Catherine H Graham

List of Publications by Year
in descending order

140 papers	32,983 citations	28736 57 h-index	13274 135 g-index
151 all docs	151 docs citations	151 times ranked	30746 citing authors

#	Article	IF	Citations
1	A heterothermic spectrum in hummingbirds. Journal of Experimental Biology, 2022, 225, .	0.8	14
2	Global plantâ€frugivore trait matching is shaped by climate and biogeographic history. Ecology Letters, 2022, 25, 686-696.	3.0	24
3	Environmental niche and functional role similarity between invasive and native palms in the Atlantic Forest. Biological Invasions, 2021, 23, 741-754.	1.2	9
4	Phenological synchronization of seasonal bird migration with vegetation greenness across dietary guilds. Journal of Animal Ecology, 2021, 90, 343-355.	1.3	30
5	Pervasive Genomic Signatures of Local Adaptation to Altitude Across Highland Specialist Andean Hummingbird Populations. Journal of Heredity, 2021, 112, 229-240.	1.0	10
6	Scale dependency of joint species distribution models challenges interpretation of biotic interactions. Journal of Biogeography, 2021, 48, 1541-1551.	1.4	31
7	Spatial variation in direct and indirect effects of climate and productivity on species richness of terrestrial tetrapods. Global Ecology and Biogeography, 2021, 30, 1899-1908.	2.7	17
8	Temporal stability in species richness but reordering in species abundances within avian assemblages of a tropical Andes conservation hot spot. Biotropica, 2021, 53, 1673-1684.	0.8	4
9	Area, isolation and climate explain the diversity of mammals on islands worldwide. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20211879.	1.2	4
10	Presence-only and Presence-absence Data for Comparing Species Distribution Modeling Methods. Biodiversity Informatics, 2020, 15, 69-80.	3.0	38
11	Rapid climate change results in long-lasting spatial homogenization of phylogenetic diversity. Nature Communications, 2020, 11, 4663.	5.8	23
12	Chemical Basis of Floral Color Signals in Gesneriaceae: The Effect of Alternative Anthocyanin Pathways. Frontiers in Plant Science, 2020, 11, 604389.	1.7	8
13	The allometry of daily energy expenditure in hummingbirds: An energy budget approach. Journal of Animal Ecology, 2020, 89, 1254-1261.	1.3	10
14	Hummingbird torpor in context: duration, more than temperature, is the key to nighttime energy savings. Journal of Avian Biology, 2020, 51, .	0.6	22
15	Hummingbirds budget energy flexibly in response to changing resources. Functional Ecology, 2019, 33, 1904-1916.	1.7	19
16	Environmental factors explain the spatial mismatches between species richness and phylogenetic diversity of terrestrial mammals. Global Ecology and Biogeography, 2019, 28, 1855-1865.	2.7	21
17	Survival estimates of bird species across altered habitats in the tropical Andes. Journal of Field Ornithology, 2019, 90, 105-116.	0.3	4
18	Divergent Fine-Scale Recombination Landscapes between a Freshwater and Marine Population of Threespine Stickleback Fish. Genome Biology and Evolution, 2019, 11, 1552-1572.	1.1	44

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19	The productivity-biodiversity relationship varies across diversity dimensions. Nature Communications, 2019, 10, 5691.	5.8	64
20	The Latitudinal Diversity Gradient: Novel Understanding through Mechanistic Eco-evolutionary Models. Trends in Ecology and Evolution, 2019, 34, 211-223.	4.2	151
21	Environment and evolutionary history shape phylogenetic turnover in European tetrapods. Nature Communications, 2019, 10, 249.	5.8	32
22	Species diversity as a surrogate for conservation of phylogenetic and functional diversity in terrestrial vertebrates across the Americas. Nature Ecology and Evolution, 2019, 3, 53-61.	3.4	45
23	Land use change has stronger effects on functional diversity than taxonomic diversity in tropical Andean hummingbirds. Ecology and Evolution, 2018, 8, 3478-3490.	0.8	25
24	Phylogenetic scale in ecology and evolution. Global Ecology and Biogeography, 2018, 27, 175-187.	2.7	151
25	Evolutionary time drives global tetrapod diversity. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20172378.	1.2	32
26	Ecological controls of mammalian diversification vary with phylogenetic scale. Global Ecology and Biogeography, 2018, 27, 32-46.	2.7	27
27	Environmental variation is a major predictor of global trait turnover in mammals. Journal of Biogeography, 2018, 45, 225-237.	1.4	17
28	Comparing species interaction networks along environmental gradients. Biological Reviews, 2018, 93, 785-800.	4.7	203
29	Long-distance migratory birds threatened by multiple independent risks from global change. Nature Climate Change, 2018, 8, 992-996.	8.1	86
30	Do longâ€distance migratory birds track their niche through seasons?. Journal of Biogeography, 2018, 45, 1459-1468.	1.4	50
31	Towards a predictive model of species interaction beta diversity. Ecology Letters, 2018, 21, 1299-1310.	3.0	30
32	Effects of hummingbird morphology on specialization in pollination networks vary with resource availability. Oikos, 2017, 126, 52-60.	1.2	56
33	Persistent bill and corolla matching despite shifting temporal resources in tropical hummingbirdâ€plant interactions. Ecology Letters, 2017, 20, 326-335.	3.0	78
34	A comparison of Dynamic Habitat Indices derived from different MODIS products as predictors of avian species richness. Remote Sensing of Environment, 2017, 195, 142-152.	4.6	73
35	Future geographic patterns of novel and disappearing assemblages across three dimensions of diversity: A case study with Ecuadorian hummingbirds. Diversity and Distributions, 2017, 23, 944-954.	1.9	16
36	On comparing traits and abundance for predicting species interactions with imperfect detection. Food Webs, 2017, 11, 17-25.	0.5	21

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37	Plant and habitat use by Black-breasted Puffleg (Eriocnemis nigrivestis), a critically endangered hummingbird. Journal of Field Ornithology, 2017, 88, 229-235.	0.3	3
38	The signature of human pressure history on the biogeography of body mass in tetrapods. Global Ecology and Biogeography, 2017, 26, 1022-1034.	2.7	28
39	Global priorities for conservation across multiple dimensions of mammalian diversity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7641-7646.	3.3	213
40	Regional Diversity and Diversification in Mammals. American Naturalist, 2017, 189, E1-E13.	1.0	11
41	Community functional trait composition at the continental scale: the effects of nonâ€ecological processes. Ecography, 2017, 40, 651-663.	2.1	25
42	Hovering in the heat: effects of environmental temperature on heat regulation in foraging hummingbirds. Royal Society Open Science, 2017, 4, 171056.	1.1	25
43	Geography of current and future global mammal extinction risk. PLoS ONE, 2017, 12, e0186934.	1.1	34
44	The role of environment, dispersal and competition in explaining reduced co-occurrence among related species. PLoS ONE, 2017, 12, e0185493.	1.1	15
45	Species and functional diversity accumulate differently in mammals. Global Ecology and Biogeography, 2016, 25, 1119-1130.	2.7	103
46	Using measurement error models to account for georeferencing error in species distribution models. Ecography, 2016, 39, 305-316.	2.1	18
47	Global mammal beta diversity shows parallel assemblage structure in similar but isolated environments. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20161028.	1.2	38
48	Twenty-million-year relationship between mammalian diversity and primary productivity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10908-10913.	3.3	42
49	Landscape Demography: Population Change and its Drivers Across Spatial Scales. Quarterly Review of Biology, 2016, 91, 459-485.	0.0	45
50	Winter conditions influence biological responses of migrating hummingbirds. Ecosphere, 2016, 7, e01470.	1.0	9
51	Evaluating broad scale patterns among related species using resource experiments in tropical hummingbirds. Ecology, 2016, 97, 2085-2093.	1.5	7
52	Process-Based Species Pools Reveal the Hidden Signature of Biotic Interactions Amid the Influence of Temperature Filtering. American Naturalist, 2016, 187, 75-88.	1.0	54
53	Citizenâ€science data provides new insight into annual and seasonal variation in migration patterns. Ecosphere, 2015, 6, 1-19.	1.0	46
54	Niche availability in space and time: migration in Sylvia warblers. Journal of Biogeography, 2015, 42, 1896-1906.	1.4	47

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55	The macroecology of phylogenetically structured hummingbirdâ€“plant networks. Global Ecology and Biogeography, 2015, 24, 1212-1224.	2.7	100
56	Demography, traits and vulnerability to urbanization: can we make generalizations?. Journal of Applied Ecology, 2015, 52, 1455-1464.	1.9	20
57	The impact of roads on the avifauna of pÃ¡ramo grasslands in Cajas National Park, Ecuador. Studies on Neotropical Fauna and Environment, 2014, 49, 204-212.	0.5	10
58	Imputation of missing data in lifeâ€history trait datasets: which approach performs the best?. Methods in Ecology and Evolution, 2014, 5, 961-970.	2.2	258
59	Taxonomic, Phylogenetic, and Trait Beta Diversity in South American Hummingbirds. American Naturalist, 2014, 184, 211-224.	1.0	77
60	Nodeâ€based analysis of species distributions. Methods in Ecology and Evolution, 2014, 5, 1225-1235.	2.2	25
61	The origin and maintenance of montane diversity: integrating evolutionary and ecological processes. Ecography, 2014, 37, 711-719.	2.1	182
62	Environmental correlates of anuran beta diversity in the Brazilian Cerrado. Ecography, 2013, 36, 708-717.	2.1	26
63	An Update of Wallaceâ€™s Zoogeographic Regions of the World. Science, 2013, 339, 74-78.	6.0	1,037
64	Effects of climate change on species distribution, community structure, and conservation of birds in protected areas in Colombia. Regional Environmental Change, 2013, 13, 235-248.	1.4	107
65	Intraâ€generic species richness and dispersal ability interact to determine geographic ranges of birds. Global Ecology and Biogeography, 2013, 22, 223-232.	2.7	30
66	How can we bring together empiricists and modellers in functional biodiversity research?. Basic and Applied Ecology, 2013, 14, 93-101.	1.2	24
67	Influence of Patch Factors and Connectivity on the Avifauna of Fragmented Polylepis Forest in the Ecuadorian Andes. Biotropica, 2013, 45, 602-611.	0.8	18
68	Evaluating multiple causes of amphibian declines of Ecuador using geographical quantitative analyses. Ecography, 2013, 36, 756-769.	2.1	29
69	Diversity in time and space: wanted dead and alive. Trends in Ecology and Evolution, 2013, 28, 509-516.	4.2	128
70	Intraspecific morphological and genetic variation of common species predicts ranges of threatened ones. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130423.	1.2	5
71	Response to Comment on â€œAn Update of Wallaceâ€™s Zoogeographic Regions of the Worldâ€• Science, 2013, 341, 343-343.	6.0	15
72	Process, correlation and parameter fitting in species distribution models: a response to Kriticos etÂal. Journal of Biogeography, 2013, 40, 612-613.	1.4	8

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73	Latitude, elevational climatic zonation and speciation in New World vertebrates. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 194-201.	1.2	186
74	Climatic niche evolution and species diversification in the <scp>C</scp>ape flora, <scp>S</scp>outh <scp>A</scp>frica. Journal of Biogeography, 2012, 39, 2201-2211.	1.4	65
75	Mapping the biosphere: exploring species to understand the origin, organization and sustainability of biodiversity. Systematics and Biodiversity, 2012, 10, 1-20.	0.5	182
76	Untangling the influence of ecological and evolutionary factors on trait variation across hummingbird assemblages. Ecology, 2012, 93, S99.	1.5	84
77	Sensitivity of Metrics of Phylogenetic Structure to Scale, Source of Data and Species Pool of Hummingbird Assemblages along Elevational Gradients. PLoS ONE, 2012, 7, e35472.	1.1	18
78	Correlation and process in species distribution models: bridging a dichotomy. Journal of Biogeography, 2012, 39, 2119-2131.	1.4	526
79	Measuring ecological niche overlap from occurrence and spatial environmental data. Global Ecology and Biogeography, 2012, 21, 481-497.	2.7	1,130
80	Species interactions are disrupted by habitat degradation in the highly threatened Tumbesian region of Ecuador. , 2011, 21, 2974-2986.		24
81	Patterns and Magnitude of Temporal Change in Avian Communities in the Ecuadorian Andes. Condor, 2011, 113, 24-40.	0.7	32
82	Contrasting patterns of phylogenetic assemblage structure along the elevational gradient for major hummingbird clades. Journal of Biogeography, 2011, 38, 2350-2361.	1.4	18
83	Mapping evolutionary process: a multiâ€taxa approach to conservation prioritization. Evolutionary Applications, 2011, 4, 397-413.	1.5	84
84	Geography, topography, and history affect realizedâ€toâ€potential tree species richness patterns in Europe. Ecography, 2010, 33, 1070-1080.	2.1	49
85	Sampling in ecology and evolution â€“ bridging the gap between theory and practice. Ecography, 2010, 33, 1028-1037.	2.1	111
86	Dynamic refugia and species persistence: tracking spatial shifts in habitat through time. Ecography, 2010, 33, 1062-1069.	2.1	97
87	Withinâ€taxon niche structure: niche conservatism, divergence and predicted effects of climate change. Ecography, 2010, 33, 990-1003.	2.1	181
88	New trends in species distribution modelling. Ecography, 2010, 33, 985-989.	2.1	234
89	Assessing the potential impact of invasive ring-necked parakeets Psittacula krameri on native nuthatches Sitta europeae in Belgium. Journal of Applied Ecology, 2010, 47, 549-557.	1.9	44
90	Assessing the impact of deforestation and climate change on the range size and environmental niche of bird species in the Atlantic forests, Brazil. Journal of Biogeography, 2010, 37, 1288-1301.	1.4	40

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91	Reassessment of phylogeographical structure in an eastern North American tree using Monmonierâ€™s algorithm and ecological niche modelling. Journal of Biogeography, 2010, 37, 1657-1667.	1.4	46
92	Evaluating the potential causes of range limits of birds of the Colombian Andes. Journal of Biogeography, 2010, 37, 1863-1875.	1.4	33
93	Phylogeographyâ€™s past, present, and future: 10 years after Avise, 2000. Molecular Phylogenetics and Evolution, 2010, 54, 291-301.	1.2	535
94	Incorporating Clade Identity in Analyses of Phylogenetic Community Structure: An Example with Hummingbirds. American Naturalist, 2010, 176, 573-587.	1.0	40
95	Distribution and conservation ofGrallariaandGrallariculaantpittas (Grallariidae) in Ecuador. Bird Conservation International, 2010, 20, 410-431.	0.7	9
96	Using behavioral landscape ecology to predict speciesâ€™ responses to land-use and climate change. Biological Conservation, 2010, 143, 1342-1354.	1.9	123
97	Modeling environmentally associated morphological and genetic variation in a rainforest bird, and its application to conservation prioritization. Evolutionary Applications, 2010, 3, 1-16.	1.5	52
98	I.11 Remote Sensing and Geographic Information Systems. , 2009, , 79-86.		1
99	Towards an Understanding of Vertebrate Biodiversity in the Australian Wet Tropics. , 2009, , 133-149.		5
100	Selecting pseudo-absence data for presence-only distribution modeling: How far should you stray from what you know?. Ecological Modelling, 2009, 220, 589-594.	1.2	653
101	Do they? How do they? WHY do they differ? On finding reasons for differing performances of species distribution models. Ecography, 2009, 32, 66-77.	2.1	844
102	Phylogenetic structure in tropical hummingbird communities. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19673-19678.	3.3	341
103	Distribution, ecology and conservation of an endangered Andean hummingbird: the Violet-throated Metaltail (Metallura baroni). Bird Conservation International, 2009, 19, 63-76.	0.7	67
104	Sample selection bias and presenceâ€•only distribution models: implications for background and pseudoâ€•absence data. Ecological Applications, 2009, 19, 181-197.	1.8	2,121
105	Identification and dynamics of a cryptic suture zone in tropical rainforest. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 1235-1244.	1.2	141
106	The influence of spatial errors in species occurrence data used in distribution models. Journal of Applied Ecology, 2008, 45, 239-247.	1.9	401
107	Effects of sample size on the performance of species distribution models. Diversity and Distributions, 2008, 14, 763-773.	1.9	1,771
108	Phylogenetic beta diversity: linking ecological and evolutionary processes across space in time. Ecology Letters, 2008, 11, 1265-1277.	3.0	527

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109	Predicting species distributions across the Amazonian and Andean regions using remote sensing data. Journal of Biogeography, 2008, 35, 1160-1176.	1.4	178
110	Integrating GIS-based environmental data into evolutionary biology. Trends in Ecology and Evolution, 2008, 23, 141-148.	4.2	413
111	WHAT MATTERS FOR PREDICTING THE OCCURRENCES OF TREES: TECHNIQUES, DATA, OR SPECIES' CHARACTERISTICS?. Ecological Monographs, 2007, 77, 615-630.	2.4	293
112	Sensitivity of predictive species distribution models to change in grain size. Diversity and Distributions, 2007, 13, 332-340.	1.9	445
113	Novel methods improve prediction of speciesâ€™ distributions from occurrence data. Ecography, 2006, 29, 129-151.	2.1	6,691
114	Phylogeographic Lineages and Species Comparisons in Conservation Analyses: A Case Study of California Herpetofauna. American Naturalist, 2006, 167, 655-666.	1.0	160
115	Habitat history improves prediction of biodiversity in rainforest fauna. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 632-636.	3.3	318
116	Evolutionary and Ecological Causes of the Latitudinal Diversity Gradient in Hylid Frogs: Treefrog Trees Unearth the Roots of High Tropical Diversity. American Naturalist, 2006, 168, 579-596.	1.0	365
117	The effect of sample size and species characteristics on performance of different species distribution modeling methods. Ecography, 2006, 29, 773-785.	2.1	1,850
118	The ability of climate envelope models to predict the effect of climate change on species distributions. Global Change Biology, 2006, 12, 2272-2281.	4.2	917
119	A comparison of methods for mapping species ranges and species richness. Global Ecology and Biogeography, 2006, 15, 578-587.	2.7	322
120	A comparison of methods for mapping species ranges and species richness. Global Ecology and Biogeography, 2006, .	2.7	37
121	Current and historical factors influencing patterns of species richness and turnover of birds in the Gulf of Guinea highlands. Journal of Biogeography, 2005, 32, 1371-1384.	1.4	42
122	Support vector machines for predicting distribution of Sudden Oak Death in California. Ecological Modelling, 2005, 182, 75-90.	1.2	251
123	Niche Conservatism: Integrating Evolution, Ecology, and Conservation Biology. Annual Review of Ecology, Evolution, and Systematics, 2005, 36, 519-539.	3.8	1,847
124	Evaluating alternative data sets for ecological niche models of birds in the Andes. Ecography, 2004, 27, 350-360.	2.1	91
125	INTEGRATING PHYLOGENETICS AND ENVIRONMENTAL NICHE MODELS TO EXPLORE SPECIATION MECHANISMS IN DENDROBATID FROGS. Evolution; International Journal of Organic Evolution, 2004, 58, 1781-1793.	1.1	515
126	New developments in museum-based informatics and applications in biodiversity analysis. Trends in Ecology and Evolution, 2004, 19, 497-503.	4.2	848

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127	INTEGRATING PHYLOGENETICS AND ENVIRONMENTAL NICHE MODELS TO EXPLORE SPECIATION MECHANISMS IN DENDROBATID FROGS. Evolution; International Journal of Organic Evolution, 2004, 58, 1781.	1.1	18
128	Avoiding Pitfalls of Using Species Distribution Models in Conservation Planning. Conservation Biology, 2003, 17, 1591-1600.	2.4	413
129	Use of Fruiting Trees by Birds in Continuous Forest and Riparian Forest Remnants in Los Tuxtlas, Veracruz, Mexico1. Biotropica, 2002, 34, 589-597.	0.8	32
130	INFLUENCE OF PATCH- AND LANDSCAPE-LEVEL FACTORS ON BIRD ASSEMBLAGES IN A FRAGMENTED TROPICAL LANDSCAPE. , 2001, 11, 1709-1721.		85
131	Habitat Selection and Activity Budgets of Keel-Billed Toucans at the Landscape Level. Condor, 2001, 103, 776.	0.7	22
132	Historical biogeography, diversity and conservation of Australia's tropical rainforest herpetofauna. , 2001, , 243-264.		14
133	Habitat Selection and Activity Budgets of Keel-Billed Toucans at the Landscape Level. Condor, 2001, 103, 776-784.	0.7	38
134	Putting process on the map: why ecotones are important for preserving biodiversity. , 2001, , 166-197.		12
135	Factors Influencing Movement Patterns of Keel-Billed Toucans in a Fragmented Tropical Landscape in Southern Mexico. Conservation Biology, 2001, 15, 1789-1798.	2.4	116
136	Spatial genetic structure of a tropical understory shrub, PSYCHOTRIA OFFICINALIS (RuBIACEAE). American Journal of Botany, 1995, 82, 1420-1425.	0.8	823
137	Seed Dispersal Effectiveness by Two Bulbuls on Maesa lanceolata, an African Montane Forest Tree. Biotropica, 1995, 27, 479.	0.8	44
138	Comparison of Genetic Variation in Bird-Dispersed Shrubs of a Tropical Wet Forest. Biotropica, 1995, 27, 487.	0.8	26
139	Spatial genetic structure of a tropical understory shrub, PSYCHOTRIA OFFICINALIS (RuBIACEAE). , 1995, 82, 1420.		573
140	Pleistocene climate oscillations and habitat connectivity contributed to avian betaâ€diversity in the megadiverse Colombian Paramo ecosystems. Journal of Biogeography, 0, , .	1.4	2