Daniel I Bolnick

List of Publications by Citations

151 papers	15,934 citations	58 h-index	126 g-index
174 ext. papers	18,783 ext. citations	6.1 avg, IF	6.98 L-index

#	Paper	IF	Citations
151	The ecology of individuals: incidence and implications of individual specialization. *American Naturalist*, **2003**, 161, 1-28	3.7	1766
150	Why intraspecific trait variation matters in community ecology. *Trends in Ecology and Evolution*, **2011**, 26, 183-92	10.9	1350
149	SCARED TO DEATH? THE EFFECTS OF INTIMIDATION AND CONSUMPTION IN PREDATORPREY INTERACTIONS. *Ecology*, **2005**, 86, 501-509	4.6	1138
148	The ecological causes of individual specialisation. *Ecology Letters*, **2011**, 14, 948-58	10	593
147	Sympatric Speciation: Models and Empirical Evidence. *Annual Review of Ecology, Evolution, and Systematics*, **2007**, 38, 459-487	13.5	505
146	Intraspecific competition drives increased resource use diversity within a natural population. *Proceedings of the Royal Society B: Biological Sciences*, **2007**, 274, 839-44	4.4	488
145	PredatorPrey naVetantipredator behavior, and the ecology of predator invasions. *Oikos*, **2010**, 119, 610-621	4	444
144	MEASURING INDIVIDUAL-LEVEL RESOURCE SPECIALIZATION. *Ecology*, **2002**, 83, 2936-2941	4.6	401
143	Revisiting the classics: considering nonconsumptive effects in textbook examples of predator-prey interactions. *Ecology*, **2008**, 89, 2416-25	4.6	331
142	Individual diet has sex-dependent effects on vertebrate gut microbiota. *Nature Communications*, **2014**, 5, 4500	17.4	330
141	Comparative support for the niche variation hypothesis that more generalized populations also are more heterogeneous. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 10075-9	11.5	313
140	Microgeographic adaptation and the spatial scale of evolution. *Trends in Ecology and Evolution*, **2014**, 29, 165-76	10.9	311
139	Many-to-One Mapping of Form to Function: A General Principle in Organismal Design?. *Integrative and Comparative Biology*, **2005**, 45, 256-62	2.8	307
138	An evolutionary ecology of individual differences. *Ecology Letters*, **2012**, 15, 1189-98	10	301
137	Ecological release from interspecific competition leads to decoupled changes in population and individual niche width. *Proceedings of the Royal Society B: Biological Sciences*, **2010**, 277, 1789-97	4.4	270
136	CAN INTRASPECIFIC COMPETITION DRIVE DISRUPTIVE SELECTION? AN EXPERIMENTAL TEST IN NATURAL POPULATIONS OF STICKLEBACKS. *Evolution; International Journal of Organic Evolution*, **2004**, 58, 608-618	3.8	233
135	Assortative mating in animals. *American Naturalist*, **2013**, 181, E125-38	3.7	227

134	Non-random gene flow: an underappreciated force in evolution and ecology. *Trends in Ecology and Evolution*, **2012**, 27, 659-65	10.9	199
133	Mistaking geography for biology: inferring processes from species distributions. *Trends in Ecology and Evolution*, **2014**, 29, 572-80	10.9	187
132	Along the speciation continuum in sticklebacks. *Journal of Fish Biology*, **2009**, 75, 2000-36	1.9	185
131	The many faces of fear: comparing the pathways and impacts of nonconsumptive predator effects on prey populations. *PLoS ONE*, **2008**, 3, e2465	3.7	181
130	Dietary input of microbes and host genetic variation shape among-population differences in stickleback gut microbiota. *ISME Journal*, **2015**, 9, 2515-26	11.9	178
129	IndividualsÙdiet diversity influences gut microbial diversity in two freshwater fish (threespine stickleback and Eurasian perch). *Ecology Letters*, **2014**, 17, 979-87	10	178
128	Evolutionary consequences of many-to-one mapping of jaw morphology to mechanics in labrid fishes. *American Naturalist*, **2005**, 165, E140-54	3.7	171
127	Intraspecific competition favours niche width expansion in Drosophila melanogaster. *Nature*, **2001**, 410, 463-6	50.4	170
126	Sexual dimorphism and adaptive speciation: two sides of the same ecological coin. *Evolution; International Journal of Organic Evolution*, **2003**, 57, 2433-49	3.8	167
125	Network analysis reveals contrasting effects of intraspecific competition on individual vs. population diets. *Ecology*, **2008**, 89, 1981-93	4.6	165
124	TEMPO OF HYBRID INVIABILITY IN CENTRARCHID FISHES (TELEOSTEI: CENTRARCHIDAE). *Evolution; International Journal of Organic Evolution*, **2005**, 59, 1754-1767	3.8	163
123	Parallel and nonparallel aspects of ecological, phenotypic, and genetic divergence across replicate population pairs of lake and stream stickleback. *Evolution; International Journal of Organic Evolution* , **2012**, 66, 402-18	3.8	159
122	Natural selection in populations subject to a migration load. *Evolution; International Journal of Organic Evolution*, **2007**, 61, 2229-43	3.8	154
121	Demystifying the RAD fad. *Molecular Ecology*, **2014**, 23, 5937-42	5.7	148
120	Using delta13C stable isotopes to quantify individual-level diet variation. *Oecologia*, **2007**, 152, 643-54	2.9	144
119	EVOLUTIONARY DYNAMICS OF COMPLEX BIOMECHANICAL SYSTEMS: AN EXAMPLE USING THE FOUR-BAR MECHANISM. *Evolution; International Journal of Organic Evolution*, **2004**, 58, 495-503	3.8	136
118	Predictable patterns of disruptive selection in stickleback in postglacial lakes. *American Naturalist*, **2008**, 172, 1-11	3.7	132
117	Reverse evolution of armor plates in the threespine stickleback. *Current Biology*, **2008**, 18, 769-774	6.3	130

116	Systematic analysis of complex genetic interactions. *Science*, **2018**, 360,	33.3	128
115	Contrasting effects of environment and genetics generate a continuum of parallel evolution. *Nature Ecology and Evolution*, **2017**, 1, 158	12.3	125
114	Phenotype-dependent native habitat preference facilitates divergence between parapatric lake and stream stickleback. *Evolution; International Journal of Organic Evolution*, **2009**, 63, 2004-16	3.8	124
113	Using functional morphology to examine the ecology and evolution of specialization. *Integrative and Comparative Biology*, **2002**, 42, 265-77	2.8	123
112	(Non)Parallel Evolution. *Annual Review of Ecology, Evolution, and Systematics*, **2018**, 49, 303-330	13.5	118
111	FOSSIL CALIBRATIONS AND MOLECULAR DIVERGENCE TIME ESTIMATES IN CENTRARCHID FISHES (TELEOSTEI: CENTRARCHIDAE). *Evolution; International Journal of Organic Evolution*, **2005**, 59, 1768-1782	3.8	117
110	RInSp: an r package for the analysis of individual specialization in resource use. *Methods in Ecology and Evolution*, **2013**, 4, 1018-1023	7.7	115
109	Melanomacrophage Centers As a Histological Indicator of Immune Function in Fish and Other Poikilotherms. *Frontiers in Immunology*, **2017**, 8, 827	8.4	114
108	Major Histocompatibility Complex class IIb polymorphism influences gut microbiota composition and diversity. *Molecular Ecology*, **2014**, 23, 4831-45	5.7	111
107	The community effects of phenotypic and genetic variation within a predator population. *Ecology*, **2011**, 92, 1582-93	4.6	107
106	RESOURCE COMPETITION MODIFIES THE STRENGTH OF TRAIT-MEDIATED PREDATOR–PREY INTERACTIONS: A META-ANALYSIS. *Ecology*, **2005**, 86, 2771-2779	4.6	89
105	Specialization of trophic position and habitat use by sticklebacks in an adaptive radiation. *Ecology*, **2010**, 91, 1025-34	4.6	87
104	Accelerated mitochondrial evolution and "Darwin's corollary": asymmetric viability of reciprocal F1 hybrids in Centrarchid fishes. *Genetics*, **2008**, 178, 1037-48	4	85
103	Individual-level diet variation in four species of Brazilian frogs. *Journal of Animal Ecology*, **2009**, 78, 848-56	4.7	80
102	Waiting for sympatric speciation. *Evolution; International Journal of Organic Evolution*, **2004**, 58, 895-9	3.8	80
101	Evaluation of TagSeq, a reliable low-cost alternative for RNAseq. *Molecular Ecology Resources*, **2016**, 16, 1315-1321	8.4	79
100	Can intraspecific competition drive disruptive selection? An experimental test in natural populations of sticklebacks. *Evolution; International Journal of Organic Evolution*, **2004**, 58, 608-18	3.8	79
99	Effects of founding genetic variation on adaptation to a novel resource. *Evolution; International Journal of Organic Evolution*, **2011**, 65, 2481-91	3.8	78

98	Investigating phylogenetic relationships of sunfishes and black basses (Actinopterygii: Centrarchidae) using DNA sequences from mitochondrial and nuclear genes. *Molecular Phylogenetics and Evolution*, **2004**, 32, 344-57	4.1	62
97	Resource dynamics influence the strength of non-consumptive predator effects on prey. *Ecology Letters*, **2009**, 12, 315-23	10	61
96	The magnitude of local adaptation under genotype-dependent dispersal. *Ecology and Evolution*, **2013**, 3, 4722-35	2.8	60
95	Multi-species outcomes in a common model of sympatric speciation. *Journal of Theoretical Biology*, **2006**, 241, 734-44	2.3	60
94	Tempo of hybrid inviability in centrarchid fishes (Teleostei: Centrarchidae). *Evolution; International Journal of Organic Evolution*, **2005**, 59, 1754-67	3.8	59
93	Assortative mating by diet in a phenotypically unimodal but ecologically variable population of stickleback. *American Naturalist*, **2008**, 172, 733-9	3.7	56
92	Asymmetric male and female genetic histories among Native Americans from Eastern North America. *Molecular Biology and Evolution*, **2006**, 23, 2161-74	8.3	56
91	Foraging trait (co)variances in stickleback evolve deterministically and do not predict trajectories of adaptive diversification. *Evolution; International Journal of Organic Evolution*, **2010**, 64, 2265-77	3.8	48
90	Causes of maladaptation. *Evolutionary Applications*, **2019**, 12, 1229-1242	4.8	45
89	Intraspecific genetic variation and competition interact to influence niche expansion. *Proceedings of the Royal Society B: Biological Sciences*, **2010**, 277, 2915-24	4.4	42
88	Resist Globally, Infect Locally: A Transcontinental Test of Adaptation by Stickleback and Their Tapeworm Parasite. *American Naturalist*, **2017**, 189, 43-57	3.7	41
87	Evidence for asymmetric migration load in a pair of ecologically divergent stickleback populations. *Biological Journal of the Linnean Society*, **2008**, 94, 273-287	1.9	41
86	Appreciating the Multiple Processes Increasing Individual or Population Fitness. *Trends in Ecology and Evolution*, **2019**, 34, 435-446	10.9	38
85	Infectious diseases and social distancing in nature. *Science*, **2021**, 371,	33.3	37
84	Evolutionary dynamics of complex biomechanical systems: an example using the four-bar mechanism. *Evolution; International Journal of Organic Evolution*, **2004**, 58, 495-503	3.8	36
83	Frequency dependence limits divergent evolution by favouring rare immigrants over residents. *Nature*, **2017**, 546, 285-288	50.4	35
82	Covarying variances: more morphologically variable populations also exhibit more diet variation. *Oecologia*, **2015**, 178, 89-101	2.9	35
81	The relationship between intraspecific assortative mating and reproductive isolation between divergent populations. *Environmental Epigenetics*, **2012**, 58, 484-492	2.4	35

80	Partitioning the effects of spatial isolation, nest habitat, and individual diet in causing assortative mating within a population of threespine stickleback. *Evolution; International Journal of Organic Evolution*, **2012**, 66, 3582-94	3.8	32
79	Sympatric Speciation in Threespine Stickleback: Why Not?. *International Journal of Ecology*, **2011**, 2011, 1-15	1.9	31
78	Contrasting patterns of phenotype-dependent parasitism within and among populations of threespine stickleback. *American Naturalist*, **2014**, 183, 810-25	3.7	30
77	Does intraspecific size variation in a predator affect its diet diversity and top-down control of prey?. *PLoS ONE*, **2011**, 6, e20782	3.7	30
76	The evolution of hybrid fitness during speciation. *PLoS Genetics*, **2019**, 15, e1008125	6	29
75	Among-lake reciprocal transplants induce convergent expression of immune genes in threespine stickleback. *Molecular Ecology*, **2015**, 24, 4629-46	5.7	28
74	Intrapopulation Diet Variation in Four Frogs (Leptodactylidae) of the Brazilian Savannah. *Copeia*, **2007**, 2007, 855-865	1.1	28
73	Parasite Microbiome Project: Systematic Investigation of Microbiome Dynamics within and across Parasite-Host Interactions. *MSystems*, **2017**, 2,	7.6	28
72	Recent evolution of extreme cestode growth suppression by a vertebrate host. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 6575-6580	11.5	27
71	Understanding Maladaptation by Uniting Ecological and Evolutionary Perspectives. *American Naturalist*, **2019**, 194, 495-515	3.7	27
70	When predators don't eat their prey: nonconsumptive predator effects on prey dynamics. *Ecology*, **2008**, 89, 2414-5	4.6	27
69	Stepwise threshold clustering: a new method for genotyping MHC loci using next-generation sequencing technology. *PLoS ONE*, **2014**, 9, e100587	3.7	27
68	Sickness effects on social interactions depend on the type of behaviour and relationship. *Journal of Animal Ecology*, **2020**, 89, 1387-1394	4.7	26
67	What causes partial F1 hybrid viability? Incomplete penetrance versus genetic variation. *PLoS ONE*, **2007**, 2, e1294	3.7	25
66	An immune challenge reduces social grooming in vampire bats. *Animal Behaviour*, **2018**, 140, 141-149	2.8	24
65	Many-to-one form-to-function mapping weakens parallel morphological evolution. *Evolution; International Journal of Organic Evolution*, **2017**, 71, 2738-2749	3.8	23
64	Resource diversity promotes among-individual diet variation, but not genomic diversity, in lake stickleback. *Ecology Letters*, **2020**, 23, 495-505	10	23
63	Partitioning the effects of isolation by distance, environment, and physical barriers on genomic divergence between parapatric threespine stickleback. *Evolution; International Journal of Organic Evolution*, **2017**, 71, 342-356	3.8	22

62	Gene Expression Contributes to the Recent Evolution of Host Resistance in a Model Host Parasite System. *Frontiers in Immunology*, **2017**, 8, 1071	8.4	22
61	Fossil calibrations and molecular divergence time estimates in centrarchid fishes (Teleostei: Centrarchidae). *Evolution; International Journal of Organic Evolution*, **2005**, 59, 1768-82	3.8	22
60	Ecological factors and morphological traits are associated with repeated genomic differentiation between lake and stream stickleback. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2019**, 374, 20180241	5.8	21
59	Evolutionary inferences from the analysis of exchangeability. *Evolution; International Journal of Organic Evolution*, **2013**, 67, 3429-41	3.8	20
58	Asymmetric selection and the evolution of extraordinary defences. *Nature Communications*, **2013**, 4, 2085	17.4	18
57	The shape of the competition and carrying capacity kernels affects the likelihood of disruptive selection. *Journal of Theoretical Biology*, **2009**, 259, 5-11	2.3	18
56	Natural selection on MHC IIβ in parapatric lake and stream stickleback: Balancing, divergent, both or neither?. *Molecular Ecology*, **2017**, 26, 4772-4786	5.7	17
55	Biased movement drives local cryptic coloration on distinct urban pavements. *Proceedings of the Royal Society B: Biological Sciences*, **2019**, 286, 20191343	4.4	17
54	SEXUAL DIMORPHISM AND ADAPTIVE SPECIATION: TWO SIDES OF THE SAME ECOLOGICAL COIN. *Evolution; International Journal of Organic Evolution*, **2003**, 57, 2433	3.8	16
53	Host-microbiota interaction helps to explain the bottom-up effects of climate change on a small rodent species. *ISME Journal*, **2020**, 14, 1795-1808	11.9	16
52	Character displacement is a pattern: so, what causes it?. *Biological Journal of the Linnean Society*, **2017**, 121, 711-715	1.9	15
51	Phenotypic plasticity drives a depth gradient in male conspicuousness in threespine stickleback, Gasterosteus aculeatus. *Evolution; International Journal of Organic Evolution*, **2017**, 71, 2022-2036	3.8	15
50	Intraspecific competition reduces niche width in experimental populations. *Ecology and Evolution*, **2014**, 4, 3978-90	2.8	15
49	A multivariate view of parallel evolution. *Evolution; International Journal of Organic Evolution*, **2020**, 74, 1466-1481	3.8	14
48	Repeatability of Adaptive Radiation Depends on Spatial Scale: Regional Versus Global Replicates of Stickleback in Lake Versus Stream Habitats. *Journal of Heredity*, **2020**, 111, 43-56	2.4	14
47	Differences in rheotactic responses contribute to divergent habitat use between parapatric lake and stream threespine stickleback. *Evolution; International Journal of Organic Evolution*, **2015**, 69, 2517-24	3.8	14
46	Population-Specific Covariation between Immune Function and Color of Nesting Male Threespine Stickleback. *PLoS ONE*, **2015**, 10, e0126000	3.7	14
45	Behavioural hypervolumes of spider communities predict community performance and disbandment. *Proceedings of the Royal Society B: Biological Sciences*, **2016**, 283,	4.4	13

44	Intruder colour and light environment jointly determine how nesting male stickleback respond to simulated territorial intrusions. *Biology Letters*, **2016**, 12,	3.6	12
43	Plasticity contributes to a fine-scale depth gradient in sticklebacksUvisual system. *Molecular Ecology* , **2017**, 26, 4339-4350	5.7	11
42	Dietary niche and population dynamic feedbacks in a novel habitat. *Oikos*, **2012**, 121, 347-356	4	11
41	Water availability alters the relative performance of Salix sericea,Sralix eriocephala, and their F1 hybrids. *Canadian Journal of Botany*, **1999**, 77, 514-522		11
40	Brain morphology of the threespine stickleback () varies inconsistently with respect to habitat complexity: A test of the Clever Foraging Hypothesis. *Ecology and Evolution*, **2017**, 7, 3372-3380	2.8	10
39	Gene expression stasis and plasticity following migration into a foreign environment. *Molecular Ecology*, **2017**, 26, 4657-4670	5.7	10
38	Female stickleback prefer shallow males: Sexual selection on nest microhabitat. *Evolution; International Journal of Organic Evolution*, **2015**, 69, 1643-1653	3.8	9
37	The gut microbiota response to helminth infection depends on host sex and genotype. *ISME Journal*, **2020**, 14, 1141-1153	11.9	9
36	Scale-dependent effects of host patch traits on species composition in a stickleback parasite metacommunity. *Ecology*, **2020**, 101, e03181	4.6	8
35	Host patch traits have scale-dependent effects on diversity in a stickleback parasite metacommunity. *Ecography*, **2020**, 43, 990-1002	6.5	8
34	Clines Arc through Multivariate Morphospace. *American Naturalist*, **2017**, 189, 354-367	3.7	7
33	Widespread positive but weak assortative mating by diet within stickleback populations. *Ecology and Evolution*, **2015**, 5, 3352-63	2.8	7
32	CAN INTRASPECIFIC COMPETITION DRIVE DISRUPTIVE SELECTION? AN EXPERIMENTAL TEST IN NATURAL POPULATIONS OF STICKLEBACKS. *Evolution; International Journal of Organic Evolution*, **2004**, 58, 608	3.8	7
31	Rapid Evolution of Parasite Resistance via Improved Recognition and Accelerated Immune Activation and Deactivation		7
30	Microhabitat contributes to microgeographic divergence in threespine stickleback. *Evolution; International Journal of Organic Evolution*, **2020**, 74, 749-763	3.8	6
29	FOSSIL CALIBRATIONS AND MOLECULAR DIVERGENCE TIME ESTIMATES IN CENTRARCHID FISHES (TELEOSTEI: CENTRARCHIDAE). *Evolution; International Journal of Organic Evolution*, **2005**, 59, 1768	3.8	6
28	WAITING FOR SYMPATRIC SPECIATION. *Evolution; International Journal of Organic Evolution*, **2004**, 58, 895	3.8	5
27	Immune-challenged vampire bats produce fewer contact calls. *Biology Letters*, **2020**, 16, 20200272	3.6	5

26	Male and female reproductive fitness costs of an immune response in natural populations. *Evolution; International Journal of Organic Evolution*, **2021**, 75, 2509-2523	3.8	5
25	Intergeneric Spawning Between Captive Female Sacramento Perch (Archoplites interruptus) and Male Rock Bass (Ambloplites rupestrus), Teleostei: Centrarchidae. *American Midland Naturalist*, **2006**, 156, 299-304	0.7	4
24	Phylogenetically conserved peritoneal fibrosis response to an immunologic adjuvant in ray-finned fishes		4
23	The genomic signature of ecological divergence along the benthic-limnetic axis in allopatric and sympatric threespine stickleback. *Molecular Ecology*, **2021**, 30, 451-463	5.7	4
22	What evolutionary processes maintain MHC II? diversity within and among populations of stickleback?. *Molecular Ecology*, **2021**, 30, 1659-1671	5.7	4
21	Macroevolutionary foundations of a recently evolved innate immune defense. *Evolution; International Journal of Organic Evolution*, **2021**, 75, 2600-2612	3.8	4
20	Opsin expression predicts male nuptial color in threespine stickleback. *Ecology and Evolution*, **2018**, 8, 7094-7102	2.8	3
19	A test of the Baldwin Effect: Differences in both constitutive expression and inducible responses to parasites underlie variation in host response to a parasite		3
18	Nothing in Evolution Makes Sense Except in the Light of Biology. *BioScience*, **2021**, 71, 370-382	5.7	3
17	Between-population differences in constitutive and infection-induced gene expression in threespine stickleback. *Molecular Ecology*, **2021**, 30, 6791-6805	5.7	3
16	MEASURING INDIVIDUAL-LEVEL RESOURCE SPECIALIZATION **2002**, 83, 2936		2
15	Immune Gene Expression Covaries with Gut Microbiome Composition in Stickleback. *MBio*, **2021**, 12,	7.8	2
14	Evolution of a costly immunity to cestode parasites is a pyrrhic victory		2
13	Copy number variation of a fatty acid desaturase gene associated with ecological divergence in freshwater stickleback populations. *Biology Letters*, **2021**, 17, 20210204	3.6	2
12	Adding the third dimension to studies of parallel evolution of morphology and function: An exploration based on parapatric lake-stream stickleback. *Ecology and Evolution*, **2020**, 10, 13297-13311	2.8	1
11	Learning Objectives for Weaving Evolutionary Thinking into Medical Education. *Medical Science Educator*, **2017**, 27, 137-145	0.7	1
10	Geographical variation in colour of female threespine stickleback (). *PeerJ*, **2018**, 6, e4807	3.1	1
9	Host sex and genotype modify the gut microbiome response to helminth infection		1

8	Sick of Eating: eco-evo-immuno dynamics of predators and their trophically acquired parasites		1
7	Immune gene expression covaries with gut microbiome composition in stickleback		1
6	Adaptive plasticity generates microclines in threespine stickleback male nuptial color		1
5	Food Specialization **2019**, 204-211		1
4	Population-level variation in parasite resistance due to differences in immune initiation and rate of response.. *Evolution Letters*, **2022**, 6, 162-177	5.3	1
3	Complex community-wide consequences of consumer sexual dimorphism.. *Journal of Animal Ecology*, **2022**,	4.7	1
2	Sick of eating: Eco-evo-immuno dynamics of predators and their trophically acquired parasites. *Evolution; International Journal of Organic Evolution*, **2021**, 75, 2842-2856	3.8	0
1	Behavioural genetics: evolutionary fingerprint of the ‘invisible hand’. *Current Biology*, **2007**, 17, R596-7	6.3	