Donald A Jackson

List of Publications by Year
in descending order

112 papers	11,220 citations	50276 46 h-index	30087 103 g-index
112 all docs	112 docs citations	112 times ranked	12706 citing authors

#	Article	IF	Citations
1	Stopping Rules in Principal Components Analysis: A Comparison of Heuristical and Statistical Approaches. Ecology, 1993, 74, 2204-2214.	3.2	1,800
2	Illuminating the â€œblack boxâ€: a randomization approach for understanding variable contributions in artificial neural networks. Ecological Modelling, 2002, 154, 135-150.	2.5	935
3	How well do multivariate data sets match? The advantages of a Procrustean superimposition approach over the Mantel test. Oecologia, 2001, 129, 169-178.	2.0	801
4	What controls who is where in freshwater fish communities Â– the roles of biotic, abiotic, and spatial factors. Canadian Journal of Fisheries and Aquatic Sciences, 2001, 58, 157-170.	1.4	751
5	How many principal components? stopping rules for determining the number of non-trivial axes revisited. Computational Statistics and Data Analysis, 2005, 49, 974-997.	1.2	626
6	PROTEST: A PROcrustean Randomization TEST of community environment concordance. Ecoscience, 1995, 2, 297-303.	1.4	444
7	GIVING MEANINGFUL INTERPRETATION TO ORDINATION AXES: ASSESSING LOADING SIGNIFICANCE IN PRINCIPAL COMPONENT ANALYSIS. Ecology, 2003, 84, 2347-2363.	3.2	297
8	Similarity Coefficients: Measures of Co-Occurrence and Association or Simply Measures of Occurrence?. American Naturalist, 1989, 133, 436-453.	2.1	246
9	Impacts of temperature and selected chemical digestion methods on microplastic particles. Environmental Toxicology and Chemistry, 2018, 37, 91-98.	4.3	235
10	A comparison of statistical approaches for modelling fish species distributions. Freshwater Biology, 2002, 47, 1976-1995.	2.4	205
11	Will northern fish populations be in hot water because of climate change?. Global Change Biology, 2007, 13, 2052-2064.	9.5	196
12	What controls who is where in freshwater fish communities â€“ the roles of biotic, abiotic, and spatial factors. Canadian Journal of Fisheries and Aquatic Sciences, 2001, 58, 157-170.	1.4	186
13	Biogeographic Associations in Fish Assemblages: Local vs. Regional Processes. Ecology, 1989, 70, 1472-1484.	3.2	167
14	Predictive Models of Fish Species Distributions: A Note on Proper Validation and Chance Predictions. Transactions of the American Fisheries Society, 2002, 131, 329-336.	1.4	159
15	Qualitative and quantitative sampling of lake fish communities. Canadian Journal of Fisheries and Aquatic Sciences, 1997, 54, 2807-2813.	1.4	153
16	Variable selection in large environmental data sets using principal components analysis. Environmetrics, 1999, 10, 67-77.	1.4	151
17	Paleoecology of the Greater Phyllopod Bed community, Burgess Shale. Palaeogeography, Palaeoclimatology, Palaeoecology, 2008, 258, 222-256.	2.3	144
18	Spatial isolation and fish communities in drainage lakes. Oecologia, 2001, 127, 572-585.	2.0	141

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19	Fish and Benthic Invertebrates: Community Concordance and Communityâ€“Environment Relationships. Canadian Journal of Fisheries and Aquatic Sciences, 1993, 50, 2641-2651.	1.4	137
20	COMPOSITIONAL DATA IN COMMUNITY ECOLOGY: THE PARADIGM OR PERIL OF PROPORTIONS?. Ecology, 1997, 78, 929-940.	3.2	137
21	Are probability estimates from the permutation model of Mantel's test stable?. Canadian Journal of Zoology, 1989, 67, 766-769.	1.0	136
22	Environmentally constrained null models: site suitability as occupancy criterion. Oikos, 2001, 93, 110-120.	2.7	131
23	Torturing data for the sake of generality: How valid are our regression models?. Ecoscience, 2000, 7, 501-510.	1.4	121
24	Replacement of Zebra Mussels by Quagga Mussels in the Canadian Nearshore of Lake Ontario: the Importance of Substrate, Round Goby Abundance, and Upwelling Frequency. Journal of Great Lakes Research, 2006, 32, 11-28.	1.9	119
25	Addressing the removal of rare species in multivariate bioassessments: The impact of methodological choices. Ecological Indicators, 2012, 18, 82-90.	6.3	119
26	Null Models and Fish Communities: Evidence of Nonrandom Patterns. American Naturalist, 1992, 139, 930-951.	2.1	117
27	The influence of smallmouth bass (Micropterus dolomieu) predation and habitat complexity on the structure of littoral zone fish assemblages. Canadian Journal of Fisheries and Aquatic Sciences, 2001, 58, 342-351.	1.4	112
28	Fishâ€“Habitat Relationships in Lakes: Gaining Predictive and Explanatory Insight by Using Artificial Neural Networks. Transactions of the American Fisheries Society, 2001, 130, 878-897.	1.4	107
29	Ontario freshwater fishes demonstrate differing rangeâ€boundary shifts in a warming climate. Diversity and Distributions, 2014, 20, 123-136.	4.1	104
30	Functionalâ€diversity indices can be driven by methodological choices and species richness. Ecology, 2009, 90, 341-347.	3.2	102
31	Multivariate analysis of benthic invertebrate communities: the implication of choosing particular data standardizations, measures of association, and ordination methods. Hydrobiologia, 1993, 268, 9-26.	2.0	100
32	The influence of smallmouth bass (Micropterus dolomieu) predation and habitat compleÃ—ity on the structure of littoral zone fish assemblages. Canadian Journal of Fisheries and Aquatic Sciences, 2001, 58, 342-351.	1.4	97
33	Putting Things in Order: The Ups and Downs of Detrended Correspondence Analysis. American Naturalist, 1991, 137, 704-712.	2.1	91
34	Are PCB Levels in Fish from the Canadian Great Lakes Still Declining?. Journal of Great Lakes Research, 2007, 33, 592.	1.9	87
35	Metaâ€analysis suggests biotic resistance in freshwater environments is driven by consumption rather than competition. Ecology, 2014, 95, 3259-3270.	3.2	82
36	Ratios in Aquatic Sciences: Statistical Shortcomings with Mean Depth and the Morphoedaphic Index. Canadian Journal of Fisheries and Aquatic Sciences, 1990, 47, 1788-1795.	1.4	76

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37	Robust principal component analysis and outlier detection with ecological data. Environmetrics, 2004, 15, 129-139.	1.4	71
38	Empirical modelling of lake waterâ€temperature relationships: a comparison of approaches. Freshwater Biology, 2008, 53, 897-911.	2.4	64
39	Window collisions by migratory bird species: urban geographical patterns and habitat associations. Urban Ecosystems, 2015, 18, 1427-1446.	2.4	63
40	Reconstructing community relationships: the impact of sampling error, ordination approach, and gradient length. Diversity and Distributions, 2007, 13, 361-371.	4.1	60
41	Longâ€term changes in legacy trace organic contaminants and mercury in Lake Ontario salmon in relation to source controls, trophodynamics, and climatic variability. Limnology and Oceanography, 2006, 51, 2794-2807.	3.1	59
42	Functional rarefaction: estimating functional diversity from field data. Oikos, 2008, 117, 286-296.	2.7	59
43	Habitat alteration and habitat fragmentation differentially affect beta diversity of stream fish communities. Landscape Ecology, 2017, 32, 647-662.	4.2	53
44	Composition of Dioxin-like PCBs in Fish:Â An Application for Risk Assessment. Environmental Science & Technology, 2007, 41, 3096-3102.	10.0	52
45	Multispecies crayfish declines in lakes: implications for species distributions and richness. Journal of the North American Benthological Society, 2009, 28, 719-732.	3.1	48
46	Adjusting Mercury Concentration for Fish-Size Covariation: A Multivariate Alternative to Bivariate Regression. Canadian Journal of Fisheries and Aquatic Sciences, 1993, 50, 2388-2396.	1.4	46
47	Temporal and spatial trends of organochlorines and mercury in fishes from the St. Clair River/Lake St. Clair corridor, Canada. Journal of Great Lakes Research, 2010, 36, 100-112.	1.9	44
48	Estimating dioxinâ€like polychlorinated biphenyl toxic equivalents from total polychlorinated biphenyl measurements in fish. Environmental Toxicology and Chemistry, 2007, 26, 1622-1628.	4.3	42
49	Quantifying the potential effects of climate change and the invasion of smallmouth bass on native lake trout populations across Canadian lakes. Ecography, 2009, 32, 517-525.	4.5	41
50	The abiotic and biotic factors limiting establishment of predatory fishes at their expanding northern range boundaries in Ontario, Canada. Global Change Biology, 2015, 21, 2227-2237.	9.5	41
51	Linking the ballâ€andâ€cup analogy and ordination trajectories to describe ecosystem stability, resistance, and resilience. Ecosphere, 2019, 10, e02629.	2.2	38
52	Predicting smallmouth bass (Micropterus dolomieu) occurrence across North America under climate change: a comparison of statistical approaches. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 471-481.	1.4	34
53	Microplastic contamination in Great Lakes fish. Conservation Biology, 2022, 36, .	4.7	32
54	Random-effects ordination: describing and predicting multivariate correlations and co-occurrences. Ecological Monographs, 2011, 81, 635-663.	5.4	29

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55	A multi-scale comparison of trait linkages to environmental and spatial variables in fish communities across a large freshwater lake. Oecologia, 2011, 166, 819-831.	2.0	28
56	Functional diversity and redundancy of freshwater fish communities across biogeographic and environmental gradients. Diversity and Distributions, 2018, 24, 1612-1626.	4.1	23
57	Salty summertime streamsâ€"road salt contaminated watersheds and estimates of the proportion of impacted species. Facets, 2021, 6, 317-333.	2.4	23
58	Bootstrapping Principal Components Analysis: Reply to Mehlman Et Al.. Ecology, 1995, 76, 644-645.	3.2	22
59	Selective foraging in the white sucker (Catostomus commersoni). Canadian Journal of Zoology, 2000, 78, 1320-1331.	1.0	22
60	History and taxonomy: their roles in the core-satellite hypothesis. Oecologia, 2001, 127, 131-142.	2.0	22
61	Conspecific attraction during establishment of Least Flycatcher clusters. Journal of Field Ornithology, 2006, 77, 34-38.	0.5	22
62	Catch-per-unit-effort and size spectra of lake fish assemblages reflect underlying patterns in ecological conditions and anthropogenic activities across regional and local scales. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 535-546.	1.4	22
63	Thirty-Year Time Series of PCB Concentrations in a Small Invertivorous Fish (Notropis Hudsonius): An Examination of Post-1990 Trajectory Shifts in the Lower Great Lakes. Ecosystems, 2011, 14, 415-429.	3.4	21
64	The vulnerability of species to range expansions by predators can be predicted using historical species associations and body size. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151211.	2.6	21
65	Life history variation parallels phylogeographical patterns in North American walleye (Sander) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.4	20
66	Long-term changes in fish mercury levels in the historically impacted English-Wabigoon River system (Canada). Journal of Environmental Monitoring, 2012, 14, 2327.	2.1	20
67	The response of amphibian larvae to environmental change is both consistent and variable. Oikos, 2016, 125, 1700-1711.	2.7	20
68	Speciesâ€pair associations, null models, and tests of mechanisms structuring ecological communities. Ecosphere, 2019, 10, e02797.	2.2	19
69	Potential spread of Great Lakes fishes given climate change and proposed dams: an approach using circuit theory to evaluate invasion risk. Landscape Ecology, 2015, 30, 919-935.	4.2	18
70	Effects of broad-scale geological changes on patterns in macroinvertebrate assemblages. Journal of the North American Benthological Society, 2011, 30, 459-473.	3.1	17
71	Impact of species-specific dispersal and regional stochasticity on estimates of population viability in stream metapopulations. Landscape Ecology, 2012, 27, 405-416.	4.2	17
72	Assessing the impacts of imperfect detection on estimates of diversity and community structure through multispecies occupancy modeling. Ecology and Evolution, 2018, 8, 4676-4684.	1.9	17

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73	Trends of legacy and emerging-issue contaminants in Lake Simcoe fishes. Journal of Great Lakes Research, 2011, 37, 148-159.	1.9	16
74	Modeling the establishment of invasive species: habitat and biotic interactions influencing the establishment of Bythotrephes longimanus. Biological Invasions, 2011, 13, 2499-2512.	2.4	16
75	Geology as a Structuring Mechanism of Stream Fish Communities. Transactions of the American Fisheries Society, 2012, 141, 962-974.	1.4	15
76	Estimating local and regional population sizes for an endangered minnow, redside dace (Clinostomus) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.6	15
77	Shaping up model transferability and generality of species distribution modeling for predicting invasions: implications from a study on Bythotrephes longimanus. Biological Invasions, 2014, 16, 2079-2103.	2.4	15
78	Linking temporal changes in crayfish communities to environmental changes in boreal Shield lakes in south-central Ontario. Canadian Journal of Fisheries and Aquatic Sciences, 2014, 71, 21-30.	1.4	15
79	Climate warming moderates the impacts of introduced sportfish on multiple dimensions of prey biodiversity. Global Change Biology, 2020, 26, 4937-4951.	9.5	15
80	Partitioning fish communities into guilds for ecological analyses: an overview of current approaches and future directions. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 984-993.	1.4	14
81	Selective foraging in the white sucker (Catostomus commersoni). Canadian Journal of Zoology, 2000, 78, 1320-1331.	1.0	14
82	Characterizing north temperate lake littoral fish assemblages: a comparison between distance sampling and minnow traps. Canadian Journal of Fisheries and Aquatic Sciences, 2006, 63, 558-568.	1.4	13
83	Interactive effects of calcium decline and predation risk on the potential for a continuing northward range expansion of the rusty crayfish (Orconectes rusticus). Canadian Journal of Zoology, 2013, 91, 328-337.	1.0	13
84	Evaluating the effect of lake calcium concentration on the acquisition of carapace calcium by freshwater crayfish. Hydrobiologia, 2015, 744, 91-100.	2.0	13
85	Shifting trophic control of fisheryâ€“ecosystem dynamics following biological invasions. Ecological Applications, 2020, 30, e02190.	3.8	13
86	The importance of scaling of multivariate analysis in ecological studies. Ecoscience, 2001, 8, 522-526.	1.4	12
87	Fish Assemblages and Environmental Conditions in the Lower Reaches of Northeastern Lake Erie Tributaries. Journal of Great Lakes Research, 2007, 33, 15-27.	1.9	12
88	An empirical study on estimators for linear regression analyses in fisheries and ecology. Fisheries Research, 2000, 49, 193-206.	1.7	11
89	Regional-scale patterns in community concordance: testing the roles of historical biogeography versus contemporary abiotic controls in determining stream community composition. Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 1141-1150.	1.4	10
90	Quantifying Littoral Vertical Habitat Structure and Fish Community Associations using Underwater Visual Census. Environmental Biology of Fishes, 2006, 75, 395-407.	1.0	9

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91	UNCERTAINTY ANALYSIS OF DIOXIN-LIKE POLYCHLORINATED BIPHENYLS-RELATED TOXIC EQUIVALENTS IN FISH. Environmental Toxicology and Chemistry, 2008, 27, 997.	4.3	9
92	Projecting impacts of climate change on surface water temperatures of a large subalpine lake: Lake Tahoe, USA. Climatic Change, 2013, 118, 841-855.	3.6	9
93	Approaches and research needs for advancing the protection and recovery of imperilled freshwater fishes and mussels in Canada¹. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 1356-1370.	1.4	9
94	Effect of lake size, isolation and top predator presence on nested fish community structure. Journal of Biogeography, 2016, 43, 1425-1435.	3.0	8
95	Fishing down then up the food web of an invaded lake. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19995-20001.	7.1	8
96	Describing Flowering Schedule Shape through Multivariate Ordination. International Journal of Plant Sciences, 2014, 175, 70-79.	1.3	7
97	Utilizing gradient simulations for quantifying communityâ€level resistance and resilience. Ecosphere, 2017, 8, e01953.	2.2	7
98	Long-term directional trajectories among lake crustacean zooplankton communities and water chemistry. Canadian Journal of Fisheries and Aquatic Sciences, 2018, 75, 1926-1939.	1.4	7
99	Exploratory analysis of multivariate data: Applications of parallel coordinates in ecology. Ecological Informatics, 2021, 64, 101361.	5.2	7
100	Putting the Mantel test back together again. Ecology, 2022, 103, .	3.2	7
101	Fifteen years of Canadaâ€™s Species at Risk Act: Evaluating research progress for aquatic species in the Great LakesÂâ€“ St. Lawrence River basin1. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 1205-1218.	1.4	5
102	Variable selection in large environmental data sets using principal components analysis. Environmetrics, 1999, 10, 67-77.	1.4	5
103	Bioregions are predominantly climatic for fishes of northern lakes. Global Ecology and Biogeography, 2022, 31, 233-246.	5.8	5
104	Effects of declining calcium availability on the survival, growth and calcium content of a freshwater crayfish, Orconectes virilis. Freshwater Biology, 2016, 61, 914-922.	2.4	4
105	Determining a More Environmental than Spatial Influence on Structuring Fish Communities and Ecological Boundaries of Fangcheng Coastal Waters, Northern South China Sea. Journal of Coastal Research, 2017, 80, 55-68.	0.3	4
106	Long-term spatiotemporal trends and health risk assessment of oyster arsenic levels in coastal waters of northern South China Sea. Environmental Science and Pollution Research, 2017, 24, 20673-20684.	5.3	4
107	Synthesizing reference conditions for highly degraded areas through best professional judgment. Journal of Great Lakes Research, 2014, 40, 37-42.	1.9	3
108	Abiotic factors influence species coâ€occurrence patterns of lake fishes. Journal of Animal Ecology, 2021, 90, 2859-2874.	2.8	3

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109	Weighted stream temperature tolerance index is insensitive to changes in stream fish composition. Freshwater Science, 2022, 41, 386-397.	1.8	2
110	Size spectrum model reveals importance of considering species interactions in a freshwater fisheries management context. Ecosphere, 2022, 13, .	2.2	2
111	Communication and cohesion in aquatic science literature. Canadian Journal of Fisheries and Aquatic Sciences, 2009, 66, 701-712.	1.4	1
112	Shifting Trophic Control of Fisheryâ€“Ecosystem Dynamics Following Biological Invasions. Bulletin of the Ecological Society of America, 2020, 101, e01764.	0.2	1