Daniel E Schindler

List of Publications by Year
in descending order

137 papers	12,051 citations	36203 51 h-index	28224 105 g-index
138 all docs	138 docs citations	138 times ranked	11578 citing authors

#	Article	IF	Citations
1	Population diversity and the portfolio effect in an exploited species. Nature, 2010, 465, 609-612.	13.7	1,187
2	Rapid and highly variable warming of lake surface waters around the globe. Geophysical Research Letters, 2015, 42, 10,773.	1.5	767
3	Biocomplexity and fisheries sustainability. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6564-6568.	3.3	747
4	CLIMATE CHANGE UNCOUPLES TROPHIC INTERACTIONS IN AN AQUATIC ECOSYSTEM. Ecology, 2004, 85, 2100-2106.	1.5	655
5	Habitat coupling in lake ecosystems. Oikos, 2002, 98, 177-189.	1.2	556
6	Pacific Salmon, Nutrients, and the Dynamics of Freshwater and Riparian Ecosystems. Ecosystems, 2002, 5, 399-417.	1.6	490
7	TROPHIC CASCADES, NUTRIENTS, AND LAKE PRODUCTIVITY: WHOLE-LAKE EXPERIMENTS. Ecological Monographs, 2001, 71, 163-186.	2.4	448
8	Climatic effects on the phenology of lake processes. Global Change Biology, 2004, 10, 1844-1856.	4.2	352
9	The portfolio concept in ecology and evolution. Frontiers in Ecology and the Environment, 2015, 13, 257-263.	1.9	349
10	Pacific salmon and the ecology of coastal ecosystems. Frontiers in Ecology and the Environment, 2003, 1, 31-37.	1.9	274
11	Prediction, precaution, and policy under global change. Science, 2015, 347, 953-954.	6.0	231
12	STOICHIOMETRY OF FISHES AND THEIR PREY: IMPLICATIONS FOR NUTRIENT RECYCLING. Ecology, 1997, 78, 1816-1831.	1.5	182
13	Animating the Carbon Cycle. Ecosystems, 2014, 17, 344-359.	1.6	168
14	Simultaneous quantification of aquatic ecosystem metabolism and reaeration using a Bayesian statistical model of oxygen dynamics. Limnology and Oceanography, 2010, 55, 1047-1063.	1.6	156
15	A global database of lake surface temperatures collected by in situ and satellite methods from 1985â€“2009. Scientific Data, 2015, 2, 150008.	2.4	153
16	Alteration of Nutrient Cycles and Algal Production Resulting from Fish Introductions intoMountain Lakes. Ecosystems, 2001, 4, 308-321.	1.6	147
17	The Role of Sharks and Longline Fisheries in a Pelagic Ecosystem of the Central Pacific. Ecosystems, 2002, 5, 202-216.	1.6	147
18	DIEL VERTICAL MIGRATION BY JUVENILE SOCKEYE SALMON: EMPIRICAL EVIDENCE FOR THE ANTIPREDATION WINDOW. Ecology, 2003, 84, 1713-1720.	1.5	145

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19	Synchronization and portfolio performance of threatened salmon. Conservation Letters, 2010, 3, 340-348.	2.8	139
20	EFFECTS OF CHANGING CLIMATE ON ZOOPLANKTON AND JUVENILE SOCKEYE SALMON GROWTH IN SOUTHWESTERN ALASKA. Ecology, 2005, 86, 198-209.	1.5	137
21	Diel horizontal migration in streams: Juvenile fish exploit spatial heterogeneity in thermal and trophic resources. Ecology, 2013, 94, 2066-2075.	1.5	131
22	Resource waves: phenological diversity enhances foraging opportunities for mobile consumers. Ecology, 2016, 97, 1099-1112.	1.5	119
23	Fisheries portfolio diversification and turnover buffer Alaskan fishing communities from abrupt resource and market changes. Nature Communications, 2017, 8, 14042.	5.8	113
24	Riding the crimson tide: mobile terrestrial consumers track phenological variation in spawning of an anadromous fish. Biology Letters, 2013, 9, 20130048.	1.0	110
25	SHARKS AND TUNAS: FISHERIES IMPACTS ON PREDATORS WITH CONTRASTING LIFE HISTORIES. , 2002, 12, 735-748.		107
26	Shifting habitat mosaics and fish production across river basins. Science, 2019, 364, 783-786.	6.0	106
27	Habitat structure determines resource use by zooplankton in temperate lakes. Ecology Letters, 2011, 14, 364-372.	3.0	101
28	Evaluating early-warning indicators of critical transitions in natural aquatic ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8089-E8095.	3.3	101
29	Changes in the Spatial Distribution of Fishes in Lakes Along a Residential Development Gradient. Ecosystems, 2004, 7, 98-106.	1.6	98
30	MARINE-DERIVED NUTRIENTS, COMMERCIAL FISHERIES, AND PRODUCTION OF SALMON AND LAKE ALGAE IN ALASKA. Ecology, 2005, 86, 3225-3231.	1.5	98
31	Effects of climatic variability on the thermal properties of Lake Washington. Limnology and Oceanography, 2004, 49, 256-270.	1.6	94
32	Watershed geomorphology and snowmelt control stream thermal sensitivity to air temperature. Geophysical Research Letters, 2015, 42, 3380-3388.	1.5	92
33	Marine-derived nutrients, bioturbation, and ecosystem metabolism: reconsidering the role of salmon in streams. Ecology, 2011, 92, 373-385.	1.5	90
34	Association between geomorphic attributes of watersheds, water temperature, and salmon spawn timing in Alaskan streams. Geomorphology, 2013, 185, 78-86.	1.1	89
35	Subsidies of Aquatic Resources in Terrestrial Ecosystems. Ecosystems, 2017, 20, 78-93.	1.6	89
36	Varying effects of anadromous sockeye salmon on the trophic ecology of two species of resident salmonids in southwest Alaska. Freshwater Biology, 2007, 52, 1944-1956.	1.2	86

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37	Biotic disturbance and benthic community dynamics in salmonâ€bearing streams. Journal of Animal Ecology, 2008, 77, 275-284.	1.3	85
38	Who Should Pick the Winners of Climate Change?. Trends in Ecology and Evolution, 2017, 32, 167-173.	4.2	84
39	Demographic changes in Chinook salmon across the Northeast Pacific Ocean. Fish and Fisheries, 2018, 19, 533-546.	2.7	79
40	Climate Change, Ecosystem Impacts, and Management for Pacific Salmon. Fisheries, 2008, 33, 502-506.	0.6	77
41	The Introduction of Nonnative Fish into Wilderness Lakes: Good Intentions, Conflicting Mandates, and Unintended Consequences. Ecosystems, 2001, 4, 275-278.	1.6	72
42	Trophic ecology of Pacific salmon (Oncorhynchus spp.) in the ocean: a synthesis of stable isotope research. Ecological Research, 2009, 24, 855-863.	0.7	70
43	Asynchrony in population dynamics of sockeye salmon in southwest Alaska. Oikos, 2008, 117, 1578-1586.	1.2	69
44	Metabolic theory and taxonomic identity predict nutrient recycling in a diverse food web. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2640-7.	3.3	68
45	Coalescence in the Lake Washington story: Interaction strengths in a planktonic food web. Limnology and Oceanography, 2006, 51, 2042-2051.	1.6	67
46	Going with the Flow: Spatial Distributions of Juvenile Coho Salmon Track an Annually Shifting Mosaic of Water Temperature. Ecosystems, 2013, 16, 1429-1441.	1.6	67
47	Genomic islands of divergence linked to ecotypic variation in sockeye salmon. Molecular Ecology, 2017, 26, 554-570.	2.0	62
48	Temperature-associated population diversity in salmon confers benefits to mobile consumers. Ecology, 2011, 92, 2073-2084.	1.5	61
49	OPTICAL CHARACTERISTICS OF NATURAL WATERS PROTECT AMPHIBIANS FROM UV-B IN THE U.S. PACIFIC NORTHWEST. Ecology, 2002, 83, 2951-2957.	1.5	60
50	Unaccounted mortality in salmon fisheries: nonâ€retention in gillnets and effects on estimates of spawners. Journal of Applied Ecology, 2009, 46, 752-761.	1.9	59
51	Management for network diversity speeds evolutionary adaptation to climate change. Nature Climate Change, 2019, 9, 632-636.	8.1	59
52	Large predators and biogeochemical hotspots: brown bear (Ursus arctos) predation on salmon alters nitrogen cycling in riparian soils. Ecological Research, 2009, 24, 1125-1135.	0.7	57
53	Spawning salmon and the phenology of emergence in stream insects. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 1695-1703.	1.2	57
54	ALTERNATIVE FISHERIES AND THE PREDATION RATE OF YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN. , 2002, 12, 724-734.		56

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55	Deeper waters are changing less consistently than surface waters in a global analysis of 102 lakes. Scientific Reports, 2020, 10, 20514.	1.6	56
56	Centennial-scale fluctuations and regional complexity characterize Pacific salmon population dynamics over the past five centuries. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1750-1755.	3.3	53
57	EFFECTS OF GRAZER COMMUNITY STRUCTURE ON PHYTOPLANKTON RESPONSE TO NUTRIENT PULSES. Ecology, 2000, 81, 183-200.	1.5	52
58	Performance of salmon fishery portfolios across western <scp>N</scp>orth <scp>A</scp>merica. Journal of Applied Ecology, 2014, 51, 1554-1563.	1.9	51
59	Getting ahead of climate change for ecological adaptation and resilience. Science, 2022, 376, 1421-1426.	6.0	51
60	Disrupted seasonal clockwork in the population dynamics of a freshwater copepod by climate warming. Limnology and Oceanography, 2009, 54, 2493-2505.	1.6	49
61	Responses of Zooplankton Populations to Four Decades of Climate Warming in Lakes of Southwestern Alaska. Ecosystems, 2012, 15, 1010-1026.	1.6	47
62	Population coherence and environmental impacts across spatial scales: a case study of Chinook salmon. Ecosphere, 2016, 7, e01333.	1.0	47
63	Dendritic network models: Improving isoscapes and quantifying influence of landscape and inâ€stream processes on strontium isotopes in rivers. Geophysical Research Letters, 2016, 43, 5043-5051.	1.5	45
64	Spawning Habitat and Geography Influence Population Structure and Juvenile Migration Timing of Sockeye Salmon in the Wood River Lakes, Alaska. Transactions of the American Fisheries Society, 2011, 140, 763-782.	0.6	44
65	Effects of warming climate and competition in the ocean for life-histories of Pacific salmon. Nature Ecology and Evolution, 2019, 3, 935-942.	3.4	44
66	Glacier Retreat and Pacific Salmon. BioScience, 2020, 70, 220-236.	2.2	41
67	Evolution and connectivity influence the persistence and recovery of coral reefs under climate change in the Caribbean, Southwest Pacific, and Coral Triangle. Global Change Biology, 2021, 27, 4307-4321.	4.2	39
68	QUANTIFYING SPATIAL PATTERN WITH EVENNESS INDICES. , 2005, 15, 507-520.		37
69	Effects of Urbanization on the Dynamics of Organic Sediments in Temperate Lakes. Ecosystems, 2007, 10, 1057-1068.	1.6	36
70	Stream geomorphology regulates the effects on periphyton of ecosystem engineering and nutrient enrichment by Pacific salmon. Freshwater Biology, 2010, 55, 2598-2611.	1.2	36
71	Juvenile coho salmon track a seasonally shifting thermal mosaic across a river floodplain. Freshwater Biology, 2016, 61, 1454-1465.	1.2	36
72	Scale and the detection of climatic influences on the productivity of salmon populations. Global Change Biology, 2011, 17, 2546-2558.	4.2	34

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73	Empirical evaluation of observation scale effects in community time series. Oikos, 2006, 113, 424-439.	1.2	33
74	Resurgence of an apex marine predator and the decline in prey body size. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26682-26689.	3.3	32
75	Variation in spatial and temporal gradients in zooplankton spring development: the effect of climatic factors. Freshwater Biology, 2005, 50, 1007-1021.	1.2	31
76	Linking otolith microchemistry and dendritic isoscapes to map heterogeneous production of fish across river basins. Ecological Applications, 2017, 27, 363-377.	1.8	31
77	Spatial heterogeneity contributes more to portfolio effects than species variability in bottom-associated marine fishes. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180915.	1.2	31
78	Does lipid-correction introduce biases into isotopic mixing models? Implications for diet reconstruction studies. Oecologia, 2019, 191, 745-755.	0.9	29
79	Association of amphibians with attenuation of ultraviolet-b radiation in montane ponds. Oecologia, 2001, 128, 519-525.	0.9	28
80	Aquatic insects play a minor role in dispersing salmon-derived nutrients into riparian forests in southwestern Alaska. Canadian Journal of Fisheries and Aquatic Sciences, 2006, 63, 2543-2552.	0.7	28
81	A multi-proxy record of the Last Glacial Maximum and last 14,500Âyears of paleoenvironmental change at Lone Spruce Pond, southwestern Alaska. Journal of Paleolimnology, 2012, 48, 9-26.	0.8	28
82	TROPHIC CASCADES, NUTRIENTS, AND LAKE PRODUCTIVITY: WHOLE-LAKE EXPERIMENTS. , 2001, 71, 163.		28
83	Foraging and growth responses of stream-dwelling fishes to inter-annual variation in a pulsed resource subsidy. Ecosphere, 2012, 3, art113.	1.0	27
84	Environmental and algal forcing of Daphnia production dynamics. Limnology and Oceanography, 2002, 47, 1477-1485.	1.6	26
85	The reproductive value of large females: consequences of shifts in demographic structure for population reproductive potential in Chinook salmon. Canadian Journal of Fisheries and Aquatic Sciences, 2020, 77, 1292-1301.	0.7	25
86	Individual behavior drives ecosystem function and the impacts of harvest. Science Advances, 2020, 6, eaax8329.	4.7	25
87	Spatial variation in timing of marine subsidies influences riparian phenology through a plant-pollinator mutualism. Ecosphere, 2011, 2, art101.	1.0	22
88	Adaptive capacity at the northern front: sockeye salmon behaviourally thermoregulate during novel exposure to warm temperatures. , 2016, 4, cow039.		22
89	Ecological, landscape, and climatic regulation of sediment geochemistry in North American sockeye salmon nursery lakes: Insights for paleoecological salmon investigations. Limnology and Oceanography, 2009, 54, 1733-1745.	1.6	20
90	Species- and community-level responses combine to drive phenology of lake phytoplankton. Ecology, 2013, 94, 2188-2194.	1.5	20

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91	Response of chinook salmon to climate change. Nature Climate Change, 2015, 5, 613-615.	8.1	19
92	Geomorphology controls the trophic base of stream food webs in a boreal watershed. Ecology, 2015, 96, 1775-1782.	1.5	18
93	An assessment of assumptions and uncertainty in deuteriumâ€based estimates of terrestrial subsidies to aquatic consumers. Ecology, 2018, 99, 1073-1088.	1.5	18
94	Low snowpack reduces thermal response diversity among streams across a landscape. Limnology and Oceanography Letters, 2020, 5, 254-263.	1.6	18
95	Twoâ€stage metabolism inferred from diel oxygen dynamics in aquatic ecosystems. Ecosphere, 2017, 8, e01867.	1.0	17
96	Watershed geomorphology interacts with precipitation to influence the magnitude and source of CO₂ emissions from Alaskan streams. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 1903-1921.	1.3	17
97	Glacier retreat creating new Pacific salmon habitat in western North America. Nature Communications, 2021, 12, 6816.	5.8	17
98	Fish extinctions and ecosystem functioning in tropical ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5707-5708.	3.3	16
99	Body Condition Correlates with Instantaneous Growth in Streamâ€Dwelling Rainbow Trout and Arctic Grayling. Transactions of the American Fisheries Society, 2013, 142, 747-755.	0.6	16
100	Freshwater habitat associations between pink (Oncorhynchus gorbuscha), chum (O.Âketa) and Chinook salmon (O.Âtshawytscha) in a watershed dominated by sockeye salmon (O.Ânerka) abundance. Ecology of Freshwater Fish, 2014, 23, 360-372.	0.7	16
101	Comment on Demars et al. 2015, â€œStream metabolism and the open diel oxygen method: Principles, practice, and perspectivesâ€• Limnology and Oceanography: Methods, 2016, 14, 110-113.	1.0	16
102	Warmer climate squeezes aquatic predators out of their preferred habitat. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9764-9765.	3.3	16
103	Influences of spawning timing, water temperature, and climatic warming on early life history phenology in western Alaska sockeye salmon. Canadian Journal of Fisheries and Aquatic Sciences, 2019, 76, 123-135.	0.7	16
104	Selection due to nonretention mortality in gillnet fisheries for salmon. Evolutionary Applications, 2011, 4, 429-443.	1.5	15
105	Consequences of changing climate and geomorphology for bioenergetics of juvenile sockeye salmon in a shallow Alaskan lake. Ecology of Freshwater Fish, 2012, 21, 349-362.	0.7	15
106	Predator avoidance during reproduction: diel movements by spawning sockeye salmon between stream and lake habitats. Journal of Animal Ecology, 2014, 83, 1478-1489.	1.3	15
107	Wind-driven upwelling in lakes destabilizes thermal regimes of downstream rivers. Limnology and Oceanography, 2015, 60, 169-180.	1.6	15
108	Landcover and geomorphology influence streamwater temperature sensitivity in salmon bearing watersheds in Southeast Alaska. Environmental Research Letters, 2018, 13, 064034.	2.2	15

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109	Diverse juvenile lifeâ€history behaviours contribute to the spawning stock of an anadromous fish population. Ecology of Freshwater Fish, 2015, 24, 204-213.	0.7	14
110	Evolution reverses the effect of network structure on metapopulation persistence. Ecology, 2021, 102, e03381.	1.5	14
111	Effects of simultaneous climate change and geomorphic evolution on thermal characteristics of a shallow Alaskan lake. Limnology and Oceanography, 2011, 56, 193-205.	1.6	13
112	Inter-Tributary Movements by Resident Salmonids across a Boreal Riverscape. PLoS ONE, 2015, 10, e0136985.	1.1	12
113	Quantifying habitat use of migratory fish across riverscapes using spaceâ€time isotope models. Methods in Ecology and Evolution, 2019, 10, 1036-1047.	2.2	11
114	Salmon-derived nutrients drive diatom beta-diversity patterns. Freshwater Biology, 2011, 56, 292-301.	1.2	10
115	Mysis in the Okanagan Lake food web: a time-series analysis of interaction strengths in an invaded plankton community. Aquatic Ecology, 2012, 46, 215-227.	0.7	10
116	Climate variation is filtered differently among lakes to influence growth of juvenile sockeye salmon in an Alaskan watershed. Oikos, 2014, 123, 687-698.	1.2	10
117	Depth variation in isotopic composition of benthic resources and assessment of sculpin feeding patterns in an oligotrophic Alaskan lake. Aquatic Ecology, 2013, 47, 403-414.	0.7	9
118	Episodic predation of mammals by stream fishes in a boreal river basin. Ecology of Freshwater Fish, 2014, 23, 622-630.	0.7	9
119	Assessing the potential for demographic restoration and assisted evolution to build climate resilience in coral reefs. Ecological Applications, 2022, 32, e2650.	1.8	9
120	Migration Timing of Adult Chinook Salmon into the Togiak River, Alaska, Watershed: Is There Evidence for Stock Structure?. Transactions of the American Fisheries Society, 2015, 144, 829-836.	0.6	8
121	Watershed complexity increases the capacity for salmonâ€“wildlife interactions in coastal ecosystems. Conservation Letters, 2020, 13, e12689.	2.8	8
122	Depth-specific benthic specialization of Arctic char in an oligotrophic subarctic lake. Aquatic Sciences, 2021, 83, 1.	0.6	8
123	Global data set of long-term summertime vertical temperature profiles in 153 lakes. Scientific Data, 2021, 8, 200.	2.4	7
124	Resource waves: phenological diversity enhances foraging opportunities for mobile consumers. Ecology, 2016, 97, 1099.	1.5	7
125	Thermal constraints on stream consumer responses to a marine resource subsidy. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 1661-1671.	0.7	6
126	The phenology of migration in an unpredictable world. Journal of Animal Ecology, 2019, 88, 8-10.	1.3	6

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127	Headwater Catchments Govern Biogeochemistry in America's Largest Freeâ€Flowing River Network. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005851.	1.3	6
128	Ecological dynamics of a peri-urban lake: a multi-proxy paleolimnological study of Cultus Lake (British) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.8	6
129	Improving short-term recruitment forecasts for coho salmon using a spatiotemporal integrated population model. Fisheries Research, 2021, 242, 106014.	0.9	6
130	Long time horizon for adaptive management to reveal predation effects in a salmon fishery. Ecological Applications, 2016, 26, 2695-2707.	1.8	5
131	Watershed Alnus cover alters N:P stoichiometry and intensifies P limitation in subarctic streams. Biogeochemistry, 2021, 153, 155-176.	1.7	4
132	Interaction between watershed features and climate forcing affects habitat profitability for juvenile salmon. Ecosphere, 2020, 11, e03266.	1.0	3
133	OPTICAL CHARACTERISTICS OF NATURAL WATERS PROTECT AMPHIBIANS FROM UV-B IN THE U.S. PACIFIC NORTHWEST: REPLY. Ecology, 2004, 85, 1754-1759.	1.5	2
134	Constrained by markets: processing costs limit potential for managing predatorâ€“prey interactions in a commercial fishery. Journal of Applied Ecology, 2017, 54, 1946-1956.	1.9	2
135	Effects of variability and synchrony in assessing contributions of individual streams to habitat portfolios of river basins. Ecological Indicators, 2021, 124, 107427.	2.6	2
136	Isotopes in teeth and a cryptic population of coastal freshwater seals. Conservation Biology, 2019, 33, 1415-1425.	2.4	1
137	Connecting Salmon Science in an Era of Global Change. Fisheries, 2020, 45, 214-215.	0.6	0