James B Heffernan

List of Publications by Year in Descending Order

73 papers	3,023 citations	30 h-index	54 g-index
77 ext. papers	3,580 ext. citations	5.3 avg, IF	5.24 L-index

#	Paper	IF	Citations
73	Light and flow regimes regulate the metabolism of rivers.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	4
72	Hypoxia dynamics and spatial distribution in a low gradient river. *Limnology and Oceanography*, **2021**, 66, 2251-2265	4.8	2
71	Competition Among Limestone Depressions Leads to Self-Organized Regular Patterning on a Flat Landscape. *Journal of Geophysical Research F: Earth Surface*, **2021**, 126, e2021JF006072	3.8	1
70	A seasonally dynamic model of light at the stream surface. *Freshwater Science*, **2021**, 40, 286-301	2	5
69	A Multiscale Approach to Timescale Analysis: Isolating Diel Signals from Solute Concentration Time Series. *Environmental Science & Technology*, **2021**, 55, 12731-12738	10.3	3
68	Residential yard management and landscape cover affect urban bird community diversity across the continental USA. *Ecological Applications*, **2021**, 31, e02455	4.9	6
67	Urban soil carbon and nitrogen converge at a continental scale. *Ecological Monographs*, **2020**, 90, e01401	9	15
66	Estimating Benthic Light Regimes Improves Predictions of Primary Production and constrains Light-Use Efficiency in Streams and Rivers. *Ecosystems*, **2020**, 24, 825	3.9	8
65	How Old Are Marshes on the East Coast, USA? Complex Patterns in Wetland Age Within and Among Regions. *Geophysical Research Letters*, **2020**, 47, e2020GL089415	4.9	3
64	Bioavailability and compositional changes of dissolved organic matter in urban headwaters. *Aquatic Sciences*, **2020**, 82, 1	2.5	3
63	Municipal regulation of residential landscapes across US cities: Patterns and implications for landscape sustainability. *Journal of Environmental Management*, **2020**, 275, 111132	7.9	13
62	Interactions Between Physical Template and Self-organization Shape Plant Dynamics in a Stream Ecosystem. *Ecosystems*, **2020**, 23, 891-905	3.9	2
61	Initiation and Development of Wetlands in Southern Florida Karst Landscape Associated With Accumulation of Organic Matter and Vegetation Evolution. *Journal of Geophysical Research G: Biogeosciences*, **2019**, 124, 1604-1617	3.7	6
60	Climate and lawn management interact to control C plant distribution in residential lawns across seven U.S. cities. *Ecological Applications*, **2019**, 29, e01884	4.9	6
59	Ecohydrologic processes and soil thickness feedbacks control limestone-weathering rates in a karst landscape. *Chemical Geology*, **2019**, 527, 118774	4.2	10
58	Mass balance implies Holocene development of a low-relief karst patterned landscape. *Chemical Geology*, **2019**, 527, 118782	4.2	7
57	Emergent productivity regimes of river networks. *Limnology and Oceanography Letters*, **2019**, 4, 173-181	7.9	30

56	Wetland Connectivity Thresholds and Flow Dynamics From Stage Measurements. *Water Resources Research*, **2019**, 55, 6018-6032	5.4	10
55	Stoichiometry and daily rhythms: experimental evidence shows nutrient limitation decouples N uptake from photosynthesis. *Ecology*, **2019**, 100, e02822	4.6	4
54	Residential household yard care practices along urban-exurban gradients in six climatically-diverse U.S. metropolitan areas. *PLoS ONE*, **2019**, 14, e0222630	3.7	4
53	Metabolic rhythms in flowing waters: An approach for classifying river productivity regimes. *Limnology and Oceanography*, **2019**, 64, 1835-1851	4.8	28
52	Coastal Wetland Distributions: Delineating Domains of Macroscale Drivers and Local Feedbacks. *Ecosystems*, **2019**, 22, 1256-1270	3.9	7
51	Ecohydrologic feedbacks controlling sizes of cypress wetlands in a patterned karst landscape. *Earth Surface Processes and Landforms*, **2019**, 44, 1178-1191	3.7	7
50	Engineered headwaters can act as sources of dissolved organic matter and nitrogen to urban stream networks. *Limnology and Oceanography Letters*, **2018**, 3, 215-224	7.9	15
49	Homogenization of plant diversity, composition, and structure in North American urban yards. *Ecosphere*, **2018**, 9, e02105	3.1	39
48	The metabolic regimes of flowing waters. *Limnology and Oceanography*, **2018**, 63, S99	4.8	157
47	Measuring and interpreting relationships between nutrient supply, demand, and limitation. *Freshwater Science*, **2018**, 37, 448-455	2	26
46	Artificial Aquatic Ecosystems. *Water (Switzerland)*, **2018**, 10, 1096	3	21
45	The metabolic regimes of 356 rivers in the United States. *Scientific Data*, **2018**, 5, 180292	8.2	36
44	A multi-city comparison of front and backyard differences in plant species diversity and nitrogen cycling in residential landscapes. *Landscape and Urban Planning*, **2018**, 178, 102-111	7.7	13
43	Sediment chemistry of urban stormwater ponds and controls on denitrification. *Ecosphere*, **2018**, 9, e023[illegible]	3.1	17
42	Ecological homogenization of residential macrosystems. *Nature Ecology and Evolution*, **2017**, 1, 191	12.3	44
41	Continental-scale homogenization of residential lawn plant communities. *Landscape and Urban Planning*, **2017**, 165, 54-63	7.7	54
40	Fertilizer Management and Environmental Factors Drive N2O and NO3 Losses in Corn: A Meta-Analysis. *Soil Science Society of America Journal*, **2017**, 81, 1191-1202	2.5	63
39	Land use and topography bend and break fractal rules of water body size-distributions. *Limnology and Oceanography Letters*, **2017**, 2, 71-80	7.9	9

38	Satisfaction, water and fertilizer use in the American residential macrosystem. *Environmental Research Letters*, **2016**, 11, 034004	6.2	20
37	Ecosystem services in managing residential landscapes: priorities, value dimensions, and cross-regional patterns. *Urban Ecosystems*, **2016**, 19, 95-113	2.8	66
36	Plant nitrogen concentration and isotopic composition in residential lawns across seven US cities. *Oecologia*, **2016**, 181, 271-85	2.9	24
35	Convergence of microclimate in residential landscapes across diverse cities in the United States. *Landscape Ecology*, **2016**, 31, 101-117	4.3	59
34	Designer Ecosystems: Incorporating Design Approaches into Applied Ecology. *Annual Review of Environment and Resources*, **2015**, 40, 419-443	17.2	27
33	Convergent Surface Water Distributions in U.S. Cities. *Ecosystems*, **2014**, 17, 685-697	3.9	47
32	Direct and Indirect Effects of Dissolved Organic Matter Source and Concentration on Denitrification in Northern Florida Rivers. *Ecosystems*, **2014**, 17, 14-28	3.9	27
31	Evidence of biogeomorphic patterning in a low-relief karst landscape. *Earth Surface Processes and Landforms*, **2014**, 39, 2027-2037	3.7	18
30	Environmentally-mediated consumer control of algal proliferation in Florida springs. *Freshwater Biology*, **2014**, 59, 2009-2023	3.1	8
29	Macrosystems ecology: understanding ecological patterns and processes at continental scales. *Frontiers in Ecology and the Environment*, **2014**, 12, 5-14	5.5	230
28	Morphological characteristics of urban water bodies: mechanisms of change and implications for ecosystem function **2014**, 24, 1070-84		64
27	Nutrient limitation and physiology mediate the fine-scale (de)coupling of biogeochemical cycles. *American Naturalist*, **2014**, 184, 384-406	3.7	23
26	Assessing the homogenization of urban land management with an application to US residential lawn care. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 4432-7	11.5	139
25	Ecological homogenization of urban USA. *Frontiers in Ecology and the Environment*, **2014**, 12, 74-81	5.5	244
24	Nutrient flux, uptake, and autotrophic limitation in streams and rivers. *Freshwater Science*, **2014**, 33, 85-98	2.2	31
23	Diel phosphorus variation and the stoichiometry of ecosystem metabolism in a large spring-fed river. *Ecological Monographs*, **2013**, 83, 155-176	9	68
22	On the multiple ecological roles of water in river networks. *Ecosphere*, **2013**, 4, art17	3.1	37
21	Discharge competence and pattern formation in peatlands: a meta-ecosystem model of the Everglades ridge-slough landscape. *PLoS ONE*, **2013**, 8, e64174	3.7	22

20	Plant–microbe interactions and nitrogen dynamics during wetland establishment in a desert stream. *Biogeochemistry*, **2012**, 107, 379-391	3.8	8
19	Inference of riverine nitrogen processing from longitudinal and diel variation in dual nitrate isotopes. *Journal of Geophysical Research*, **2012**, 117,		37
18	Denitrification and inference of nitrogen sources in the karstic Floridan Aquifer. *Biogeosciences*, **2012**, 9, 1671-1690	4.6	40
17	Reciprocal Biotic Control on Hydrology, Nutrient Gradients, and Landform in the Greater Everglades. *Critical Reviews in Environmental Science and Technology*, **2011**, 41, 395-429	11.1	29
16	Algal blooms and the nitrogen-enrichment hypothesis in Florida springs: evidence, alternatives, and adaptive management **2010**, 20, 816-29		48
15	Hydrologic and biotic influences on nitrate removal in a subtropical spring-fed river. *Limnology and Oceanography*, **2010**, 55, 249-263	4.8	43
14	Direct and indirect coupling of primary production and diel nitrate dynamics in a subtropical spring-fed river. *Limnology and Oceanography*, **2010**, 55, 677-688	4.8	56
13	Hydrologic Modification and the Loss of Self-organized Patterning in the Ridge–Slough Mosaic of the Everglades. *Ecosystems*, **2010**, 13, 813-827	3.9	57
12	Direct and indirect coupling of primary production and diel nitrate dynamics in a subtropical spring-fed river **2010**, 55, 677		72
11	Consequences of a biogeomorphic regime shift for the hyporheic zone of a Sonoran Desert stream. *Freshwater Biology*, **2008**, 53, 1954-1968	3.1	32
10	Wetlands as an alternative stable state in desert streams. *Ecology*, **2008**, 89, 1261-71	4.6	80
9	Unintended Consequences of Urbanization for Aquatic Ecosystems: A Case Study from the Arizona Desert. *BioScience*, **2008**, 58, 715-727	5.7	47
8	Functional ecomorphology: Feedbacks between form and function in fluvial landscape ecosystems. *Geomorphology*, **2007**, 89, 84-96	4.3	77
7	RIPARIAN ZONES INCREASE REGIONAL SPECIES RICHNESS BY HARBORING DIFFERENT, NOT MORE, SPECIES. *Ecology*, **2005**, 86, 56-62	4.6	293
6	Nutrient mobilization and processing in Sonoran desert riparian soils following artificial re-wetting. *Biogeochemistry*, **2004**, 70, 117-134	3.8	22
5	Effects of Urbanization on Nutrient Biogeochemistry of Aridland Streams. *Geophysical Monograph Series*, **2004**, 129-146	1.1	6
4	HORIZONS IN STREAM BIOGEOCHEMISTRY: FLOWPATHS TO PROGRESS. *Ecology*, **2004**, 85, 2369-2379	4.6	121
3	The influence of dissolved nutrients and particulate organic matter quality on microbial respiration and biomass in a forest stream. *Freshwater Biology*, **2003**, 48, 1925-1937	3.1	118

2	Ecological homogenisation in North American urban yards: vegetation diversity, composition, and structure	3
1	Propagation of inflowing urban stormwater pulses through reservoir embayments. *Urban Ecosystems*,1	2.8