Stephen P Ellner

List of Publications by Year
in descending order

126 papers	12,611 citations	26610 56 h-index	26591 107 g-index
134 all docs	134 docs citations	134 times ranked	9596 citing authors

#	Article	IF	Citations
1	A critical comparison of integral projection and matrix projection models for demographic analysis: Comment. Ecology, 2022, 103, e3605.	1.5	2
2	Pathogen transport amplifies or dilutes disease transmission depending on the host doseâ€response relationship. Ecology Letters, 2022, 25, 453-465.	3.0	3
3	Snared in an Evil Time: How Age-Dependent Environmental and Demographic Variability Contribute to Variance in Lifetime Outcomes. American Naturalist, 2022, 200, E124-E140.	1.0	5
4	Toward a â€œmodern coexistence theoryâ€•for the discrete and spatial. Ecological Monographs, 2022, 92, .	2.4	6
5	Time and Chance: Using Age Partitioning to Understand How Luck Drives Variation in Reproductive Success. American Naturalist, 2021, 197, E110-E128.	1.0	12
6	Generalized Single Index Models and Jensen Effects on Reproduction and Survival. Journal of Agricultural, Biological, and Environmental Statistics, 2021, 26, 492-512.	0.7	0
7	A practical guide to selecting models for exploration, inference, and prediction in ecology. Ecology, 2021, 102, e03336.	1.5	170
8	Hostâ€“pathogen immune feedbacks can explain widely divergent outcomes from similar infections. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210786.	1.2	16
9	Collective behaviour can stabilize ecosystems. Nature Ecology and Evolution, 2021, 5, 1435-1440.	3.4	9
10	Technical Comment on Pande <i>et al</i>. (2020): Why invasion analysis is important for understanding coexistence. Ecology Letters, 2020, 23, 1721-1724.	3.0	17
11	The Jensen effect and functional single index models: Estimating the ecological implications of nonlinear reaction norms. Annals of Applied Statistics, 2020, 14, .	0.5	1
12	Consumer-resource dynamics is an eco-evolutionary process in a natural plankton community. Nature Ecology and Evolution, 2019, 3, 1351-1358.	3.4	43
13	Why So Variable: Can Genetic Variance in Flowering Thresholds Be Maintained by Fluctuating Selection?. American Naturalist, 2019, 194, E13-E29.	1.0	9
14	Special issue of theoretical ecology to honor Alan Hastingsâ€™ 65th birthday. Theoretical Ecology, 2019, 12, 129-130.	0.4	0
15	Rapid evolution with generation overlap: the double-edged effect of dormancy. Theoretical Ecology, 2019, 12, 179-195.	0.4	19
16	An expanded modern coexistence theory for empirical applications. Ecology Letters, 2019, 22, 3-18.	3.0	147
17	Spatiotemporally Heterogeneous Population Dynamics of Gut Bacteria Inferred from Fecal Time Series Data. MBio, 2018, 9, .	1.8	29
18	Weak interspecific interactions in a sagebrush steppe? Conflicting evidence from observations and experiments. Ecology, 2018, 99, 1621-1632.	1.5	16

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19	Generation Time in Structured Populations. American Naturalist, 2018, 192, 105-110.	1.0	7
20	Sizeâ€byâ€environment interactions: a neglected dimension of species' responses to environmental variation. Ecology Letters, 2018, 21, 1757-1770.	3.0	21
21	Disease where you dine: plant species and floral traits associated with pathogen transmission in bumble bees. Ecology, 2018, 99, 2535-2545.	1.5	68
22	Evolving integral projection models: evolutionary demography meets ecoâ€evolutionary dynamics. Methods in Ecology and Evolution, 2016, 7, 157-170.	2.2	36
23	Detecting collective behaviour in animal relocation data, with application to migrating caribou. Methods in Ecology and Evolution, 2016, 7, 30-41.	2.2	18
24	Antagonistic coevolution between quantitative and Mendelian traits. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152926.	1.2	24
25	Simple Deterministic IPM. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , 9-56.	0.1	0
26	Basic Analyses 1: Demographic Measures and Events in the Life Cycle. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , 57-85.	0.1	0
27	Basic Analyses 2: Prospective Perturbation Analysis. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , 87-109.	0.1	0
28	General Deterministic IPM. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , 139-185.	0.1	0
29	Spatial Models. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , 229-254.	0.1	1
30	Evolutionary Demography. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , 255-282.	0.1	0
31	Data-driven Modelling of Structured Populations. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , .	0.1	170
32	Density Dependence. Lecture Notes on Mathematical Modelling in the Life Sciences, 2016, , 111-138.	0.1	1
33	Can Population Genetics Adapt to Rapid Evolution?. Trends in Genetics, 2016, 32, 408-418.	2.9	171
34	How to quantify the temporal storage effect using simulations instead of math. Ecology Letters, 2016, 19, 1333-1342.	3.0	80
35	Human judgment vs. quantitative models for the management of ecological resources. Ecological Applications, 2016, 26, 1553-1565.	1.8	18
36	Linking the continental migratory cycle of the monarch butterfly to understand its population decline. Oikos, 2016, 125, 1081-1091.	1.2	150

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37	We Happy Few: Using Structured Population Models to Identify the Decisive Events in the Lives of Exceptional Individuals. American Naturalist, 2016, 188, E28-E45.	1.0	20
38	Linking demography with drivers: climate and competition. Methods in Ecology and Evolution, 2016, 7, 171-183.	2.2	60
39	The economic benefit of timeâ€varying surveillance effort for invasive species management. Journal of Applied Ecology, 2016, 53, 712-721.	1.9	42
40	Informed herbivore movement and interplant communication determine the effects of induced resistance in an individualâ€based model. Journal of Animal Ecology, 2015, 84, 1273-1285.	1.3	33
41	Species fluctuations sustained by a cyclic succession at the edge of chaos. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6389-6394.	3.3	126
42	Statistical modelling of annual variation for inference on stochastic population dynamics using Integral Projection Models. Methods in Ecology and Evolution, 2015, 6, 1007-1017.	2.2	31
43	Eco-Evolutionary Dynamics in a Three-Species Food Web with Intraguild Predation. Advances in Ecological Research, 2014, 50, 41-73.	1.4	22
44	Infectious disease in consumer populations: dynamic consequences of resource-mediated transmission and infectiousness. Theoretical Ecology, 2014, 7, 163-179.	0.4	20
45	Building integral projection models: a user's guide. Journal of Animal Ecology, 2014, 83, 528-545.	1.3	121
46	A newly discovered role of evolution in previously published consumerâ€"resource dynamics. Ecology Letters, 2014, 17, 915-923.	3.0	91
47	Rapid evolution: from genes to communities, and back again?. Functional Ecology, 2013, 27, 1087-1099.	1.7	56
48	Temporally variable dispersal and demography can accelerate the spread of invading species. Theoretical Population Biology, 2012, 82, 283-298.	0.5	62
49	Comments on: Inference for Size Demography From Point Pattern Data Using Integral Projection Models. Journal of Agricultural, Biological, and Environmental Statistics, 2012, 17, 682-689.	0.7	5
50	Variable cost of prey defense and coevolution in predatorâ€"prey systems. Ecological Monographs, 2012, 82, 491-504.	2.4	33
51	Avoiding unintentional eviction from integral projection models. Ecology, 2012, 93, 2008-2014.	1.5	70
52	Disease dynamics in wild populations: modeling and estimation: a review. Journal of Ornithology, 2012, 152, 485-509.	0.5	70
53	Forecasting plant community impacts of climate variability and change: when do competitive interactions matter?. Journal of Ecology, 2012, 100, 478-487.	1.9	135
54	Designing an effective trap cropping strategy: the effects of attraction, retention and plant spatial distribution. Journal of Applied Ecology, 2012, 49, 715-722.	1.9	26

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55	The functional genomics of an ecoâ€evolutionary feedback loop: linking gene expression, trait evolution, and community dynamics. Ecology Letters, 2012, 15, 492-501.	3.0	159
56	Impacts of aspergillosis on sea fan coral demography: modeling a moving target. Ecological Monographs, 2011, 81, 123-139.	2.4	76
57	Does rapid evolution matter? Measuring the rate of contemporary evolution and its impacts on ecological dynamics. Ecology Letters, 2011, 14, 603-614.	3.0	229
58	Rapid prey evolution and the dynamics of two-predator food webs. Theoretical Ecology, 2011, 4, 133-152.	0.4	56
59	Parameterizing stateâ€“space models for infectious disease dynamics by generalized profiling: measles in Ontario. Journal of the Royal Society Interface, 2011, 8, 961-974.	1.5	50
60	Importance of individual and environmental variation for invasive species spread: a spatial integral projection model. Ecology, 2011, 92, 86-97.	1.5	67
61	Reduction of adaptive genetic diversity radically alters ecoâ€evolutionary community dynamics. Ecology Letters, 2010, 13, 989-997.	3.0	218
62	Coexistence of perennial plants: an embarrassment of niches. Ecology Letters, 2010, 13, 1019-1029.	3.0	230
63	How Microbial Community Composition Regulates Coral Disease Development. PLoS Biology, 2010, 8, e1000345.	2.6	119
64	Understanding Rapid Evolution in Predatorâ€Prey Interactions Using the Theory of Fastâ€Slow Dynamical Systems. American Naturalist, 2010, 176, E109-E127.	1.0	112
65	Integral projection models for populations in temporally varying environments. Ecological Monographs, 2009, 79, 575-594.	2.4	139
66	Chaos in a long-term experiment with a plankton community. Nature, 2008, 451, 822-825.	13.7	343
67	Commentary on Holmesetal.(2007): resolving the debate on when extinction risk is predictable. Ecology Letters, 2008, 11, E1-E5.	3.0	41
68	Evolutionary demography of longâ€lived monocarpic perennials: a timeâ€lagged integral projection model. Journal of Ecology, 2008, 96, 821-832.	1.9	62
69	Cryptic Population Dynamics: Rapid Evolution Masks Trophic Interactions. PLoS Biology, 2007, 5, e235.	2.6	200
70	Withinâ€Host Disease Ecology in the Sea Fan Gorgonia ventalina: Modeling the Spatial Immunodynamics of a Coralâ€Pathogen Interaction. American Naturalist, 2007, 170, E143-E161.	1.0	34
71	Stochastic stable population growth in integral projection models: theory and application. Journal of Mathematical Biology, 2007, 54, 227-256.	0.8	90
72	Effects of rapid prey evolution on predatorâ€“prey cycles. Journal of Mathematical Biology, 2007, 55, 541-573.	0.8	75

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73	Integral Projection Models for Species with Complex Demography. American Naturalist, 2006, 167, 410-428.	1.0	482
74	Prey evolution on the time scale of predator-prey dynamics revealed by allele-specific quantitative PCR. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10690-10695.	3.3	99
75	POPULATION CYCLES IN THE PINE LOOPER MOTH: DYNAMICAL TESTS OF MECHANISTIC HYPOTHESES. Ecological Monographs, 2005, 75, 259-276.	2.4	56
76	Rapid evolution and the convergence of ecological and evolutionary time. Ecology Letters, 2005, 8, 1114-1127.	3.0	802
77	Evolution of sizeâ€“dependent flowering in a variable environment: construction and analysis of a stochastic integral projection model. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 425-434.	1.2	90
78	Evolutionary tradeâ€“off between defence against grazing and competitive ability in a simple unicellular alga, Chlorella vulgaris. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 1947-1953.	1.2	168
79	Evolutionary tradeoff and equilibrium in an aquatic predatorâ€“prey system. Bulletin of Mathematical Biology, 2004, 66, 1547-1573.	0.9	28
80	When does parameter drift decrease the uncertainty in extinction risk estimates?. Ecology Letters, 2003, 6, 1039-1045.	3.0	13
81	Rapid evolution drives ecological dynamics in a predatorâ€“prey system. Nature, 2003, 424, 303-306.	13.7	897
82	Pair-edge approximation for heterogeneous lattice population models. Theoretical Population Biology, 2003, 64, 271-280.	0.5	24
83	EFFECTS OF SUCCESSIONAL DYNAMICS ON METAPOPULATION PERSISTENCE. Ecology, 2003, 84, 882-889.	1.5	68
84	Evolution of complex flowering strategies: an ageâ€“ and sizeâ€“structured integral projection model. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 1829-1838.	1.2	87
85	Evolution as a critical component of plankton dynamics. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 1015-1022.	1.2	121
86	DYNAMICAL EFFECTS OF PLANT QUALITY AND PARASITISM ON POPULATION CYCLES OF LARCH BUDMOTH. Ecology, 2003, 84, 1207-1214.	1.5	130
87	USING PVA FOR MANAGEMENT DESPITE UNCERTAINTY: EFFECTS OF HABITAT, HATCHERIES, AND HARVEST ON SALMON. Ecology, 2003, 84, 1359-1369.	1.5	73
88	STATE-DEPENDENT ENERGY ALLOCATION IN VARIABLE ENVIRONMENTS: LIFE HISTORY EVOLUTION OF A ROTIFER. Ecology, 2002, 83, 2181-2193.	1.5	31
89	SCALING UP ANIMAL MOVEMENTS IN HETEROGENEOUS LANDSCAPES: THE IMPORTANCE OF BEHAVIOR. Ecology, 2002, 83, 2240-2247.	1.5	223
90	FITTING POPULATION DYNAMIC MODELS TO TIME-SERIES DATA BY GRADIENT MATCHING. Ecology, 2002, 83, 2256-2270.	1.5	60

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91	Predator-prey cycles in an aquatic microcosm: testing hypotheses of mechanism. Journal of Animal Ecology, 2002, 71, 802-815.	1.3	86
92	Precision of Population Viability Analysis. Conservation Biology, 2002, 16, 258-261.	2.4	164
93	Stochastic matrix models for conservation and management: a comparative review of methods. Ecology Letters, 2001, 4, 244-266.	3.0	224
94	Pair Approximation for Lattice Models with Multiple Interaction Scales. Journal of Theoretical Biology, 2001, 210, 435-447.	0.8	94
95	Habitat structure and population persistence in an experimental community. Nature, 2001, 412, 538-543.	13.7	187
96	INFERRING COLONIZATION PROCESSES FROM POPULATION DYNAMICS IN SPATIALLY STRUCTURED PREDATORâ€"PREY SYSTEMS. Ecology, 2000, 81, 3350-3361.	1.5	7
97	LINKING ECOLOGICAL PATTERNS TO ENVIRONMENTAL FORCING VIA NONLINEAR TIME SERIES MODELS. Ecology, 2000, 81, 2767-2780.	1.5	40
98	Reconstructing susceptible and recruitment dynamics from measles epidemic data. Mathematical Population Studies, 2000, 8, 1-29.	0.8	15
99	SIZE-SPECIFIC SENSITIVITY: APPLYING A NEW STRUCTURED POPULATION MODEL. Ecology, 2000, 81, 694-708.	1.5	574
100	WHEN IS IT MEANINGFUL TO ESTIMATE AN EXTINCTION PROBABILITY?. Ecology, 2000, 81, 2040-2047.	1.5	184
101	Inferring Colonization Processes from Population Dynamics in Spatially Structured Predator-Prey Systems. Ecology, 2000, 81, 3350.	1.5	16
102	Cholera Dynamics and El Nino-Southern Oscillation. Science, 2000, 289, 1766-1769.	6.0	446
103	Crossing the Hopf Bifurcation in a Live Predator-Prey System. Science, 2000, 290, 1358-1360.	6.0	366
104	LIVING ON THE EDGE OF CHAOS: POPULATION DYNAMICS OF FENNOSCANDIAN VOLES. Ecology, 2000, 81, 3099-3116.	1.5	121
105	When Is It Meaningful to Estimate an Extinction Probability?. Ecology, 2000, 81, 2040.	1.5	11
106	LINKING ECOLOGICAL PATTERNS TO ENVIRONMENTAL FORCING VIA NONLINEAR TIME SERIES MODELS. , 2000, 81, 2767.		3
107	Size-Specific Sensitivity: Applying a New Structured Population Model. Ecology, 2000, 81, 694.	1.5	9
108	Living on the Edge of Chaos: Population Dynamics of Fennoscandian Voles. Ecology, 2000, 81, 3099.	1.5	8

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109	WHY DO POPULATIONS CYCLE? A SYNTHESIS OF STATISTICAL AND MECHANISTIC MODELING APPROACHES. Ecology, 1999, 80, 1789-1805.	1.5	300
110	The Roles of Fluctuating Selection and Long-Term Diapause in Microevolution of Diapause Timing in a Freshwater Copepod. Evolution; International Journal of Organic Evolution, 1999, 53, 111.	1.1	35
111	THE ROLES OF FLUCTUATING SELECTION AND LONG-TERM DIAPAUSE IN MICROEVOLUTION OF DIAPAUSE TIMING IN A FRESHWATER COPEPOD. Evolution; International Journal of Organic Evolution, 1999, 53, 111-122.	1.1	42
112	Speed of invasion in lattice population models: pair-edge approximation. Journal of Mathematical Biology, 1998, 36, 469-484.	0.8	66
113	A SPATIALLY EXPLICIT STOCHASTIC MODEL DEMONSTRATES THE FEASIBILITY OF WRIGHT'S SHIFTING BALANCE THEORY. Evolution; International Journal of Organic Evolution, 1998, 52, 1834-1839.	1.1	27
114	QUANTITATIVE GENETIC VARIANCE MAINTAINED BY FLUCTUATING SELECTION WITH OVERLAPPING GENERATIONS: VARIANCE COMPONENTS AND COVARIANCES. Evolution; International Journal of Organic Evolution, 1997, 51, 682-696.	1.1	58
115	Inferring mechanism from time-series data: Delay-differential equations. Physica D: Nonlinear Phenomena, 1997, 110, 182-194.	1.3	42
116	Patterns of Genetic Polymorphism Maintained by Fluctuating Selection with Overlapping Generations. Theoretical Population Biology, 1996, 50, 31-65.	0.5	67
117	Phenotypic Variation in a Zooplankton Egg Bank. Ecology, 1996, 77, 2382-2392.	1.5	55
118	Environmental fluctuations and the maintenance of genetic diversity in age or stage-structured populations. Bulletin of Mathematical Biology, 1996, 58, 103-127.	0.9	33
119	Environmental fluctuations and the maintenance of genetic diversity in age or stage-structured populations. Bulletin of Mathematical Biology, 1996, 58, 103-127.	0.9	3
120	Chaos in a Noisy World: New Methods and Evidence from Time-Series Analysis. American Naturalist, 1995, 145, 343-375.	1.0	434
121	THE EVOLUTIONARILY STABLE PHENOTYPE DISTRIBUTION IN A RANDOM ENVIRONMENT. Evolution; International Journal of Organic Evolution, 1995, 49, 337-350.	1.1	136
122	Role of Overlapping Generations in Maintaining Genetic Variation in a Fluctuating Environment. American Naturalist, 1994, 143, 403-417.	1.0	357
123	Estimating the Lyapunov Exponent of a Chaotic System with Nonparametric Regression. Journal of the American Statistical Association, 1992, 87, 682-695.	1.8	124
124	Estimating the Lyapunov Exponent of a Chaotic System With Nonparametric Regression. Journal of the American Statistical Association, 1992, 87, 682.	1.8	37
125	Alternate plant life history strategies and coexistence in randomly varying environments. Plant Ecology, 1987, 69, 199-208.	1.2	68
126	Alternate plant life history strategies and coexistence in randomly varying environments. , 1987, , 199-208.		19