Samuel A Cushman

List of Publications by Year
in descending order

141 papers	11,669 citations	34016 52 h-index	37111 96 g-index
153 all docs	153 docs citations	153 times ranked	9605 citing authors

#	Article	IF	Citations
1	Effects of habitat loss and fragmentation on amphibians: A review and prospectus. Biological Conservation, 2006, 128, 231-240.	1.9	1,065
2	Gene Flow in Complex Landscapes: Testing Multiple Hypotheses with Causal Modeling. American Naturalist, 2006, 168, 486-499.	1.0	571
3	COMPARATIVE EVALUATION OF EXPERIMENTAL APPROACHES TO THE STUDY OF HABITAT FRAGMENTATION EFFECTS. , 2002, 12, 335-345.		543
4	Parsimony in landscape metrics: Strength, universality, and consistency. Ecological Indicators, 2008, 8, 691-703.	2.6	473
5	Multi-scale habitat selection modeling: a review and outlook. Landscape Ecology, 2016, 31, 1161-1175.	1.9	390
6	Applications of landscape genetics in conservation biology: concepts and challenges. Conservation Genetics, 2010, 11, 375-385.	0.8	356
7	Surface metrics: an alternative to patch metrics for the quantification of landscape structure. Landscape Ecology, 2009, 24, 433-450.	1.9	352
8	Behavior of class-level landscape metrics across gradients of class aggregation and area. Landscape Ecology, 2004, 19, 435-455.	1.9	270
9	Spurious correlations and inference in landscape genetics. Molecular Ecology, 2010, 19, 3592-3602.	2.0	253
10	Hierarchical, Multi-scale decomposition of species-environment relationships. Landscape Ecology, 2002, 17, 637-646.	1.9	251
11	A Resistant-Kernel Model of Connectivity for Amphibians that Breed in Vernal Pools. Conservation Biology, 2007, 21, 788-799.	2.4	249
12	Gradient modeling of conifer species using random forests. Landscape Ecology, 2009, 24, 673-683.	1.9	245
13	Modeling Species Distribution and Change Using Random Forest. , 2011, , 139-159.		199
14	Use of Empirically Derived Sourceâ€Destination Models to Map Regional Conservation Corridors. Conservation Biology, 2009, 23, 368-376.	2.4	198
15	Movement behavior explains genetic differentiation in American black bears. Landscape Ecology, 2010, 25, 1613-1625.	1.9	180
16	Wolverine gene flow across a narrow climatic niche. Ecology, 2009, 90, 3222-3232.	1.5	166
17	Utility of computer simulations in landscape genetics. Molecular Ecology, 2010, 19, 3549-3564.	2.0	155
18	Are all data types and connectivity models created equal? Validating common connectivity approaches with dispersal data. Diversity and Distributions, 2018, 24, 868-879.	1.9	147

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19	The gradient concept of landscape structure. , 2005, , 112-119.		145
20	Effects of sample size, number of markers, and allelic richness on the detection of spatial genetic pattern. Molecular Ecology Resources, 2012, 12, 276-284.	2.2	143
21	Scale dependent inference in landscape genetics. Landscape Ecology, 2010, 25, 967-979.	1.9	141
22	Spatial scaling and multi-model inference in landscape genetics: Martes americana in northern Idaho. Landscape Ecology, 2010, 25, 1601-1612.	1.9	138
23	Patterns in the species-environment relationship depend on both scale and choice of response variables. Oikos, 2004, 105, 117-124.	1.2	136
24	Re-Evaluating Causal Modeling with Mantel Tests in Landscape Genetics. Diversity, 2013, 5, 51-72.	0.7	130
25	Scale dependence in habitat selection: the case of the endangered brown bear (<i>Ursus arctos</i>) in the Cantabrian Range (NW Spain). International Journal of Geographical Information Science, 2014, 28, 1531-1546.	2.2	129
26	Landscape effects on gene flow for a climateâ€sensitive montane species, the <scp>A</scp>merican pika. Molecular Ecology, 2014, 23, 843-856.	2.0	117
27	Separating the effects of habitat area, fragmentation and matrix resistance on genetic differentiation in complex landscapes. Landscape Ecology, 2012, 27, 369-380.	1.9	109
28	Sensitivity of landscape resistance estimates based on point selection functions to scale and behavioral state: pumas as a case study. Landscape Ecology, 2014, 29, 541-557.	1.9	107
29	Climate Change and Future Wildfire in the Western United States: An Ecological Approach to Nonstationarity. Earth's Future, 2018, 6, 1097-1111.	2.4	105
30	Multiple-scale prediction of forest loss risk across Borneo. Landscape Ecology, 2017, 32, 1581-1598.	1.9	104
31	HIERARCHICAL ANALYSIS OF FOREST BIRD SPECIESâ€"ENVIRONMENT RELATIONSHIPS IN THE OREGON COAST RANGE. , 2004, 14, 1090-1105.		101
32	Multi-taxa population connectivity in the Northern Rocky Mountains. Ecological Modelling, 2012, 231, 101-112.	1.2	99
33	Why Did the Bear Cross the Road? Comparing the Performance of Multiple Resistance Surfaces and Connectivity Modeling Methods. Diversity, 2014, 6, 844-854.	0.7	99
34	Evaluating population connectivity for species of conservation concern in the American Great Plains. Biodiversity and Conservation, 2013, 22, 2583-2605.	1.2	96
35	Representing genetic variation as continuous surfaces: an approach for identifying spatial dependency in landscape genetic studies. Ecography, 2008, 31, 685-697.	2.1	89
36	A comparison of regression methods for model selection in individualâ€based landscape genetic analysis. Molecular Ecology Resources, 2018, 18, 55-67.	2.2	89

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37	Operationalizing Ecological Resilience Concepts for Managing Species and Ecosystems at Risk. Frontiers in Ecology and Evolution, 2019, 7, .	1.1	82
38	The Gradient Paradigm: A Conceptual and Analytical Framework for Landscape Ecology. , 2010, , 83-108.		82
39	Landscape genetics and limiting factors. Conservation Genetics, 2013, 14, 263-274.	0.8	79
40	Evaluating the intersection of a regional wildlife connectivity network with highways. Movement Ecology, 2013, 1, 12.	1.3	75
41	Southwestern white pine (Pinus strobiformis) species distribution models project a large range shift and contraction due to regional climatic changes. Forest Ecology and Management, 2018, 411, 176-186.	1.4	73
42	Prioritizing core areas, corridors and conflict hotspots for lion conservation in southern Africa. PLoS ONE, 2018, 13, e0196213.	1.1	72
43	A Multiscale Landscape Approach to Predicting Bird and Moth Rarity Hotspots in a Threatened Pitch Pine-Scrub Oak Community. Conservation Biology, 2004, 18, 1063-1077.	2.4	70
44	Landscape genetic connectivity in a riparian foundation tree is jointly driven by climatic gradients and river networks. Ecological Applications, 2014, 24, 1000-1014.	1.8	70
45	A multi-scale assessment of population connectivity in African lions (Panthera leo) in response to landscape change. Landscape Ecology, 2016, 31, 1337-1353.	1.9	70
46	LANDSCAPE-LEVEL PATTERNS OF AVIAN DIVERSITY IN THE OREGON COAST RANGE. Ecological Monographs, 2003, 73, 259-281.	2.4	69
47	A multi-scale, multi-species approach for assessing effectiveness of habitat and connectivity conservation for endangered felids. Biological Conservation, 2020, 245, 108523.	1.9	69
48	Calculating the configurational entropy of a landscape mosaic. Landscape Ecology, 2016, 31, 481-489.	1.9	67
49	Linking movement behavior and fine-scale genetic structure to model landscape connectivity for bobcats (Lynx rufus). Landscape Ecology, 2013, 28, 471-486.	1.9	64
50	A multi-scale analysis of species-environment relationships: breeding birds in a pitch pineâ€"scrub oak (Pinus rigidaâ€"Quercus ilicifolia) community. Biological Conservation, 2003, 112, 307-317.	1.9	63
51	Influences of scale on bat habitat relationships in a forested landscape in Nicaragua. Landscape Ecology, 2016, 31, 1299-1318.	1.9	63
52	Use of Abundance of One Species as a Surrogate for Abundance of Others. Conservation Biology, 2010, 24, 830-840.	2.4	62
53	Isolation by distance, resistance and/or clusters? Lessons learned from a forestâ€dwelling carnivore inhabiting a heterogeneous landscape. Molecular Ecology, 2015, 24, 5110-5129.	2.0	60
54	Multiâ€scale habitat modelling identifies spatial conservation priorities for mainland clouded leopards (<i>Neofelis nebulosa</i>). Diversity and Distributions, 2019, 25, 1639-1654.	1.9	60

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55	Mapping Landscape Resistance to Identify Corridors and Barriers for Elephant Movement in Southern Africa. , 2010, , 349-367.		59
56	Spatiotemporal variation in resource selection: insights from the American marten (<i>Martes) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	1.8	58
57	Multispecies assessment of core areas and connectivity of desert carnivores in central Iran. Diversity and Distributions, 2018, 24, 193-207.	1.9	56
58	Do forest community types provide a sufficient basis to evaluate biological diversity?. Frontiers in Ecology and the Environment, 2008, 6, 13-17.	1.9	53
59	Population connectivity and genetic diversity of American marten (Martes americana) in the United States northern Rocky Mountains in a climate change context. Conservation Genetics, 2013, 14, 529-541.	0.8	52
60	Spatio-temporal ecology of sympatric felids on Borneo. Evidence for resource partitioning?. PLoS ONE, 2018, 13, e0200828.	1.1	52
61	Landscape connectivity modeling from the perspective of animal dispersal. Landscape Ecology, 2020, 35, 41-58.	1.9	52
62	Current State of the Art for Statistical Modelling of Species Distributions. , 2010, , 273-311.		51
63	Multi-scale Mexican spotted owl (Strix occidentalis lucida) nest/roost habitat selection in Arizona and a comparison with single-scale modeling results. Landscape Ecology, 2016, 31, 1209-1225.	1.9	47
64	Predicting global population connectivity and targeting conservation action for snow leopard across its range. Ecography, 2016, 39, 419-426.	2.1	46
65	Multi-scale prediction of landscape resistance for tiger dispersal in central India. Landscape Ecology, 2016, 31, 1355-1368.	1.9	45
66	Landscape Genetics for the Empirical Assessment of Resistance Surfaces: The European Pine Marten (Martes martes) as a Target-Species of a Regional Ecological Network. PLoS ONE, 2014, 9, e110552.	1.1	44
67	Species and space: a combined gap analysis to guide management planning of conservation areas. Landscape Ecology, 2020, 35, 1505-1517.	1.9	44
68	Grand challenges in evolutionary and population genetics: the importance of integrating epigenetics, genomics, modeling, and experimentation. Frontiers in Genetics, 2014, 5, 197.	1.1	40
69	Tiger abundance and gene flow in Central India are driven by disparate combinations of topography and land cover. Diversity and Distributions, 2017, 23, 863-874.	1.9	39
70	Integrating Sunda clouded leopard (Neofelis diardi) conservation into development and restoration planning in Sabah (Borneo). Biological Conservation, 2019, 235, 63-76.	1.9	38
71	Calculation of Configurational Entropy in Complex Landscapes. Entropy, 2018, 20, 298.	1.1	37
72	Improving habitat and connectivity model predictions with multi-scale resource selection functions from two geographic areas. Landscape Ecology, 2019, 34, 503-519.	1.9	37

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73	Multi-scale habitat selection modeling identifies threats and conservation opportunities for the Sunda clouded leopard (Neofelis diardi). Biological Conservation, 2018, 227, 92-103.	1.9	35
74	Forest cover and level of protection influence the island-wide distribution of an apex carnivore and umbrella species, the Sri Lankan leopard (Panthera pardus kotiya). Biodiversity and Conservation, 2018, 27, 235-263.	1.2	34
75	Spatially-explicit estimation of Wright's neighborhood size in continuous populations. Frontiers in Ecology and Evolution, 2014, 2, .	1.1	33
76	Evaluating scenarios of landscape change for Sunda clouded leopard connectivity in a human dominated landscape. Biological Conservation, 2018, 222, 232-240.	1.9	33
77	Multi-scale niche modeling of three sympatric felids of conservation importance in central Iran. Landscape Ecology, 2019, 34, 2451-2467.	1.9	33
78	Contrasting use of habitat, landscape elements, and corridors by grey wolf and golden jackal in central Iran. Landscape Ecology, 2019, 34, 1263-1277.	1.9	32
79	Metaâ€replication, sampling bias, and multiâ€scale model selection: A case study on snow leopard (<i>Panthera uncia</i>) in western China. Ecology and Evolution, 2020, 10, 7686-7712.	0.8	32
80	Sensitivity of resource selection and connectivity models to landscape definition. Landscape Ecology, 2017, 32, 835-855.	1.9	31
81	Conserving threatened riparian ecosystems in the American West: Precipitation gradients and river networks drive genetic connectivity and diversity in a foundation riparian tree (<i>Populus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	2.0	31
82	Metrics and Models for Quantifying Ecological Resilience at Landscape Scales. Frontiers in Ecology and Evolution, 2019, 7, .	1.1	31
83	The influence of landscape characteristics and home-range size on the quantification of landscape-genetics relationships. Landscape Ecology, 2012, 27, 253-266.	1.9	30
84	Meta-replication reveals nonstationarity in multi-scale habitat selection of Mexican Spotted Owl. Condor, 2017, 119, 641-658.	0.7	30
85	Sustainable land-use optimization using NSGA-II: theoretical and experimental comparisons of improved algorithms. Landscape Ecology, 2021, 36, 1877-1892.	1.9	28
86	Empirical modeling of spatial and temporal variation in warm season nocturnal air temperatures in two North Idaho mountain ranges, USA. Agricultural and Forest Meteorology, 2011, 151, 261-269.	1.9	27
87	Evaluating the sufficiency of protected lands for maintaining wildlife population connectivity in the U.S. northern Rocky Mountains. Diversity and Distributions, 2012, 18, 873-884.	1.9	27
88	Empirical validation of landscape resistance models: insights from the Greater Sage-Grouse (Centrocercus urophasianus). Landscape Ecology, 2015, 30, 1837-1850.	1.9	27
89	Simulating the impact of Belt and Road initiative and other major developments in Myanmar on an ambassador felid, the clouded leopard, Neofelis nebulosa. Landscape Ecology, 2020, 35, 727-746.	1.9	27
90	Habitat Fragmentation Reduces Genetic Diversity and Connectivity of the Mexican Spotted Owl: A Simulation Study Using Empirical Resistance Models. Genes, 2018, 9, 403.	1.0	26

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91	Machine learning in landscape ecological analysis: a review of recent approaches. Landscape Ecology, 2022, 37, 1227-1250.	1.9	26
92	Habitat Fragmentation Effects Depend on Complex Interactions Between Population Size and Dispersal Ability: Modeling Influences of Roads, Agriculture and Residential Development Across a Range of Life-History Characteristics. , 2010, , 369-385.		25
93	Simulating impacts of rapid forest loss on population size, connectivity and genetic diversity of Sunda clouded leopards (Neofelis diardi) in Borneo. PLoS ONE, 2018, 13, e0196974.	1.1	23
94	Prioritizing areas for conservation outside the existing protected area network in Bhutan: the use of multi-species, multi-scale habitat suitability models. Landscape Ecology, 2021, 36, 1281-1309.	1.9	21
95	Effects of climatic gradients on genetic differentiation of Caragana on the Ordos Plateau, China. Landscape Ecology, 2013, 28, 1729-1741.	1.9	20
96	Modelling multilocus selection in an individualâ€based, spatiallyâ€explicit landscape genetics framework. Molecular Ecology Resources, 2020, 20, 605-615.	2.2	20
97	Ecological differences and limiting factors in different regional contexts: landscape genetics of the stone marten inÂthe Iberian Peninsula. Landscape Ecology, 2017, 32, 1269-1283.	1.9	19
98	Predicting biodiversity richness in rapidly changing landscapes: climate, low human pressure or protection as salvation?. Biodiversity and Conservation, 2020, 29, 4035-4057.	1.2	19
99	Integrating spatial analysis and questionnaire survey to better understand human-onager conflict in Southern Iran. Scientific Reports, 2021, 11, 12423.	1.6	19
100	Landscape-level analysis of mountain goat population connectivity in Washington and southern British Columbia. Conservation Genetics, 2015, 16, 1195-1207.	0.8	18
101	Adaptive trait syndromes along multiple economic spectra define cold and warm adapted ecotypes in a widely distributed foundation tree species. Journal of Ecology, 2021, 109, 1298-1318.	1.9	18
102	Managing emerging threats to spotted owls. Journal of Wildlife Management, 2018, 82, 682-697.	0.7	17
103	Where buffalo and cattle meet: modelling interspecific contact risk using cumulative resistant kernels. Ecography, 2018, 41, 1616-1626.	2.1	17
104	Landscape Applications of Machine Learning: Comparing Random Forests and Logistic Regression in Multi-Scale Optimized Predictive Modeling of American Marten Occurrence in Northern Idaho, USA. , 2018, , 185-203.		17
105	Multi-scale path-level analysis of jaguar habitat use in the Pantanal ecosystem. Biological Conservation, 2021, 253, 108900.	1.9	17
106	Landscape Ecology: Past, Present, and Future. , 2010, , 65-82.		15
107	Winter bait stations as a multispecies survey tool. Ecology and Evolution, 2017, 7, 6826-6838.	0.8	15
108	Targeting conifer removal to create an even playing field for birds in the Great Basin. Biological Conservation, 2021, 257, 109130.	1.9	15

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109	Separating the effects of habitat amount and fragmentation on invertebrate abundance using a multi-scale framework. Landscape Ecology, 2019, 34, 105-117.	1.9	14
110	Forecasting habitat and connectivity for pronghorn across the Great Basin ecoregion. Diversity and Distributions, 2021, 27, 2315-2329.	1.9	14
111	How Important Are Resistance, Dispersal Ability, Population Density and Mortality in Temporally Dynamic Simulations of Population Connectivity? A Case Study of Tigers in Southeast Asia. Land, 2020, 9, 415.	1.2	13
112	The Problem of Ecological Scaling in Spatially Complex, Nonequilibrium Ecological Systems. , 2010, , 43-63.		13
113	Landscape Metrics, Scales of Resolution. Managing Forest Ecosystems, 2008, , 33-51.	0.4	12
114	Synthesizing habitat connectivity analyses of a globally important humanâ€dominated tigerâ€conservation landscape. Conservation Biology, 2022, 36, .	2.4	12
115	FracL: A Tool for Characterizing the Fractality of Landscape Gradients from a New Perspective. ISPRS International Journal of Geo-Information, 2019, 8, 466.	1.4	11
116	Habitat amount mediates the effect of fragmentation on a pollinatorâ€™s reproductive performance, but not on its foraging behaviour. Oecologia, 2020, 193, 523-534.	0.9	11
117	Genetic diversity and drivers of genetic differentiation of Reaumuria soongorica of the Inner Mongolia plateau in China. Plant Ecology, 2015, 216, 925-937.	0.7	10
118	Morphological Differences in Pinus strobiformis Across Latitudinal and Elevational Gradients. Frontiers in Plant Science, 2020, 11, 559697.	1.7	10
119	The effect of gene flow from unsampled demes in landscape genetic analysis. Molecular Ecology Resources, 2021, 21, 394-403.	2.2	10
120	Optimization of spatial scale, but not functional shape, affects the performance of habitat suitability models: a case study of tigers (Panthera tigris) in Thailand. Landscape Ecology, 2021, 36, 455-474.	1.9	10
121	Effects of non-representative sampling design on multi-scale habitat models: flammulated owls in the Rocky Mountains.. Ecological Modelling, 2021, 450, 109566.	1.2	10
122	The effect of scale in quantifying fire impacts on species habitats. Fire Ecology, 2020, 16, .	1.1	10
123	Temporal Non-stationarity of Path-Selection Movement Models and Connectivity: An Example of African Elephants in Kruger National Park. Frontiers in Ecology and Evolution, 2021, 9, .	1.1	9
124	Entropy in Landscape Ecology: A Quantitative Textual Multivariate Review. Entropy, 2021, 23, 1425.	1.1	9
125	Seascape genetics and connectivity modelling for an endangered Mediterranean coral in the northern Ionian and Adriatic seas. Landscape Ecology, 2019, 34, 2649-2668.	1.9	8
126	Predicting connectivity, population size and genetic diversity of Sunda clouded leopards across Sabah, Borneo. Landscape Ecology, 2019, 34, 275-290.	1.9	8

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127	Space and Time in Ecology: Noise or Fundamental Driver?. , 2010, , 19-41.		8
128	Data on Distribution and Abundance: Monitoring for Research and Management. , 2010, , 111-129.		8
129	Evidence of spatial genetic structure in a snow leopard population from Gansu, China. Heredity, 2021, 127, 522-534.	1.2	8
130	Multivariate Landscape Trajectory Analysis. , 2007, , 119-140.		7
131	Topographical features and forest cover influence landscape connectivity and gene flow of the Caucasian pit viper, Gloydius caucasicus (Nikolsky, 1916), in Iran. Landscape Ecology, 2019, 34, 2615-2630.	1.9	6
132	Assessing the complex relationship between landscape, gene flow, and range expansion of a Mediterranean carnivore. European Journal of Wildlife Research, 2019, 65, 1.	0.7	6
133	Genetic connectivity of two marine gastropods in the Mediterranean Sea: seascape genetics reveals speciesâ€specific oceanographic drivers of gene flow. Molecular Ecology, 2021, 30, 4608-4629.	2.0	6
134	Random forest modelling of multiâ€scale, multiâ€species habitat associations within <scp>KAZA</scp> transfrontier conservation area using spoor data. Journal of Applied Ecology, 2022, 59, 2346-2359.	1.9	5
135	Scale-dependent seasonal habitat selection by jaguars (Panthera onca) and pumas (Puma concolor) in Panama. Landscape Ecology, 2022, 37, 129-146.	1.9	4
136	Pathwalker: A New Individual-Based Movement Model for Conservation Science and Connectivity Modelling. ISPRS International Journal of Geo-Information, 2022, 11, 329.	1.4	4
137	Modeling Understory Vegetation and Its Response to Fire. , 2009, , 391-414.		3
138	Mediterranean scrubland and elevation drive gene flow of a Mediterranean carnivore, the Egyptian mongooseHerpestes ichneumon(Herpestidae). Biological Journal of the Linnean Society, 2016, , .	0.7	3
139	Investigating Carnivore Guild Structure: Spatial and Temporal Relationships amongst Threatened Felids in Myanmar. ISPRS International Journal of Geo-Information, 2021, 10, 808.	1.4	3
140	Genetic Sampling of Palmer's Chipmunks in the Spring Mountains, Nevada. Western North American Naturalist, 2013, 73, 198-210.	0.2	1
141	Landscape Genetics. , 2010, , 313-328.		1