STEPHEN P. ELLNER

Department of Ecology and Evolutionary Biology   170 Lexington Drive
Corson Hall, Cornell University, Ithaca NY 14853-2701   Ithaca NY 14850
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EDUCATION

B.A.   1975 University of California, Berkeley: Mathematics
Ph.D.   1982 Cornell University: Applied Mathematics, directed by Simon A. Levin
Postdoctoral 1984-85 with Lee Segel, Department of Applied Mathematics, Weizmann Institute

PROFESSIONAL EMPLOYMENT

2013 - present	**Horace White Professor** of Ecology & Evolutionary Biology
2000 – present	Department of Ecology and Evolutionary Biology, Cornell University. **Professor.**
1986-2000	Biomathematics Graduate Program, Department of Statistics, North Carolina State University, Raleigh, NC. **Professor** 1994-2000, **Associate Professor** 1989-1994, **Assistant Professor** 1986-1989. **Director of Graduate Studies** for the Biomathematics Program, 1991-1995 and 1997.
1982-1986	Department of Mathematics and Program in Ecology, University of Tennessee, Knoxville. **Assistant Professor**.

Visiting positions at Department of Mathematics, University of Arizona, Tucson (1984); Institute of Advanced Studies, Hebrew University, Jerusalem (1990); Isaac Newton Institute for Mathematical Sciences, Cambridge, UK (1993); Biology Department, Kyushu University (1996); Section of Ecology and Systematics, Cornell University (1996); Institute of Computational Sustainability, Cornell (2011).

AFFILIATIONS: Ecological Society of America, British Ecological Society, Society for Industrial and Applied Mathematics, American Society of Naturalists, Society for Mathematical Biology.

AWARDS AND HONORS

- 2017 American Society of Naturalists Presidential Award (2016 best paper in *The American Naturalist*, joint with Robin Snyder).
- Fellow of the Ecological Society of America (elected 2016).
- 2012 Tansley Lecturer, British Ecological Society
- Japan Society for Promotion of Science, Visiting Research Fellowship (1996).
- US-Israel BSF Bergmann Memorial Research Award (1987).

CURRENT RESEARCH SUPPORT

- NSF/NIH Program on Ecology and Evolution of Infectious Diseases. "Transmission networks in trait-based communities: implications for bee disease." (PIs S. McArt (Lead), L. Adler, S.P. Ellner, R. Irwin, Q. McFredrick, C. Myers), 10/1/2016 – 9/30/2020.

- US National Science Foundation, Division of Environmental Biology. "Integral Projection Models for Populations in Varying Environments - Construction and Analysis" (PIs S.P. Ellner, G. Hooker, P.B. Adler, R. Snyder). 2014-2019.

BOOKS

1. S.P. Ellner, D.Z. Childs, and M. Rees. 2016. Data-driven Modeling of Structured Populations: a Practical Guide to the Integral Projection Model. Springer.
2. S.P. Ellner and J. Guckenheimer. 2006. Dynamic Models in Biology. Princeton U. Press.

REFEREED PUBLICATIONS (2010 and later; see p. 11 for earlier publications. *h*-index 69**)**

1. M. Rees and S.P. Ellner. Why so variable: can genetic variance in flowering thresholds be maintained by fluctuating selection? American Naturalist**, *in press.*
2. L.L. Truitt, S.H. McArt, A.H. Vaughn, and S.P. Ellner. Trait-based modeling of multi-host pathogen transmission: Plant-pollinator networks. American Naturalist**, *in press*.
3. M. Yamamichi, N.G. Hairston Jr., M. Rees, and S.P. Ellner. Rapid evolution with generation overlap: the double-edged effect of dormancy. Theoretical Ecology, ***in press.***
4. S.P. Ellner, R.E. Snyder, P.B. Adler, and G. J. Hooker **2019**. An expanded Modern Coexistence Theory for empirical applications. Ecology Letters 22: 3-18. doi:10.1111/ele.13159.
5. A.T. Tredennick, B. J. Teller, P. B. Adler, G. Hooker and S.P. Ellner. **2018.** Size-by-environment interactions: a neglected dimension of species' responses to environmental variation. Ecology Letters 21: 1757-1770. DOI: 10.1111/ele.13154
6. L.S. Adler, K.M. Michaud, S.P. Ellner, S.H. McArt, P.C. Stevenson and R.E. Irwin. **2018**. Disease where you dine: plant species and floral traits associated with pathogen transmission in bumble bees. Ecology 99: 2535-2545.
7. P.B. Adler, A. Kleinhesselink, G. Hooker, J. B. Taylor, B. Teller, and S.P. Ellner. **2018**. Weak interspecific interactions in a sagebrush steppe? Conflicting evidence from observations and experiments. Ecology 99: 1621–1632.
8. S.P. Ellner. **2018**. Generation time in structured populations. American Naturalist 192: 105–110. https://doi.org/10.1086/697539.
9. R.E. Snyder and S.P. Ellner. **2018.** Pluck or luck: does trait variation or chance drive variation in lifetime reproductive success? American Naturalist 191: E90-E107. https://doi.org/10.1086/696125
10. H. Inamine, S.P. Ellner, P. D. Newell, Y. Luo, N. Buchon and A.E. Douglas. **2018**. Spatiotemporally heterogeneous population dynamics of gut bacteria inferred from fecal time-series data. mBio 9:e01453-17. https://doi.org/10.1128/mBio.01453-17.
11. S.P. Ellner, R.E. Snyder, and P.B. Adler. 2016. How to quantify the temporal storage effect using simulations instead of math. Ecology Letters 19: 1333–1342. doi:10.1111/ele.12672
12. P.W. Messer, S.P. Ellner, and N.G. Hairston, Jr. 2016. Can population genetics adapt to rapid evolution? Trends in Genetics 32: 408-417.
13. R.E. Snyder and S.P. Ellner. 2016. We happy few: using structured population models to identify the decisive events in the lives of exceptional individuals. American Naturalist 188: E28-E45.
14. Holden, M.H. and S.P. Ellner. 2016. Human judgment vs. quantitative models for the management of ecological resources. Ecological Applications 26: 1553–1565.
15. Holden, M.H., J.P. Nyrop, S.P. Ellner. 2016. The economic benefit of time-varying surveillance effort for invasive species management. Journal of Applied Ecology 53: 712-721.

16. H. Inamine, S. P. Ellner, J. P. Springer and A. A. Agrawal. 2016. Linking the continental migratory cycle of the monarch butterfly to understand its population decline. Oikos 125: 1081–1091. doi: 10.1111/oik.03196

17. M. Yamamichi and S.P. Ellner. 2016. Antagonistic coevolution between quantitative and Mendelian traits. Proceedings of the Royal Society B 283: 20152926. doi: 10.1098/rspb.2015.2926

18. B.J. Teller, P. B. Adler, C.B. Edwards, G. Hooker and S. P. Ellner. 2016. Linking demography with drivers: climate and competition. Methods in Ecology and Evolution 7: 171-183. doi: 10.1111/2041-210X.12486.

19. M. Rees and S. P. Ellner. 2016. Evolving integral projection models: evolutionary demography meets eco-evolutionary dynamics. Methods in Ecology and Evolution 7: 157 - 170 doi: 10.1111/2041-210X.12487

20. B.D. Dalziel, M. Le Corre, S. Côté, and S.P. Ellner. 2016. Detecting collective behaviour in animal relocation data, with application to migrating caribou. Methods in Ecology and Evolution 7: 30-41. doi: 10.1111/2041-210X.12437.

21. E. Benincà, B. Ballantine, S. P. Ellner, and J. Huisman. 2015. Species fluctuations sustained by a cyclic succession at the edge of chaos. Proceedings of the National Academy of Sciences (USA) 112: 6389–6394.

22. G. Hooker and S. P. Ellner. 2015. Goodness of fit in nonlinear dynamics: mis-specified rates or mis-specified states? Annals of Applied Statistics 9(2): 754-776.

23. I. N. Rubin, S.P. Ellner, A. Kessler, and K. A. Morrell. 2015. Informed herbivore movement and interplant communication determine the effects of induced resistance in an individual-based model. Journal of Animal Ecology 84, 1273–1285.

24. C. J. E. Metcalf, S. P. Ellner, D. Z. Childs, R. Salguero-Gómez, C. Merow, S. M. McMahon, E. Jongejans and M. Rees. 2015. Statistical modeling of annual variation for inference on stochastic population dynamics using Integral Projection Models. Methods in Ecology and Evolution 6: 1007-1017.

25. P.J. Hurtado, S.R. Hall and S.P. Ellner. 2014. Infectious disease in consumer populations: dynamic consequences of resource-mediated transmission and infectiousness. Theoretical Ecology 7:163–179, doi: 10.1007/s12080-013-0208-2

26. M. Rees, D. Z. Childs and S. P. Ellner. 2014. Building integral projection models: a user's guide. Journal of Animal Ecology 83: 528–545. doi: 10.1111/1365-2656.12178

27. T. Hiltunen, N. G.Hairston Jr, G. Hooker, L.E. Jones and S. P. Ellner. 2014. A newly discovered role of evolution in previously published consumer-resource dynamics. Ecology Letters. 17: 915–923. doi: 10.1111/ele.12291

28. B. D. Dalziel, K. Huang, J. L. Geoghegan, N. Arinaminpathy, E. J. Dubovi, B. T. Grenfell, S. P. Ellner, E. C. Holmes, C.R. Parrish. 2014. Contact heterogeneity, rather than transmission efficiency, limits the emergence and spread of canine influenza virus. PLoS Pathogens 10(10): e1004455. doi:10.1371/journal.ppat.1004455.

29. T. Hiltunen, S.P. Ellner, G. Hooker, L.E. Jones, and N.G. Hairston, Jr.. 2014. Eco-Evolutionary Dynamics in a Three-Species Food Web with Intraguild Predation: Intriguingly Complex. Advances in Ecological Research 50: 41-73.

30. T. Hiltunen, , L.E. Jones, S.P. Ellner, and N.G. Hairston, Jr. 2013. Temporal dynamics of a simple community with intraguild predation: an experimental test. Ecology 94, 773-779.

31. C. Low, S. P. Ellner, and M. H. Holden. 2013. Optimal control and cold war dynamics between plant and herbivore. American Naturalist 182: E25-E39.

32. S.P. Ellner. 2013. Rapid evolution: from genes to communities, and back again? Functional Ecology 27: 1087-1099.

33. B. D. Dalziel, B. Pourbohloul and S. P. Ellner. 2013. Human mobility patterns predict divergent epidemic patterns among cities. Proceedings of the Royal Society B 280: 20130763 doi: 10.1098/rspb.2013.0763.
34. S.P. Ellner and S.J. Schreiber. 2012. Temporally variable dispersal and demography can accelerate the spread of invading species. Theoretical Population Biology 82: 283-298.
35. R. J. Tien and S.P. Ellner. 2012. Variable cost of prey defense and coevolution in predator–prey systems. Ecological Monographs 82: 491–504.
36. P. B. Adler, H. J. Dalgleish, and S.P. Ellner. 2012. Forecasting plant community impacts of climate variability and change: when do competitive interactions matter? Journal of Ecology 100: 478-487.
37. L. Becks, S.P. Ellner, L.E. Jones, and N.G. Hairston, Jr. 2012. The functional genomics of an eco-evolutionary feedback loop: linking gene expression, trait evolution, and community dynamics. Ecology Letters 15: 492-501.
38. J.L. Williams, T.E.X. Miller, and S.P. Ellner. 2012. Avoiding unintentional eviction from integral projection models. Ecology 93: 2008-2014
39. M.H. Holden, S.P. Ellner, D-H Lee, J.P. Nyrop, and J.P. Sanderson. 2012. Designing an effective trap cropping strategy: the effects of attraction, retention and plant spatial distribution. Journal of Applied Ecology 49: 715-722.
40. E.G. Cooch, P.B. Conn, S.P. Ellner, A.Dobson, and K.H. Pollock. Disease dynamics in wild populations: modeling and estimation: a review. Journal of Ornithology 152 (Supplement 2): S485-S509.
41. S. P. Ellner. 2012. Comments on: Inference for size demography from point pattern data using Integral Projection Models. Journal of Agricultural, Biological, and Environmental Statistics 17: 682–689.
42. S.P. Ellner, M.A. Geber, and N.G. Hairston, Jr. 2011. Does rapid evolution matter? Measuring the rate of contemporary evolution and its impacts on ecological dynamics Ecology Letters 14: 603–614.
43. J.F. Bruno, S. P. Ellner, I. Vu, K. Kim, and C. D. Harvell. 2011. Impacts of aspergillosis on sea fan coral demography: modeling a moving target. Ecological Monographs 81:123-139.
44. E. Jongejans, K. Shea, O. Skarpaas, D. Kelly, and S. P. Ellner. 2011. Importance of individual and environmental variation for invasive species spread: a spatial integral projection model. Ecology 92:86-97.
45. G. Hooker, S. P. Ellner, L. De Vargas Roditi and D. J. D. Earn. 2011. Parameterizing state–space models for infectious disease dynamics by generalized profiling: measles in Ontario. Journal of the Royal Society Interface 8: 961-974.
46. S.P. Ellner and L. Becks. 2011. Rapid prey evolution and the dynamics of two-predator food webs. Theoretical Ecology 4:133–152.
47. Maarika Teose, Kiyan Ahmadizadeh, Eoin O'Mahony, Rebecca L. Smith, Zhao Lu, Stephen P. Ellner, Carla Gomes, Yrjo Grohn. 2011. Embedding System Dynamics in Agent Based Models for Complex Adaptive Systems. Proceedings of the Twenty-Second International Joint Conference on Artificial Intelligence 2531-2538. doi: 10.5591/978-1-57735-516-8/IJCAI11-421
48. L. Becks, S. P. Ellner, L. E. Jones, and N. G. Hairston, Jr. 2010 Reduction of adaptive genetic diversity radically alters eco-evolutionary community dynamics. Ecology Letters 13: 989 – 997.
49. P. B. Adler, S.P. Ellner and J. M. Levine. 2010 Coexistence of perennial plants: an embarrasment of niches. Ecology Letters 13: 1019-1029.
50. V.B. Pasour and S.P. Ellner. 2010. Computational and analytic perspectives on the drift paradox. SIAM Journal on Applied Dynamical Systems 9: 333-356.
51. J. Mao-Jones K.B. Ritchie, L.E. Jones and S.P. Ellner. 2010. How Microbial Community Composition Regulates Coral Disease Development. PLoS Biol 8(3):e1000345.

52. M.H. Cortez and S.P. Ellner. 2010. Understanding rapid evolution in predator-prey interactions using the theory of fast-slow dynamical systems. American Naturalist 176: E109–E127.

INVITED TALKS (previous 10 years)

2019
- Department of Zoology, Oxford University

2018
- International Statistical Ecology Conference, Univ. of St. Andrews (plenary)
- Workshop on Pollination Ecology, Fields Institute for Mathematical Sciences, University of Toronto
- Midwest Mathematical Ecology Conference, Univ. Wisconsin- La Crosse (plenary)

2017
- Odum School of Ecology, University of Georgia (grad student invited speaker)

2016
- Department of Biology, University of Calgary.
- Workshop on Integrodifference Equations in Ecology, Pacific Institute of Mathematical Sciences, Banff International Research Station.

2015
- British Ecological Society Symposium "Demography Beyond the Population", University of Sheffield, UK (plenary).
- Ecological Society of America, Annual Meeting, Baltimore MD (Organized Oral Session presentation).

2014
- Workshop on Statistics and Nonlinear Dynamics in Biology and Medicine, Banff International Research Station (plenary)

2013
- INTECOL 2013/British Ecological Society Annual Meeting, London UK (invited symposium talk)
- Department of Ecology & Evolutionary Biology, Princeton University.

2012
- Tansley Lecture, British Ecological Society Annual Meeting, Birmingham UK (plenary)
- Conference on Mathematical Ecology, University of Nebraska, Lincoln
- Workshop on Integral Projection Models, Max Planck Institute for Demographic Research, Rostock, Germany.
- Biology Department, Penn State University

2011
- Departments of Ecology and Evolution, UC Davis.
- Ecological Society of America Annual Meeting, Austin TX (invited symposium talk)

2010
- Mathematical Biology seminar, Departments of Biology and Mathematics, Georgia Tech.
- Mathematical Biosciences Institute, Ohio State

2009
- University of Utah, Department of Mathematics, Workshop on Building an Interdisciplinary Career in Mathematical Biology (plenary)
- Ecological Society of America Annual Meeting (invited symposium talk)
- Department of Natural Resources, Cornell University.
- First International Conference on Computational Sustainability, Cornell

2008
- Department of Mathematics, University of Nebraska, Lincoln.
- School of Biological Sciences, University of Nebraska, Lincoln.
- Department of Biology, McMaster University, Hamilton ON, Canada
- Cornell Summer School on Probability, Ithaca NY (plenary)

OTHER PROFESSIONAL ACTIVITIES

- Cornell service: Research Advisory Committee, Office of the Vice Provost for Research (2014-2017); Director of Undergraduate Studies for Computational Biology (2006-2010), Center for Applied Mathematics Colloquium Committee (2000-01), FCI Subcommittee on Computational Biology (2000-01), FCI Subcommittee on Computational Science and Engineering (2000-01), Transition Committee for Department of Biostatistics and Computational Biology (2001-02).

- Editorial boards: *PLoS Biology* (2003-2012), *Ecology Letters* (2006-2009), *Journal of Animal Ecology* (2001-2005), *Evolutionary Ecology Research* (2001-2005), *Journal of Theoretical Biology* (2000-2003), *Theoretical Population Biology* (1989-2000), *Ecology/Ecological Monographs* (1994-97).

- Manuscript reviews for *Science, Nature, PNAS, American Naturalist, Ecology, Ecology Letters, Oikos, Journal of Ecology, Journal of Animal Ecology, Theoretical Ecology, Proc. Royal Society B, Biometrics, Journal of Mathematical Biology, Bulletin of Mathematical Biology, Theoretical Population Biology, Journal of Agricultural Biological and Environmental Statistics,* and others.

- Grant proposal reviews for NSF, USDA, NSERC (UK and Canada), Israel Science Foundation, Swiss National Science Foundation, and other agencies.

- NSF proposal and preproposal panels in DEB and DMS.

- Organizing committee, SIAM Conference on Life Sciences/Society for Mathematical Biology annual meeting, August 2006.

- Organizing and program committee, Society for Mathematical Biology annual meeting, August 1997.

- Board of Directors, Society for Mathematical Biology 1996-1998.

PREVIOUS RESEARCH GRANTS

- US National Science Foundation, Division of Environmental Biology. "Effects of Rapid Consumer Evolution on Community Dynamics: Predictions and Tests in a (nearly) Natural Food Web" (PIs Nelson G. Hairston, Jr., S.P. Ellner, G.Hooker, B.P. Lazzaro, G. Hooker). 2013-2016, $200,000.

- National Science Foundation "Rapid Evolution and the Dynamics of Complex Ecological Communities" (co-PIs Nelson G. Hairston Jr., L.E. Jones, and G.Hooker). 2008 - 2012.

- James S. McDonnell Foundation. "Contemporary rapid evolution: dynamics and persistence in complex ecological communities" (co-PIs Nelson G. Hairston Jr., L.E. Jones and G.F Fussmann) 2008 - 2012.

- Andrew W. Mellon Foundation, "The evolutionary ecology of population dynamics: experimental and modeling approaches" (co-PI with Nelson G. Hairston, Jr.), 2004-2008.

- NSF/NIH (Ecology of Infectious Diseases) "Origins and Spread of the Aspergillus - Gorgonian Coral Epizootic: Role of Climate and Environmental Facilitators" (co-PI with C. Drew Harvell and 4 others) 2003- 2009.

- NSF (DEB Systematics and Population Biology) "Long term diapause and spreading of risk across the life cycle: testing predictions" (co-PI with Nelson G. Hairston, Jr.) 1999 – 2003.

- Andrew W. Mellon Foundation, "Evaluating Complex Dynamics and Chaos in Natural Ecological Systems: Experimental, Statistical, and Modeling Approaches" (co-PI with Nelson G. Hairston, Jr.), 1997-2003.

- NSF Grant DMS-9217866, "Estimation and inference for noisy nonlinear systems" (co-PIs D. Nychka and A. R. Gallant), 1993-1997.

- NSF SGER Grant "Real population data for evaluating chaos detection methods" (co-PI Nelson G. Hairston, Jr.), 1995-1996.
- NSF Grant BSR-9118894 "The evolutionary dynamics of a dormant propagule pool" (co-PI Nelson G. Hairston, Jr.), 1992-1995.
- US-Israel BARD Grant IS-1634-89R, "Use of macroalgae to solve water quality problems in intensively cultured marine fishponds" (co-investigator with A. Neori, M. Krom, and C. Boyd), 1990-1994.
- US-Israel Binational Science Foundation Grant 86-00092, "Optimal Dispersal in a Desert Widow Spider" (co-PIs Y. D. Lubin and B. Pinshow), 1987-1990.
- NC State Biomedical Research Support Grant RR7071 (1986-1987).
- BARD research project I-626-83, co-investigator (1986).
- University of Tennessee Faculty Research Award (1982-1983).
- NSF Grant MCS-8201682 (1982-1983).

POSTDOCS SUPERVISED (and current positions)
- Akira Sasaki (1992-1994). Professor, Graduate University for Advanced Studies (SOKENDAI), Hayama, Japan.
- Dariouche Babaï (1994-1995). No longer active in science for medical reasons.
- Yodit Seifu (1996-1997). Research statistician, Allergan.
- Gregor Fussmann (1998-2001, jointly supervised by Nelson G. Hairston, Jr.). Professor, McGill University, Montreal CA.
- Takehito Yoshida (2001-2006, jointly supervised by Nelson G. Hairston, Jr.). Associate Professor, University of Tokyo.
- Lutz Becks (2006-2008, jointly supervised by Nelson G. Hairston, Jr.). DFG Heisenberg Programme Research Group Leader, Max Plank Institute for Evolutionary Biology, Plön, Germany.
- Teppo Hiltunen (2008-2011, jointly supervised by Nelson G. Hairston, Jr.). Academy Research Fellow, U. Helsinki, and Associate Professor, Turku University, Finland.
- Candace Low (2010-2012), Adjunct Assistant Professor, San Francisco State University.
- Masato Yamamichi (2012-2014, jointly supervised by Nelson G. Hairston, Jr). Assistant Professor, University of Tokyo.
- Brittany Teller (2014-2017, jointly supervised by Peter Adler, Utah State). Lecturer, Penn State University.
- Andrew Tredennick (2017-2018, jointly supervised by Peter Adler, Utah State). Postdoc at University of Georgia.

GRADUATE STUDENTS SUPERVISED (committee chair or **co-chair)

Patricia L. Phillips	Biomathematics, NCSU	MBMA* 1991
Gretchen Marcucci	Biomathematics, NCSU	M.Sc. 1991
Ana Henry	Biomathematics, NCSU	M.Sc. 1992
Michael Easterling	Biomathematics, NCSU	M.Sc. 1994; PhD 1998
George Hess	Biomathematics, NCSU	PhD 1994
Jack Weiss**	Biomathematics, NCSU	PhD 1995
Barbara Bailey**	Biomathematics, NCSU	PhD 1996
Steven Peck	Biomathematics, NCSU	PhD 1997
Georgiy Bobashev	Biomathematics, NCSU	PhD 1997
Daniel Fiscus	Ecology, NCSU	MSc 1997
Paul Schliekelman	Biomathematics, NCSU	MBMA* 1998, PhD 2000
John Fieberg	Biomathematics, NCSU	PhD 2000
Kyle Shertzer	Biomathematics, NCSU	PhD 2001
Nikkala Thomson	Biomathematics, NCSU	MSc 2002
Jonathan Rowell	Biomathematics, NCSU	MBMA* 2000
	Applied Mathematics, Cornell	PhD 2003
Takao Kumazawa	E&EB, Cornell	MSc 2005
Virginia Pasour	Applied Mathematics, Cornell	PhD 2006
Rebecca Tien**	E&EB, Cornell	PhD 2009
Paul Hurtado	Applied Mathematics, Cornell	PhD 2012
Michael Cortez**	Applied Mathematics, Cornell	PhD 2011
Ben Dalziel	E&EB, Cornell	PhD 2014
Matthew Holden	Applied Mathematics, Cornell	PhD 2015
Hidetoshi Inamine	E&EB, Cornell	PhD 2017
Collin Edwards	E&EB, Cornell	PhD in progress
Timothy Lambert**	E&EB, Cornell	PhD in progress
Timothy Salazar**	E&EB, Cornell	PhD in progress

MBMA is the non-thesis Masters option from the NC State University Biomathematics Program.

Current employment of past PhD students

- Hidetoshi Inamine, Penn State University: postdoc

- Matthew Holden, University of Queensland, Australia: Lecturer in Mathematics.

- Ben Dalziel, Oregon State University: Assistant Professor, Departments of Integrative Biology and Mathematics.

- Paul Hurtado, Department of Mathematics and Statistics, University of Nevada, Reno: Assistant Professor

- Michael Cortez, Department of Mathematics and Statistics, Utah State University: Assistant Professor.

- Rebecca Tien, Ohio State University: Lecturer.

- Virginia Pasour, US Army Research Office, Research Triangle Park NC: Program Officer for Mathematical Biology.

- Jonathan Rowell, Department of Mathematics and Statistics, UNC Greensboro: Assistant Professor.

- Paul Schliekelman, Department of Statistics, University of Georgia: Associate Professor.

- Kyle Shertzer, NOAA/NMFS Center for Coastal Fisheries and Habitat Research, Beaufort NC: Leader of Population Dynamics and Sustainable Fisheries Branch.

- John Fieberg, Department of Fisheries, Wildlife and Conservation Biology, University of Minnesota: Associate Professor.

- Michael Easterling, Constella Group, Research Triangle Park, NC: Biomathematician.

- Barbara Bailey, Department of Mathematics and Statistics, San Diego State University: Associate Professor.

- Jack Weiss: deceased.

- Georgiy Bobashev, Research Triangle Institute, Durham, North Carolina: Senior Data Scientist.

- Steve Peck, Department of Biology, Brigham Young University, Associate Professor.

- George Hess, Department of Forestry, North Carolina State University: Professor

GRADUATE STUDENT COMMITTEES

Carole Hom	Ecology, UT Knoxville	PhD 1986
Margaret Cochran	Ecology, UT Knoxville	PhD 1986
Katherine Potak	Biomathematics, NCSU	MBMA* 1992
Daniel McCaffrey	Statistics, NCSU	PhD 1991
Reuven Dukas	Zoology, NCSU	PhD 1991
Jane Molofsky	Botany, Duke	PhD 1992
Bernadette Roche	Biology, UNC-Chapel Hill	PhD 1993
Erran Seaman	Zoology, NCSU	PhD 1993
Selena Heppell	Zoology, NCSU	MSc 1993
Susan Wigley	Biomathematics, NCSU	MSc 1994
Ben Letcher	Zoology, NCSU	PhD 1994
Juan Morales	Zoology, NCSU	MSc 1999
David Hiebeler	Applied Mathematics, Cornell	Ph.D. 2001
Hinsby Quiroz-Caudillo	Microbiology, Cornell	PhD 2008
Kristi Arend	Natural Resources, Cornell	PhD 2008
Sam Arbesman	Computational Biology, Cornell	PhD 2008
Rebecca Doyle-Morin	E&EB, Cornell	PhD 2011
Michael Schmidt	Computational Biology, Cornell	PhD 2011
Joseph Simonis	E&EB, Cornell	PhD 2012
Patrick Ayscue	Veterinary Medicine, Cornell	VMD 2013
Katherine Marchetto	E&EB, Cornell	PhD 2017
Aubrie James	E&EB, Cornell	PhD in progress
Gregor Fausto-Siegmund	E&EB, Cornell	PhD in progress
Zi Ye	BSCB, Cornell	PhD in progress
Toby Holda	Natural Resource, Cornell	PhD in progress

Non-thesis Masters, NC State University Biomathematics Program.

EARLIER PUBLICATIONS

1. Shmida and S. Ellner, 1981. Why are adaptations for long-range seed dispersal rare in desert plants? Oecologia 51: 133-144.
2. A. Shmida and S. Ellner, 1983. Seed dispersal on pastoral grazers in open Mediterranean chaparral, Israel. Israel J. Botany 32: 147-159.
3. S. Ellner, 1984. Asymptotic behavior of some stochastic difference equation population models. J. Mathematical Biology 19: 169-200.
4. S. Ellner and C. A. Beuchat, 1984. A model of optimal thermoregulation during gestation by Sceloporus jarrovi, a live-bearing lizard. pp. 15-28 in: S. A. Levin and T. G. Hallam, eds. Mathematical Ecology. Proceedings, Trieste 1982 (Lecture Notes in Biomathematics Volume 54). Springer-Verlag.
5. A. Shmida and S. Ellner, 1984. Coexistence of plant species with similar niches. Vegetatio 58: 29-55.
6. S. Ellner and A. Shmida, 1984. Seed dispersal in relation to habitat in the genus Picris (Compositae). Israel J. Botany 33: 25-39 .
7. S. Ellner, 1985. ESS germination strategies in randomly varying environments. I. Logistic type models. Theoretical Population Biology 28: 50-79.
8. S. Ellner, 1985. ESS germination strategies in randomly varying environments. II. Reciprocal Yield Law Models. Theoretical Population Biology 28: 80-116.
9. S. Ellner, 1985. The accuracy of Bartlett's small-fluctuation approximation for stochastic-difference-equation population models. Mathematical Biosciences 74: 233-246.
10. S. Ellner, 1986. Germination dimorphisms and parent-offspring conflict in seed germination. J. Theoretical Biology 123: 173-185.
11. W. M. Schaffer, S. Ellner, and M. Kot, 1986. Effects of noise on some dynamical models in ecology. J. Mathematical Biology 24: 479-523.
12. C. A. Beuchat and S. Ellner, 1987. A quantitative test of life history theory: thermoregulation by a viviparous lizard. Ecological Monographs 57: 45-60.
13. S. Ellner, 1987. Alternate plant life history strategies and coexistence in randomly varying environments. Vegetatio 69: 199-208.
14. S. Ellner, 1987. Competition and dormancy: a reanalysis and review. American Naturalist 130, 798-803.
15. S. Ellner, 1988. Estimating attractor dimensions from limited data: a new method, with error-estimates. Physics Letters A 133, 128-133.
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