Andy Baird

List of Publications by Year
in descending order

65 papers	1,698 citations	257101 24 h-index	329751 37 g-index
67 all docs	67 docs citations	67 times ranked	1821 citing authors

#	Article	IF	Citations
1	Overriding water table control on managed peatland greenhouse gas emissions. Nature, 2021, 593, 548-552.	13.7	172
2	Ecohydrological feedbacks confound peatâ€based climate reconstructions. Geophysical Research Letters, 2012, 39, .	1.5	97
3	Conceptualizing catchment processes: simply too complex?. Hydrological Processes, 2008, 22, 1727-1730.	1.1	86
4	Effect of temperature and atmospheric pressure on methane (CH4) ebullition from near-surface peats. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	82
5	The DigiBog peatland development model 1: rationale, conceptual model, and hydrological basis. Ecohydrology, 2012, 5, 242-255.	1.1	61
6	A mesocosm study of the role of the sedge Eriophorum angustifolium in the efflux of methaneâ€"including that due to episodic ebullitionâ€"from peatlands. Plant and Soil, 2012, 351, 207-218.	1.8	56
7	High permeability explains the vulnerability of the carbon store in drained tropical peatlands. Geophysical Research Letters, 2017, 44, 1333-1339.	1.5	45
8	Misinterpreting carbon accumulation rates in records from near-surface peat. Scientific Reports, 2019, 9, 17939.	1.6	44
9	The DigiBog peatland development model 2: ecohydrological simulations in 2D. Ecohydrology, 2012, 5, 256-268.	1.1	43
10	The high hydraulic conductivity of three wooded tropical peat swamps in northeast Peru: measurements and implications for hydrological function. Hydrological Processes, 2014, 28, 3373-3387.	1.1	43
11	Untangling climate signals from autogenic changes in longâ€term peatland development. Geophysical Research Letters, 2015, 42, 10,788.	1.5	40
12	Upscaling of Peatland-Atmosphere Fluxes of Methane: Small-Scale Heterogeneity in Process Rates and the Pitfalls of â€œBucket-and-Slabâ€•Models. Geophysical Monograph Series, 0, , 37-53.	0.1	38
13	Natural pipes in blanket peatlands: major point sources for the release of carbon to the aquatic system. Global Change Biology, 2012, 18, 3568-3580.	4.2	36
14	Bridging the gap between models and measurements of peat hydraulic conductivity. Water Resources Research, 2015, 51, 5353-5364.	1.7	36
15	Variable source and age of different forms of carbon released from natural peatland pipes. Journal of Geophysical Research, 2012, 117, .	3.3	35
16	Methane Dynamics in Peat: Importance of Shallow Peats and a Novel Reduced-Complexity Approach for Modeling Ebullition. Geophysical Monograph Series, 0, , 173-185.	0.1	35
17	The importance of ebullition as a mechanism of methane (CH₄) loss to the atmosphere in a northern peatland. Geophysical Research Letters, 2013, 40, 2087-2090.	1.5	35
18	Effect of atmospheric pressure and temperature on entrapped gas content in peat. Hydrological Processes, 2009, 23, 2970-2980.	1.1	34

#	Article	IF	Citations
19	Ebullition of methane from peatlands: Does peat act as a signal shredder?. Geophysical Research Letters, 2015, 42, 3371-3379.	1.5	33
20	Simulating the longâ€term impacts of drainage and restoration on the ecohydrology of peatlands. Water Resources Research, 2017, 53, 6510-6522.	1.7	32
21	The effect of peat structure on the spatial distribution of biogenic gases within bogs. Hydrological Processes, 2014, 28, 5483-5494.	1.1	29
22	Microformâ€scale variations in peatland permeability and their ecohydrological implications. Journal of Ecology, 2016, 104, 531-544.	1.9	28
23	Hydrological hotspots in blanket peatlands: Spatial variation in peat permeability around a natural soil pipe. Water Resources Research, 2013, 49, 5342-5354.	1.7	26
24	The dynamics of natural pipe hydrological behaviour in blanket peat. Hydrological Processes, 2013, 27, 1523-1534.	1.1	25
25	The impact of ditch blocking on the hydrological functioning of blanket peatlands. Hydrological Processes, 2017, 31, 525-539.	1.1	25
26	Sensitivity of mangrove soil organic matter decay to warming and sea level change. Global Change Biology, 2020, 26, 1899-1907.	4.2	25
27	Regional variation in the biogeochemical and physical characteristics of natural peatland pools. Science of the Total Environment, 2016, 545-546, 84-94.	3.9	24
28	Microtopographic Drivers of Vegetation Patterning in Blanket Peatlands Recovering from Erosion. Ecosystems, 2019, 22, 1035-1054.	1.6	24
29	Testing a simple model of gas bubble dynamics in porous media. Water Resources Research, 2015, 51, 1036-1049.	1.7	22
30	A cautionary tale about using the apparent carbon accumulation rate (aCAR) obtained from peat cores. Scientific Reports, 2021, 11, 9547.	1.6	22
31	Fine root production in a chronosequence of mature reforested mangroves. New Phytologist, 2021, 232, 1591-1602.	3.5	21
32	EnRoot: a narrow-diameter, inexpensive and partially 3D-printable minirhizotron for imaging fine root production. Plant Methods, 2019, 15, 101.	1.9	20
33	Greenhouse gas losses from peatland pipes: A major pathway for loss to the atmosphere?. Journal of Geophysical Research, 2011, 116, .	3.3	18
34	The importance of episodic ebullition methane losses from three peatland microhabitats: a controlledâ€environment study. European Journal of Soil Science, 2013, 64, 27-36.	1.8	18
35	Evaluating the use of dominant microbial consumers (testate amoebae) as indicators of blanket peatland restoration. Ecological Indicators, 2016, 69, 318-330.	2.6	18
36	First Evidence of Peat Domes in the Congo Basin using LiDAR from a Fixed-Wing Drone. Remote Sensing, 2020, 12, 2196.	1.8	18

#	Article	IF	Citations
37	Morphological change of natural pipe outlets in blanket peat. Earth Surface Processes and Landforms, 2012, 37, 109-118.	1.2	17
38	Do peatland microforms move through time? Examining the developmental history of a patterned peatland using groundâ€penetrating radar. Journal of Geophysical Research, 2012, 117, .	3.3	16
39	Controls on Nearâ€Surface Hydraulic Conductivity in a Raised Bog. Water Resources Research, 2019, 55, 1531-1543.	1.7	16
40	Ebullition events monitored from northern peatlands using electrical imaging. Journal of Geophysical Research, 2011, 116, .	3.3	14
41	The effect of pore structure on ebullition from peat. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1646-1656.	1.3	14
42	An experimental study on the response of blanket bog vegetation and water tables to ditch blocking. Wetlands Ecology and Management, 2017, 25, 703-716.	0.7	14
43	Methane and carbon dioxide fluxes from open and blocked ditches in a blanket bog. Plant and Soil, 2018, 424, 619-638.	1.8	13
44	The Importance of CH₄ Ebullition in Floodplain Fens. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1750-1763.	1.3	12
45	The role of hydrological transience in peatland pattern formation. Earth Surface Dynamics, 2013, 1, 29-43.	1.0	11
46	Waterâ€level dynamics in natural and artificial pools in blanket peatlands. Hydrological Processes, 2018, 32, 550-561.	1.1	11
47	A mesocosm study of the effect of restoration on methane (CH4) emissions from blanket peat. Wetlands Ecology and Management, 2014, 22, 523-537.	0.7	10
48	Evidence that piezometers vent gas from peat soils and implications for poreâ€water pressure and hydraulic conductivity measurements. Hydrological Processes, 2009, 23, 1249-1254.	1.1	9
49	Testing the relationship between testate amoeba community composition and environmental variables in a coastal tropical peatland. Ecological Indicators, 2018, 91, 636-644.	2.6	9
50	Validity of managing peatlands with fire. Nature Geoscience, 2019, 12, 884-885.	5.4	9
51	Tropical Peatland Hydrology Simulated With a Global Land Surface Model. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	9
52	The Role of Natural Soil Pipes in Water and Carbon Transfer in and from Peatlands. Geophysical Monograph Series, 0, , 251-264.	0.1	8
53	A regime shift from erosion to carbon accumulation in a temperate northern peatland. Journal of Ecology, 2021, 109, 125-138.	1.9	8
54	Daytime-only measurements underestimate CHâ‚„ emissions from a restored bog. Ecoscience, 2018, 25, 259-270.	0.6	6

#	Article	IF	Citations
55	The effect of crab burrows on soilâ€water dynamics in mangroves. Hydrological Processes, 2022, 36, .	1.1	6
56	Carbon concentrations in natural and restoration pools in blanket peatlands. Hydrological Processes, 2022, 36, .	1.1	5
57	The effect of sampling effort on estimates of methane ebullition from peat. Water Resources Research, 2017, 53, 4158-4168.	1.7	4
58	A new approach for measuring surface hydrological connectivity. Hydrological Processes, 2020, 34, 538-552.	1.1	4
59	The effects of ditch dams on waterâ€level dynamics in tropical peatlands. Hydrological Processes, 2021, 35, e14174.	1.1	4
60	Linking ecosystem changes to their social outcomes: Lost in translation. Ecosystem Services, 2021, 50, 101327.	2.3	4
61	Replumbing Wetlandsâ€" Managing Water for the Restoration of Bogs and Fens. , 0, , 755-779.		3
62	Exploring pathways to late Holocene increased surface wetness in subarctic peatlands of eastern Canada. Quaternary Research, 2018, 90, 83-95.	1.0	3
63	Modelling the performance of bunds and ditch dams in the hydrological restoration of tropical peatlands. Hydrological Processes, 2022, 36, .	1.1	3
64	The Water Table: Its Conceptual Basis, its Measurement, and its Usefulness as a Hydrological Variable. Hydrological Processes, 0, , .	1.1	3
65	Comment on: â€œPeatland carbon stocks and burn history: Blanket bog peat core evidence highlights charcoal impacts on peat physical properties and longâ€term carbon storage,â€• by A. Heinemeyer, Q. Asena, W. L. Burn and A. L. Jones (<i>Geo: Geography and Environment</i> 2018; e00063). Geo: Geography and Environment, 2019, 6, e00075.	0.5	2