

Oswald J Schmitz

List of Publications by Year in descending order

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Version: 2024-02-01

124
papers

14,359
citations

34016

52
h-index

20900

115
g-index

178
all docs

178
docs citations

178
times ranked

12144
citing authors

#	ARTICLE	IF	CITATIONS
1	Status and Ecological Effects of the World's Largest Carnivores. <i>Science</i> , 2014, 343, 1241484.	6.0	2,390
2	Trophic cascades: the primacy of trait-mediated indirect interactions. <i>Ecology Letters</i> , 2004, 7, 153-163.	3.0	889
3	Trophic Cascades in Terrestrial Systems: A Review of the Effects of Carnivore Removals on Plants. <i>American Naturalist</i> , 2000, 155, 141-153.	1.0	866
4	BEHAVIORALLY MEDIATED TROPHIC CASCADES: EFFECTS OF PREDATION RISK ON FOOD WEB INTERACTIONS. <i>Ecology</i> , 1997, 78, 1388-1399.	1.5	715
5	Effects of Predator Hunting Mode on Grassland Ecosystem Function. <i>Science</i> , 2008, 319, 952-954.	6.0	456
6	REVISITING THE CLASSICS: CONSIDERING NONCONSUMPTIVE EFFECTS IN TEXTBOOK EXAMPLES OF PREDATOR-PREY INTERACTIONS. <i>Ecology</i> , 2008, 89, 2416-2425.	1.5	401
7	PREDATOR DIVERSITY AND TROPHIC INTERACTIONS. <i>Ecology</i> , 2007, 88, 2415-2426.	1.5	379
8	Physiological Stress as a Fundamental Mechanism Linking Predation to Ecosystem Functioning. <i>American Naturalist</i> , 2010, 176, 537-556.	1.0	336
9	Predator control of ecosystem nutrient dynamics. <i>Ecology Letters</i> , 2010, 13, 1199-1209.	3.0	332
10	PREDATOR HUNTING MODE AND HABITAT DOMAIN ALTER NONCONSUMPTIVE EFFECTS IN PREDATOR-PREY INTERACTIONS. <i>Ecology</i> , 2007, 88, 2744-2751.	1.5	326
11	CONNECTING THEORETICAL AND EMPIRICAL STUDIES OF TRAIT-MEDIATED INTERACTIONS. <i>Ecology</i> , 2003, 84, 1101-1114.	1.5	300
12	Biodiversity and the productivity and stability of ecosystems. <i>Trends in Ecology and Evolution</i> , 1996, 11, 372-377.	4.2	283
13	Herbivore physiological response to predation risk and implications for ecosystem nutrient dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 15503-15507.	3.3	252
14	Rapid Recovery of Damaged Ecosystems. <i>PLoS ONE</i> , 2009, 4, e5653.	1.1	251
15	EFFECTS OF TOP PREDATOR SPECIES ON DIRECT AND INDIRECT INTERACTIONS IN A FOOD WEB. <i>Ecology</i> , 2001, 82, 2072-2081.	1.5	242
16	What is a Trophic Cascade?. <i>Trends in Ecology and Evolution</i> , 2016, 31, 842-849.	4.2	218
17	Top predator control of plant biodiversity and productivity in an old-field ecosystem. <i>Ecology Letters</i> , 2003, 6, 156-163.	3.0	200
18	Herbivory from Individuals to Ecosystems. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2008, 39, 133-152.	3.8	200

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19	Fear of Predation Slows Plant-Litter Decomposition. <i>Science</i> , 2012, 336, 1434-1438.	6.0	197
20	Animals and the zoogeochemistry of the carbon cycle. <i>Science</i> , 2018, 362, .	6.0	197
21	Carnivore conservation needs evidence-based livestock protection. <i>PLoS Biology</i> , 2018, 16, e2005577.	2.6	192
22	Climate Change, Nutrition, and Bottom-Up and Top-Down Food Web Processes. <i>Trends in Ecology and Evolution</i> , 2016, 31, 965-975.	4.2	181
23	Animating the Carbon Cycle. <i>Ecosystems</i> , 2014, 17, 344-359.	1.6	168
24	FROM INDIVIDUALS TO ECOSYSTEM FUNCTION: TOWARD AN INTEGRATION OF EVOLUTIONARY AND ECOSYSTEM ECOLOGY. <i>Ecology</i> , 2008, 89, 2436-2445.	1.5	158
25	Experimental warming transforms multiple predator effects in a grassland food web. <i>Ecology Letters</i> , 2009, 12, 1317-1325.	3.0	157
26	Ecosystem Function and Services of Aquatic Predators in the Anthropocene. <i>Trends in Ecology and Evolution</i> , 2019, 34, 369-383.	4.2	143
27	Ecosystem Responses to Global Climate Change: Moving Beyond Color Mapping. <i>BioScience</i> , 2003, 53, 1199.	2.2	136
28	Global climate change and mammalian species diversity in U.S. national parks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 11474-11477.	3.3	135
29	Climate warming strengthens indirect interactions in an old-field food web. <i>Ecology</i> , 2009, 90, 2346-2351.	1.5	133
30	Fear on the move: predator hunting mode predicts variation in prey mortality and plasticity in prey spatial response. <i>Journal of Animal Ecology</i> , 2014, 83, 214-222.	1.3	130
31	Effects of predator functional diversity on grassland ecosystem function. <i>Ecology</i> , 2009, 90, 2339-2345.	1.5	120
32	PREDATORS HAVE LARGE EFFECTS ON ECOSYSTEM PROPERTIES BY CHANGING PLANT DIVERSITY, NOT PLANT BIOMASS. <i>Ecology</i> , 2006, 87, 1432-1437.	1.5	115
33	Resolving Ecosystem Complexity (MPB-47)., 2010, , .		115
34	PRESS PERTURBATIONS AND THE PREDICTABILITY OF ECOLOGICAL INTERACTIONS IN A FOOD WEB. <i>Ecology</i> , 1997, 78, 55-69.	1.5	102
35	Predator and Prey Models with Flexible Individual Behavior and Imperfect Information. <i>American Naturalist</i> , 2000, 155, 669-683.	1.0	97
36	Effectiveness of contemporary techniques for reducing livestock depredations by large carnivores. <i>Wildlife Society Bulletin</i> , 2016, 40, 806-815.	1.6	97

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37	Climate change effects on behavioral and physiological ecology of predator–prey interactions: Implications for conservation biological control. <i>Biological Control</i> , 2014, 75, 87-96.	1.4	86
38	Predator and prey functional traits: understanding the adaptive machinery driving predator–prey interactions. <i>Frontiers in Ecology and the Environment</i> , 2017, 6, 1767.	0.8	85
39	AGGREGATE EFFECTS OF MULTIPLE PREDATOR SPECIES ON A SHARED PREY. <i>Ecology</i> , 2002, 83, 2367-2372.	1.5	83
40	A call for applying trophic structure in ecological restoration. <i>Restoration Ecology</i> , 2015, 23, 503-507.	1.4	81
41	The context dependence of non-consumptive predator effects. <i>Ecology Letters</i> , 2021, 24, 113-129.	3.0	80
42	Trophic cascade alters ecosystem carbon exchange. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 11035-11038.	3.3	78
43	Foraging to balance conflicting demands: novel insights from grasshoppers under predation risk. <i>Behavioral Ecology</i> , 1997, 8, 551-559.	1.0	71
44	Linearity in the aggregate effects of multiple predators in a food web. <i>Ecology Letters</i> , 2002, 5, 168-172.	3.0	70
45	Applying population and community ecology theory to advance understanding of belowground biogeochemistry. <i>Ecology Letters</i> , 2017, 20, 231-245.	3.0	69
46	Trophic exploitation in grassland food chains: simple models and a field experiment. <i>Oecologia</i> , 1993, 93, 327-335.	0.9	67
47	Toward a community ecology of landscapes: predicting multiple predator–prey interactions across geographic space. <i>Ecology</i> , 2017, 98, 2281-2292.	1.5	65
48	Linking individuals with ecosystems: Experimentally identifying the relevant organizational scale for predicting trophic abundances. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 12927-12931.	3.3	63
49	Grasshoppers alter jumping biomechanics to enhance escape performance under chronic risk of spider predation. <i>Functional Ecology</i> , 2011, 25, 279-288.	1.7	63
50	Perturbation and abrupt shift in trophic control of biodiversity and productivity. <i>Ecology Letters</i> , 2004, 7, 403-409.	3.0	61
51	Functional Traits and Trait-Mediated Interactions. <i>Advances in Ecological Research</i> , 2015, , 319-343.	1.4	61
52	Scaling from plot experiments to landscapes: studying grasshoppers to inform forest ecosystem management. <i>Oecologia</i> , 2005, 145, 224-233.	0.9	58
53	Modelling food web complexity: The consequences of individual-based, spatially explicit behavioural ecology on trophic interactions. <i>Evolutionary Ecology</i> , 1997, 11, 379-398.	0.5	56
54	Interactive effects of multiple climate change variables on trophic interactions: a meta-analysis. <i>Climate Change Responses</i> , 2014, 1, .	2.6	55

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55	Opposite effects of daytime and nighttime warming on top-down control of plant diversity. <i>Ecology</i> , 2018, 99, 13-20.	1.5	54
56	Exploitation in model food chains with mechanistic consumer-resource dynamics. <i>Theoretical Population Biology</i> , 1992, 41, 161-183.	0.5	52
57	Enhancing species distribution modeling by characterizing predator-prey interactions. <i>Ecological Applications</i> , 2014, 24, 204-216.	1.8	52
58	Towards a cohesive, holistic view of top predation: a definition, synthesis and perspective. <i>Oikos</i> , 2014, 123, 1234-1243.	1.2	50
59	Temperature dependence of predation stress and the nutritional ecology of a generalist herbivore. <i>Ecology</i> , 2016, 97, 3119-3130.	1.5	49
60	Combining field experiments and individual-based modeling to identify the dynamically relevant organizational scale in a field system. <i>Oikos</i> , 2000, 89, 471-484.	1.2	46
61	Weather variation and trophic interaction strength: sorting the signal from the noise. <i>Oecologia</i> , 2004, 140, 398-406.	0.9	43
62	Landscape of fear and human-predator coexistence: Applying spatial predator-prey interaction theory to understand and reduce carnivore-livestock conflict. <i>Biological Conservation</i> , 2019, 236, 464-473.	1.9	43
63	Human Perceptions Mirror Realities of Carnivore Attack Risk for Livestock: Implications for Mitigating Human-Carnivore Conflict. <i>PLoS ONE</i> , 2016, 11, e0162685.	1.1	43
64	Predation risk, stoichiometric plasticity and ecosystem elemental cycling. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 4183-4191.	1.2	42
65	Disease, population viability, and recovery of endangered Sierra Nevada bighorn sheep. <i>Journal of Wildlife Management</i> , 2011, 75, 1753-1766.	0.7	41
66	Multiple stressors, state-dependence and predation risk - foraging trade-offs: toward a modern concept of trait-mediated indirect effects in communities and ecosystems. <i>Current Opinion in Behavioral Sciences</i> , 2016, 12, 6-11.	2.0	41
67	Alternative Dynamic Regimes and Trophic Control of Plant Succession. <i>Ecosystems</i> , 2006, 9, 659-672.	1.6	40
68	Predator-driven elemental cycling: the impact of predation and risk effects on ecosystem stoichiometry. <i>Ecology and Evolution</i> , 2015, 5, 4976-4988.	0.8	38
69	EFFECTS OF GROUPING BEHAVIOR AND PREDATORS ON THE SPATIAL DISTRIBUTION OF A FOREST FLOOR ARTHROPOD. <i>Ecology</i> , 2005, 86, 960-971.	1.5	37
70	Trophic trait plasticity in response to changes in resource availability and predation risk. <i>Functional Ecology</i> , 2011, 25, 1223-1231.	1.7	35
71	Projected range shifting by montane mammals under climate change: implications for Cascadia's National Parks. <i>Ecosphere</i> , 2012, 3, 1-51.	1.0	35
72	A spatial theory for characterizing predator-multiprey interactions in heterogeneous landscapes. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20150973.	1.2	35

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73	Infusing considerations of trophic dependencies into species distribution modelling. <i>Ecology Letters</i> , 2014, 17, 1507-1517.	3.0	34
74	From interesting details to dynamical relevance: toward more effective use of empirical insights in theory construction. <i>Oikos</i> , 2001, 94, 39-50.	1.2	32
75	Global climate change and the evolutionary ecology of ecosystem functioning. <i>Annals of the New York Academy of Sciences</i> , 2013, 1297, 61-72.	1.8	32
76	Food Webs and Ecosystems: Linking Species Interactions to the Carbon Cycle. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2020, 51, 271-295.	3.8	32
77	Wildlife and climate change: assessing the sensitivity of selected species to simulated doubling of atmospheric CO ₂ . <i>Global Change Biology</i> , 1997, 3, 531-544.	4.2	29
78	A spatial theory for emergent multiple predator–prey interactions in food webs. <i>Ecology and Evolution</i> , 2017, 7, 6935-6948.	0.8	29
79	Short-term effects of different genetically modified maize varieties on arthropod food web properties: an experimental field assessment. <i>Scientific Reports</i> , 2014, 4, 5315.	1.6	28
80	Trophic Control across a Natural Productivity Gradient with Sap-Feeding Herbivores. <i>Oikos</i> , 1998, 82, 552.	1.2	25
81	Invertebrate functional traits and terrestrial nutrient cycling: Insights from a global meta-analysis. <i>Journal of Animal Ecology</i> , 2021, 90, 1714-1726.	1.3	25
82	Reconciling variability and optimal behaviour using multiple criteria in optimization models. <i>Evolutionary Ecology</i> , 1998, 12, 73-94.	0.5	24
83	Predator community composition is linked to soil carbon retention across a human land use gradient. <i>Ecology</i> , 2017, 98, 1256-1265.	1.5	24
84	A methodological roadmap to quantify animal-mediated spatial ecosystem subsidies. <i>Journal of Animal Ecology</i> , 2021, 90, 1605-1622.	1.3	23
85	Intraspecific differences in plant chemotype determine the structure of arthropod food webs. <i>Oecologia</i> , 2016, 180, 797-807.	0.9	22
86	Effects of gray wolf-induced trophic cascades on ecosystem carbon cycling. <i>Ecosphere</i> , 2016, 7, e01501.	1.0	21
87	Acceleration or deceleration of litter decomposition by herbivory depends on nutrient availability through intraspecific differences in induced plant resistance traits. <i>Journal of Ecology</i> , 2018, 106, 2380-2394.	1.9	20
88	Landscapes shaped from the top down: predicting cascading predator effects on spatial biogeochemistry. <i>Oikos</i> , 2022, 2022, .	1.2	20
89	Convergence of trophic interaction strengths in grassland food webs through metabolic scaling of herbivore biomass. <i>Journal of Animal Ecology</i> , 2011, 80, 1330-1336.	1.3	18
90	Cascading effects of a disease outbreak in a remote protected area. <i>Ecology Letters</i> , 2022, 25, 1152-1163.	3.0	18

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91	Linking trophic interactions to plasticity in thermal sensitivity of geographically separated populations of a herbivore. <i>Evolutionary Ecology</i> , 2016, 30, 649-661.	0.5	17
92	Microbial and animal nutrient limitation change the distribution of nitrogen within coupled green and brown food chains. <i>Ecology</i> , 2019, 100, e02674.	1.5	15
93	Linking intraspecific variation in plant chemical defence with arthropod and soil bacterial community structure and N allocation. <i>Plant and Soil</i> , 2019, 444, 383-397.	1.8	14
94	Integrating policy and ecology systems to achieve path dependent climate solutions. <i>Environmental Science and Policy</i> , 2019, 98, 54-60.	2.4	14
95	Regional-scale Assessment of Deer Impacts on Vegetation Within Western Connecticut, USA. <i>Journal of Wildlife Management</i> , 2010, 74, 1257-1263.	0.7	12
96	Cascading ecological effects of landscape moderated arthropod diversity. <i>Oikos</i> , 2016, 125, 1261-1272.	1.2	12
97	Nitrogen recycling in coupled green and brown food webs: Weak effects of herbivory and detritivory when nitrogen passes through soil. <i>Journal of Ecology</i> , 2019, 107, 963-976.	1.9	12
98	Community consequences of phenotypic plasticity of terrestrial plants. , 2012, , 161-185.		11
99	Spatial Dynamics and Ecosystem Functioning. <i>PLoS Biology</i> , 2010, 8, e1000378.	2.6	10
100	Restoration of Ailing Wetlands. <i>PLoS Biology</i> , 2012, 10, e1001248.	2.6	10
101	Natural enemy functional identity, trait-mediated interactions and biological control. , 0, , 450-465.		10
102	The Temperature Dependence of Predation Stress and Prey Nutritional Stoichiometry. <i>Frontiers in Ecology and Evolution</i> , 2017, 5, .	1.1	10
103	Predators affect competitors'™ coexistence through fear effects. <i>Nature</i> , 2019, 570, 43-44.	13.7	9
104	Differences in prey personality mediate trophic cascades. <i>Ecology and Evolution</i> , 2020, 10, 9538-9551.	0.8	9
105	The economics of conservation debt: a natural capital approach to revealed valuation of ecological dynamics. <i>Ecological Applications</i> , 2020, 30, e02132.	1.8	9
106	EFFECTS OF TOP PREDATOR SPECIES ON DIRECT AND INDIRECT INTERACTIONS IN A FOOD WEB. , 2001, 82, 2072.		9
107	Effects of ungulate density and sociality on landscape heterogeneity: a mechanistic modeling approach. <i>Ecography</i> , 2022, 2022, .	2.1	9
108	Predators avoiding predation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 14749-14750.	3.3	8

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109	The implications of adaptive prey behaviour for ecological communities. , 2012, , 131-160.		8
110	Detritivores ameliorate the enhancing effect of plant-based trophic cascades on nitrogen cycling in an old-field system. <i>Biology Letters</i> , 2015, 11, 20141048.	1.0	8
111	Will like replace like? Linking thermal performance to ecological function across predator and herbivore populations. <i>Ecology</i> , 2019, 100, e02643.	1.5	8
112	Suburbanization Increases Echinostome Infection in Green Frogs and Snails. <i>EcoHealth</i> , 2019, 16, 235-247.	0.9	6
113	Aquatic Predators Influence Micronutrients: Important but Understudied. <i>Trends in Ecology and Evolution</i> , 2019, 34, 882-883.	4.2	5
114	Eco-Evolutionary Dynamics: The Predator-Prey Adaptive Play and the Ecological Theater. <i>Yale Journal of Biology and Medicine</i> , 2018, 91, 481-489.	0.2	5
115	Consequences of individual size variation for survival of an insect herbivore: an analytical model and experimental field testing using the red-legged grasshopper. <i>Journal of Orthoptera Research</i> , 2008, 17, 283-291.	0.4	4
116	Linking Predation Risk, Herbivore Physiological Stress and Microbial Decomposition of Plant Litter. <i>Journal of Visualized Experiments</i> , 2013, , e50061.	0.2	3
117	Do predators have a role to play in wetland ecosystem functioning? An experimental study in New England salt marshes. <i>Ecology and Evolution</i> , 2021, 11, 10956-10967.	0.8	3
118	Predators and rainfall control spatial biogeochemistry in a landscape of fear. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 24016-24018.	3.3	2
119	Weak interactions between strong interactors in an old-field ecosystem: Control of nitrogen cycling by coupled herbivores and detritivores. <i>Functional Ecology</i> , 2022, 36, 133-147.	1.7	2
120	Haynes, G. 1991. <i>Mammoths, mastodons and elephants: biology, behavior and the fossil record.</i> Cambridge University Press, Cambridge. 413 p. ISBN:0-521-38435-4. <i>Journal of Evolutionary Biology</i> , 1993, 6, 147-148.	0.8	1
121	Species in ecosystems and all that jazz. <i>PLoS Biology</i> , 2018, 16, e2006285.	2.6	1
122	EFFECTS OF TOP PREDATOR SPECIES ON DIRECT AND INDIRECT INTERACTIONS IN A FOOD WEB. , 2001, 82, 2072.		1
123	Pushing the Boundaries of Ecosystems. <i>Perspectives in Biology and Medicine</i> , 2005, 48, 301-306.	0.3	0
124	Editorial overview: Global change, evolutionary ecology and adaptation. <i>Current Opinion in Insect Science</i> , 2018, 29, iii-v.	2.2	0