

Stephen Carpenter

List of Publications by Year
in descending order

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282
papers

91,217
citations

2322
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568
263
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284
all docs

284
docs citations

284
times ranked

66418
citing authors

#	ARTICLE	IF	CITATIONS
1	Global Consequences of Land Use. Science, 2005, 309, 570-574.	12.6	9,451
2	Planetary boundaries: Guiding human development on a changing planet. Science, 2015, 347, 1259855.	12.6	7,124
3	Solutions for a cultivated planet. Nature, 2011, 478, 337-342.	27.8	5,821
4	Catastrophic shifts in ecosystems. Nature, 2001, 413, 591-596.	27.8	5,656
5	NONPOINT POLLUTION OF SURFACE WATERS WITH PHOSPHORUS AND NITROGEN. , 1998, 8, 559-568.		4,255
6	Early-warning signals for critical transitions. Nature, 2009, 461, 53-59.	27.8	3,286
7	Trophic Downgrading of Planet Earth. Science, 2011, 333, 301-306.	12.6	3,030
8	Complexity of Coupled Human and Natural Systems. Science, 2007, 317, 1513-1516.	12.6	2,705
9	Resilience Thinking: Integrating Resilience, Adaptability and Transformability. Ecology and Society, 2010, 15, .	2.3	2,469
10	Catastrophic regime shifts in ecosystems: linking theory to observation. Trends in Ecology and Evolution, 2003, 18, 648-656.	8.7	2,206
11	Cascading Trophic Interactions and Lake Productivity. BioScience, 1985, 35, 634-639.	4.9	2,183
12	Social-Ecological Resilience to Coastal Disasters. Science, 2005, 309, 1036-1039.	12.6	2,002
13	Science for managing ecosystem services: Beyond the Millennium Ecosystem Assessment. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1305-1312.	7.1	1,736
14	Anticipating Critical Transitions. Science, 2012, 338, 344-348.	12.6	1,607
15	Trophic cascades revealed in diverse ecosystems. Trends in Ecology and Evolution, 1999, 14, 483-488.	8.7	1,209
16	Stability and Diversity of Ecosystems. Science, 2007, 317, 58-62.	12.6	1,193
17	Scenario Planning: a Tool for Conservation in an Uncertain World. Conservation Biology, 2003, 17, 358-366.	4.7	1,068
18	Ecological Forecasts: An Emerging Imperative. Science, 2001, 293, 657-660.	12.6	774

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19	Regulation of Lake Primary Productivity by Food Web Structure. Ecology, 1987, 68, 1863-1876.	3.2	762
20	Reducing Phosphorus to Curb Lake Eutrophication is a Success. Environmental Science & Technology, 2016, 50, 8923-8929.	10.0	761
21	Human Impact on Erodable Phosphorus and Eutrophication: A Global Perspective. BioScience, 2001, 51, 227.	4.9	757
22	Ecosystem stewardship: sustainability strategies for a rapidly changing planet. Trends in Ecology and Evolution, 2010, 25, 241-249.	8.7	744
23	Early Warnings of Regime Shifts: A Whole-Ecosystem Experiment. Science, 2011, 332, 1079-1082.	12.6	723
24	MANAGEMENT OF EUTROPHICATION FOR LAKES SUBJECT TO POTENTIALLY IRREVERSIBLE CHANGE. , 1999, 9, 751-771.		711
25	WATER IN A CHANGING WORLD. , 2001, 11, 1027-1045.		709
26	State of the World's Freshwater Ecosystems: Physical, Chemical, and Biological Changes. Annual Review of Environment and Resources, 2011, 36, 75-99.	13.4	705
27	Principles for knowledge co-production in sustainability research. Nature Sustainability, 2020, 3, 182-190.	23.7	697
28	Rising variance: a leading indicator of ecological transition. Ecology Letters, 2006, 9, 311-318.	6.4	690
29	Eutrophication of aquatic ecosystems: Bistability and soil phosphorus. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10002-10005.	7.1	660
30	Methods for Detecting Early Warnings of Critical Transitions in Time Series Illustrated Using Simulated Ecological Data. PLoS ONE, 2012, 7, e41010.	2.5	638
31	Coupled Human and Natural Systems. Ambio, 2007, 36, 639-649.	5.5	601
32	Turning back from the brink: Detecting an impending regime shift in time to avert it. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 826-831.	7.1	587
33	Phosphorus control is critical to mitigating eutrophication. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11039-11040.	7.1	542
34	Whole-lake carbon-13 additions reveal terrestrial support of aquatic food webs. Nature, 2004, 427, 240-243.	27.8	497
35	Social norms as solutions. Science, 2016, 354, 42-43.	12.6	476
36	TROPHIC CASCADES, NUTRIENTS, AND LAKE PRODUCTIVITY: WHOLE-LAKE EXPERIMENTS. Ecological Monographs, 2001, 71, 163-186.	5.4	448

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37	Decision-making under great uncertainty: environmental management in an era of global change. Trends in Ecology and Evolution, 2011, 26, 398-404.	8.7	446
38	ECOLOGY: Enhanced: Millennium Ecosystem Assessment: Research Needs. Science, 2006, 314, 257-258.	12.6	442
39	ESTIMATING COMMUNITY STABILITY AND ECOLOGICAL INTERACTIONS FROM TIME-SERIES DATA. Ecological Monographs, 2003, 73, 301-330.	5.4	435
40	Reconnecting to the Biosphere. Ambio, 2011, 40, 719-38.	5.5	420
41	Bright spots: seeds of a good Anthropocene. Frontiers in Ecology and the Environment, 2016, 14, 441-448.	4.0	414
42	Persistence of net heterotrophy in lakes during nutrient addition and food web manipulations. Limnology and Oceanography, 2000, 45, 1718-1730.	3.1	400
43	Consumer Control of Lake Productivity. BioScience, 1988, 38, 764-769.	4.9	381
44	Invasive species triggers a massive loss of ecosystem services through a trophic cascade. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4081-4085.	7.1	361
45	Resilience indicators: prospects and limitations for early warnings of regime shifts. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20130263.	4.0	349
46	ECOSYSTEM SUBSIDIES: TERRESTRIAL SUPPORT OF AQUATIC FOOD WEBS FROM ¹³ C ADDITION TO CONTRASTING LAKES. Ecology, 2005, 86, 2737-2750.	3.2	341
47	Generic Indicators of Ecological Resilience: Inferring the Chance of a Critical Transition. Annual Review of Ecology, Evolution, and Systematics, 2015, 46, 145-167.	8.3	339
48	Lake metabolism: Relationships with dissolved organic carbon and phosphorus. Limnology and Oceanography, 2003, 48, 1112-1119.	3.1	335
49	Reconsideration of the planetary boundary for phosphorus. Environmental Research Letters, 2011, 6, 014009.	5.2	307
50	Differential support of lake food webs by three types of terrestrial organic carbon. Ecology Letters, 2006, 9, 558-568.	6.4	305
51	Zooplankton-mediated transitions between N- and P-limited algal growth ¹ . Limnology and Oceanography, 1988, 33, 1-14.	3.1	294
52	Strong evidence for terrestrial support of zooplankton in small lakes based on stable isotopes of carbon, nitrogen, and hydrogen. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1975-1980.	7.1	291
53	Early Warning Signals of Ecological Transitions: Methods for Spatial Patterns. PLoS ONE, 2014, 9, e92097.	2.5	286
54	Surrogates for Resilience of Social-Ecological Systems. Ecosystems, 2005, 8, 941-944.	3.4	281

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55	Trading carbon for food: Global comparison of carbon stocks vs. crop yields on agricultural land. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19645-19648.	7.1	276
56	Our future in the Anthropocene biosphere. Ambio, 2021, 50, 834-869.	5.5	275
57	Advancing sustainability through mainstreaming a social-ecological systems perspective. Current Opinion in Environmental Sustainability, 2015, 14, 144-149.	6.3	274
58	General Resilience to Cope with Extreme Events. Sustainability, 2012, 4, 3248-3259.	3.2	268
59	Impact of dissolved organic carbon, phosphorus, and grazing on phytoplankton biomass and production in experimental lakes. Limnology and Oceanography, 1998, 43, 73-80.	3.1	266
60	Scenarios for Ecosystem Services: An Overview. Ecology and Society, 2006, 11, .	2.3	245
61	Multiscale regime shifts and planetary boundaries. Trends in Ecology and Evolution, 2013, 28, 389-395.	8.7	243
62	Phosphorus Loads to Surface Waters: A Simple Model to Account for Spatial Pattern of Land Use. , 1996, 6, 865-878.		231
63	WHOLE-LAKE FERTILIZATION EFFECTS ON DISTRIBUTION OF PRIMARY PRODUCTION BETWEEN BENTHIC AND PELAGIC HABITATS. Ecology, 2001, 82, 1065-1077.	3.2	219
64	Human impacts on planetary boundaries amplified by Earth system interactions. Nature Sustainability, 2020, 3, 119-128.	23.7	217
65	Whole-lake experiments: The annual record of fossil pigments and zooplankton. Limnology and Oceanography, 1989, 34, 700-717.	3.1	203
66	Anatomy and resilience of the global production ecosystem. Nature, 2019, 575, 98-108.	27.8	203
67	Creating a safe operating space for iconic ecosystems. Science, 2015, 347, 1317-1319.	12.6	202
68	Pathways of organic carbon utilization in small lakes: Results from a whole-lake ¹³ C addition and coupled model. Limnology and Oceanography, 2002, 47, 1664-1675.	3.1	197
69	ECOLOGICAL FUTURES: BUILDING AN ECOLOGY OF THE LONG NOW ¹ . Ecology, 2002, 83, 2069-2083.	3.2	195
70	Transnational corporations and the challenge of biosphere stewardship. Nature Ecology and Evolution, 2019, 3, 1396-1403.	7.8	194
71	Ecology for transformation. Trends in Ecology and Evolution, 2006, 21, 309-315.	8.7	185
72	Abrupt Change in Ecological Systems: Inference and Diagnosis. Trends in Ecology and Evolution, 2018, 33, 513-526.	8.7	178

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73	Food Web Structure and Phosphorus Cycling in Lakes. Transactions of the American Fisheries Society, 1993, 122, 756-772.	1.4	171
74	Governing the recreational dimension of global fisheries. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5209-5213.	7.1	171
75	Large-Scale Perturbations: Opportunities for Innovation. Ecology, 1990, 71, 2038-2043.	3.2	169
76	Climate change, ecosystems and abrupt change: science priorities. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190105.	4.0	169
77	Drivers, "Slow" Variables, "Fast" Variables, Shocks, and Resilience. Ecology and Society, 2012, 17, .	2.3	164
78	Spatial Complexity, Resilience, and Policy Diversity: Fishing on Lake-rich Landscapes. Ecology and Society, 2004, 9, .	2.3	163
79	Leading indicators of trophic cascades. Ecology Letters, 2008, 11, 128-138.	6.4	157
80	Controls of $\delta^{13}\text{C}$ in lakes: Geochemistry, lake metabolism, and morphometry. Limnology and Oceanography, 2004, 49, 1160-1172.	3.1	152
81	Integrating aquatic and terrestrial components to construct a complete carbon budget for a north temperate lake district. Global Change Biology, 2011, 17, 1193-1211.	9.5	151
82	A model of carbon evasion and sedimentation in temperate lakes. Global Change Biology, 2004, 10, 1285-1298.	9.5	149
83	EUTROPHICATION DUE TO PHOSPHORUS RECYCLING IN RELATION TO LAKE MORPHOMETRY, TEMPERATURE, AND MACROPHYTES. Ecology, 2005, 86, 210-219.	3.2	149
84	Hares and Tortoises: Interactions of Fast and Slow Variables in Ecosystems. Ecosystems, 2000, 3, 495-497.	3.4	136
85	Assessing pelagic and benthic metabolism using free water measurements. Limnology and Oceanography: Methods, 2007, 5, 145-155.	2.0	135
86	Phosphorus loading reductions needed to control blue-green algal blooms in Lake Mendota. Canadian Journal of Fisheries and Aquatic Sciences, 1998, 55, 1169-1178.	1.4	133
87	MICROCOSM EXPERIMENTS HAVE LIMITED RELEVANCE FOR COMMUNITY AND ECOSYSTEM ECOLOGY: REPLY. Ecology, 1999, 80, 1085-1088.	3.2	129
88	Understanding Regional Change: A Comparison of Two Lake Districts. BioScience, 2007, 57, 323-335.	4.9	129
89	Does terrestrial organic carbon subsidize the planktonic food web in a clearwater lake?. Limnology and Oceanography, 2007, 52, 2177-2189.	3.1	128
90	Role of economics in analyzing the environment and sustainable development. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5233-5238.	7.1	128

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91	POPULATION, COMMUNITY, AND ECOSYSTEM VARIATES AS ECOLOGICAL INDICATORS: PHYTOPLANKTON RESPONSES TO WHOLE-LAKE ENRICHMENT. , 1998, 8, 508-530.		127
92	Chlorophyll Variability, Nutrient Input, and Grazing: Evidence from Whole- Lake Experiments. Ecology, 1996, 77, 725-735.	3.2	125
93	Biological Control of Eutrophication in Lakes. Environmental Science & Technology, 1995, 29, 784-786.	10.0	123
94	Rates and components of carbon turnover in fish muscle: insights from bioenergetics models and a whole-lake ¹³C addition. Canadian Journal of Fisheries and Aquatic Sciences, 2011, 68, 387-399.	1.4	122
95	Fish Community and Food Web Responses to a Whole-lake Removal of Coarse Woody Habitat. Fisheries, 2006, 31, 321-330.	0.8	120
96	ECONOMIC VALUATION OF FRESHWATER ECOSYSTEM SERVICES IN THE UNITED STATES: 1971â€“1997. , 1999, 9, 772-783.		118
97	Impacts of Daily Bag Limit Reductions on Angler Effort in Wisconsin Walleye Lakes. North American Journal of Fisheries Management, 2003, 23, 1283-1293.	1.0	118
98	Limnetic Herbivory: Effects on Phytoplankton Populations and Primary Production. Ecology, 1986, 67, 1351-1360.	3.2	114
99	UNCERTAINTY AND THE MANAGEMENT OF MULTISTATE ECOSYSTEMS: AN APPARENTLY RATIONAL ROUTE TO COLLAPSE. Ecology, 2003, 84, 1403-1411.	3.2	113
100	Biotic feedbacks in Lake phosphorus cycles. Trends in Ecology and Evolution, 1992, 7, 332-336.	8.7	112
101	The Rise and Fall of a Dominant Planktivore: Direct and Indirect Effects on Zooplankton. Ecology, 1993, 74, 303-319.	3.2	107
102	A Phosphorus Budget for the Lake Mendota Watershed. Ecosystems, 1999, 2, 69-75.	3.4	107
103	Small lakes dominate a random sample of regional lake characteristics. Freshwater Biology, 2007, 52, 814-822.	2.4	107
104	Evaluation of metabolism models for freeâ€“water dissolved oxygen methods in lakes. Limnology and Oceanography: Methods, 2008, 6, 454-465.	2.0	104
105	Allowing variance may enlarge the safe operating space for exploited ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14384-14389.	7.1	104
106	Biodiversity and ecosystem services require IPBES to take novel approach to scenarios. Sustainability Science, 2017, 12, 177-181.	4.9	104
107	Panaceas and diversification of environmental policy. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15206-15211.	7.1	102
108	LAGOS-NE: a multi-scaled geospatial and temporal database of lake ecological context and water quality for thousands of US lakes. GigaScience, 2017, 6, 1-22.	6.4	102

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109	SYNCHRONOUS BEHAVIOR OF TEMPERATURE, CALCIUM, AND CHLOROPHYLL IN LAKES OF NORTHERN WISCONSIN. <i>Ecology</i> , 2000, 81, 815-825.	3.2	101
110	Pelagic species size distributions in lakes: Are they discontinuous?. <i>Limnology and Oceanography</i> , 2001, 46, 1021-1033.	3.1	96
111	TROPHIC CASCADES AND COMPENSATION: DIFFERENTIAL RESPONSES OF MICROZOOPLANKTON IN WHOLE-LAKE EXPERIMENTS. <i>Ecology</i> , 1998, 79, 138-152.	3.2	95
112	Defining a Safe Operating Space for inland recreational fisheries. <i>Fish and Fisheries</i> , 2017, 18, 1150-1160.	5.3	95
113	Variance as a Leading Indicator of Regime Shift in Ecosystem Services. <i>Ecology and Society</i> , 2006, 11, .	2.3	93
114	The Need for Large-Scale Experiments to Assess and Predict the Response of Ecosystems to Perturbation. , 1998, , 287-312.		90
115	Program on ecosystem change and society: an international research strategy for integrated social-ecological systems. <i>Current Opinion in Environmental Sustainability</i> , 2012, 4, 134-138.	6.3	89
116	Stocking piscivores to improve fishing and water clarity: a synthesis of the Lake Mendota biomaniipulation project. <i>Freshwater Biology</i> , 2002, 47, 2410-2424.	2.4	86
117	Resilience: Accounting for the Noncomputable. <i>Ecology and Society</i> , 2009, 14, .	2.3	86
118	Interacting regime shifts in ecosystems: implication for early warnings. <i>Ecological Monographs</i> , 2010, 80, 353-367.	5.4	85
119	COMMUNITY INTERACTION WEBS AND ZOOPLANKTON RESPONSES TO PLANKTIVORY MANIPULATIONS. <i>Ecology</i> , 1999, 80, 1405-1421.	3.2	84
120	Extreme precipitation and phosphorus loads from two agricultural watersheds. <i>Limnology and Oceanography</i> , 2018, 63, 1221-1233.	3.1	84
121	LAKE DISSOLVED INORGANIC CARBON AND DISSOLVED OXYGEN: CHANGING DRIVERS FROM DAYS TO DECADES. <i>Ecological Monographs</i> , 2006, 76, 343-363.	5.4	82
122	Integrating Landscape Carbon Cycling: Research Needs for Resolving Organic Carbon Budgets of Lakes. <i>Ecosystems</i> , 2015, 18, 363-375.	3.4	81
123	Sources and fates of dissolved organic carbon in lakes as determined by whole-lake carbon isotope additions. <i>Biogeochemistry</i> , 2007, 84, 115-129.	3.5	80
124	Reversal of a cyanobacterial bloom in response to early warnings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 352-357.	7.1	79
125	Drought-driven lake level decline: effects on coarse woody habitat and fishes. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2014, 71, 315-325.	1.4	78
126	Spatial heterogeneity strongly affects estimates of ecosystem metabolism in two north temperate lakes. <i>Limnology and Oceanography</i> , 2012, 57, 1689-1700.	3.1	77

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127	Ecological and economic analysis of lake eutrophication by nonpoint pollution. <i>Austral Ecology</i> , 1998, 23, 68-79.	1.5	76
128	Understanding relationships among ecosystem services across spatial scales and over time. <i>Environmental Research Letters</i> , 2018, 13, 054020.	5.2	76
129	Food web consequences of long-term invasive crayfish control. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2013, 70, 1109-1122.	1.4	75
130	Can algal photosynthetic inorganic carbon isotope fractionation be predicted in lakes using existing models?. <i>Aquatic Sciences</i> , 2006, 68, 142-153.	1.5	74
131	Terrestrial support of pelagic consumers: patterns and variability revealed by a multilake study. <i>Freshwater Biology</i> , 2013, 58, 2037-2049.	2.4	74
132	Probabilistic Estimate of a Threshold for Eutrophication. <i>Ecosystems</i> , 2008, 11, 601-613.	3.4	73
133	Conditional Heteroscedasticity as a Leading Indicator of Ecological Regime Shifts. <i>American Naturalist</i> , 2011, 178, 442-451.	2.1	70
134	Plausible futures of a social-ecological system: Yahara watershed, Wisconsin, USA. <i>Ecology and Society</i> , 2015, 20, .	2.3	70
135	Learning to Manage and Managing to Learn: Sustaining Freshwater Recreational Fisheries in a Changing Environment. <i>Fisheries</i> , 2015, 40, 56-64.	0.8	70
136	The effects of an exotic fish invasion on the prey communities of two lakes. <i>Journal of Animal Ecology</i> , 2003, 72, 331-342.	2.8	69
137	What is the influence of a reduction of planktivorous and benthivorous fish on water quality in temperate eutrophic lakes? A systematic review. <i>Environmental Evidence</i> , 2015, 4, .	2.7	69
138	Predicting walleye recruitment as a tool for prioritizing management actions. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2015, 72, 661-672.	1.4	66
139	With and without warning: managing ecosystems in a changing world. <i>Frontiers in Ecology and the Environment</i> , 2015, 13, 460-467.	4.0	66
140	Synchronous Behavior of Temperature, Calcium, and Chlorophyll in Lakes of Northern Wisconsin. <i>Ecology</i> , 2000, 81, 815.	3.2	66
141	Production dynamics reveal hidden overharvest of inland recreational fisheries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 24676-24681.	7.1	65
142	Fish predators, food availability and diel vertical migration in <i>Daphnia</i> . <i>Journal of Plankton Research</i> , 1992, 14, 359-377.	1.8	64
143	Climate engineering reconsidered. <i>Nature Climate Change</i> , 2014, 4, 527-529.	18.8	63
144	Extreme daily loads: role in annual phosphorus input to a north temperate lake. <i>Aquatic Sciences</i> , 2015, 77, 71-79.	1.5	63

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145	Progress on Nonpoint Pollution: Barriers & Opportunities. Daedalus, 2015, 144, 35-47.	1.8	63
146	Embodied phosphorus and the global connections of United States agriculture. Environmental Research Letters, 2012, 7, 044024.	5.2	62
147	Summer water clarity responses to phosphorus, Daphnia grazing, and internal mixing in Lake Mendota. Limnology and Oceanography, 1999, 44, 137-146.	3.1	61
148	Mini-Review: Nutrient Cycling in Lakes and Streams: Insights from a Comparative Analysis. Ecosystems, 2000, 3, 131-143.	3.4	60
149	The Influence of Legacy P on Lake Water Quality in a Midwestern Agricultural Watershed. Ecosystems, 2017, 20, 1468-1482.	3.4	60
150	Catch-and-Release Rates of Sport Fishes in Northern Wisconsin from an Angler Diary Survey. North American Journal of Fisheries Management, 2013, 33, 606-614.	1.0	59
151	Changes in ecosystem resilience detected in automated measures of ecosystem metabolism during a whole-lake manipulation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17398-17403.	7.1	59
152	Water clarity in Lake Mendota since 1900: responses to differing levels of nutrients and herbivory. Canadian Journal of Fisheries and Aquatic Sciences, 1996, 53, 2250-2261.	1.4	57
153	Pelagic responses to changes in dissolved organic carbon following division of a seepage lake. Limnology and Oceanography, 1996, 41, 553-559.	3.1	57
154	Seasonal effects of variable recruitment of a dominant piscivore on pelagic food web structure. Limnology and Oceanography, 1997, 42, 722-729.	3.1	56
155	Transmission of Variance through Lake Food Webs. , 1988, , 119-135.		56
156	Exit time as a measure of ecological resilience. Science, 2021, 372, .	12.6	55
157	Early warning signals precede cyanobacterial blooms in multiple whole-lake experiments. Ecological Monographs, 2018, 88, 188-203.	5.4	54
158	Do dams and levees impact nitrogen cycling? Simulating the effects of flood alterations on floodplain denitrification. Global Change Biology, 2005, 11, 1352-1367.	9.5	51
159	Regime Shift in Fertilizer Commodities Indicates More Turbulence Ahead for Food Security. PLoS ONE, 2014, 9, e93998.	2.5	51
160	Early warnings of regime shifts in spatial dynamics using the discrete Fourier transform. Ecosphere, 2010, 1, 1-15.	2.2	50
161	Early warnings of unknown nonlinear shifts: a nonparametric approach. Ecology, 2011, 92, 2196-2201.	3.2	50
162	Are rapid transitions between invasive and native species caused by alternative stable states, and does it matter?. Ecology, 2013, 94, 2207-2219.	3.2	47

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163	Responses of epilimnetic phytoplankton to experimental nutrient enrichment in three small seepage lakes. <i>Journal of Plankton Research</i> , 1998, 20, 1889-1914.	1.8	46
164	VARIABILITY OF LAKES ON THE LANDSCAPE: ROLES OF PHOSPHORUS, FOOD WEBS, AND DISSOLVED ORGANIC CARBON. <i>Ecology</i> , 2003, 84, 1563-1575.	3.2	46
165	Evaluating Alternative Explanations in Ecosystem Experiments. <i>Ecosystems</i> , 1998, 1, 335-344.	3.4	45
166	The topology of non-linear global carbon dynamics: from tipping points to planetary boundaries. <i>Environmental Research Letters</i> , 2013, 8, 044048.	5.2	45
167	Phosphorus Flow in a Watershed-Lake Ecosystem. <i>Ecosystems</i> , 2000, 3, 561-573.	3.4	44
168	Soil Phosphorus Variability: Scale-dependence in an Urbanizing Agricultural Landscape. <i>Landscape Ecology</i> , 2005, 20, 389-400.	4.2	44
169	Water quality implications from three decades of phosphorus loads and trophic dynamics in the Yahara chain of lakes. <i>Inland Waters</i> , 2014, 4, 1-14.	2.2	44
170	From qualitative to quantitative environmental scenarios: Translating storylines into biophysical modeling inputs at the watershed scale. <i>Environmental Modelling and Software</i> , 2016, 85, 80-97.	4.5	44
171	Patterns of Primary Production and Herbivory in 25 North American Lake Ecosystems. , 1991, , 67-96.		44
172	10 Years Later. <i>Advances in Ecological Research</i> , 2015, 53, 1-53.	2.7	43
173	Carbon and water cycling in lake-rich landscapes: Landscape connections, lake hydrology, and biogeochemistry. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	42
174	Carbon sources supporting fish growth in a north temperate lake. <i>Aquatic Sciences</i> , 2008, 70, 446-458.	1.5	41
175	Response of plankton to nutrients, planktivory and terrestrial organic matter: a model analysis of whole-lake experiments. <i>Ecology Letters</i> , 2016, 19, 230-239.	6.4	41
176	Temporal, spatial, and taxonomic patterns of crustacean zooplankton variability in unmanipulated north-temperate lakes. <i>Limnology and Oceanography</i> , 2002, 47, 613-625.	3.1	40
177	Conditional Heteroskedasticity Forecasts Regime Shift in a Whole-Ecosystem Experiment. <i>Ecosystems</i> , 2012, 15, 741-747.	3.4	40
178	Support of benthic invertebrates by detrital resources and current autochthonous primary production: results from a whole-lake ¹³ C addition. <i>Freshwater Biology</i> , 2008, 53, 42-54.	2.4	38
179	Early Warnings of Regime Shift When the Ecosystem Structure Is Unknown. <i>PLoS ONE</i> , 2012, 7, e45586.	2.5	38
180	Coupled human and natural systems: The evolution and applications of an integrated framework. <i>Ambio</i> , 2021, 50, 1778-1783.	5.5	38

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181	Comparisons of P-Yield, Riparian Buffer Strips, and Land Cover in Six Agricultural Watersheds. <i>Ecosystems</i> , 2002, 5, 568-577.	3.4	37
182	Whole-lake addition of coarse woody habitat: response of fish populations. <i>Aquatic Sciences</i> , 2012, 74, 255-266.	1.5	37
183	Zooplankton provide early warnings of a regime shift in a whole lake manipulation. <i>Limnology and Oceanography</i> , 2013, 58, 525-532.	3.1	37
184	Terrestrial, benthic, and pelagic resource use in lakes: results from a three-isotope Bayesian mixing model. <i>Ecology</i> , 2011, 92, 1115-1125.	3.2	37
185	Uncertainty in Discount Models and Environmental Accounting. <i>Ecology and Society</i> , 2005, 10, .	2.3	36
186	LONG-TERM ENVIRONMENTAL MONITORING: SOME PERSPECTIVES FROM LAKES. , 1998, 8, 269-276.		35
187	Preparing for the future: teaching scenario planning at the graduate level. <i>Frontiers in Ecology and the Environment</i> , 2010, 8, 267-273.	4.0	35
188	Early warnings of regime shifts: evaluation of spatial indicators from a whole-ecosystem experiment. <i>Ecosphere</i> , 2014, 5, 1-13.	2.2	35
189	A new approach for rapid detection of nearby thresholds in ecosystem time series. <i>Oikos</i> , 2014, 123, 290-297.	2.7	35
190	Spatial early warning signals in a lake manipulation. <i>Ecosphere</i> , 2017, 8, e01941.	2.2	35
191	Scenarios reveal pathways to sustain future ecosystem services in an agricultural landscape. <i>Ecological Applications</i> , 2018, 28, 119-134.	3.8	34
192	Lake restoration: capabilities and needs. <i>Hydrobiologia</i> , 1999, 395/396, 19-28.	2.0	33
193	Filling holes in regional carbon budgets: Predicting peat depth in a north temperate lake district. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	33
194	Evidence of alternate attractors from a whole-ecosystem regime shift experiment. <i>Theoretical Ecology</i> , 2013, 6, 385-394.	1.0	33
195	Dancing on the volcano: social exploration in times of discontent. <i>Ecology and Society</i> , 2019, 24, .	2.3	33
196	Social dimensions of fertility behavior and consumption patterns in the Anthropocene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 6300-6307.	7.1	33
197	Quick Fixes for the Environment: Part of the Solution or Part of the Problem?. <i>Environment</i> , 2006, 48, 20-27.	1.4	32
198	Spurious Certainty: How Ignoring Measurement Error and Environmental Heterogeneity May Contribute to Environmental Controversies. <i>BioScience</i> , 2009, 59, 65-76.	4.9	32

#	ARTICLE	IF	CITATIONS
199	Free-water lake metabolism: addressing noisy time series with a Kalman filter. <i>Limnology and Oceanography: Methods</i> , 2012, 10, 20-30.	2.0	32
200	The synergistic effect of manure supply and extreme precipitation on surface water quality. <i>Environmental Research Letters</i> , 2018, 13, 044016.	5.2	32
201	Lakeshore residential development and growth of largemouth bass (<i>Micropterus salmoides</i>): a cross-lakes comparison. <i>Ecology of Freshwater Fish</i> , 2011, 20, 92-101.	1.4	31
202	Evaluation of a Management System for a Mixed Walleye Spearing and Angling Fishery in Northern Wisconsin. <i>North American Journal of Fisheries Management</i> , 2003, 23, 481-491.	1.0	30
203	Coarse Woody Habitat, Lakeshore Residential Development, and Largemouth Bass Nesting Behavior. <i>North American Journal of Fisheries Management</i> , 2011, 31, 666-670.	1.0	30
204	Resources supporting the food web of a naturally productive lake. <i>Limnology and Oceanography</i> , 2012, 57, 1443-1452.	3.1	30
205	Continuous separation of land use and climate effects on the past and future water balance. <i>Journal of Hydrology</i> , 2018, 565, 106-122.	5.4	30
206	Water clarity and temperature effects on walleye safe harvest: an empirical test of the safe operating space concept. <i>Ecosphere</i> , 2019, 10, e02737.	2.2	30
207	Resilience: Now more than ever. <i>Ambio</i> , 2021, 50, 1774-1777.	5.5	30
208	Predicted impact of zebra mussel (<i>Dreissena polymorpha</i>) invasion on water clarity in Lake Mendota. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2000, 57, 1617-1626.	1.4	29
209	Influences of local weather, large-scale climatic drivers, and the ca. 11-year solar cycle on lake ice breakup dates; 1905–2004. <i>Climatic Change</i> , 2013, 118, 857-870.	3.6	28
210	Trophic Cascades, Nutrients, and Lake Productivity: Whole-Lake Experiments. <i>Ecological Monographs</i> , 2001, 71, 163.	5.4	28
211	Paul and Peter Lakes: A Liming Experiment Revisited. <i>American Midland Naturalist</i> , 1986, 116, 282.	0.4	27
212	The effect of whole-lake fish community manipulations on <i>Daphnia</i> migratory behavior. <i>Limnology and Oceanography</i> , 1991, 36, 370-377.	3.1	27
213	Phosphorus sources and demand during summer in a eutrophic lake. <i>Aquatic Sciences</i> , 2009, 71, 214-227.	1.5	27
214	Extreme events in lake ecosystem time series. <i>Limnology and Oceanography Letters</i> , 2017, 2, 63-69.	3.9	27
215	A Bayesian observation error model to predict cyanobacterial biovolume from spring total phosphorus in Lake Mendota, Wisconsin. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 1997, 54, 464-473.	1.4	26
216	Asymmetric response of early warning indicators of phytoplankton transition to and from cycles. <i>Theoretical Ecology</i> , 2013, 6, 285-293.	1.0	26

#	ARTICLE	IF	CITATIONS
217	Can we detect ecosystem critical transitions and signals of changing resilience from paleoecological records?. <i>Ecosphere</i> , 2018, 9, e02438.	2.2	25
218	Airborne carbon deposition on a remote forested lake. <i>Aquatic Sciences</i> , 2008, 70, 213-224.	1.5	24
219	Long-term variation in isotopic baselines and implications for estimating consumer trophic niches. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2008, 65, 2191-2200.	1.4	24
220	Altered energy flow in the food web of an experimentally darkened lake. <i>Ecosphere</i> , 2015, 6, 1-23.	2.2	24
221	Opening the Black Boxes: Ecosystem Science and Economic Valuation. <i>Ecosystems</i> , 2000, 3, 1-3.	3.4	23
222	Assessing a decade of phosphorus management in the Lake Mendota, Wisconsin watershed and scenarios for enhanced phosphorus management. <i>Aquatic Sciences</i> , 2012, 74, 241-253.	1.5	23
223	Earth stewardship: Shaping a sustainable future through interacting policy and norm shifts. <i>Ambio</i> , 2022, 51, 1907-1920.	5.5	23
224	Comparison of Dynamic Models for Edible Phytoplankton. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 1993, 50, 1757-1767.	1.4	22
225	Food Web Structure and Long-Term Phosphorus Recycling: A Simulation Model Evaluation. <i>Transactions of the American Fisheries Society</i> , 1993, 122, 773-783.	1.4	22
226	Spatial signatures of resilience. <i>Nature</i> , 2013, 496, 308-309.	27.8	22
227	Phosphorus loading, transport and concentrations in a lake chain: a probabilistic model to compare management options. <i>Aquatic Sciences</i> , 2014, 76, 145-154.	1.5	22
228	Stochastic dynamics of Cyanobacteria in long-term high-frequency observations of a eutrophic lake. <i>Limnology and Oceanography Letters</i> , 2020, 5, 331-336.	3.9	22
229	Zooplankton and the total phosphorus – chlorophyll a relationship: hierarchical Bayesian analysis of measurement error. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2008, 65, 2644-2655.	1.4	21
230	Navigating the chaos of an unfolding global cycle. <i>Ecology and Society</i> , 2020, 25, .	2.3	21
231	Phytoplankton and Their Relationship to Nutrients. <i>Springer Series on Environmental Management</i> , 1992, , 97-126.	0.3	21
232	Responses of Bluegill to Habitat Manipulations: Power to Detect Effects. <i>North American Journal of Fisheries Management</i> , 1995, 15, 519-527.	1.0	20
233	Twenty Years of Ecosystems: Emerging Questions and Challenges. <i>Ecosystems</i> , 2017, 20, 1-3.	3.4	20
234	Comparing the effects of climate and land use on surface water quality using future watershed scenarios. <i>Science of the Total Environment</i> , 2019, 693, 133484.	8.0	20

#	ARTICLE	IF	CITATIONS
235	Local perspectives and global archetypes in scenario development. <i>Ecology and Society</i> , 2016, 21, .	2.3	18
236	Governance in the Face of Extreme Events: Lessons from Evolutionary Processes for Structuring Interventions, and the Need to Go Beyond. <i>Ecosystems</i> , 2022, 25, 697-711.	3.4	18
237	Leading indicators of phytoplankton transitions caused by resource competition. <i>Theoretical Ecology</i> , 2009, 2, 139-148.	1.0	17
238	Spatial and temporal variability of future ecosystem services in an agricultural landscape. <i>Landscape Ecology</i> , 2020, 35, 2569-2586.	4.2	17
239	Climate and food web effects on the spring clearâ€water phase in two northâ€temperate eutrophic lakes. <i>Limnology and Oceanography</i> , 2021, 66, 30-46.	3.1	17
240	Appropriate discounting leads to forward-looking ecosystem management. <i>Ecological Research</i> , 2007, 22, 10-11.	1.5	16
241	Climate change and lakes: Estimating sensitivities of water and carbon budgets. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	16
242	Food web structure and nutrient enrichment: effects on sediment phosphorus retention in whole-lake experiments. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2000, 57, 1524-1533.	1.4	15
243	Estimates of phosphorus entrainment in Lake Mendota: a comparison of oneâ€dimensional and threeâ€dimensional approaches. <i>Limnology and Oceanography: Methods</i> , 2009, 7, 553-567.	2.0	15
244	Use of deep autochthonous resources by zooplankton: Results of a metalimnetic addition of ¹³C to a small lake. <i>Limnology and Oceanography</i> , 2014, 59, 986-996.	3.1	14
245	Synthesis of a 33â€yr series of wholeâ€lake experiments: Effects of nutrients, grazers, and precipitationâ€driven water color on chlorophyll. <i>Limnology and Oceanography Letters</i> , 2018, 3, 419-427.	3.9	14
246	Corridors of Clarity: Four Principles to Overcome Uncertainty Paralysis in the Anthropocene. <i>BioScience</i> , 2020, 70, 1139-1144.	4.9	14
247	What is the influence on water quality in temperate eutrophic lakes of a reduction of planktivorous and benthivorous fish? A systematic review protocol. <i>Environmental Evidence</i> , 2013, 2, .	2.7	12
248	Ecosystem Modeling for the 21st Century. <i>Ecosystems</i> , 2017, 20, 211-214.	3.4	12
249	A modeling analysis of spatial statistical indicators of thresholds for algal blooms. <i>Limnology and Oceanography Letters</i> , 2018, 3, 384-392.	3.9	12
250	A Mixed-Order Model to Assess Contaminant Declines. <i>Environmental Monitoring and Assessment</i> , 1999, 55, 435-444.	2.7	11
251	Resilience: insights from the U.S. LongTerm Ecological Research Network. <i>Ecosphere</i> , 2021, 12, e03434.	2.2	11
252	Resisting ecosystem transformation through an intensive wholeâ€lake fish removal experiment. <i>Fisheries Management and Ecology</i> , 0, , .	2.0	11

#	ARTICLE	IF	CITATIONS
253	Introduction to Special Feature. <i>Ecosystems</i> , 1999, 2, 383-383.	3.4	10
254	Long-term studies and reproducibility: Lessons from whole-lake experiments. <i>Limnology and Oceanography</i> , 2019, 64, S22.	3.1	10
255	Inferring critical transitions in paleoecological time series with irregular sampling and variable time-averaging. <i>Quaternary Science Reviews</i> , 2019, 207, 49-63.	3.0	10
256	Predicting responses of chlorophyll and primary production to changes in phosphorus, grazing, and dissolved organic carbon (Reply to comment by N��rnberg). <i>Limnology and Oceanography</i> , 1999, 44, 1179-1182.	3.1	9
257	An invitation for more research on transnational corporations and the biosphere. <i>Nature Ecology and Evolution</i> , 2020, 4, 494-494.	7.8	9
258	Editorial: How Are We Doing? Reflections on the First Year of <i>Ecosystems</i> . <i>Ecosystems</i> , 1999, 2, 1-3.	3.4	8
259	Interpolating and forecasting lake characteristics using long-term monitoring data. <i>Limnology and Oceanography</i> , 2012, 57, 1113-1125.	3.1	8
260	The consistency of a species�� response to press perturbations with high food web uncertainty. <i>Ecology</i> , 2017, 98, 1859-1868.	3.2	8
261	The effects of experimental whole-lake mixing on horizontal spatial patterns of fish and Zooplankton. <i>Aquatic Sciences</i> , 2017, 79, 543-556.	1.5	7
262	NONPOINT POLLUTION OF SURFACE WATERS WITH PHOSPHORUS AND NITROGEN. , 1998, 8, 559.		7
263	A Decade of <i>Ecosystems</i> . <i>Ecosystems</i> , 2007, 10, 519-522.	3.4	6
264	Response to the Letter, Nitrogen is Not a ��House of Cards��. <i>Environmental Science & Technology</i> , 2017, 51, 1943-1943.	10.0	6
265	Resilience of phytoplankton dynamics to trophic cascades and nutrient enrichment. <i>Limnology and Oceanography</i> , 2022, 67, .	3.1	6
266	Depuration of PCBs in the Lake Michigan Ecosystem. <i>Ecosystems</i> , 2000, 3, 332-343.	3.4	5
267	Estimating the Risk of Exceeding Thresholds in Environmental Systems. <i>Water, Air, and Soil Pollution</i> , 2008, 191, 131-138.	2.4	5
268	Variation in Bluegill Catch Rates and Total Length Distributions among Four Sampling Gears Used in Two Wisconsin Lakes Dominated by Small Fish. <i>North American Journal of Fisheries Management</i> , 2019, 39, 714-724.	1.0	5
269	Estimating pelagic primary production in lakes: Comparison of 14 C incubation and free��water O 2 approaches. <i>Limnology and Oceanography: Methods</i> , 2022, 20, 34-45.	2.0	5
270	Of Salmon and Dams. <i>Science</i> , 2000, 290, 933c-934.	12.6	4

#	ARTICLE	IF	CITATIONS
271	A Morphometric Approach for Stocking Walleye Fingerlings in Lakes Invaded by Rainbow Smelt. North American Journal of Fisheries Management, 2014, 34, 998-1002.	1.0	3
272	Phytoplankton biomass, dissolved organic matter, and temperature drive respiration in whole lake nutrient additions. Limnology and Oceanography, 2021, 66, 2174-2186.	3.1	3
273	WATER IN A CHANGING WORLD. , 2001, 11, 1027.		2
274	Evaluating the performance of temporal and spatial early warning statistics of algal blooms. Ecological Applications, 2022, 32, e2616.	3.8	2
275	Workshop on Ecosystem Manipulation. Ecosystems, 1998, 1, 321-322.	3.4	1
276	More Issues, More Impact, and More Opportunity. Ecosystems, 2001, 4, 1-2.	3.4	0
277	G. EVELYN HUTCHINSON AWARD TO MICHAEL PACE. Limnology and Oceanography Bulletin, 2008, 17, 111-111.	0.4	0
278	2020 Joint ASLO&FS Meeting in Madison, Wisconsin. Limnology and Oceanography Bulletin, 2019, 28, 112-112.	0.4	0
279	Ask& 1995: Commentary by Stephen Carpenter. , 2010, , 77-81.		0
280	Ask& 2002: Commentary by Stephen Carpenter. , 2010, , 217-220.		0
281	Marine Conservation: <i>Global Marine Biological Diversity</i> . A Strategy for Building Conservation into Decision Making. Elliott A. Norse, Ed. Island Press, Washington, DC, 1993. xxxii, 383 pp., illus. \$50; paper, \$27.50.. Science, 1994, 266, 468-468.	12.6	0
282	How We Can Advance Ecosystem Stewardship. BioScience, 0, , .	4.9	0