Marten Winter, Tim Newbold. 2016. Harmonizing Biodiversity Conservation and Productivity in the Context of Increasing Demands on Landscapes. *BioScience* 66:890-896. doi: 10.1093/biosci/biw004

Parker, T.H., W. Forstmeier, J. Koricheva, F. Fidler, J.H. Hadfield, Y. En Chee, Clint. D. Kelly, J. Gurevitch, and Shinichi Nakagawa. 2016. Transparency in ecology and evolution: real problems, real solutions. *Trends in Ecology and Evolution* 31: 711-719.

Parker, T.H., E. Main, S. Nakagawa, J. Gurevitch, F. Jarrad, and M. Burgman. 2016. Promoting transparency in conservation science. *Conservation Biology* 30, 1149-1150.

## 2015

Gurevitch, J. and S. Nakagawa. 2015. Research synthesis and meta-analysis. *In*: Gordon A. Fox, Simoneta Negrete-Yankelevich, and Vinicio J. Sosa, Eds. *Ecological Statistics: Contemporary theory and application*. Oxford University Press, Oxford, pp. 200-227.

Blaustein, L., Kadas, G.J., J. Gurevitch. 2015. Integrating ecology into green roof research. *Israel Journal of Ecology and Evolution* 62: 1-6.

Kinlock, N.L., B.Y. Schindler and J. Gurevitch. 2015. Biological invasions in the context of green roofs. *Israel Journal of Ecology & Evolution* 62: 32-43.

Thyberg, Krista L., David J. Tonjes, and Jessica Gurevitch. 2015. Quantification of Food Waste Disposal in the United States: A Meta-Analysis. *Environ. Sci. Technol.* 49: 13946:13943. Data: [edi.553.1](#)

## 2014

Hillebrand, H. and J. Gurevitch. 2014. Meta-analysis results are unlikely to be biased by differences in variance and replication between ecological lab and field studies. *Oikos* 123:794-799.

Koricheva, J. and J. Gurevitch. 2014. Uses and misuses of meta-analysis in plant ecology. *Journal of Ecology* 102:828-844 doi: 10.1111/1365-2745.12224

## 2013

Lowry, E., E. J. Rollinson, A.J. Laybourn, T. E. Scott, M. E. Aeillo-Lammens, S. M. Gray, J. Mickley and J. Gurevitch. 2013. Biological invasions: a field synopsis, systematic review and database of the literature. *Ecology and Evolution* 3: 182-196. Data: [edi.540.1](#)

Hillebrand, H. and J. Gurevitch. 2013. Reporting standards in experimental studies. (Editorial) *Ecology Letters* 16:1419-1420. DOI:10.1111/ele.12190

## 2012

Correa, A., J. Gurevitch, M. A Martins-Loucao, and C. Cruz. 2012. C allocation to the fungus is not a cost to the plant in ectomycorrhizae. *Oikos* 121: 449-463. Data: [edi.531.1](#)

Conord, C., B. Fady and J. Gurevitch. 2012. Large scale longitudinal gradients of genetic diversity: a meta-analysis across six phyla in the Mediterranean basin. *Ecology and Evolution* 2: 2600-14. DOI: 10.1002/ece3.350 Data: [edi.530.1](#)

## 2011

Gurevitch, J., G. A. Fox, G. M. Wardle, Inderjit and D. Taub. 2011. Emergent insights from the synthesis of conceptual frameworks for biological invasions. *Ecology Letters* 14: 407-418.

## 2010

Gurevitch, J. and K. Mengersen. 2010. A statistical view of research synthesis of patterns of species richness along productivity gradients: devils, forests and trees. *Ecology* 91: 2553-2560.

Gurevitch, J. 2010. Invasions and plant competition. In: Encyclopedia of Invasive Introduced Species, D. Simberloff and M. Rejmanek, eds. Univ. California Press, Berkeley CA.

**2009**

Dukes, J.S., J. Pontius, D. Orwig, J.R. Garnas, V.L. Rodgers, N. Brazee, B. Cooke, K.A. Theoharides, E.E. Stange, R. Harrington, J. Ehrenfeld, J. Gurevitch, M. Lerdau, K. Stinson, R. Wick, and M. Ayres. 2009. Responses of insect pests, pathogens, and invasive plant species to climate change in the forests of northeastern North America: What can we predict? 2009. Can. J. For. Res. 39:231-248.

**2008**

Gurevitch, J. T.G. Howard, I.W. Ashton, E.A. Leger, K.M. Howe, E. Woo and M. Lerdau. 2008. Effects of experimental manipulation of light and nutrients on establishment of seedlings of native and invasive woody species in Long Island, NY forests. Biological Invasions 10: 821-831. Data: [edi.537.1](#)

**2007**

Leger, E. A., K. M. Howe, J. Gurevitch, E. Woo, J. Hickman, I.W. Ashton, and M. Lerdau. 2007. The interaction between soil nutrients and leaf loss during early establishment in plant invasion. Forest Science 53: 701-709. Data: [edi.546.1](#)

**2006**

Richards, C., O. Bossdorf, N. Muth, J. Gurevitch and M. Pigliucci. 2006. Jack of all trades, master of some? On the role of phenotypic plasticity in plant invasions. Ecology Letters 9:981-993.

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Liebhold, A.M. and J. Gurevitch. 2002. Integrating the statistical analysis of spatial data in ecology. *Ecography* 25: 553-557.

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Hedges, L. V., J. Gurevitch and P. Curtis. 1999. Meta-analysis of response ratios in experimental ecology. *Ecology* 80:1150-1156.

Goldberg, D.E., T. Rajaniemi, J. Gurevitch and A. Stewart-Oaten. 1999. Empirical approaches to quantifying interaction intensity: competition and facilitation along productivity gradients. *Ecology* 80:1118-1131.

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**1998**

Gomez, P. and J. Gurevitch. 1998. Weed community responses in a corn-soybean intercrop. *Applied Vegetation Science* 1:281-288. Data: [edi.536.1](#)

**1997**

Adams, D.C., J. Gurevitch and M.S. Rosenberg. 1997. Resampling tests for meta-analysis of ecological data. *Ecology* 78:1277-1283.

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**1995**

Wilson, C. and J. Gurevitch. Plant size and spatial pattern in a natural population of *Myosotis micrantha*. 1995. Journal of Vegetation Science 6:847-852. Data: [edi.541.1](#)

**1994**

Gurevitch J. and S. L. Collins. 1994. Experimental manipulation of natural plant communities. Trends in Ecology and Evolution 9:94-98 (cover article).

Reader, R. J. et al. 1994. Intensity of plant competition and neighbor biomass: testing for a consistent relationship. Ecology 75:1753-1760.

**1993**

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Fortin, M.-J. and J. Gurevitch. 1993. Permutation methods: spatial patterning and plant competition. In: Scheiner, S.M. and J. Gurevitch, The Design and Analysis of Ecological Experiments. pp. 342-359.

**1992**

Gurevitch, J., L. L. Morrow, A. Wallace and J. S. Walsh. 1992. A meta-analysis of field experiments on competition. American Naturalist 140:539-572.

Gurevitch, J. 1992. Sources of variation in leaf shape among two populations of *Achillea lanulosa*. Genetics 130:385-394.

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Gurevitch, J. and P.H. Schuepp. 1990. Boundary layer properties of highly dissected leaves: an investigation using an electrochemical fluid tunnel. Plant, Cell and Environment 13:783-792.

Gurevitch, J., P. Wilson, P. Teese, J. Stone, and R. Stoutenburgh. 1990. Competition among old-field perennials: effects of available space and resource level. Journal of Ecology 78:727-744.

**1989**

Gurevitch, J. and R. S. Unnasch. 1989. The effect of competition on plant community structure at two levels of soil resources. Can. J. Bot. 67:3470-3477.

**1988**

Monson, R.K., J.A. Teeri, M.S.B. Ku, J. Gurevitch and L.J. Mets. 1988. Carbon isotope ratios in leaves of *Flaveria* species exhibiting different amounts of C<sub>3</sub>- and C<sub>4</sub>- cycle co-function. Planta 174:145-151.

Gurevitch, J. 1988. Variation in leaf dissection and leaf energy budgets among populations of *Achillea* from an altitudinal gradient. Amer. J. Botany 75:1298-1306.

Gurevitch, J. 1988. Differences in the proportion of women to men invited to give seminars: is the old boy still kicking? Bull. Ecol. Soc. Amer. 69:155-160.

**1986**

Gurevitch, J. Competition and the local distribution of the grass *Stipa neomexicana*. 1986. Ecology 67:46-57. Data: [edi.532.1](#)

Gurevitch, J. 1986. Restriction of a C<sub>3</sub> grass to dry ridges in a desert grassland. Canadian Journal of Botany 64:1006-1011.

Gurevitch, J. and S.T. Chester. 1986. Analysis of repeated measures experiments. Ecology 67:251-255.

Gurevitch, J., J.A. Teeri and A.M. Wood. 1986. Genetic differentiation in water relations and

photosynthetic carbon metabolism among populations of *Sedum wrightii* (Crassulaceae). *Oecologia* 70:198-204.

Teeri, J.A., M. Turner and J. Gurevitch. 1986. The response of leaf water potential and Crassulacean Acid metabolism to prolonged drought in *Sedum rubrotinctum*. *Plant Physiol.* 81:678-680.

#### **1984**

Teeri, J.A. and J. Gurevitch. 1984. Environmental and genetic control of Crassulacean acid metabolism in two Crassulacean species and an F<sub>1</sub> hybrid with differing biomass  $\delta^{13}\text{C}$  values. *Plant, Cell and Environment* 7:589-596.

Scheiner, S.M., J. Gurevitch and J.A. Teeri. 1984. A genetic analysis of the photosynthetic properties of populations of *Danthonia spicata* that have different growth responses to light level. *Oecologia* 64:74-77.

#### **1979**

Schaffer, W.M., Jensen, D.B., Hobbs, D.E., Gurevitch, J. Todd, J.R. and Schaffer, M.V. 1979. Competition, foraging energetics, and the cost of sociality in 3 species of bees. *Ecology* 60:976-987 DOI10.2307/1936866

#### **SOFTWARE PUBLISHED**

Rosenberg, M.S., D.C. Adams and J. Gurevitch. 1997; 2000. *MetaWin*. 1.0 & 2.0. Statistical software for conducting meta-analysis: fixed effect models, mixed effect models, and resampling tests. (Versions 1.0, 2.0). Sinauer Assoc., Sunderland, MA.

Dietz, G., B. C. Wallace, M. J. Lajeunesse, C.H. Schmid, T. A. Trikalinos, and J. Gurevitch. 2014. OpenMEE: Software for Ecological & Evolutionary Meta-Analysis. [http://www.cebm.brown.edu/open\\_mee](http://www.cebm.brown.edu/open_mee)

#### **POPULAR PUBLICATIONS**

Tonjes, David and Jessica Gurevitch. 21 May 2021. Trash Talk: Garbage and the Infrastructure Bill (retitled, Better ways to manage LI's trash). *Newsday* Opinion article.

J. Gurevitch. *Lovely Enemy*. 2009. Op Ed (full page), *Newsday*, Sunday Aug. 16, 2009. Article on invasive plants, published in the daily newspaper of Long Island, NY (Population >3 million people)

## Invited Working Groups, Workshops and Short Courses

### SHORT COURSES TAUGHT AND INVITED WORKSHOP LEADER (2009-PRESENT)

- 2022 Ecological Impacts of Geoengineering, Sunday River, ME (Organizer)
- 2020 Ecological Impacts of Geoengineering (Organizer, with P. Zarnetske, virtual, multidisciplinary)
- 2019 Göteborg University, Biology & Env. Sci., Marine station at Tjärnö, Sweden  
Meta-analysis in ecological research, Trinity College, Dublin, Ireland  
Workshop on norm of reaction approaches to pre-clinical animal trials, Vevey, Switzerland (participant)  
Meta-analysis in ecological research, Yunnan University, Kunming, China
- 2017 La Universidad Central "Marta Abreu" de Las Villas, Santa Clara, Cuba  
Mehidol University, Bangkok, Thailand, Meta-analysis and systematic reviews
- 2016 University of Haifa, Israel, Meta-analysis and population modeling (with N. Fowler)  
University of Puerto Rico, Rio Piedras, Quantitative methods in ecology, week-long invited course  
Göteborg University, Biology & Env. Sci., Marine station at Tjärnö, Sweden
- 2015 German Centre for Integrative Biodiversity Research, Leipzig, Germany, Land Use, Biodiversity and Ecosystem Services  
Evolution 2015, Guarujá, Brazil (with Marc Lajeunesse)
- 2014 CESAB, Aix-en-Provence, France, Meta-analysis and systematic reviewing  
Göteborg University, Biology & Env. Sci., Marine station at Tjärnö, Sweden  
SESYNC, Annapolis, MD: Land Use, Biodiversity and Ecosystem Services
- 2013 University of Delhi, Delhi, India, Centre for Environ. Management Degraded Ecosystems  
University of Lisbon, Lisbon, Portugal  
Carl-von-Ossietzky University Oldenberg, Oldenberg, Germany  
*All: Meta-analysis and systematic reviews in Ecology and Evolution*
- 2012 Swiss Federal Research Institute, Ecological Genetics & Evolution, Zurich, Meta-analysis in Ecology and Evolution
- 2010 Current practice in meta-analysis in ecology; Hebrew University, Rehovot campus, Israel
- 2009 J. Gurevitch, G. A. Fox, G. Wardle, M. Taub, Inderjit; Short term visiting group, Conceptual syntheses in invasion biology, funded by NESCent, Durham NC  
J. Gurevitch, K. Mengersen and M. LaJeunesse. NESCent, Durham, NC. Short course in Meta-analysis in Ecology & Evolution

**Invited Presentations** (since 2014)

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- 2024 Trees, Climate & Climate Intervention, and rethinking measures for climate change; Indiana University
- 2023 From Evidence to Landscapes and Global Climate Intervention. Spartan Eminent Lecture, EEOB, Michigan State University.  
How do we know? Evidence, Global Climate Intervention, Tipping Points and Relative Risk: an Exploration; Oak Ridge National Laboratory  
Ecological impacts of climate intervention, University of Tennessee  
Evaluating risks of climate change and climate intervention, Vanderbilt University
- 2022 What Impacts Would SAI Have on Ecology?: What We need to Know. Gordon Research Conference on Geoengineering, June, Sunday River, ME
- 2022 The future of ecological research synthesis: the next 30 years and beyond. Invited, Organized Oral Session, Ecological Society of America
- 2021 Future of Synthesis, National Center for Ecological Synthesis, 2 Day symposium (Keynote speaker, virtual)
- 2020 Moore Lecture, Dept. Environmental Sciences, University of Virginia  
Ecological Society of America Annual Meeting, Special Highlighted Poster (virtual)  
University of Liverpool, UK, Institute of Risk and Uncertainty (virtual)  
Center for Climate Intervention Strategies, National Center for Atmospheric Research, Boulder, CO (virtual)
- 2019 Graduate Student invited speaker, Ecology and Evolutionary Biology, Univ. Connecticut  
Society for Research Synthesis Methodology annual meeting, Chicago, IL  
Trinity College, Dublin, Ireland  
Distinguished Ecologist, Graduate Degree Program in Ecology, Colorado State University  
Yunnan University, Kunming, China
- 2018 Binghamton University, Biology  
GeoMIP 8, Zurich, Switzerland (Climate Science)  
Dept. Zoology, Oxford University, UK
- 2017 La Universidad Central "Marta Abreu" de Las Villas, Santa Clara, Cuba  
Plenary lecture, Botanical Conference of Thailand 2017, Mahidol University, Bangkok  
University of British Columbia-Okanagan, Canada
- 2016 Presidential Address, Society for Research Synthesis Methodology, Florence, Italy  
Pennsylvania State University, Intercollegiate Graduate Program in Ecology  
Hebrew University, Ecology and Evolution  
University of Puerto Rico, Ecology and Evolutionary Biology
- 2015 Cornell University, Northeastern IPM Center and School of Integrative Plant Sciences  
East Carolina University, Biology
- 2014 Institute for Ecosystem Studies, Millbrook, NY  
Stellenbosch Institute for Advanced Studies

## University Teaching

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### *Undergraduate Courses Taught at Stony Brook*

Intermediate Statistics, BIO 384/BEE 584

General Ecology, BIO 351

Plant Ecology, BIO 385

Principles of Biology, BIO 151, Fundamentals of Biology, BIO 201 (Intro Bio for majors)

Freshman Seminars: Critical Issues in the Environment, SSO 102

### *Graduate Courses and Seminars Taught*

Principles and Applications of Ecology and Evolution, BEE 576

Principles of Ecology, BEE 550; Advanced Ecology, BEE 560

Research Design and Analysis in Ecology and Evolution, BEE 585

*Seminars:* The synthesis of quantitative genetics and physiological ecology; Agricultural ecology; The ecology of pine barrens; Invasive species; Ecological meta-analysis & others; Biotic responses to global climate change, Ecological Disasters, and others

Undergraduate Honors college advisor, 2002-2008

## Community Service

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Member, Conservation Advisory Board, Port Jefferson Village, New York 2013- 2021

Invited public talk, North Shore Jewish Center, January 2017

Invited talk on climate change, North Shore Jewish Center Seniors, Oct. 2017

Talk on biological invasions, Philadelphia Botanical Club, March 2013

Talk on the science of plants and water, Bala Cynwyd Middle School, PA, April 2012

Talk on life as a research scientist, Brooklyn Technical High School, Brooklyn NY Oct. 2012

Supervised Intel semi-finalist research, Zachary Hollander (Great Neck North High School), 2005-2007

Supervised Intel contestant Ross Zhang, 2007-2008

Presentation/ hands-on program on Fire Ecology and the Long Island Pine Barrens, Edna Louise Spear Elementary School, Gifted and Talented Program, October 2004

Judge, Shipley-Ronal Regional Invitational Science Fair, Nassau Co. NY, May 2000

Invited faculty guest, Hand Residential College, Dept. of Residential Programs, SUNY–Stony Brook; November 18, 1998

Invited speaker, “Meet the Professor” SUNY–Stony Brook; October 30, 1997

Symposium for Girls Exploring Math and Science, held at Stony Brook on January 11, 1994; participant.

Supervised semifinalist-winning Westinghouse project, Loren Wittie, 1995

Participant and invited speaker (careers in science), Academy of St. Joseph, Brentwood, NY, April 1990.

Organized workshop on career choices and opportunities for women in science, March 27, 1990, held at State University of New York at Stony Brook.