David J Currie

List of Publications by Year
in descending order

74 papers	11,447 citations	76326 40 h-index	82547 72 g-index
76 all docs	76 docs citations	76 times ranked	11211 citing authors

#	Article	IF	Citations
1	ENERGY, WATER, AND BROAD-SCALE GEOGRAPHIC PATTERNS OF SPECIES RICHNESS. Ecology, 2003, 84, 3105-3117.	3.2	1,868
2	Energy and Large-Scale Patterns of Animal- and Plant-Species Richness. American Naturalist, 1991, 137, 27-49.	2.1	1,482
3	Predictions and tests of climate-based hypotheses of broad-scale variation in taxonomic richness. Ecology Letters, 2004, 7, 1121-1134.	6.4	1,011
4	Large-scale biogeographical patterns of species richness of trees. Nature, 1987, 329, 326-327.	27.8	636
5	Spatial speciesâ€richness gradients across scales: a metaâ€analysis. Journal of Biogeography, 2009, 36, 132-147.	3.0	573
6	A Globally Consistent Richnessâ€Climate Relationship for Angiosperms. American Naturalist, 2003, 161, 523-536.	2.1	468
7	Global Change in Forests: Responses of Species, Communities, and Biomes. BioScience, 2001, 51, 765.	4.9	371
8	The Diversity-Disturbance Relationship: Is It Generally Strong and Peaked?. Ecology, 2001, 82, 3479.	3.2	330
9	Is habitat fragmentation bad for biodiversity?. Biological Conservation, 2019, 230, 179-186.	4.1	329
10	A comparison of the abilities of freshwater algae and bacteria to acquire and retain phosphorus1. Limnology and Oceanography, 1984, 29, 298-310.	3.1	293
11	Patterns and causes of species richness: a general simulation model for macroecology. Ecology Letters, 2009, 12, 873-886.	6.4	286
12	Compensatory dynamics are rare in natural ecological communities. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3273-3277.	7.1	264
13	The relative importance of bacterioplankton and phytoplankton in phosphorus uptake in freshwater1. Limnology and Oceanography, 1984, 29, 311-321.	3.1	205
14	The Macroecological Contribution to Global Change Solutions. Science, 2007, 316, 1581-1584.	12.6	192
15	Effects of Human Activity on Global Extinction Risk. Conservation Biology, 1995, 9, 1528-1538.	4.7	157
16	THE DIVERSITYâ€"DISTURBANCE RELATIONSHIP: IS IT GENERALLY STRONG AND PEAKED?. Ecology, 2001, 82, 3479-3492.	3.2	154
17	The Species Richness-Energy Hypothesis in a System Where Historical Factors Are Thought to Prevail: Coral Reefs. American Naturalist, 1996, 148, 138-159.	2.1	153
18	Largeâ€scale variability and interactions among phytoplankton, bacterioplankton, and phosphorus. Limnology and Oceanography, 1990, 35, 1437-1455.	3.1	151

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19	Global Patterns of Animal Abundance and Species Energy Use. Oikos, 1993, 67, 56.	2.7	139
20	Big Science vs. Little Science: How Scientific Impact Scales with Funding. PLoS ONE, 2013, 8, e65263.	2.5	125
21	Human land use, agriculture, pesticides and losses of imperiled species. Diversity and Distributions, 2009, 15, 242-253.	4.1	118
22	The relative importance of bacteria and algae as food sources for crustacean zooplankton. Limnology and Oceanography, 1991, 36, 708-728.	3.1	112
23	A global model of island biogeography. Global Ecology and Biogeography, 2006, 15, 72-81.	5.8	112
24	Global Patterns of Tree Species Richness in Moist Forests: Another Look. Oikos, 1998, 81, 598.	2.7	100
25	Can bacteria outcompete phytoplankton for phosphorus? a chemostat test. Microbial Ecology, 1984, 10, 205-216.	2.8	92
26	Importance of patch scale vs landscape scale on selected forest birds. Oikos, 2002, 96, 110-118.	2.7	88
27	A re-examination of the expected effects of disturbance on diversity. Oikos, 2000, 88, 483-493.	2.7	86
28	Does climate determine broad-scale patterns of species richness? A test of the causal link by natural experiment. Global Ecology and Biogeography, 2003, 12, 461-473.	5.8	85
29	Projected Effects of Climate Change on Patterns of Vertebrate and Tree Species Richness in the Conterminous United States. Ecosystems, 2001, 4, 216-225.	3.4	81
30	TESTS OF THE MID-DOMAIN HYPOTHESIS: A REVIEW OF THE EVIDENCE. Ecological Monographs, 2008, 78, 3-18.	5.4	77
31	Evolutionary constraints on regional faunas: whom, but not how many. Ecology Letters, 2009, 12, 57-65.	6.4	76
32	The relative importance of evolutionary and environmental controls on broad-scale patterns of species richness in North America. Ecoscience, 1999, 6, 329-337.	1.4	72
33	Some general propositions about the study of spatial patterns of species richness. Ecoscience, 1999, 6, 392-399.	1.4	70
34	A test of Metabolic Theory as the mechanism underlying broad-scale species-richness gradients. Global Ecology and Biogeography, 2007, 16, 170-178.	5.8	68
35	Changing Species Richness and Composition in Canadian National Parks. Conservation Biology, 2000, 14, 1099-1109.	4.7	66
36	How are tree species distributed in climatic space? A simple and general pattern. Global Ecology and Biogeography, 2012, 21, 1157-1166.	5.8	64

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37	Lepidopteran richness patterns in North America. Ecoscience, 1998, 5, 448-453.	1.4	62
38	At the landscape level, birds respond strongly to habitat amount but weakly to fragmentation. Diversity and Distributions, 2018, 24, 629-639.	4.1	54
39	Quantifying the importance of regional and local filters for community trait structure in tropical and temperate zones. Ecology, 2011, 92, 903-914.	3.2	52
40	The extent and predictability of the biodiversityâ€“carbon correlation. Ecology Letters, 2018, 21, 365-375.	6.4	46
41	How, and how much, natural cover loss increases species richness. Global Ecology and Biogeography, 2011, 20, 857-867.	5.8	44
42	Does climate limit species richness by limiting individual speciesâ€™ ranges?. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132695.	2.6	43
43	Disentangling the roles of environment and space in ecology. Journal of Biogeography, 2007, 34, 2009-2011.	3.0	42
44	The completeness of the continental fossil record and its impact on patterns of diversification. Paleobiology, 2010, 36, 51-60.	2.0	41
45	Climate change is not a major driver of shifts in the geographical distributions of North American birds. Global Ecology and Biogeography, 2017, 26, 333-346.	5.8	39
46	Species-energy theory and patterns of species richness: I. Patterns of bird, angiosperm, and mammal species richness on islands. Biological Conservation, 1993, 63, 137-144.	4.1	38
47	A UNIFIED MODEL OF AVIAN SPECIES RICHNESS ON ISLANDS AND CONTINENTS. Ecology, 2007, 88, 1309-1321.	3.2	38
48	Protecting Endangered Species: Do the Main Legislative Tools Work?. PLoS ONE, 2012, 7, e35730.	2.5	37
49	The missing Madagascan mid-domain effect. Ecology Letters, 2006, 9, 149-159.	6.4	36
50	Assessing the strength of top-down influences on plankton abundance in unmanipulated lakes. Canadian Journal of Fisheries and Aquatic Sciences, 1999, 56, 427-436.	1.4	33
51	Can habitat suitability estimated from MaxEnt predict colonizations and extinctions?. Diversity and Distributions, 2021, 27, 873-886.	4.1	32
52	Where Newton might have taken ecology. Global Ecology and Biogeography, 2019, 28, 18-27.	5.8	29
53	A consistent occupancyâ€“climate relationship across birds and mammals of the Americas. Oikos, 2014, 123, 1029-1036.	2.7	25
54	Contemporaneous climate directly controls broadâ€scale patterns of woody plant diversity: a test by a natural experiment over 14,000 years. Global Ecology and Biogeography, 2015, 24, 97-106.	5.8	25

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55	An empirical investigation of why speciesâ€“area relationships overestimate species losses. Ecology, 2015, 96, 1253-1263.	3.2	20
56	The origins and maintenance of global species endemism. Global Ecology and Biogeography, 2019, 28, 170-183.	5.8	20
57	Species-energy theory and patterns of species richness: II. Predicting mammal species richness on isolated nature reserves. Biological Conservation, 1993, 63, 145-148.	4.1	15
58	Are North American bird species' geographic ranges mainly determined by climate?. Global Ecology and Biogeography, 2018, 27, 461-473.	5.8	15
59	Can the richnessâ€“climate relationship be explained by systematic variations in how individual speciesâ€™ ranges relate to climate?. Global Ecology and Biogeography, 2016, 25, 527-539.	5.8	13
60	Does acid rain increase human exposure to mercury? A review and analysis of recent literature. Environmental Toxicology and Chemistry, 1995, 14, 809-813.	4.3	11
61	The weakness of evidence supporting tropical niche conservatism as a main driver of current richnessâ€“temperature gradients. Global Ecology and Biogeography, 2015, 24, 795-803.	5.8	11
62	Spatial Autocorrelation Can Generate Stronger Correlations between Range Size and Climatic Niches Than the Biological Signal â€" A Demonstration Using Bird and Mammal Range Maps. PLoS ONE, 2016, 11, e0166243.	2.5	11
63	Regional-to-global patterns of biodiversity, and what they have to say about mechanisms. , 0, , 258-282.		10
64	How perilous are broad-scale correlations with environmental variables?. Frontiers of Biogeography, 2020, 12, .	1.8	8
65	Using empirical methods to assess the risks of mercury accumulation in fish from lakes receiving acid rain. Human and Ecological Risk Assessment (HERA), 1995, 1, 306-322.	3.4	7
66	Testing, as opposed to supporting, the Mid-domain Hypothesis: a response to. Ecology Letters, 2007, 10, E9-E10.	6.4	6
67	Long Time-Scale Recurrences in Ecology: Detecting Relationships Between Climate Dynamics and Biodiversity Along a Latitudinal Gradient. Understanding Complex Systems, 2015, , 335-347.	0.6	6
68	Conservation of endangered species and the patterns and propensities of biodiversity. Comptes Rendus - Biologies, 2003, 326, 98-103.	0.2	5
69	The utility of covariances: a response to Ranta et al. Oikos, 2008, 117, 1912-1913.	2.7	5
70	Can climate explain interannual local extinctions among bird species?. Journal of Biogeography, 2014, 41, 443-451.	3.0	5
71	Mountain passes are higher not only in the tropics. Ecography, 2017, 40, 459-460.	4.5	4
72	Using regional patterns for predicting local temporal change: a test by natural experiment in the Great Lakes bioregion, Ontario, Canada. Diversity and Distributions, 2017, 23, 261-271.	4.1	3

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73	Changing Species Richness and Composition in Canadian National Parks. , 2000, 14, 1099.		1
74	DOES ACID RAIN INCREASE HUMAN EXPOSURE TO MERCURY? A REVIEW AND ANALYSIS OF RECENT LITERATURE. Environmental Toxicology and Chemistry, 1995, 14, 809.	4.3	1