Mevin B Hooten

List of Publications by Year
in descending order

135 papers	6,087 citations	101543 36 h-index	98798 67 g-index
142 all docs	142 docs citations	142 times ranked	7161 citing authors

#	Article	IF	Citations
1	Multivariate Bayesian clustering using covariateâ€informed components with application to boreal vegetation sensitivity. Biometrics, 2022, 78, 1427-1440.	1.4	3
2	Rapid proliferation of the parasitic copepod, Salmincola californiensis (Dana), on kokanee salmon, Oncorhynchus nerka (Walbaum), in a large Colorado reservoir. Journal of Fish Diseases, 2022, 45, 89-98.	1.9	6
3	Recursive Bayesian computation facilitates adaptive optimal design in ecological studies. Ecology, 2022, 103, e03573.	3.2	4
4	Individual heterogeneity influences the effects of translocation on urban dispersal of an invasive reptile. Movement Ecology, 2022, 10, 2.	2.8	2
5	Constructing Flexible, Identifiable and Interpretable Statistical Models for Binary Data. International Statistical Review, 2022, 90, 328-345.	1.9	1
6	Searching for refuge: A framework for identifying site factors conferring resistance to climateâ€driven vegetation change. Diversity and Distributions, 2022, 28, 793-809.	4.1	6
7	Greater Than the Sum of its Parts: Computationally Flexible Bayesian Hierarchical Modeling. Journal of Agricultural, Biological, and Environmental Statistics, 2022, 27, 382.	1.4	0
8	Linking male reproductive success to effort within and among nests in a coâ€breeding stream fish. Ethology, 2022, 128, 489-498.	1.1	1
9	Scaleâ€dependent influence of the sagebrush community on genetic connectivity of the sagebrush obligate Gunnison sageâ€grouse. Molecular Ecology, 2022, 31, 3267-3285.	3.9	4
10	Bayesian inverse reinforcement learning for collective animal movement. Annals of Applied Statistics, 2022, 16, .	1.1	2
11	Community confounding in joint species distribution models. Scientific Reports, 2022, 12, .	3.3	4
12	Hierarchical computing for hierarchical models in ecology. Methods in Ecology and Evolution, 2021, 12, 245-254.	5.2	7
13	Making Recursive Bayesian Inference Accessible. American Statistician, 2021, 75, 185-194.	1.6	34
14	Improving inferences about private land conservation by accounting for incomplete reporting. Conservation Biology, 2021, 35, 1174-1185.	4.7	4
15	Statistical Challenges in Agent-Based Modeling. American Statistician, 2021, 75, 235-242.	1.6	7
16	Diffusion modeling reveals effects of multiple release sites and human activity on a recolonizing apex predator. Movement Ecology, 2021, 9, 34.	2.8	8
17	Bridging implementation gaps to connect large ecological datasets and complex models. Ecology and Evolution, 2021, 11, 18271-18287.	1.9	1
18	Nonlinear reactionâ€“diffusion process models improve inference for population dynamics. Environmetrics, 2020, 31, e2604.	1.4	11

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19	Compound effects of water clarity, inflow, wind and climate warming on mountain lake thermal regimes. Aquatic Sciences, 2020, 82, 1.	1.5	13
20	Statistical Implementations of Agentâ€Based Demographic Models. International Statistical Review, 2020, 88, 441-461.	1.9	13
21	Animal movement models with mechanistic selection functions. Spatial Statistics, 2020, 37, 100406.	1.9	8
22	Modelâ€based clustering reveals patterns in central place use of a marine top predator. Ecosphere, 2020, 11, e03123.	2.2	4
23	What processes must we understand to forecast regional-scale population dynamics?. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20202219.	2.6	16
24	Linking mosquito surveillance to dengue fever through Bayesian mechanistic modeling. PLoS Neglected Tropical Diseases, 2020, 14, e0008868.	3.0	8
25	Extreme site fidelity as an optimal strategy in an unpredictable and homogeneous environment. Functional Ecology, 2019, 33, 1695-1707.	3.6	24
26	Estimating lakeâ€“climate responses from sparse data: An application to high elevation lakes. Limnology and Oceanography, 2019, 64, 1371-1385.	3.1	11
27	The rise of an apex predator following deglaciation. Diversity and Distributions, 2019, 25, 895-908.	4.1	14
28	Comparing and improving methods for reconstructing peatland water-table depth from testate amoebae. Holocene, 2019, 29, 1350-1361.	1.7	5
29	Accounting for Phenology in the Analysis of Animal Movement. Biometrics, 2019, 75, 810-820.	1.4	11
30	Spatially structured statistical network models for landscape genetics. Ecological Monographs, 2019, 89, e01355.	5.4	27
31	Running on empty: recharge dynamics from animal movement data. Ecology Letters, 2019, 22, 377-389.	6.4	24
32	Animal movement models for migratory individuals and groups. Methods in Ecology and Evolution, 2018, 9, 1692-1705.	5.2	13
33	Estimating abundance of an open population with an N â€mixture model using auxiliary data on animal movements. Ecological Applications, 2018, 28, 816-825.	3.8	14
34	Predicting effects of largeâ€scale reforestation on native and exotic birds. Diversity and Distributions, 2018, 24, 811-819.	4.1	10
35	Monitoring dynamic spatioâ€temporal ecological processes optimally. Ecology, 2018, 99, 524-535.	3.2	30
36	Process convolution approaches for modeling interacting trajectories. Environmetrics, 2018, 29, e2487.	1.4	16

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37	Iterative near-term ecological forecasting: Needs, opportunities, and challenges. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1424-1432.	7.1	400
38	Largeâ€scale movement behavior in a reintroduced predator population. Ecography, 2018, 41, 126-139.	4.5	13
39	Spatial autoregressive models for statistical inference from ecological data. Ecological Monographs, 2018, 88, 36-59.	5.4	128
40	Time-varying predatory behavior is primary predictor of fine-scale movement of wildland-urban cougars. Movement Ecology, 2018, 6, 22.	2.8	14
41	Accounting for location uncertainty in azimuthal telemetry data improves ecological inference. Movement Ecology, 2018, 6, 14.	2.8	15
42	A guide to Bayesian model checking for ecologists. Ecological Monographs, 2018, 88, 526-542.	5.4	164
43	On the relationship between conditional (CAR) and simultaneous (SAR) autoregressive models. Spatial Statistics, 2018, 25, 68-85.	1.9	40
44	Inferring infection hazard in wildlife populations by linking data across individual and population scales. Ecology Letters, 2017, 20, 275-292.	6.4	50
45	The Bayesian Group Lasso for Confounded Spatial Data. Journal of Agricultural, Biological, and Environmental Statistics, 2017, 22, 42-59.	1.4	27
46	Nonnative Trout Invasions Combined with Climate Change Threaten Persistence of Isolated Cutthroat Trout Populations in the Southern Rocky Mountains. North American Journal of Fisheries Management, 2017, 37, 314-325.	1.0	22
47	Safari Science: assessing the reliability of citizen science data for wildlife surveys. Journal of Applied Ecology, 2017, 54, 2053-2062.	4.0	34
48	Dynamic spatio-temporal models for spatial data. Spatial Statistics, 2017, 20, 206-220.	1.9	28
49	Bias correction of bounded location errors in presenceâ€only data. Methods in Ecology and Evolution, 2017, 8, 1566-1573.	5.2	18
50	Basis Function Models for Animal Movement. Journal of the American Statistical Association, 2017, 112, 578-589.	3.1	23
51	Estimating occupancy and abundance using aerial images with imperfect detection. Methods in Ecology and Evolution, 2017, 8, 1679-1689.	5.2	30
52	When mechanism matters: Bayesian forecasting using models of ecological diffusion. Ecology Letters, 2017, 20, 640-650.	6.4	57
53	The basis function approach for modeling autocorrelation in ecological data. Ecology, 2017, 98, 632-646.	3.2	87
54	Reflected Stochastic Differential Equation Models for Constrained Animal Movement. Journal of Agricultural, Biological, and Environmental Statistics, 2017, 22, 353-372.	1.4	13

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55	A modelâ€based approach to wildland fire reconstruction using sediment charcoal records. Environmetrics, 2017, 28, e2450.	1.4	9
56	Imputation Approaches for Animal Movement Modeling. Journal of Agricultural, Biological, and Environmental Statistics, 2017, 22, 335-352.	1.4	29
57	Leveraging constraints and biotelemetry data to pinpoint repetitively used spatial features. Ecology, 2017, 98, 12-20.	3.2	4
58	Do we need demographic data to forecast plant population dynamics?. Methods in Ecology and Evolution, 2017, 8, 541-551.	5.2	32
59	An integrated data model to estimate spatiotemporal occupancy, abundance, and colonization dynamics. Ecology, 2017, 98, 328-336.	3.2	43
60	Guest Editorâ€™s Introduction to the Special Issue on â€œAnimal Movement Modelingâ€. Journal of Agricultural, Biological, and Environmental Statistics, 2017, 22, 224-231.	1.4	5
61	Hierarchical Spatial Models. , 2017, , 837-846.		3
62	Inferring invasive species abundance using removal data from management actions. Ecological Applications, 2016, 26, 2339-2346.	3.8	36
63	Hierarchical Species Distribution Models. Current Landscape Ecology Reports, 2016, 1, 87-97.	2.2	62
64	Model selection and assessment for multiâ€species occupancy models. Ecology, 2016, 97, 1759-1770.	3.2	97
65	Forecasting climate change impacts on plant populations over large spatial extents. Ecosphere, 2016, 7, e01525.	2.2	35
66	Dynamic social networks based on movement. Annals of Applied Statistics, 2016, 10, .	1.1	30
67	Assessing potential health risks to fish and humans using mercury concentrations in inland fish from across western Canada and the United States. Science of the Total Environment, 2016, 571, 342-354.	8.0	27
68	Dynamic occupancy models for explicit colonization processes. Ecology, 2016, 97, 194-204.	3.2	55
69	Models for Ecological Models: Ocean Primary Productivity. Chance, 2016, 29, 23-30.	0.2	0
70	When can the cause of a population decline be determined?. Ecology Letters, 2016, 19, 1353-1362.	6.4	24
71	Uncertainty in biological monitoring: a framework for data collection and analysis to account for multiple sources of sampling bias. Methods in Ecology and Evolution, 2016, 7, 900-909.	5.2	53
72	Movement reveals scale dependence in habitat selection of a large ungulate. Ecological Applications, 2016, 26, 2746-2757.	3.8	24

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73	Reconstruction of late Holocene climate based on tree growth and mechanistic hierarchical models. Environmetrics, 2016, 27, 42-54.	1.4	11
74	Hierarchical animal movement models for populationâ€level inference. Environmetrics, 2016, 27, 322-333.	1.4	52
75	A functional model for characterizing longâ€distance movement behaviour. Methods in Ecology and Evolution, 2016, 7, 264-273.	5.2	35
76	Combining statistical inference and decisions in ecology. Ecological Applications, 2016, 26, 1930-1942.	3.8	38
77	Continuous-time discrete-space models for animal movement. Annals of Applied Statistics, 2015, 9, .	1.1	60
78	Hierarchical Spatial Models. , 2015, , 1-10.		0
79	Optimal population prediction of sandhill crane recruitment based on climateâ€mediated habitat limitations. Journal of Animal Ecology, 2015, 84, 1299-1310.	2.8	31
80	Accounting for imperfect detection in Hill numbers for biodiversity studies. Methods in Ecology and Evolution, 2015, 6, 99-108.	5.2	28
81	Multi-Fraction Bayesian Sediment Transport Model. Journal of Marine Science and Engineering, 2015, 3, 1066-1092.	2.6	5
82	Forecasting the Effects of Fertility Control on Overabundant Ungulates: White-Tailed Deer in the National Capital Region. PLoS ONE, 2015, 10, e0143122.	2.5	24
83	Stateâ€space modeling to support management of brucellosis in the Yellowstone bison population. Ecological Monographs, 2015, 85, 525-556.	5.4	46
84	On the existence of maximum likelihood estimates for presenceâ€only data. Methods in Ecology and Evolution, 2015, 6, 648-655.	5.2	25
85	Restricted spatial regression in practice: geostatistical models, confounding, and robustness under model misspecification. Environmetrics, 2015, 26, 243-254.	1.4	108
86	Animal movement constraints improve resource selection inference in the presence of telemetry error. Ecology, 2015, 96, 2590-2597.	3.2	47
87	A guide to Bayesian model selection for ecologists. Ecological Monographs, 2015, 85, 3-28.	5.4	589
88	Using spatiotemporal statistical models to estimate animal abundance and infer ecological dynamics from survey counts. Ecological Monographs, 2015, 85, 235-252.	5.4	40
89	When to be discrete: the importance of time formulation in understanding animal movement. Movement Ecology, 2014, 2, 21.	2.8	73
90	Homogenization, sex, and differential motility predict spread of chronic wasting disease in mule deer in southern Utah. Journal of Mathematical Biology, 2014, 69, 369-399.	1.9	23

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91	Temporal variation and scale in movement-based resource selection functions. Statistical Methodology, 2014, 17, 82-98.	0.5	33
92	A Bayesian hierarchical model for forecasting intermountain snow dynamics. Environmetrics, 2014, 25, 324-340.	1.4	0
93	An integrated modeling approach to estimating Gunnison sageâ€grouse population dynamics: combining index and demographic data. Ecology and Evolution, 2014, 4, 4247-4257.	1.9	26
94	Guest Editorâ€™s Introduction to the Special Issue on â€œModern Dimension Reduction Methods for Big Data Problems in Ecologyâ€• Journal of Agricultural, Biological, and Environmental Statistics, 2013, 18, 271-273.	1.4	1
95	Computationally Efficient Statistical Differential Equation Modeling Using Homogenization. Journal of Agricultural, Biological, and Environmental Statistics, 2013, 18, 405-428.	1.4	23
96	Evaluating breeding and metamorph occupancy and vernal pool management effects for wood frogs using a hierarchical model. Journal of Applied Ecology, 2013, 50, 1116-1123.	4.0	33
97	Estimating animal resource selection from telemetry data using point process models. Journal of Animal Ecology, 2013, 82, 1155-1164.	2.8	75
98	Spatial occupancy models for large data sets. Ecology, 2013, 94, 801-808.	3.2	135
99	Reconciling resource utilization and resource selection functions. Journal of Animal Ecology, 2013, 82, 1146-1154.	2.8	50
100	Circuit Theory and Model-Based Inference for Landscape Connectivity. Journal of the American Statistical Association, 2013, 108, 22-33.	3.1	69
101	Practical guidance on characterizing availability in resource selection functions under a useâ€“availability design. Ecology, 2013, 94, 1456-1463.	3.2	278
102	Fragmentation and thermal risks from climate change interact to affect persistence of native trout in the Colorado River basin. Global Change Biology, 2013, 19, 1383-1398.	9.5	65
103	Atâ€“Sea Behavior Varies with Lunar Phase in a Nocturnal Pelagic Seabird, the Swallow-Tailed Gull. PLoS ONE, 2013, 8, e56889.	2.5	24
104	Comments on: Inference for Size Demography From Point Process Data Using Integral Projection Models. Journal of Agricultural, Biological, and Environmental Statistics, 2012, 17, 690-692.	1.4	0
105	The influence of external subsidies on diet, growth and Hg concentrations of freshwater sport fish: implications for management and fish consumption advisories. Ecotoxicology, 2012, 21, 1878-1888.	2.4	18
106	An Accessible Method for Implementing Hierarchical Models with Spatio-Temporal Abundance Data. PLoS ONE, 2012, 7, e49395.	2.5	23
107	Optimal spatio-temporal monitoring designs for characterizing population trends. , 2012, , 443-459.		9
108	Reconciling multiple data sources to improve accuracy of large-scale prediction of forest disease incidence. , 2011, 21, 1173-1188.		36

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109	On the use of log-transformation vs. nonlinear regression for analyzing biological power laws. Ecology, 2011, 92, 1887-1894.	3.2	253
110	Forest species diversity reduces disease risk in a generalist plant pathogen invasion. Ecology Letters, 2011, 14, 1108-1116.	6.4	143
111	Assessing First-Order Emulator Inference for Physical Parameters in Nonlinear Mechanistic Models. Journal of Agricultural, Biological, and Environmental Statistics, 2011, 16, 475-494.	1.4	42
112	Homogenization of Large-Scale Movement Models inÂEcology. Bulletin of Mathematical Biology, 2011, 73, 2088-2108.	1.9	60
113	Climate influences the demography of three dominant sagebrush steppe plants. Ecology, 2011, 92, 75-85.	3.2	98
114	Velocity-Based Movement Modeling for Individual and Population Level Inference. PLoS ONE, 2011, 6, e22795.	2.5	49
115	Prey-mediated avoidance of an intraguild predator by its intraguild prey. Oecologia, 2010, 164, 921-929.	2.0	24
116	Agent-Based Inference for Animal Movement and Selection. Journal of Agricultural, Biological, and Environmental Statistics, 2010, 15, 523-538.	1.4	60
117	A general science-based framework for dynamical spatio-temporal models. Test, 2010, 19, 417-451.	1.1	147
118	Rejoinder on: A general science-based framework forÂdynamical spatio-temporal models. Test, 2010, 19, 466-468.	1.1	2
119	Summer spatial patterning of chukars in relation to free water in western Utah. Landscape Ecology, 2010, 25, 135-145.	4.2	8
120	Assessing North American influenza dynamics with a statistical SIRS model. Spatial and Spatio-temporal Epidemiology, 2010, 1, 177-185.	1.7	40
121	Accounting for Individuals, Uncertainty, and Multiscale Clustering in Core Area Estimation. Journal of Wildlife Management, 2010, 74, 1343-1352.	1.8	23
122	Hierarchical spatial models for predicting pygmy rabbit distribution and relative abundance. Journal of Applied Ecology, 2010, 47, 401-409.	4.0	20
123	A Bayesian model for predicting local El NiÃ±o events using tree ring widths and cellulose Î´¹⁸O. Journal of Geophysical Research, 2010, 115, .	3.3	1
124	Statistical Agent-Based Models for Discrete Spatio-Temporal Systems. Journal of the American Statistical Association, 2010, 105, 236-248.	3.1	65
125	Accounting for Individuals, Uncertainty, and Multiscale Clustering in Core Area Estimation. Journal of Wildlife Management, 2010, 74, 1343-1352.	1.8	13
126	Models for Bounded Systems with Continuous Dynamics. Biometrics, 2009, 65, 850-856.	1.4	15

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127	Optimal spatioâ€temporal hybrid sampling designs for ecological monitoring. Journal of Vegetation Science, 2009, 20, 639-649.	2.2	28
128	A hierarchical Bayesian non-linear spatio-temporal model for the spread of invasive species with application to the Eurasian Collared-Dove. Environmental and Ecological Statistics, 2008, 15, 59-70.	3.5	125
129	Hierarchical Spatiotemporal Matrix Models for Characterizing Invasions. Biometrics, 2007, 63, 558-567.	1.4	78
130	Mapping pre-European settlement vegetation at fine resolutions using a hierarchical Bayesian model and GIS. Plant Ecology, 2007, 191, 85-94.	1.6	21
131	Shifts in the spatio-temporal growth dynamics of shortleaf pine. Environmental and Ecological Statistics, 2007, 14, 207-227.	3.5	20
132	Title is missing!. Landscape Ecology, 2003, 18, 487-502.	4.2	62
133	Bringing Bayesian Models to Life. , 0, , .		40
134	Animal Movement. , 0, , .		195
135	Improving Wildlife Population Inference Using Aerial Imagery and Entity Resolution. Journal of Agricultural, Biological, and Environmental Statistics, 0, , 1.	1.4	1