Justin M.J. Travis

List of Publications by Year
in descending order

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152 papers	11,993 citations	34076 52 h-index	30894 102 g-index
159 all docs	159 docs citations	159 times ranked	15066 citing authors

#	Article	IF	Citations
1	Coding for Life: Designing a Platform for Projecting and Protecting Global Biodiversity. BioScience, 2022, 72, 91-104.	2.2	23
2	Spatially explicit models for decisionâ€making in animal conservation and restoration. Ecography, 2022, 2022, .	2.1	28
3	Informed dispersal based on prospecting impacts the rate and shape of range expansions. Ecography, 2022, 2022, .	2.1	2
4	Predicting spatially heterogeneous invasive spread: Pyracantha angustifolia invading a dry Andean valley in northern Argentina. Biological Invasions, 2022, 24, 2201-2216.	1.2	4
5	Fauxcurrence: simulating multiâ€species occurrences for null models in species distribution modelling and biogeography. Ecography, 2022, 2022, .	2.1	6
6	Predicting the influence of river network configuration, biological traits and habitat quality interactions on riverine fish invasions. Diversity and Distributions, 2022, 28, 257-270.	1.9	7
7	Dispersal evolution in currents: spatial sorting promotes philopatry in upstream patches. Ecography, 2021, 44, 231-241.	2.1	5
8	Orangutan movement and population dynamics across human-modified landscapes: implications of policy and management. Landscape Ecology, 2021, 36, 2957-2975.	1.9	9
9	Ancient geological dynamics impact neutral biodiversity accumulation and are detectable in phylogenetic reconstructions. Global Ecology and Biogeography, 2021, 30, 1633-1642.	2.7	1
10	Predicting current and future global distribution of invasive <i>Ligustrum lucidum</i> W.T. Aiton: Assessing emerging risks to biodiversity hotspots. Diversity and Distributions, 2021, 27, 1568-1583.	1.9	12
11	RangeShifter 2.0: an extended and enhanced platform for modelling spatial ecoâ€evolutionary dynamics and species' responses to environmental changes. Ecography, 2021, 44, 1453-1462.	2.1	34
12	RangeShiftR: an R package for individualâ€based simulation of spatial ecoâ€evolutionary dynamics and species' responses to environmental changes. Ecography, 2021, 44, 1443-1452.	2.1	12
13	Predicting the outcomes of management strategies for controlling invasive river fishes using individualâ€based models. Journal of Applied Ecology, 2021, 58, 2427-2440.	1.9	6
14	Prospecting and informed dispersal: Understanding and predicting their joint ecoâ€evolutionary dynamics. Ecology and Evolution, 2021, 11, 15289-15302.	0.8	5
15	The role of the urban landscape on species with contrasting dispersal ability: Insights from greening plans for Barcelona. Landscape and Urban Planning, 2020, 195, 103707.	3.4	11
16	Negative densityâ€dependent dispersal emerges from the joint evolution of densityâ€and body conditionâ€dependent dispersal strategies. Evolution; International Journal of Organic Evolution, 2020, 74, 2238-2249.	1.1	9
17	Ecological time lags and the journey towards conservation success. Nature Ecology and Evolution, 2020, 4, 304-311.	3.4	67
18	Integrating an individual-based model with approximate Bayesian computation to predict the invasion of a freshwater fish provides insights into dispersal and range expansion dynamics. Biological Invasions, 2020, 22, 1461-1480.	1.2	24

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19	Maladapted Prey Subsidize Predators and Facilitate Range Expansion. American Naturalist, 2019, 194, 590-612.	1.0	13
20	Improving reintroduction success in large carnivores through individual-based modelling: How to reintroduce Eurasian lynx (Lynx lynx) to Scotland. Biological Conservation, 2019, 234, 140-153.	1.9	28
21	Incorporating fineâ€scale environmental heterogeneity into broadâ€extent models. Methods in Ecology and Evolution, 2019, 10, 767-778.	2.2	29
22	Coupled land use and ecological models reveal emergence and feedbacks in socioâ€ecological systems. Ecography, 2019, 42, 814-825.	2.1	21
23	Towards an interactive, processâ€based approach to understanding range shifts: developmental and environmental dependencies matter. Ecography, 2019, 42, 201-210.	2.1	12
24	Population and evolutionary dynamics in spatially structured seasonally varying environments. Biological Reviews, 2018, 93, 1578-1603.	4.7	39
25	A call for viewshed ecology: Advancing our understanding of the ecology of information through viewshed analysis. Methods in Ecology and Evolution, 2018, 9, 624-633.	2.2	38
26	The contribution of flight capability to the postâ€fledging dependence period of golden eagles. Journal of Avian Biology, 2018, 49, .	0.6	10
27	Genetics of dispersal. Biological Reviews, 2018, 93, 574-599.	4.7	182
28	Using fluid dynamic concepts to estimate species movement rates in terrestrial landscapes. Ecological Indicators, 2018, 93, 344-350.	2.6	3
29	Defining and delivering resilient ecological networks: Nature conservation in England. Journal of Applied Ecology, 2018, 55, 2537-2543.	1.9	56
30	Behavioural synchronization of largeâ€scale animal movementsÂâ€"Âdisperse alone, butÂmigrate together?. Biological Reviews, 2017, 92, 1275-1296.	4.7	38
31	Tree loss impacts on ecological connectivity: Developing models for assessment. Ecological Informatics, 2017, 42, 90-99.	2.3	17
32	Taking movement data to new depths: Inferring prey availability and patch profitability from seabird foraging behavior. Ecology and Evolution, 2017, 7, 10252-10265.	0.8	36
33	Evolution of dispersal strategies and dispersal syndromes in fragmented landscapes. Ecography, 2017, 40, 56-73.	2.1	185
34	Ecoâ€evolutionary dynamics in fragmented landscapes. Ecography, 2017, 40, 9-25.	2.1	101
35	Early Engagement of Stakeholders with Individual-Based Modeling Can Inform Research for Improving Invasive Species Management: The Round Goby as a Case Study. Frontiers in Ecology and Evolution, 2017, 5, .	1.1	16
36	A traitâ€based approach for predicting species responses to environmental change from sparse data: how well might terrestrial mammals track climate change?. Global Change Biology, 2016, 22, 2415-2424.	4.2	69

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37	The importance of realistic dispersal models in conservation planning: application of a novel modelling platform to evaluate management scenarios in an Afrotropical biodiversity hotspot. Journal of Applied Ecology, 2016, 53, 1055-1065.	1.9	40
38	Using individual tracking data to validate the predictions of species distribution models. Diversity and Distributions, 2016, 22, 682-693.	1.9	18
39	The use of an unsupervised learning approach for characterizing latent behaviors in accelerometer data. Ecology and Evolution, 2016, 6, 727-741.	0.8	90
40	Improving the forecast for biodiversity under climate change. Science, 2016, 353, .	6.0	780
41	Spread rates on fragmented landscapes: the interacting roles of demography, dispersal and habitat availability. Diversity and Distributions, 2016, 22, 1266-1275.	1.9	15
42	Models of Dispersal Evolution Highlight Several Important Issues in Evolutionary and Ecological Modeling. American Naturalist, 2016, 187, 143-150.	1.0	7
43	Emerging Opportunities for Landscape Ecological Modelling. Current Landscape Ecology Reports, 2016, 1, 146-167.	1.1	29
44	The Evolution of Male-Biased Dispersal under the Joint Selective Forces of Inbreeding Load and Demographic and Environmental Stochasticity. American Naturalist, 2016, 188, 423-433.	1.0	28
45	Are existing biodiversity conservation strategies appropriate in a changing climate?. Biological Conservation, 2016, 193, 17-26.	1.9	27
46	Striking the right balance between site and landscape-scale conservation actions for a woodland insect within a highly fragmented landscape: A landscape genetics perspective. Biological Conservation, 2016, 195, 146-155.	1.9	5
47	Community dynamics under environmental change: How can next generation mechanistic models improve projections of species distributions?. Ecological Modelling, 2016, 326, 63-74.	1.2	66
48	Modelling conservation conflicts. , 2015, , 195-211.		2
49	Dispersal asymmetries and deleterious mutations influence metapopulation persistence and range dynamics. Evolutionary Ecology, 2015, 29, 833-850.	0.5	10
50	Modelling potential success of conservation translocations of a specialist grassland butterfly. Biological Conservation, 2015, 192, 200-206.	1.9	23
51	Range expansion of an invasive species through a heterogeneous landscape â€“ the case of American mink in Scotland. Diversity and Distributions, 2015, 21, 888-900.	1.9	40
52	A stochastic movement simulator improves estimates of landscape connectivity. Ecology, 2015, 96, 2203-2213.	1.5	49
53	A multi-species modelling approach to examine the impact of alternative climate change adaptation strategies on range shifting ability in a fragmented landscape. Ecological Informatics, 2015, 30, 222-229.	2.3	21
54	Mutation accumulation and the formation of range limits. Biology Letters, 2015, 11, 20140871.	1.0	21

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55	Site fidelity, survival and conservation options for the threatened flapper skate <i>(Dipturus cf.) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.9	48
56	Modelling Hen Harrier Dynamics to Inform Human-Wildlife Conflict Resolution: A Spatially-Realistic, Individual-Based Approach. PLoS ONE, 2014, 9, e112492.	1.1	5
57	Range<scp>S</scp>hifter: a platform for modelling spatial ecoâ€evolutionary dynamics and species' responses to environmental changes. Methods in Ecology and Evolution, 2014, 5, 388-396.	2.2	160
58	ALADYN â€" a spatially explicit, allelic model for simulating adaptive dynamics. Ecography, 2014, 37, 1288-1291.	2.1	14
59	Mechanistic modelling of animal dispersal offers new insights into range expansion dynamics across fragmented landscapes. Ecography, 2014, 37, 1240-1253.	2.1	61
60	Interâ€individual variability in dispersal behaviours impacts connectivity estimates. Oikos, 2014, 123, 923-932.	1.2	24
61	Using dynamic vegetation models to simulate plant range shifts. Ecography, 2014, 37, 1184-1197.	2.1	89
62	Simple individualâ€based models effectively represent <scp>A</scp>frotropical forest bird movement in complex landscapes. Journal of Applied Ecology, 2014, 51, 693-702.	1.9	29
63	Changes in species' distributions during and after environmental change: which ecoâ€evolutionary processes matter more?. Ecography, 2014, 37, 1210-1217.	2.1	17
64	Between migration load and evolutionary rescue: dispersal, adaptation and the response of spatially structured populations to environmental change. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132795.	1.2	65
65	Landscape structure and genetic architecture jointly impact rates of niche evolution. Ecography, 2014, 37, 1218-1229.	2.1	28
66	Hugging the hedges: Might agri-environment manipulations affect landscape permeability for hedgehogs?. Biological Conservation, 2014, 176, 109-116.	1.9	23
67	Prospecting and dispersal: their eco-evolutionary dynamics and implications for population patterns. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132851.	1.2	57
68	Impacts of Land Cover Data Selection and Trait Parameterisation on Dynamic Modelling of Speciesâ€™ Range Expansion. PLoS ONE, 2014, 9, e108436.	1.1	9
69	Inter-annual variability influences the eco-evolutionary dynamics of range-shifting. PeerJ, 2014, 1, e228.	0.9	9
70	Modelling foraging movements of diving predators: a theoretical study exploring the effect of heterogeneous landscapes on foraging efficiency. PeerJ, 2014, 2, e544.	0.9	4
71	Dispersal and speciesâ€™ responses to climate change. Oikos, 2013, 122, 1532-1540.	1.2	318
72	Fitting complex ecological point process models with integrated nested Laplace approximation. Methods in Ecology and Evolution, 2013, 4, 305-315.	2.2	72

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73	Limited evolutionary rescue of locally adapted populations facing climate change. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120083.	1.8	136
74	More rapid climate change promotes evolutionary rescue through selection for increased dispersal distance. Evolutionary Applications, 2013, 6, 353-364.	1.5	52
75	Interspecific interactions affect species and community responses to climate shifts. Oikos, 2013, 122, 358-366.	1.2	56
76	Red noise increases extinction risk during rapid climate change. Diversity and Distributions, 2013, 19, 815-824.	1.9	24
77	Eco-evolutionary dynamics of range shifts: Elastic margins and critical thresholds. Journal of Theoretical Biology, 2013, 321, 1-7.	0.8	31
78	Identification of 100 fundamental ecological questions. Journal of Ecology, 2013, 101, 58-67.	1.9	605
79	Ideal free distribution of fixed dispersal phenotypes in a wing dimorphic beetle in heterogeneous landscapes. Ecology, 2013, 94, 2487-2497.	1.5	12
80	Effects of local adaptation and interspecific competition on speciesâ€™ responses to climate change. Annals of the New York Academy of Sciences, 2013, 1297, 83-97.	1.8	49
81	When do young birds disperse? Tests from studies of golden eagles in Scotland. BMC Ecology, 2013, 13, 42.	3.0	34
82	Predictive systems ecology. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131452.	1.2	114
83	Evolution of Predator Dispersal in Relation to Spatio-Temporal Prey Dynamics: How Not to Get Stuck in the Wrong Place!. PLoS ONE, 2013, 8, e54453.	1.1	13
84	Critical Scales for Long-Term Socio-ecological Biodiversity Research. , 2013, , 123-138.		4
85	Uncertainty and the Role of Information Acquisition in the Evolution of Context-Dependent Emigration. American Naturalist, 2012, 179, 606-620.	1.0	67
86	Costs of dispersal. Biological Reviews, 2012, 87, 290-312.	4.7	996
87	Risky movement increases the rate of range expansion. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 1194-1202.	1.2	42
88	A decision framework for considering climate change adaptation in biodiversity conservation planning. Journal of Applied Ecology, 2012, 49, 1247-1255.	1.9	54
89	Projecting speciesâ€™ range expansion dynamics: sources of systematic biases when scaling up patterns and processes. Methods in Ecology and Evolution, 2012, 3, 1008-1018.	2.2	34
90	A meta-analysis on the impact of different matrix structures on species movement rates. Landscape Ecology, 2012, 27, 1263-1278.	1.9	113

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91	Modelling dispersal: an ecoâ€evolutionary framework incorporating emigration, movement, settlement behaviour and the multiple costs involved. Methods in Ecology and Evolution, 2012, 3, 628-641.	2.2	132
92	The Speed of Range Shifts in Fragmented Landscapes. PLoS ONE, 2012, 7, e47141.	1.1	71
93	Integrating demographic data and a mechanistic dispersal model to predict invasion spread of Rhododendron ponticum in different habitats. Ecological Informatics, 2011, 6, 187-195.	2.3	22
94	Filling evidence gaps with expert opinion: The use of Delphi analysis in least-cost modelling of functional connectivity. Landscape and Urban Planning, 2011, 103, 400-409.	3.4	29
95	Introducing a â€˜stochastic movement simulatorâ€™ for estimating habitat connectivity. Methods in Ecology and Evolution, 2011, 2, 258-268.	2.2	93
96	Improving prediction and management of range expansions by combining analytical and individualâ€based modelling approaches. Methods in Ecology and Evolution, 2011, 2, 477-488.	2.2	45
97	An Open Source Simulation Model for Soil and Sediment Bioturbation. PLoS ONE, 2011, 6, e28028.	1.1	50
98	Targeting and evaluating biodiversity conservation action within fragmented landscapes: an approach based on generic focal species and least-cost networks. Landscape Ecology, 2010, 25, 1305-1318.	1.9	80
99	Local adaptation and the evolution of speciesâ€™ ranges under climate change. Journal of Theoretical Biology, 2010, 266, 449-457.	0.8	175
100	Towards a mechanistic understanding of dispersal evolution in plants: conservation implications. Diversity and Distributions, 2010, 16, 690-702.	1.9	61
101	Tradeâ€offs and the evolution of lifeâ€histories during range expansion. Ecology Letters, 2010, 13, 1210-1220.	3.0	355
102	Mutation surfing and the evolution of dispersal during range expansions. Journal of Evolutionary Biology, 2010, 23, 2656-2667.	0.8	42
103	Developing a functional connectivity indicator to detect change in fragmented landscapes. Ecological Indicators, 2010, 10, 552-557.	2.6	50
104	How range shifts induced by climate change affect neutral evolution. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 1527-1534.	1.2	58
105	Disappearing refuges in time and space: how environmental change threatens species coexistence. Theoretical Ecology, 2009, 2, 217-227.	0.4	7
106	The evolution of an â€˜intelligentâ€™ dispersal strategy: biased, correlated random walks in patchy landscapes. Oikos, 2009, 118, 309-319.	1.2	86
107	The dynamics of climateâ€induced range shifting; perspectives from simulation modelling. Oikos, 2009, 118, 131-137.	1.2	47
108	Accelerating invasion rates result from the evolution of density-dependent dispersal. Journal of Theoretical Biology, 2009, 259, 151-158.	0.8	131

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109	Using distribution models to test alternative hypotheses about a speciesâ€™ environmental limits and recovery prospects. Biological Conservation, 2009, 142, 488-499.	1.9	48
110	Developing an integrated conceptual framework to understand biodiversity conflicts. Land Use Policy, 2009, 26, 242-253.	2.5	106
111	Invasive species control: Incorporating demographic data and seed dispersal into a management model for Rhododendron ponticum. Ecological Informatics, 2009, 4, 226-233.	2.3	28
112	The effect of host movement on viral transmission dynamics in a vector-borne disease system. Parasitology, 2009, 136, 1221-1234.	0.7	16
113	Facilitation in plant communities: the past, the present, and the future. Journal of Ecology, 2008, 96, 18-34.	1.9	788
114	Landscape structure and boundary effects determine the fate of mutations occurring during range expansions. Heredity, 2008, 101, 329-340.	1.2	39
115	Reidâ€™s Paradox Revisited: The Evolution of Dispersal Kernels during Range Expansion. American Naturalist, 2008, 172, S34-S48.	1.0	213
116	The Frequency of Fitness Peak Shifts Is Increased at Expanding Range Margins Due to Mutation Surfing. Genetics, 2008, 179, 941-950.	1.2	48
117	Thermal conditions during juvenile development affect adult dispersal in a spider. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17000-17005.	3.3	100
118	Evaluating the Influence of Epidemiological Parameters and Host Ecology on the Spread of Phocine Distemper Virus through Populations of Harbour Seals. PLoS ONE, 2008, 3, e2710.	1.1	12
119	Deleterious Mutations Can Surf to High Densities on the Wave Front of an Expanding Population. Molecular Biology and Evolution, 2007, 24, 2334-2343.	3.5	196
120	Which species will succesfully track climate change? The influence of intraspecific competition and density dependent dispersal on range shifting dynamics. Oikos, 2007, 116, 1531-1539.	1.2	5
121	Microcosm experiments can inform global ecological problems. Trends in Ecology and Evolution, 2007, 22, 516-521.	4.2	273
122	Testing mechanistic models of seed dispersal for the invasive Rhododendron ponticum (L.). Perspectives in Plant Ecology, Evolution and Systematics, 2007, 9, 15-28.	1.1	36
123	Range shifting on a fragmented landscape. Ecological Informatics, 2007, 2, 1-8.	2.3	57
124	Modelling speciesâ€™ range shifts in a changing climate: The impacts of biotic interactions, dispersal distance and the rate of climate change. Journal of Theoretical Biology, 2007, 245, 59-65.	0.8	226
125	Which species will succesfully track climate change? The influence of intraspecific competition and density dependent dispersal on range shifting dynamics. Oikos, 2007, 116, 1531-1539.	1.2	67
126	Habitat geometry, population viscosity and the rate of genetic drift. Ecological Informatics, 2006, 1, 153-161.	2.3	5

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127	Evolving dispersal and age at death. Oikos, 2006, 113, 530-538.	1.2	45
128	The impact of habitat loss and fragmentation on genetic drift and fixation time. Oikos, 2006, 114, 367-375.	1.2	50
129	Incorporating evolutionary processes into a spatially-explicit model: exploring the consequences of mink-farm closures in Denmark. Ecography, 2006, 29, 465-476.	2.1	22
130	The distribution of positive and negative species interactions across environmental gradients on a dual-lattice model. Journal of Theoretical Biology, 2006, 241, 896-902.	0.8	87
131	Modelling establishment probabilities of an exotic plant, Rhododendron ponticum, invading a heterogeneous, woodland landscape using logistic regression with spatial autocorrelation. Ecological Modelling, 2006, 193, 747-758.	1.2	46
132	The interplay of positive and negative species interactions across an environmental gradient: insights from an individual-based simulation model. Biology Letters, 2005, 1, 5-8.	1.0	90
133	Spatial processes can determine the relationship between prey encounter rate and prey density. Biology Letters, 2005, 1, 136-138.	1.0	35
134	Mutators in Space: The Dynamics of High-Mutability Clones in a Two-Patch Model. Genetics, 2004, 167, 513-522.	1.2	8
135	The Evolution of Programmed Death in a Spatially Structured Population. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2004, 59, B301-B305.	1.7	70
136	A method for simulating patterns of habitat availability at static and dynamic range margins. Oikos, 2004, 104, 410-416.	1.2	37
137	Spatial structure and the control of invasive alien species. Animal Conservation, 2004, 7, 321-330.	1.5	50
138	Neighbourhood size, dispersal distance and the complex dynamics of the spatial Ricker model. Population Ecology, 2003, 45, 227-237.	0.7	13
139	Climate change and habitat destruction: a deadly anthropogenic cocktail. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 467-473.	1.2	593
140	Mutator dynamics in fluctuating environments. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 591-597.	1.2	71
141	The evolution of dispersal distance in spatially-structured populations. Oikos, 2002, 97, 229-236.	1.2	111
142	The color of noise and the evolution of dispersal. Ecological Research, 2001, 16, 157-163.	0.7	65
143	Density-dependent dispersal in host-parasitoid assemblages. Oikos, 2001, 95, 125-135.	1.2	62
144	Flexibility and the use of indicator taxa in the selection of sites for nature reserves. Biodiversity and Conservation, 2001, 10, 271-285.	1.2	31

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145	Dispersal functions and spatial models: expanding our dispersal toolbox. Ecology Letters, 2000, 3, 163-165.	3.0	63
146	A preliminary assessment of the contribution of nature reserves to biodiversity conservation in Great Britain. Animal Conservation, 2000, 3, 311-320.	1.5	22
147	Linking the coevolutionary and population dynamics of hostâ€"parasitoid interactions. Population Ecology, 2000, 42, 195-203.	0.7	24
148	A preliminary assessment of the contribution of nature reserves to biodiversity conservation in Great Britain. Animal Conservation, 2000, 3, 311-320.	1.5	2
149	Habitat persistence, habitat availability and the evolution of dispersal. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 723-728.	1.2	308
150	The evolution of densityâ€"dependent dispersal. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 1837-1842.	1.2	231
151	The evolution of dispersal in a metapopulation: a spatially explicit, individual-based model. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 17-23.	1.2	129
152	CONTAIN: Optimising the long-term management of invasive alien species using adaptive management. NeoBiota, 0, 59, 119-138.	1.0	10