

Nicole L. Kinlock

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Education

- 2013–2020 Stony Brook University, Stony Brook, NY, USA
Ph.D. in Ecology & Evolution
Advisor: Dr. Jessica Gurevitch
- 2009–2013 Rochester Institute of Technology, Rochester, NY, USA
Bachelor of Science in Biology, *summa cum laude*

Selected Research Experience

- 2020–present **University of Konstanz**, Department of Biology
Postdoctoral researcher (Supervisor: Dr. Mark van Kleunen)
- 2018–2020 **Stony Brook University**, Department of Ecology & Evolution
Graduate Research Assistant (Supervisors: Drs. Ross Nehm and Gena Sbeglia)
- 2017–2020 **Applied Biomathematics, Inc.**
Research Associate (Supervisors: Drs. Lev Ginzburg and Nicholas Friedenberg)
- 2017–2018 **Brookhaven National Laboratory**, Environmental & Climate Sciences Department
Research Assistant (Supervisor: Dr. Alistair Rogers)

Peer-reviewed Publications

- 2024 Guo, K, P Pyšek, M van Kleunen, **NL Kinlock**, M Lučanová, IJ Leitch, S Pierce, W Dawson, F Essl, H Kreft, B Lenzner, J Pergl, P Weigelt, and W-Y Guo. Plant invasion and naturalization are influenced by genome size, ecology and economic use globally. *Nature Communications*, 15(1): 1330. [\[DOI\]](#)
- 2024 Dong, B, Q Yang, **NL Kinlock**, R Pouteau, P Pyšek, P Weigelt, F Yu, and M van Kleunen. Naturalization of introduced plants is driven by life-form-dependent cultivation biases. *Diversity and Distributions*, 30(1): 55-70. [\[DOI\]](#)
- 2023 Fristoe, TS, J Bleilevens, **NL Kinlock**, Q Yang, Z Zhang, W Dawson, F Essl, H Kreft, J Pergl, P Pyšek, P Weigelt, JM Dufour-Dror, AN Sennikov, P Wasowicz, KB Westergaard, and M van Kleunen. Evolutionary imbalance, climate and human history jointly shape the global biogeography of alien plants. *Nature Ecology & Evolution*, 7(10): 1633–1644. [\[DOI\]](#)

- 2023 Fertakos, ME, EM Beaurty, NR Ford, **NL Kinlock**, DW Adams, and BA Bradley. Historical Plant Sales (HPS) database: Documenting the spatiotemporal history of plant sales in the conterminous U.S. *Ecology*, 104(7): e4106. [\[DOI\]](#)
- 2022 **Kinlock, NL**, DW Adams, and M van Kleunen. An ecological and evolutionary perspective of the historical US nursery flora. *Plants, People, Planet*, 5(1): 146-159. [\[DOI\]](#)
- 2022 **Kinlock, NL**, K Dehnen-Schmutz, F Essl, J Pergl, P Pyšek, H Kreft, P Weigelt, Q Yang, and M van Kleunen. Introduction history mediates naturalization and invasiveness of cultivated plants. *Global Ecology and Biogeography*, 31(6): 1104-1119. [\[DOI\]](#)
- 2021 **Kinlock, NL** and SB Munch. Interaction network structure and spatial patterns influence invasiveness and invasibility in a stochastic model of plant communities. *Oikos*, 130(11): 2040-2052. [\[DOI\]](#)
- 2021 **Kinlock, NL**. Uncovering structural features that underlie coexistence in an invaded woody plant community with interaction networks at multiple life stages. *Journal of Ecology*, 109(1): 384-398. [\[DOI\]](#)
- 2020 **Kinlock, NL**, CM Foley, GC Sbeglia, and R Nehm. A lesson on matter and energy at the organismal scale: Linking patterns and processes across diverse taxa. *CourseSource*.
- 2020 **Kinlock, NL**, AJ Laybourn, CE Murphy, JJ Hoover, and NA Friedenberg. Modelling bioenergetic and population-level impacts of invasive bigheaded carps (*Hypophthalmichthys* spp.) on native paddlefish (*Polyodon spathula*) in backwaters of the lower Mississippi River. *Freshwater Biology*, 65: 1086-1100. [\[DOI\]](#)
- 2020 Kattge, J, G Bönisch, S Díaz, S Lavorel, IC Prentice, ..., **NL Kinlock**, ... (729 coauthors). TRY plant trait database—enhanced coverage and open access. *Global Change Biology*, 26: 119-188. [\[DOI\]](#)
- 2019 **Kinlock, NL**. A meta-analysis of plant interaction networks reveals competitive hierarchies as well as facilitation and intransitivity. *The American Naturalist*, 194(5): 640-653. [\[DOI\]](#)
- 2019 **Kinlock, NL**, L Prowant, EM Herstoff, CM Foley, M Akin-Fajiye, N Bender, M Umarani, HY Ryu, B Şen, and J Gurevitch. Open science and meta-analysis allow for rapid advances in ecology: A response to Menegotto et al. (2019). *Global Ecology and Biogeography*, 28(10): 1533-1534. [\[DOI\]](#)
- 2019 Beckmann, M, K Gerstner, M Akin-Fajiye, S Ceaşu, S Kambach, **NL Kinlock**, HRP Phillips, W Verhagen, J Gurevitch, S Klotz, T Newbold, PH Verburg, M Winter, and R Seppelt. Conventional land-use intensification reduces species richness and increases production: A global meta-analysis. *Global Change Biology*, 25(6): 1941-1956. [\[DOI\]](#)
- 2019 Peng, S, **NL Kinlock**, J Gurevitch, and S Peng. Correlation of native and exotic species richness: a global meta-analysis finds no invasion paradox across scales. *Ecology*, 100(1): e02552. [\[DOI\]](#)
- 2018 **Kinlock, NL**, L Prowant, EM Herstoff, CM Foley, M Akin-Fajiye, N Bender, M Umarani, HY Ryu, B Şen, and J Gurevitch. Explaining global variation in the latitudinal diversity gradient: Meta-analysis confirms known patterns and uncovers new ones. *Global Ecology and Biogeography*, 27: 125-141. [\[DOI\]](#)

- 2015 **Kinlock, NL**, BY Schindler, and J Gurevitch. Biological invasions in the context of green roofs. *Israel Journal of Ecology and Evolution*, 62(1-2): 32–43. [\[DOI\]](#)

Teaching and Mentorship

INSTRUCTOR

University of Konstanz

- 2023 Plant Physiology, advanced undergraduate level course

Stony Brook University

- 2019 Biometry, **graduate level (Master's and PhD) course** in statistics

- 2018 Plant Ecology, guest lecturer for one month

- 2017, 2016 Introduction to R, two-day workshop for graduate students

TEACHING ASSISTANT

Stony Brook University

- 2019, 2016, 2014 Fundamentals of Biology: Organisms to Ecosystems

- 2018 Ecology

- 2017, 2016 Biometry

- 2015 Landscape Ecology Laboratory

- 2015 Plant Diversity

- 2014 Applied Ecology and Conservation Biology Laboratory

- 2013 Fundamentals of Scientific Inquiry in the Biological Sciences I

UNDERGRADUATE MENTOR

- 2017 Zambuto, MA, **NL Kinlock**, and J Gurevitch. “Comparing Intra- and Interspecific Competition of Spotted Knapweed and Orchardgrass.” Undergraduate Research and Creative Activities Research Symposium. Stony Brook, NY. (Mentored student poster presentation)

Honors and Awards

- 2022 Shortlisted for the Harper Prize, *Journal of Ecology* annual award for the best paper by an early career author
- 2020 Best Teaching Assistant Award, Department of Ecology & Evolution, Stony Brook University
- 2017 Lawrence B. Slobodkin Award for Research in Ecology (**\$550**)
- 2015 Lawrence B. Slobodkin Award for Research in Ecology (**\$750**)
- 2014 Tinker Foundation Field Research Grant (**\$1,997**)
- 2014 Departmental Excellence Research Award (**\$1,000**)

- 2013 Graduate Council Fellowship, Stony Brook University (**\$125,000**) *Awarded annually to ten incoming doctoral students at Stony Brook University.*
- 2013 Recruitment Fellowship, Stony Brook University (**\$2,000**)
- 2013 John Wiley Jones Award for Outstanding Students in Science (**\$250**)
- 2013 Research Scholars Program Award

Professional Service

Reviewer for *Diversity and Distributions*, *Ecography*, *Ecology*, *Ecology and Evolution*, *Ecology Letters*, *Ecosphere*, *Functional Ecology*, *Global Ecology and Biogeography*, *Israel Journal of Ecology and Evolution*, *Journal of Biogeography*, *Journal of Experimental Botany*, *Nature Ecology & Evolution*, *Nature Plants*, *PLOS ONE*, *Proceedings B*, *Science*, and *Scientific Reports*.

Member of the Ecological Society of America and the American Society of Naturalists

Presentations

- 2022 **Kinlock, NL**, K Dehnen-Schmutz, F Essl, J Pergl, P Pyšek, H Kreft, P Weigelt, Q Yang, M van Kleunen. "Introduction history mediates naturalization and invasiveness of cultivated plants." Neobiota 12th International Conference on Biological Invasions, Tartu, Estonia (Oral presentation)
- 2022 **Kinlock, NL**, K Dehnen-Schmutz, F Essl, J Pergl, P Pyšek, H Kreft, P Weigelt, Q Yang, M van Kleunen. "Introduction history mediates naturalization and invasiveness of cultivated plants." International Association for Ecology (INTECOL) 2022, Geneva, Switzerland. (Oral presentation)
- 2019 **Kinlock, NL**. "Invasive plants in the northeast U.S.: Combining natural history and ecology." Friends of the Long Pond Greenbelt Sunday Talks Series, Bridgehampton, NY, USA. (Public talk)
- 2018 **Kinlock, NL** and J Gurevitch. "Invasive status does not dictate community-level interactions in an interaction network of woody plants." Ecological Society of America Annual Meeting, New Orleans, LA, USA. (Poster)
- 2017 **Kinlock, NL** and J Gurevitch. "Experimental determination of an invaded old field plant interaction network." Early Career Researcher Symposium, Brookhaven National Laboratory, Upton, NY, USA. (Poster)
- 2017 **Kinlock, NL** and J Gurevitch. "Characterizing the structure of plant interaction networks." Ecological Society of America Annual Meeting, Portland, OR, USA. (Poster)
- 2017 **Kinlock, NL**. "A meta-analysis of network structure in plant-plant interaction communities." Society for Research Synthesis Methodology Annual Meeting, Montreal, QC, Canada. (Oral presentation)
- 2017 **Kinlock, NL**. "Community structure of an invaded old field plant interaction network."

- Yale-Myers Summer Seminar Series, Eastford, C.T. (Public talk)
- 2017 **Kinlock, NL.** “Characterizing the structure of plant interaction networks.” Department of Ecology & Evolution Retreat, Stony Brook, NY. (Oral presentation)
- 2013 **Kinlock, NL** and AC Tyler. “Does the history of small, urban and suburban wetlands influence the biodiversity of aquatic invertebrate communities?” College of Science Seminar at RIT, Rochester, NY. (Oral presentation)
- 2012 **Kinlock, NL** and AC Tyler. “Analyzing the effectiveness and efficiency of different methods for invasive *Typha* spp. removal in created wetlands.” Summer Undergraduate Research Symposium at RIT, Rochester, NY. (Oral presentation)
- 2011 **Kinlock, NL**, S Loftus, N Marshall, J Skufca, and M Twiss. “Comparison of plankton dynamics in nearshore and main channel areas of the St. Lawrence River.” Summer Symposium on Undergraduate Research Experiences at Clarkson University, Potsdam, NY. (Oral presentation)

Additional Experience

- 2014 **Tropical Plant Systematics**, Organization for Tropical Studies, Costa Rica
Five-week graduate course on the phylogeny and identification of neotropical plants with a research component.
- 2013–2014 **Improvisation for Scientists**, Alan Alda Center for Communicating Science, Stony Brook University
Weekly workshop to improve communication skills, tailored to scientists.
- 2012–2013 **Research Scholar**, RIT (Advisor: Dr. A. Christy Tyler)
Undergraduate thesis characterizing aquatic macroinvertebrate communities in small urban and suburban wetlands.
- 2012 **Undergraduate Liaison**, RIT in assoc. with the Great Lakes Innovative Stewardship Through Education Network (Advisors: Drs. A. Christy Tyler and John Waud)
Designed and conducted wetland mitigation, invasive species management, and community outreach projects.
- 2011 **Summer Research Fellow**, Research Experience for Undergraduates Program, Clarkson University (Advisor: Dr. Michael Twiss)
Assessed plankton dynamics in the St. Lawrence River in support of a two-dimensional ecosystem model.

Skills

Programming languages R, Python, Julia, C++, Bash, $\LaTeX$
High-performance cluster computing
Git (GitHub/nlkinlock)

