

Robert K Colwell

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

31,340
citations

23500

58
h-index

34900

98
g-index

104
all docs

104
docs citations

104
times ranked

32480
citing authors

#	ARTICLE	IF	CITATIONS
1	Language and ethnobiological skills decline precipitously in Papua New Guinea, the world's most linguistically diverse nation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	14
2	Spatial scale and the synchrony of ecological disruption. <i>Nature</i> , 2021, 599, E8-E10.	13.7	6
3	The arboreal ants of a Neotropical rain forest show high species density and comprise one third of the ant fauna. <i>Biotropica</i> , 2020, 52, 675-685.	0.8	9
4	Quantifying sample completeness and comparing diversities among assemblages. <i>Ecological Research</i> , 2020, 35, 292-314.	0.7	141
5	Proportional mixture of two rarefaction/extrapolation curves to forecast biodiversity changes under landscape transformation. <i>Ecology Letters</i> , 2019, 22, 1913-1922.	3.0	11
6	Humboldt's enigma: What causes global patterns of mountain biodiversity?. <i>Science</i> , 2019, 365, 1108-1113.	6.0	505
7	Building mountain biodiversity: Geological and evolutionary processes. <i>Science</i> , 2019, 365, 1114-1119.	6.0	415
8	The distributions of morphologically specialized hummingbirds coincide with floral trait matching across an Andean elevational gradient. <i>Biotropica</i> , 2019, 51, 205-218.	0.8	35
9	Drivers of geographical patterns of North American language diversity. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2019, 286, 20190242.	1.2	18
10	Moth body size increases with elevation along a complete tropical elevational gradient for two hyperdiverse clades. <i>Ecography</i> , 2019, 42, 632-642.	2.1	40
11	Mechanism, Process, and Causation in Ecological Models: A Reply to McGill and Potochnik. <i>Trends in Ecology and Evolution</i> , 2018, 33, 305-306.	4.2	2
12	Managing consequences of climate-driven species redistribution requires integration of ecology, conservation and social science. <i>Biological Reviews</i> , 2018, 93, 284-305.	4.7	154
13	Response to Qian et al. (2017): Daily and seasonal climate variations are both critical in the evolution of species' elevational range size. <i>Journal of Biogeography</i> , 2018, 45, 2832-2836.	1.4	1
14	Modeling the ecology and evolution of biodiversity: Biogeographical cradles, museums, and graves. <i>Science</i> , 2018, 361, .	6.0	260
15	Process-based modelling shows how climate and demography shape language diversity. <i>Global Ecology and Biogeography</i> , 2017, 26, 584-591.	2.7	22
16	Seen once or more than once: applying Good's Turing theory to estimate species richness using only unique observations and a species list. <i>Methods in Ecology and Evolution</i> , 2017, 8, 1221-1232.	2.2	31
17	Biodiversity redistribution under climate change: Impacts on ecosystems and human well-being. <i>Science</i> , 2017, 355, .	6.0	2,026
18	Environment-induced changes in selective constraints on social learning during the peopling of the Americas. <i>Scientific Reports</i> , 2017, 7, 44431.	1.6	16

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19	Elevational species richness gradients in a hyperdiverse insect taxon: a global meta-analysis on geometrid moths. <i>Global Ecology and Biogeography</i> , 2017, 26, 412-424.	2.7	83
20	Process, Mechanism, and Modeling in Macroecology. <i>Trends in Ecology and Evolution</i> , 2017, 32, 835-844.	4.2	119
21	Deciphering the enigma of undetected species, phylogenetic, and functional diversity based on Good-Turing theory. <i>Ecology</i> , 2017, 98, 2914-2929.	1.5	17
22	Mobile hotspots and refugia of avian diversity in the mountains of southwest China under past and contemporary global climate change. <i>Journal of Biogeography</i> , 2017, 44, 615-626.	1.4	48
23	Turning Up the Heat on a Hotspot: DNA Barcodes Reveal 80% More Species of Geometrid Moths along an Andean Elevational Gradient. <i>PLoS ONE</i> , 2016, 11, e0150327.	1.1	61
24	Midpoint attractors and species richness: Modelling the interaction between environmental drivers and geometric constraints. <i>Ecology Letters</i> , 2016, 19, 1009-1022.	3.0	75
25	Seasonal and daily climate variation have opposite effects on species elevational range size. <i>Science</i> , 2016, 351, 1437-1439.	6.0	97
26	Statistical Analysis of Paradigmatic Class Richness Supports Greater Paleoindian Projectile-Point Diversity in the Southeast. <i>American Antiquity</i> , 2016, 81, 174-192.	0.6	44
27	An estimate of the number of tropical tree species. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 7472-7477.	3.3	335
28	Ecological and biogeographic null hypotheses for comparing rarefaction curves. <i>Ecological Monographs</i> , 2015, 85, 437-455.	2.4	42
29	Unveiling the species-rank abundance distribution by generalizing the Good-Turing sample coverage theory. <i>Ecology</i> , 2015, 96, 1189-1201.	1.5	70
30	EstimateS turns 20: statistical estimation of species richness and shared species from samples, with non-parametric extrapolation. <i>Ecography</i> , 2014, 37, 609-613.	2.1	207
31	Thermal-safety margins and the necessity of thermoregulatory behavior across latitude and elevation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 5610-5615.	3.3	906
32	Defining and observing stages of climate-mediated range shifts in marine systems. <i>Global Environmental Change</i> , 2014, 26, 27-38.	3.6	207
33	Understanding historical and current patterns of species richness of babblers along a 5000-m subtropical elevational gradient. <i>Global Ecology and Biogeography</i> , 2014, 23, 1167-1176.	2.7	34
34	Rarefaction and extrapolation with Hill numbers: a framework for sampling and estimation in species diversity studies. <i>Ecological Monographs</i> , 2014, 84, 45-67.	2.4	2,397
35	How Ants Drop Out: Ant Abundance on Tropical Mountains. <i>PLoS ONE</i> , 2014, 9, e104030.	1.1	41
36	Explaining the species richness of birds along a subtropical elevational gradient in the Hengduan Mountains. <i>Journal of Biogeography</i> , 2013, 40, 2310-2323.	1.4	83

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37	Toward a Mechanistic Understanding of Linguistic Diversity. <i>BioScience</i> , 2013, 63, 524-535.	2.2	62
38	Quantifying temporal change in biodiversity: challenges and opportunities. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20121931.	1.2	178
39	Coextinction and Persistence of Dependent Species in a Changing World. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2012, 43, 183-203.	3.8	204
40	Estimating the Richness of a Population When the Maximum Number of Classes Is Fixed: A Nonparametric Solution to an Archaeological Problem. <i>PLoS ONE</i> , 2012, 7, e34179.	1.1	46
41	Specimen-Based Modeling, Stopping Rules, and the Extinction of the Ivory-Billed Woodpecker. <i>Conservation Biology</i> , 2012, 26, 47-56.	2.4	29
42	Density compensation, species composition, and richness of ants on a neotropical elevational gradient. <i>Ecosphere</i> , 2011, 2, art29.	1.0	89
43	A novel statistical method for classifying habitat generalists and specialists. <i>Ecology</i> , 2011, 92, 1332-1343.	1.5	203
44	Resolution of Respect: Lawrence B. Slobodkin 1928-2009. <i>Bulletin of the Ecological Society of America</i> , 2011, 92, 19-32.	0.2	1
45	Assessing the threat to montane biodiversity from discordant shifts in temperature and precipitation in a changing climate. <i>Ecology Letters</i> , 2011, 14, 1236-1245.	3.0	214
46	Species loss revisited. <i>Nature</i> , 2011, 473, 288-289.	13.7	15
47	Beta diversity: synthesis and a guide for the perplexed. <i>Ecography</i> , 2010, 33, 1-1.	2.1	140
48	A stochastic, evolutionary model for range shifts and richness on tropical elevational gradients under Quaternary glacial cycles. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2010, 365, 3695-3707.	1.8	77
49	Hutchinson's duality: The once and future niche. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 19651-19658.	3.3	534
50	Elevational Patterns of Diversity and Abundance of Eusocial Paper Wasps (Vespidae) in Costa Rica. <i>Biotropica</i> , 2009, 41, 338-346.	0.8	41
51	Patterns and causes of species richness: a general simulation model for macroecology. <i>Ecology Letters</i> , 2009, 12, 873-886.	3.0	286
52	Vulnerability and Resilience of Tropical Forest Species to Land-Use Change. <i>Conservation Biology</i> , 2009, 23, 1438-1447.	2.4	90
53	Sufficient sampling for asymptotic minimum species richness estimators. <i>Ecology</i> , 2009, 90, 1125-1133.	1.5	420
54	The sixth mass coextinction: are most endangered species parasites and mutualists?. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 3037-3045.	1.2	420

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55	Correlates of extinction proneness in tropical angiosperms. <i>Diversity and Distributions</i> , 2008, 14, 1-10.	1.9	106
56	RangeModel: tools for exploring and assessing geometric constraints on species richness (the Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	2.1	54
57	Global Warming, Elevational Range Shifts, and Lowland Biotic Attrition in the Wet Tropics. <i>Science</i> , 2008, 322, 258-261.	6.0	1,045
58	Distribution of megabenthic gastropods along environmental gradients: the mid-domain effect and beyond. <i>Marine Ecology - Progress Series</i> , 2008, 367, 193-202.	0.9	11
59	Predicting continental-scale patterns of bird species richness with spatially explicit models. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2007, 274, 165-174.	1.2	271
60	Species Richness and Evolutionary Niche Dynamics: A Spatial Patternâ€œOriented Simulation Experiment. <i>American Naturalist</i> , 2007, 170, 602-616.	1.0	147
61	A COMPARISON OF TAXON CO-OCCURRENCE PATTERNS FOR MACRO- AND MICROORGANISMS. <i>Ecology</i> , 2007, 88, 1345-1353.	1.5	223
62	A strong Madagascan rainforest MDE and no equatorward increase in species richness: re-analysis of ?The missing Madagascan mid-domain effect?, by Kerr J.T., Perring M. & Currie D.J. (<i>Ecology Letters</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.0	10
63	The role of environment and mid-domain effect on moth species richness along a tropical elevational gradient. <i>Global Ecology and Biogeography</i> , 2007, 16, 205-219.	2.7	168
64	The river domain: why are there more species halfway up the river?. <i>Ecography</i> , 2006, 29, 251-259.	2.1	46
65	Abundance-Based Similarity Indices and Their Estimation When There Are Unseen Species in Samples. <i>Biometrics</i> , 2006, 62, 361-371.	0.8	474
66	Vascular epiphyte distribution patterns: explaining the mid-elevation richness peak. <i>Journal of Ecology</i> , 2006, 94, 144-156.	1.9	223
67	Microbial biogeography: putting microorganisms on the map. <i>Nature Reviews Microbiology</i> , 2006, 4, 102-112.	13.6	2,434
68	Species richness and distribution of ferns along an elevational gradient in Costa Rica. <i>American Journal of Botany</i> , 2006, 93, 73-83.	0.8	109
69	Estimating the Species Accumulation Curve Using Mixtures. <i>Biometrics</i> , 2005, 61, 433-441.	0.8	111
70	Species Loss and Aboveground Carbon Storage in a Tropical Forest. <i>Science</i> , 2005, 310, 1029-1031.	6.0	390
71	ESTIMATION OF SPECIES RICHNESS: MIXTURE MODELS, THE ROLE OF RARE SPECIES, AND INFERENTIAL CHALLENGES. <i>Ecology</i> , 2005, 86, 1143-1153.	1.5	116
72	THE INFLUENCE OF BAND SUM AREA, DOMAIN EXTENT, AND RANGE SIZES ON THE LATITUDINAL MID-DOMAIN EFFECT. <i>Ecology</i> , 2005, 86, 235-244.	1.5	36

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73	The coincidence of rarity and richness and the potential signature of history in centres of endemism. <i>Ecology Letters</i> , 2004, 7, 1180-1191.	3.0	304
74	A new statistical approach for assessing similarity of species composition with incidence and abundance data. <i>Ecology Letters</i> , 2004, 8, 148-159.	3.0	1,470
75	The Midâ€œDomain Effect and Species Richness Patterns:What Have We Learned So Far?. <i>American Naturalist</i> , 2004, 163, E1-E23.	1.0	484
76	Species Coextinctions and the Biodiversity Crisis. <i>Science</i> , 2004, 305, 1632-1634.	6.0	505
77	INTERPOLATING, EXTRAPOLATING, AND COMPARING INCIDENCE-BASED SPECIES ACCUMULATION CURVES. <i>Ecology</i> , 2004, 85, 2717-2727.	1.5	1,366
78	THE ANT FAUNA OF A TROPICAL RAIN FOREST: ESTIMATING SPECIES RICHNESS THREE DIFFERENT WAYS. <i>Ecology</i> , 2002, 83, 689-702.	1.5	456
79	Quantifying biodiversity: procedures and pitfalls in the measurement and comparison of species richness. <i>Ecology Letters</i> , 2001, 4, 379-391.	3.0	4,953
80	Virtual Biodiversity Assessment Systems. <i>BioScience</i> , 2000, 50, 441.	2.2	29
81	BIODIVERSITY ASSESSMENT USING STRUCTURED INVENTORY: CAPTURING THE ANT FAUNA OF A TROPICAL RAIN FOREST. , 1997, 7, 1263-1277.		239
82	New Genus and Two New Species of Melicharini from Venezuela (Acari: Mesostigmata: Ascidae). <i>Annals of the Entomological Society of America</i> , 1995, 88, 284-293.	1.3	12
83	<i>Excelsotarsonemus kaliszewskii</i>, a new genus and new species from Costa Rica (Acari:) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	0.8	11
84	Nonbiological Gradients in Species Richness and a Spurious Rapoport Effect. <i>American Naturalist</i> , 1994, 144, 570-595.	1.0	562
85	Cellulose acetate electrophoretic techniques for the genetic analysis of individual ascid mites (Mesostigmata: Ascidae). <i>International Journal of Acarology</i> , 1992, 18, 97-105.	0.3	6
86	Detection and Identification of Mammalian DNA from the Gut of Museum Specimens of Ticks. <i>Journal of Medical Entomology</i> , 1992, 29, 1049-1051.	0.9	29
87	The Planned Introduction of Genetically Engineered Organisms: Ecological Considerations and Recommendations. <i>Ecology</i> , 1989, 70, 298-315.	1.5	537
88	The Evolution of Ecology. <i>American Zoologist</i> , 1985, 25, 771-777.	0.7	23
89	Female-biased sex ratios (reply). <i>Nature</i> , 1982, 298, 495-496.	13.7	9
90	Group selection is implicated in the evolution of female-biased sex ratios. <i>Nature</i> , 1981, 290, 401-404.	13.7	241

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91	Elevation and the Morphology, Flight Energetics, and Foraging Ecology of Tropical Hummingbirds. <i>American Naturalist</i> , 1979, 113, 481-497.	1.0	119
92	Community Organization Among Neotropical Nectar-Feeding Birds. <i>American Zoologist</i> , 1978, 18, 779-795.	0.7	357
93	Organization of Contiguous Communities of Amphibians and Reptiles in Thailand. <i>Ecological Monographs</i> , 1977, 47, 229-253.	2.4	192
94	Predictability, Constancy, and Contingency of Periodic Phenomena. <i>Ecology</i> , 1974, 55, 1148-1153.	1.5	496
95	Competition for the Nectar of <i>Centropogon valerii</i> by the Hummingbird <i>Colibri thalassinus</i> and the Flower-Piercer <i>Diglossa plumbea</i> , and Its Evolutionary Implications. <i>Condor</i> , 1974, 76, 447.	0.7	48
96	Competition and Coexistence in a Simple Tropical Community. <i>American Naturalist</i> , 1973, 107, 737-760.	1.0	141
97	Suffering Legions?. <i>Science</i> , 1972, 177, 210-210.	6.0	1
98	On the Measurement of Niche Breadth and Overlap. <i>Ecology</i> , 1971, 52, 567-576.	1.5	1,144